

CHAPTER IX

ECONOMIC TRENDS

The Bangalore Rural District, being recently created, is difficult to discuss from the point of economic growth as detailed statistics on the various aspects of the new district are not readily available. Considerable part of population here is floating, and thus depends to some extent on the city of Bangalore. Vicinity to this major city has provided a wide daily market to the goods produced in this district like milk, eggs, vegetables and fruits. It is still an agricultural district, industrially not well developed with very few medium and large scale industries for the development of which there is ample scope. Weaving provides work to considerable sections including powerloom weavers. Certain taluks have flourishing sericulture farms. Proper indicators to measure or assess income or growth have not been formulated. Thus presenting a picture of the growth of economic activity is not easy so far as this district is concerned. However, an effort is made to indicate certain sectoral trends.

WORKERS

Working population of any area constitutes the primary factor for the production of goods and services and effective utilisation of the available resources within the area. The Bangalore (rural) district, carved out of the erstwhile Bangalore district in 1986 had 1,87,233 workers of various categories in 1901, which was 33.7 per cent of the total population. Among the total workers, 86.4 per cent were male workers, the rest being female. In subsequent decades, the total workers in the district and their percentage to total population in corresponding years were respectively 1,42,524 and 23.5 in 1921, 2,56,118 and 37.1 in 1931, and 2,01,668 and 25.9 in 1941. Between 1961 and 1981, the workers in the district and their percentage to the total population became 5,06,575 and 46.5 in 1961, 4,31,395 and 33.8 in 1971 respectively and in 1981, these corresponding figures were

6,34,334 and 39.6 inclusive of the marginal workers. From the earlier decades, male workers formed the majority, being 86.4 per cent of the total workers in 1901 and in later decades, the percentage of male workers was 84.9 in 1921, 90.8 in 1941, 66.8 in 1961, 86.7 in 1971 and 72.51 in 1981. (All these figures include four hoblis transferred to urban district). It was in 1981, the concept of marginal workers was introduced and in the district, there were 70,699 marginal workers of which, males constituted only 4,582. The remaining 66,117 (93.5%) were female workers. The growth or otherwise of the working population in the district from 1901 to 1981 is given for each taluk as percentage to the total taluk population. (See Table I at the end of the chapter)

Though, the percentage increase of workers in each taluk were far from significant, their number in absolute terms had increased by more than 200 to 400 per cent. The least rise was 212 per cent in Nelamangala taluk as against 485 per cent in Ramanagaram taluk. In other taluks, the percentage increase of workers was 410 in Channapatna, 310 in Magadi and Dodballapura taluks, 320 in Hoskote and Devanahally taluks and 420 in Kanakapura taluk.

The participation of females in work also underwent much variation between 1901 and 1981 with a phenomenal increase by 1981 from 25,413 in 1901 to 1,78,983 in 1981. Female workers comprised only 13.6 per cent of total workers in 1901 and a gradual increase was perceived by 1981 with the percentage increasing to 15.0 in 1921, 18.1 in 1931, 33.1 in 1961 and 28.2 in 1981. The taluk-wise participation rate of female workers from 1901 to 1981 has been presented in Table II.

The workers of urban areas were far less than those of rural areas in number. Out of 5,06,575 in 1961, rural areas had 4,61,335 (91.1%) workers of which 3,00,734 were males and 1,60,601 being females. The workers in urban areas were only 34,839 males and 7,401 females constituting 7.47 and 1.46 per cent to total workers. Out of 4,31,395 workers in 1971 and of 5,63,635 in 1981, rural workers were 87.1 and 85.9 per cent respectively, the remaining percentage being that of urban workers. Some comparative percentages of workers under rural and urban areas for 1961, 1971 and 1981 are given below:

Sl. no.	Particulars	1961	1971	1981
1	2	3	4	5
I. Rural male workers:				
a)	as % to total workers	59.37	75.25	68.92
b)	as % to total male workers	88.82	86.80	85.31
c)	as % to total rural workers	65.19	86.45	80.23
II. Rural female workers:				
a)	as % to total workers	31.70	11.80	16.98
b)	as % to total female workers	95.59	88.65	88.39
c)	as % to total rural workers	34.81	13.55	19.77
III. Urban male workers:				
a)	as % to total workers	7.47	11.44	11.87
b)	as % to total male workers	11.18	13.20	14.69
c)	as % to total urban workers	83.64	88.34	84.18
IV. Urban female workers				
a)	as % to total workers	1.46	1.51	2.23
b)	as % to total urban workers	16.36	11.66	15.82
c)	as % to total female workers	4.41	11.35	11.61
V. Workers in relation to population:				
a)	as % to total population	46.49	33.83	35.17
b)	Male workers as % of male population	60.94	57.32	55.51
c)	Female workers as % of Female population	31.45	9.22	13.84
d)	Rural male workers as % of rural male population	62.03	58.32	56.44
e)	Rural female workers as % of rural female population	34.23	9.52	14.51
f)	Urban male workers as % of urban male population	53.43	51.48	50.66
g)	Urban female workers as % of urban female population	11.39	7.38	10.22

LIVELIHOOD CLASSIFICATION

Various occupations were broadly grouped in 1871 under six classes, namely a) professional, b) domestic, c) commercial, d) agricultural, e) industrial and f) indefinite and non-productive. The workers in important occupational classes in 1871 and 1881 pertaining to the erstwhile Bangalore district (with 1881 figures in bracket)

were as follows: 1,45,935 (2,04,014) in agriculture, 51,490 (44,069) in industrial class, and 3,942 (11,139) in commercial class. In 1901, the classifications of occupations were a) Government, b) pasture and agriculture, c) personal services, d) preparation and supply of material substances, e) commerce, transport and storage, f) professions, g) unskilled labour not agricultural, and h) means of subsistence independent of occupation, which classifications were further classified into 24 orders. The number of workers in the district (inclusive of South and North taluks of Bangalore and Anekal taluks) were 2,51,671 and under each of the above mentioned classes was 9,620 in 'a', 1,46,937 in 'b', 9,300 in 'c', 29,273 in 'd', 10,634 in 'e', 4,314 in 'f', 12,764 in 'g' and 8,562 in 'h'. From 1911, the occupations were divided into four main classes and these were subdivided into 12 sub-classes. During 1931 and 1941, the same scheme was employed with a little modification. Accordingly the workers in the district under each sub-class were as follows from 1911 to 1941:

Sl. no.	Sub-class	1911*	1921	1931	1941
1)	Exploitation of the surface of earth	1,40,936	1,14,167	2,01,005	1,51,304
2)	Extraction of minerals	4	2	2	231
3)	Industrial occupation	16,374	10,746	17,548	15,569
4)	Transport	1,136	769	1,188	1,249
5)	Trade	10,999	7,513	11,501	11,248
6)	Public force	3,508	850	688	1,117
7)	Public administration	4,149	2,141	2,202	4,169
8)	Professions and liberal arts	2,789	2,583	2,777	4,695
9)	Persons living on their income	536	242	221	476
10)	Domestic service	873	954	3,580	1,392
11)	Insufficiently described occupations	21,736	178	13,316	8,716
12)	Unproductive services	4,119	2,379	2,090	1,502
	Total	2,07,159	1,42,524	2,56,118	2,01,668

*The figures of 1911 include the workers of Bangalore South and North taluks and also of Anekal taluk. The rest of the figures are of the new district including four hoblis transferred to the urban district.

Even from the previous century, majority of workers had been absorbed in the exploitation of the surface of the earth or exploitation of the animals and vegetation as termed in 1931 and 1941. The percentage of workers in this sub-class had been 68.03 in 1911, 80.1 in 1921, 78.48 in 1931 and 75.03 in 1941. The domination of agriculture as a source of occupation continued even in 1980s. Between 1961 and 1981, the number of workers under various livelihood classes and also their percentage to the total workers were as follows:

Census Year	Cultivators	Agricultural labourers	Household industry	Others	Total
1961	3,58,568 (70.78)	46,029 (9.09)	33,627 (6.64)	68,351 (13.49)	5,06,575 (100.00)
1971	2,51,840 (58.38)	87,156 (20.21)	13,783 (3.19)	78,616 (18.22)	4,31,395 (100.00)
1981	3,03,206 (53.80)	1,05,858 (18.78)	17,437 (3.09)	1,37,134 (24.33)	5,63,635* (100.00)

*Figures are exclusive of 70,699 marginal workers existed in the district. These figures include four transferred hoblis.

The taluk-wise total workers in the district for 1961, 1971 and 1981 under each livelihood class as per 1981 census pattern have been tabulated in Table III.

Rural workers figured prominently under each of the major classifications compared to the urban working class. Even under urban and rural categories, male workers were more in number than the females excepting under the 'cultivators' in 1981. The percentage of workers to the total workers in each of the livelihood class under urban and rural bifurcations were as in Table IV.

WAGES

Wages activate the demand for goods and services in the economy which in turn encourages the level of production. Wages of agricultural labourers and also those of industrial workers have undergone upward revision from time to time in the long run. Around 13th century, a priest was paid 10 gadyanas (62-grain gold coin) in 1220, 12 in 1228, 6 in 1291 and 4 in 1237, as per illustrations available. In the case of others, a cook was paid 6 gadyanas in 1220, 3 in 1237 and 2 in 1291, an attendant received 4 gadyanas, water

carriers 2 gadyanas, an officer in charge of granary from 10 to 20 gadyanas. These rates prevailed without much variations from temple to temple and from area to area.

Buchanan while travelling around Dodballapura in 1800 remarks that the wages were extremely low in that part and a male labourer got six fanams (fanam is 5.2 grain of gold) a month and a woman got five fanams. During that period, a Gauda (village headman) was paid 20 fanams a month. Similarly in Magadi and Gattipura, where iron smelting and iron forges were in plenty, the wages for workers were 15 fanams a month for a head workman at smelting house and 20 fanams for the same job at the forge. In respect of lower category, wages (in fanams) were 13 for a under workman, nine for a hammer man, eight for bellows-man and eight to ten for making charcoal.

During the 1860s, the wages were half of what had been 10 years later during the 1870s. Around the later half of 19th century, the wages for the unskilled and the skilled workers on an average ranged from Rs 0.13 to 0.26 and Rs 0.44 to 0.75 per day respectively. In Bidadi magani wage-rate per day varied from 10 to 19 paise for male coolies and 6 to 10 paise for the females around 1872-73. The hire for a plough and pair of bullocks was 31 paise per diem, while a bandy with bullocks for agricultural purpose was paid 50 paise per diem. As revealed in the original survey settlement reports pertaining to some taluks of the district, the average daily wages for male labourers was 15 paise and only 12 paise for the female worker in Nelamangala taluk around 1875-76. In Magadi taluk during the same period the same rate existed for both the sexes and when paid both in cash and kind, they would receive 8 paise together with one seer of ragi. Around 1882-83, the wages for the agriculture labourer in Devanahalli taluk during the harvest season was eight paise or four seers of ragi. When a person was employed for a year, he got four *khandies* of ragi and six rupees. In the harvest season, the average rate for weeding was 8 paise for a female worker and 9 paise for a male worker, 37 paise per day for ploughman if he supplied plough and bullocks. About the same period, wages in Hoskote taluk varied from 12 to 50 paise per day for a male labourer and from 8 to 15 paise for a female labourer. During 1892-93, the wages for the labourers varied from 22 to 31 paise in Channapatna taluk. It was considered that wage rate in this taluk was comparatively higher due to the presence of railways and many construction works which were in progress during the period. About 1895, the wages increased a little and in Kanakapura taluk, a male cooly got 25 to 37 paise per day whereas a female worker earned 12 to 19 paise per day.

Between 1890 to 1895, the daily average rate for the unskilled ranged between 17 paise to 34 paise and for the skilled from 63 to 75 paise. In the next five year period of 1900 to 1905, the average wage rate per day decreased to some extent for the skilled workers and for the unskilled it increased. The variation was from Rs 0.30 to Rs 0.50 for the unskilled and from Rs 0.75 to 0.50 for the skilled. From 1906 to 1913 there existed some stability of the average wage rate at Rs 0.50 for the skilled and at Rs 0.40 for the unskilled. During the years of economic depression, the wages for agricultural labourers varied from Rs 0.25 to Rs 0.50 per day. The average wage was Rs 0.37 in Channapatna taluk, Rs 0.25 to Rs 0.37 in Kanakapura and Ramanagaram taluks during 1930 to 1935. In respect of other taluks also, the wage rates were almost the same in this period. Even in respect of non-agriculture workers, the daily wage rate was a little higher and ranged between Rs 0.37 and Rs 0.50 in the taluks of Channapatna, Kanakapura and Ramanagaram.

The World War II acted as a great stimulant to price rise which in turn gave way for further wage rise. During the 1940s, there was a steady rise of wages of agricultural workers. The Census of Mysore conducted an economic survey in selected villages in 1941 and made an enquiry into the existing wages to agricultural labourers in the villages. Normally, the average rate per day for a male, female and child worker was respectively 37, 19 and 12 paise in the villages of Hoskote, Devanahally, and Channapatna taluks. In Magadi, Nelamangala and Kanakapura taluks, the daily wages were around 25 paise, 19 paise and 12 paise respectively for male, female and child labour. In the villages of Ramanagaram and Dodballapura taluks, the rates varied from Rs 0.25 to 0.50 for men, from Rs 0.12 to Rs 0.25 for women and from Rs 0.06 to 0.18 for children. During the Second World War period, wages began to rise for both the skilled and the unskilled and also the cart hire charges. For different categories of work, wages ranged from Rs 0.50 to Rs 3.00 (skilled) Rs 0.19 to Rs 1.00 (unskilled) in 1939-40 and in 1944-45 the range was Rs 1.37 to Rs 3.19 (skilled), Rs 1.00 to Rs 1.37 (unskilled) and the cart-hire charge ranged from Rs 4.56 to Rs 6.06 per day. Even during the post-war years of Second World War, the wages showed an upward trend like prices. The wages per day for agriculture and non-agriculture labour respectively were Rs 0.75 and Rs 1.00 from 1945 to 1948 in Channapatna, Kanakapura and Ramanagaram taluks and in other taluks also almost the same wage rate existed. From 1945-46 to 1949-50 the wage-rate further doubled from the range of Rs 1.50 to Rs 3.50 for the skilled and for the unskilled, the range of wages increased from Rs 1.00 to Rs 1.25 and the maximum level from Rs 1.50 to Rs 2.50.

Usually, the upward trend in wages would start in Bangalore and thereafter spread to neighbouring taluks. The non-agriculture labour would reap the benefit of higher wages only to be followed by the agricultural labourers in later period. The survey settlement officers observed that the cash wages during the decades of 1940s and 1950s, would be supplemented by the agriculture labourers through demanding food and tiffin which would normally be valued at Rs 0.50. As an alternative to this practice, on exceptional occasions, the labourers working in sugarcane fields, potato, mulberry, arecanut cultivations, would demand or be paid higher rate of wages upto Rs 2.50 per day. Similarly in backward and interior tracts where irrigation facilities were totally absent and in the villages of surplus supply of labour wages would be less than the normal rates of Rs 1.25 to Rs 1.50. The female labourers engaged in weeding operations would get about Rs 0.62 to Rs 0.75 per day.

During 1950 to 1960, the average wage rate had gone up as a general phenomena except in the middle years when a slight fall could be observed. Generally, the average wage-rate in the district was Rs 4.00 to Rs 8.00 for the skilled, Rs 1.50 to Rs 3.00 for the unskilled in 1953-54, and in 1954-55 it decreased to Rs 3.00 to 5.00 for the skilled and Rs 1.50 to Rs 2.00 for the unskilled. The following table gives the average wage-rate of agricultural labourers during 1950 to 1960:-

Sl. No.	Taluk	1950 Rs. P.	1952 Rs. P.	1955 Rs. P.	1956 Rs. P.	1958 Rs. P.	1960 Rs.P.
1	2	3	4	5	6	7	8
1.	Channapatna	0.75	1.00	1.25	1.25	1.50	1.50
2.	Devanahalli	1.00	1.12	1.12	1.25	1.37	1.37
3.	Dodballapur	1.25	1.25	1.00	1.00	1.25	1.25
4.	Hoskote	2.00	1.50	1.50	1.50	1.50	1.50
5.	Kanakapura	0.75	0.75	1.00	1.25	1.25	1.50
6.	Magadi	1.25	1.25	0.88	0.88	1.25	1.25
7.	Nelamangala	1.12	1.12	1.00	1.00	1.25	1.37
8.	Ramanagaram	0.75	1.00	1.25	1.25	1.50	1.50

On the whole, between 1930 and 1960, the percentage rise of wages was nearly 305.4 in Channapatna, 500 in Kanakapura, Ramanagaram and Nelamangala taluks, 270 in Devanahalli and Magadi taluks, 238 in

Dodballapura and only 200 in Hoskote taluk. The smaller percentage of rise in Hoskote taluk was due to the higher wage rate at Rs 0.50, having existed in the early years of 1930s.

NON-AGRICULTURAL WORKERS

The wages of non-agricultural workers had also increased substantially between 1930 and 1960. Their wages were comparatively higher than those of agricultural labourers both in 1930 being Rs 0.37 and in 1960, being Rs 2.00 in the taluks of Channapatna, Ramanagaram and Kanakapura. Similar rates had existed in other taluks also with marginal variations. Between 1950 and 1960, the average wage of non-agricultural worker was between Rs 0.75 and Rs 2.00 in Channapatna and between Rs 1.00 and Rs 2.00 in Kanakapura and Ramanagaram taluks. In other taluks almost the same wages with slight variations existed.

During the 1960s and subsequent decades, wage rates have registered an upward trend in all fields of work. The rising prices and the unbearable increase in the cost of living, increasing supply of money in the economy due to expansion programmes of the governmental and non governmental, public and private undertakings, crores of rupees of investment in Plan schemes which may not be essentially production oriented, huge investments on large scale and heavy industrial undertakings which involved a longer period of gestation, general rise in the level of income, etc., had been only a few of the causes for the higher wage rates. The demand of the wage earners for higher wage rate and other benefits as a result of the agitations through the trade unions resulted in increased wage structure in several organised industries as a chain reaction. The Directorate of Economics and Statistics has been collecting the average rate of wages since 1965, for agricultural and non-agricultural labourers in each of the districts selecting a few villages from each taluk. According to the compiled information, the average wage per day for a field labourer in the erstwhile Bangalore district which contained all the taluks of the (rural) district of Bangalore increased from Rs 2.13 for a male in 1967 to Rs 3.93 in 1975, from Rs 1.48 to Rs 3.08 for a female and from Rs 1.12 to Rs 1.96 to a child labour in the corresponding year, registering about 84.5, 108 and 75 per cent of increase in respective category. Under the skilled category, the wages for the above period of 1967-1975 varied from Rs 5.08 to Rs 6.35 for a blacksmith and from Rs 5.76 to Rs 7.29 for a carpenter, thereby indicating a percentage rise of around 25 per cent in respective groups. The range in the average wages (in rupees) in respect of other agricultural labourers from 1967 to 1975 was from Rs 1.87 to 4.03 for a male, Rs 1.29 to 3.07 for a female and Rs 1.07 to 1.97 for a child

labourer, and for herdsmen, the range was Rs 1.23 to 2.82 for a male, Rs 1.06 to 2.09 for a female and Rs 0.93 to 1.50 for a child labourer. These above average rates practically existed with a marginal variation in the rural district. From 1976 and onwards, various jobs in agricultural operations were divided into four classes i.e. A, B, C and D according to the nature of the job and the average wages under each class of the job were worked out. From 1976 to 1985, these average wages (in rupees) for the erstwhile Bangalore district varied from 4.45 to 7.83 for A class, 3.65 to 7.31 for B class, 2.00 to 5.55 for C class on drylands, from 5.25 to 7.74 for A, 4.50 to 7.76 for B, 2.20 to 5.52 for C on wetlands. The rates of wages on garden lands varied from Rs 2.20 to 6.50 in 1976 for A to D class of work and from Rs 7.34 to 9.27 in 1984 for corresponding classes. The average wage rate which ranged in the rural district for 1986 and 1987 for labourers working on various jobs under each class are given in Table V.

In respect of skilled workers, the average daily wages (in rupees) for 1987 (with wages for 1986 in brackets) were 23.55 (18.86) for a carpenter, 20.61 (15.84) for a blacksmith and 7.52 (5.42) for a *mochi*.

MONTHLY WAGES

Monthly wages or salary was also in vogue during the last quarter of the 18th century. Under Tipu's new administration, an Amildar's pay was 10 pagodas (52 grain gold coin) and in his office, the monthly pay of other officials was (in pagodas) five for a Sheristedar, two for a *gumasta* or a *munshi*. Likewise, in Asof's (Governor) cutchery, the Asof's pay was 50 to 60 pagodas, and the pay for other officials was (in pagodas) 25 to 30 for Sheristedar, eight for a *gumasta/munshi*, two for a *golla/shroff* and five for a *kazi*. As Buchanan remarks a Gowda (village headman) was paid 20 fanams (or two pagodas) a month around 1800.

Around 1835, the pay of a Trooper in Mysore horse was Rs 20.00. About 1862, a first class Sepoy got Rs 7.00 per month and a second class Sepoy Rs 6.00 only. During 1855 and 1865, the average monthly wage-rate for Postal Runners and Postmen was Rs 7.00. From 1870, several pay rates from Rs 7.00 to Rs 12.00 came to force for different categories of workers which by 1904 got enhanced to the range of Rs 9.00 to Rs 15.00. Between 1905 to 1913, the pay rates increased ranging from Rs 10.00 to Rs 20.00. Considering the wage-rate of 1875 as the base= 100, the index had risen from 83 to 176 between 1855 to 1913, though the index decreased during 1907 to 129 from 137 in 1904.

During 1862-63, the pay of an Amildar of a taluk was Rs 175 per month excepting in Channapatna and Ramanagaram taluks where he was paid only Rs 100. In the case of other officials, the pay was Rs 40 to a Paishkar, Rs 35 to Sheristedar, Rs 20 to a Munshi, Rs 15 to a Gumasta, Rs 10 to a Shroff, Rs five to a Gollar, Rs seven to a Daffedar and Rs four to a Peon. In the Medical Department about 1918-19, an Assistant Surgeon was paid Rs 120 to 360, Rs 80 to 100 for a medical graduate, Rs 75 to Rs 200 to a lady Apothecary. The Police Department during 1921-22 paid a Constable from Rs 12 to Rs 16 and Rs 21 to Rs 24 for a Daffedar. The pay of a Sub-Inspector and Inspector varied from Rs 46 to Rs 56 and from Rs 68 to Rs 150 respectively. An upward revision in 1929-30 and 1932-33 effected increase in pay varying from Rs 15 to Rs 17 for a Constable, from Rs 21 to Rs 30 for a Daffedar, from Rs 50 to Rs 80 for a Sub-Inspector and from Rs 100 to Rs 150 for an Inspector. In 1920, a Clerk would get from Rs 20 to Rs 50 per month, a menial from Rs 7.00 to Rs 9.00 in all the Departments. In the Education Department, ever since 1908, a Primary School Teacher got Rs 10 per month. Prior to 1941, Primary Teachers were appointed on fixed salary of Rs 15.00 per month and from 1.7.1941 a graded scale of Rs 15-1-20 was allowed. In 1934, the pay scale of Assistant Inspectors was reduced from Rs 75-10-125 to Rs 35-3-65-5-100. By 1942-43, the minimum pay of a graduate teacher was Rs 45 and that of a post-graduate was Rs 75. On 13.6.1941, the revised grades were given and the minimum pay of a graduate teacher in high schools was Rs 35 in grade 35-3-65-5-100.

The post-war (II) years and the later decades of planned economy witnessed several revisions of pay scales effected by the State Government to its employees. Prior to the implementation of equated pay scales after Re-organisation which were effective from 1.1.1957, the pay of a Peon was Rs 18.00 per month and that of a Primary Teacher was Rs 30.00. In other categories, the pay was Rs 40.00 to a Second Division Clerk and also to trained S.S.L.C. Teacher, Rs 60.00 to a Ist Division Clerk. The following table gives the minimum basic pay of some categories of employment as revised often:

Category of employment	as on 1.1.57	as on 1.1.61	as on 1.1.70	as on 1.1.77	as on 1.1.82	as on 1.7.86	% rise
Peon	25	50	65	250	390	780	3020
Daffedar	30	55	80	280	410	810	2600
Driver	45	70	80	280	450	870	1833
Police							
Constable	30	65	80	300	490	960	3100

Police Head							
Constable	40	85	90	400	630	1,190	2875
Primary							
Teacher	50	80	100	340	550	1,040	1980
Clerk II							
Division	50	80	90	300	490	960	1820
Typist	55	80	90	300	490	960	1645
Clerk I							
Division	75	110	130	400	630	1,190	1486
Graduate							
Assistant	75	130	175	500	750	1,400	1766

Note:- Besides the basic pay, Dearness Allowance will also be paid based on the cost of living index.

MINIMUM WAGES

Many aspects like exploitation of labourers by employers, seasonal unemployment in agriculture and certain manufacturing concerns, prevailing barter exchange in most of the rural areas, etc., have compelled the Central Government to enact the Minimum Wages Act in 1948 and to empower the State Governments to fix and revise the minimum wages as and when it becomes necessary. Among the several industrial categories covered by the Act, a few employments prominent to the district are given below with some details of the wages.

In agriculture, the minimum wage as revised from 12-7-1988 for various agricultural operations ranged (in rupees) from 12.00 to 15.20 for work on dry lands, 13.25 to 16.40 on wet lands, 14.50 to 16.40 on garden lands for 'A' class works, 12.00 for 'B' class works on all types of lands, and from 12.60 to 17.65 for 'C' class of works. Various kinds of works as detailed under class A, B and C can be available from the labour offices. Residential labour was fixed at Rs 227.00 with food and clothing and Rs 287 without them per month. Exhibition of films being the important sector in the district and since Channapatna, Dodballapura and Kanakapura towns would come under Zone IV, the wages (with effect from 24.5. 1984) for various categories of workers ranged from Rs 291.70 to 407.40 per month. In other places and in touring talkies, the wages were fixed from Rs 268.90 to 397.55. In the district, residential hotels and catering houses were covered by the revised Act from 14.2.1986 and all the places in the district belonged to Zone C. The wages ranged from Rs 247.00 to 380.00 per month. When food was served to them Rs 75.00 was deductible. Public Motor transport workers had been fixed the revised minimum wages (in rupees) per month with effect from 24.5.84,

according to which 390 to 420 was payable for operational staff, 360 to 420 for ministerial staff and 270 to 430 for workers in workshops. Sericulture being prominent and extensive in the district, the revised daily wages for several categories of workers with effect from 6.6.84 were from Rs 13.00 to 15.00 in silk farms and gardens, from 9.50 to Rs 14.00 in nursery, from Rs 13.00 to 14.00 in grainages, rearing centres and cocoon markets. Tile manufacturing being a prominent field in some taluks, the revised wages per day were fixed from 11.3.87, at Rs 22.00, Rs 20.00 and Rs 16.00 for the skilled, the semi-skilled and the office staff, and the unskilled respectively.

Engineering industry workers excluding those of automobile and foundry were fixed the minimum wages from 18.2.87 and it was Rs 26.00 for the highly skilled, 16.50 for the skilled, 13.50 for the semi-skilled and Rs 12.50 for the unskilled in the places of the district which were in Zone III. Beedi rolling being prevalent in a few taluks, the wages as fixed from 25.7.86 were Rs 11.50 per 1,000 beedies rolled Rs 25.00 for wrapping one lakh beedies or Rs 292.50 per month. For other categories of workers, the monthly wages ranged from Rs 292.50 to 499.50. Hospitals and nursing homes were covered under the Act from 26.10.87 and the monthly wages ranged from Rs 500 payable to a scavenger/gate keeper to Rs 1,136 payable to a doctor. Shops and commercial establishments were brought under the Act from 19.8.87 and its workers were fixed wages (in rupees) of 599.25 and 584.20 in group I, 525.75 and 503.70 in group II, 469.70 and 458.25 in group III, 444.70 and 435.25 in group IV, 408.75 and 389.75 in group V, 398.75 and 378.75 in group VI at the places of the district which were in Zones III and IV respectively. Gunny bag stitching was fixed at Rs 0.70 to 0.80 per bag. Drivers and Attenders were fixed Rs 464.75 in Zone III and Rs 437.75 in Zone IV. Clubs like recreation clubs etc., were brought under the Act from 26.10.87 and the monthly wages fixed for the various categories of workers varied from Rs 494.00 to 602.00, and Rs 777.00 per month for the manager. Bakery was covered by the Act from 26.10.87 and its different employees were allowed the revised wages from Rs 325.00 to 450.00 in the district which comes under Zone III. Confectionery workers also were allowed from 26.10.87 a revised minimum wage varying from Rs 325.00 to Rs 450.00 per month in the towns of the district. Tailoring came under the Act from 13.6.86 and its various categories of workers were allowed the revised daily wages from Rs 16.00 to 14.50 for the highly skilled, 15.50 to 14.00 for the skilled, 14.00 to 12.00 for the semi-skilled, and 11.00 to 10.50 for the unskilled in the places of the district under the Zones III and IV respectively. The office staff were allowed Rs 12.00 and 11.00 in the corresponding Zones. Soil conservation for agriculture was covered under the Act and as revised from 31.10.84, the minimum wages for

different jobs under the piece rated basis ranged from Rs 3.00 to 65.00, though the daily wage-rate should not be less than Rs 10.00 for eight hours of work for any worker. In the case of other employments, Table VI presents some salient particulars.

In addition to the basic wages, cost of living allowances at prescribed rates should be payable as envisaged in the Act for the different wage-slabs. In spite of the enactment of the Act, wages paid now-a-days are the result of mutual agreement between the employers and the employees or the trade union on the employees' behalf. Besides the wages, several incentive measures, facilities and advantages in kind are also provided in most of the establishments to keep their employees happy and contented. The existing wages of workers in some establishments are given in Table VII.

EMPLOYMENT

The Bangalore (rural) district was primarily dominated by the agricultural activities and as such from the long past, agriculture and its allied activities were the major sources of employment. In the early period, several jobs existed in the temple services for both men and women on yearly remuneration system in cash, or in land grants. The princes and their feudatories offered employment to various categories of workers like soldiers, watchmen, palanquin bearers, palace servants including women and also artists, musicians, etc. Construction of temples, fortifications, tanks and tank bunds provided employment to the skilled and the unskilled. Several other crafts, trades and vocations, which have continued even now existed. Spinning was a part-time vocation for all sections of women.

During 1800, apart from agriculture and allied activities, manufacture of steel wires for musical instruments, glass warēs, etc., in Channapatna, mining of iron and related manufacturing units of iron and steel in Magadi provided employment to many persons. During the early decades of 19th century, men from traditional military families were employed to guard small forts and villages. These people were also required to work as palanquin bearers and also as postal runners in the Mysore Anche or provincial postal service. The State Government provided several categories of employment both white collared as well as manual. The *kamatis* who did repairing and services, the *khalihats* who did general services were as a body turned over to the Maramat Department in 1841. The period of Mark Cubbon after 1834, was remarkable for busy activities in agriculture. Establishment of Industrial undertakings and expansion of trade and construction activities including roads and railways increased the employment

avenues manifold of both general and technical nature. The famine relief works in 1876-78 provided jobs to thousands and many skilled craftsman also joined these public works as wages were assured. The 1891 Census mentioned the existence of several employment categories other than those based on agriculture and allied sector. Some of the more noted were priesthood, temple service, trading, gold-smithy, hair dressing, tailoring, weaving, laundry, live-stock rearing, oil-pressing, pottery, fishing, toddy tapping, leather works, stone dressing, etc. In 1918-19, apart from 2,45,018 persons in agriculture as a source of employment, 6,744 persons had engaged themselves in trade, 4,958 in weaving, 1,174 in pottery, 354 in carpentry, 34 in smithy, 8,043 in rearing of silk worms and silk reeling, 18,457 in casual labour and 16,977 in other occupations. Around this period of 1918-19, 591 oil mills, 632 sugarcane mills, 9,097 irrigation wells, 1,647 looms for cotton weaving, 163 for silk weaving and 372 looms for woolen weaving and 364 reeling basins of silk existed.

During the years of post-World War II, many industrial units both small and large scale sprang up in the district creating considerable employment opportunities. According to the 1941 Census, the industrial occupations other than agriculture and mining in the district (inclusive of Anekal, Bangalore South and North taluks) provided employment to 24,686 workers, of which, 6,087 were in textiles (mostly in Bangalore city), 4,805 in dress and toilet, 2,373 in building activities, 2,107 in ceramics, 1,687 in wood, 1,147 in metals, 1,630 in hides and skins, 1,322 in food and the remaining 3,528 in miscellaneous and undefined industries. Between 1945 and 1947, the average daily employment of workers in the perennial and large industrial establishments in the rural district increased from 1,710 to 3,896 due to new establishments coming up in these years and also due to the expansion of existing units.

After Independence, economic plans were implemented from the 1950s and the employment avenues increased multifold in sectors based on agriculture and industry, particularly during and after the II Five Year Plan. During the subsequent plan periods, greater stress was laid on schemes which were employment oriented, in order to achieve the objectives of reducing the income disparity and attaining the social justice.

About the year 1969-70, there were 200 manufacturing units in the Rural district having about 3,350 employees as assessed by the Department of Industries in collaboration with Mysore Chamber of Commerce and Industry, Bangalore. The Institute for Social and Economic change in Bangalore while attempting to evaluate the inter-

district backwardness, mentioned that nearly 4,210 workers had been on the roll during 1979-80 in about 243 manufacturing units inclusive of small scale industries. In 1983-84 and 1985-86, the number of registered factories were 447 and 451 respectively having 11,203 and 14,673 workers in the corresponding years. By 1986-87 and 1987-88, the number of employees in the registered factories had increased to 15,473 (458) and on to 16,679 (475), the figures in the brackets being the number of registered factories in respective years.

EMPLOYMENT EXCHANGE

In fact, there are no employment exchanges with exclusive jurisdiction of the rural district, working in the district. The employment seekers are to register their names in the six employment exchanges which are having the jurisdiction of the erstwhile Bangalore district. These exchanges are located in Bangalore city and they are:- 1) District Employment Exchange (General) under an Employment Officer, 2) District Employment Exchange (Technical) under an Employment Officer, 3) Sub-Regional Employment Exchange (for S.S.L.C and above qualification) under an Assistant Director, 4) Professional and Executive Employment Exchange under an Assistant Director 5) Special Employment Exchange for the physically handicapped under an Assistant Director and 6) Special Employment Exchange for the SCs. and STs. under an Assistant Director. The last three exchange offices have state wide jurisdiction. Besides these exchanges, two more exchanges, one each at Bangalore University and Bangalore Agricultural University are functioning in Bangalore, guiding the employment seekers. The Directorate of Employment and Training in Bangalore and also its subordinate offices are not compiling particulars of registered employment seekers exclusively for the rural district, though only the number of applicants on the live register as at the end of December 1975 only are available being furnished to the Government in respect of the taluks of the erstwhile district. The number of applicants on the live register as on 31.12.1975 under educational standards for the eight taluks (including the four transferred hoblis) of the district are as follows:

Taluk	Graduates and post-graduates	Matri- culates	Others	Illite- rates	Total
Channapatna	151	688	803	841	2,483
Devanahalli	62	322	634	521	1,539
Dodballapura	127	634	597	745	2,103
Hoskote	82	434	450	495	1,461

Kanakapura	131	642	403	531	1,707
Magadi	120	829	493	489	1,931
Nelamangala	113	768	651	772	2,304
Ramanagaram	108	529	646	485	1,768
Total	894	4,846	4,677	4,879	15,296

Source: Taluk-wise plan statistics, District and Regional Planning Unit, 1976.

PRICES

Prices of food grains play an important role in the consumption pattern of common man. In the district, *ragi* tops the list of the dry land crops followed by jowar. Rice is important among the wet land crops, though *ragi* is extensively grown. According to the enquiry of Buchanan during his travels at Ramagiri near Ramanagaram in 1800 young goat male or female would sell at a price of five or six fanams earlier to 1800 and a five-year-old ox at 25 to 30 fanams or a cow at 20 to 25 fanams. In 1800, the price of ox was 40 fanams, cow 30 fanams, honey at two seers a fanam and wax at 2 1/2 seers for a fanam. Stick lac would fetch three fanams for a maund of 40 seers. During 1833, soon after the assumption, the province suffered from drought for a short period and during this year, *ragi* was sold at 30 3/4 seers and rice at 16 1/2 seers a rupee. Around the later half of the 19th century, prices of *ragi*, rice and jaggery underwent considerable fluctuation. During 1852-53 and 1872-73, around Bidadi of Ramanagaram taluk *ragi* was available at 90 seers and 59 seers a rupee in respective years. Similarly, rice could be fetched at 64 seers and 31 seers per rupee in corresponding years. The price of jaggery ranged between one rupee and Rs 1.37 per maund in that span. Around 1865-66, the steep rise of prices reduced the purchasing power of the rupee very much and in that year only 13 seers of *ragi* or 15 seers of rice could be got per rupee. From 1867-68, the prices began falling. The rupee which could be exchanged for 14 seers of *ragi* or 17 seers of rice, would fetch about 31 seers of rice or 59 seers of *ragi* by about 1872-73. In the case of jaggery, a maund of it cost Rs 2.28 in 1866-67 and in the next year, the price came down to Rs 1.22 per maund. In the subsequent years, the price was varying marginally and a maund of jaggery was Rs 1.37 in 1872-73. Around this part of the 19th century, the variations in the prices for staple and other food grains were violent and the table VIII gives the ruling prices of rice and *ragi* in some taluks of the district where they are extensively grown (seers per rupee).

The years 1876-77, being the years of famine witnessed the price rise. About 1879-80, the prices began falling and maintained a marginal fluctuation at a lower level till 1891-92 when again a steep rise was perceivable.

Among other crops, coconuts and supari were important in some parts of the district around the latter part of the 19th century. Channapatna and Kanakapura taluks were noted for coconuts and Nelamangala, Magadi and Doddaballapura taluks for supari. Between 1860-61 and 1875-76, the price of supari varied in Nelamangala taluk, from Rs 5.00 to Rs 10.75 for the I sort, from Rs 3.90 to Rs 9.10 for the II sort and from Rs 1.50 to Rs 4.60 for the III sort per maund of 48 seers. Almost similar rates had existed in the other two taluks for supari. Around 1867-68, the first sort of supari fetched maximum average price of Rs 10.50 in Dodballapur, Rs 9.70 in Magadi and Rs 10.50 in Nelamangala taluks. The price of coconut was comparatively less in Channapatna taluk and between 1868 and 1892, the average prices per 100 nuts was RS 2.40 in the taluk as against Rs 3.25 in Kanakapura taluk. Devanahalli (Kasba) was noted for potatoes and the produce was exported to Madras through the local dealers who would buy it at Rs 10.00 per cart load of 30 maunds, but the retail price was around rupees six to eight per maund.

The average annual prices of several other commodities in Bangalore district in which all the taluks of the rural district were included were published by the Governor General in Council periodically. The prices being retail, are mentioned below in a table from the year 1873 to 1916:-

in Rupees per maund (82.268 lakhs)

Year	Rice common	Wheat	Jowar	Ragi	Gram kadalai	Tur dal	salt
1873	3.03	4.63	1.88	0.97	1.66	4.06	2.88
1876	4.12	4.04	2.25	2.28	2.47	2.66	2.99
1879	3.77	6.46	2.05	1.75	2.18	4.23	3.73
1882	3.52	3.45	1.45	1.45	1.24	2.41	3.34
1885	4.11	3.74	1.98	1.50	2.07	3.29	3.35
1888	3.43	3.94	1.68	1.18	3.21	2.50	4.31
1889	3.84	3.79	1.67	1.24	3.54	2.93	4.27
1892	5.29	5.36	2.58	2.17	4.48	4.04	3.97
1895	4.32	2.98	1.54	1.33	3.52	3.13	4.02
1898	5.26	5.56	2.57	2.25	4.26	5.19	4.04

1	2	3	4	5	6	7	8
1901	4.75	4.71	NA	2.88	4.44	7.17	3.25
1904	3.60	3.46	NA	1.31	3.54	4.99	3.36
1907	5.07	4.53	NA	2.93	4.41	5.97	2.41
1910	5.20	5.38	NA	2.84	3.96	5.89	2.45
1913	7.27	6.40	4.00	2.95	4.98	6.49	2.30
1914	7.19	6.15	4.53	3.48	5.33	7.12	2.50
1915	6.32	6.73	2.99	2.81	6.15	8.73	2.42
1916	6.22	5.75	2.86	2.55	5.73	5.89	2.54

During the above period of four decades, violent fluctuations had occurred in prices. The peak and the lowest price points in rupees per maund of 40 seers were 7.27 in 1913 and 2.80 in 1875 for rice, 6.73 in 1915 and 2.98 in 1895 for wheat, 4.60 in 1877 and 1.39 in 1883 for jowar, 4.74 in 1877 and 0.97 in 1873 for *ragi*, 6.15 in 1915 and 1.11 in 1881 for Bengal gram, 8.73 in 1915 and 2.11 in 1881 for tur dal and 4.31 in 1888 and 2.10 in 1908 for salt.

The post-war years of First World War had not much affected the stability of prices in the parts of the district. If there had been any fluctuation, in the commodity prices, it was only a matter of marginal variation and these variations were mostly due to the seasonal variations with rise of prices in the bad season. Thus between 1918 and 1924, the average prices of *ragi* and paddy in rupees per maund of 3,200 tolas were 2.22 and 2.16 in Hoskote, 3.63 and 3.07 in Devanahalli, 2.01 and 3.33 in Dodballapura, 2.22 and 2.16 in Nelamangala and 3.02 and 2.00 in Magadi. During these years, the fluctuations in prices depended upon the agricultural produce which in turn depended upon the seasonal conditions.

The world-wide depression of the 1930s had its adverse effects on the market conditions resulting in steep fall in prices of agricultural commodities particularly in the early years of the decade and the district was no exception. It was the Second World War of 1939 to 1945 which activated the economy and stimulated the price level to go up gradually. The prices almost touched rock-bottom level during 1934, and from 1939 and onwards there occurred an appreciating trend and the rise of prices was rather more steep after 1945. The quantity of *ragi* and rice in seers (80 tolas) per rupee during the year 1934 in some taluks respectively was 28.0 and 8.00 in Hoskote and Devanahalli, 32.0 and 11.0 in Dodballapur, 32.0 and 10.0 in Nelamangala and 30.0 and

10.0 in Magadi taluk. In Channapatna and Kanakapura taluks, 21 seers of ragi and 9.3 seers of paddy were obtainable per rupee and this price continued for five to six years from 1930.

The quantity (in seers) of some staple commodities obtainable per rupee during the Second World War was 6.80 (6.00) of rice second sort, 14.70 (18.00) of ragi, 12.50 (12.60) of jowar and 6.80 (6.90) of Bengal gram in 1939-40 and the figures in the brackets refer to the quantity available in 1940-41. In the later years, the prices began rising gradually. With the introduction of rationing, rice, ragi, jowar were distributed at controlled rates. The quantity obtainable per rupee before 10-4-1952 and on and after this date onwards respectively were 2.37 and 1.75 seers of rice (II sort), 2.00 and 1.5 seers of rice (I sort) and 4.5 and 4.00 seers of ragi or jowar. From 16-8-1953, the Government rate per seer rose to Rs 0.60 for rice II sort, Rs 0.65 for rice I sort, and Rs 0.30 for millets. The subsequent periods witnessed periodical rise in controlled rates. From 22-3-1954, a seer of rice II sort cost Rs 0.47, wheat Rs 0.37, millets Rs 0.30 and rice I sort Rs 0.65. During 1953-54 and 1954-55 respectively, a rupee obtained 2.09 and 2.35 seers of rice II sort, 3.63 and 4.80 seers of ragi, 3.54 and 4.44 seers of jowar and 1.90 and 2.55 of Bengal gram in the open market.

Between 1939 and 1960, in addition to the World War II and its after-effects, the economic planning from 1951-52 also had its share in rising the price level. The percentage of rise in prices of rice and ragi between 1939 and 1960 was respectively 375 and 509 in Hoskote taluk. In other taluks, the percentage rise was 233 for rice and 433 for ragi in Devanahalli, 500 and 467 in Dodballapura, 457 and 533 in Nelamangala and 457 and 567 in Magadi for respective commodities. In Channapatna and Kanakapura taluks, the percentage rise was 670 and 800 for ragi and 324 and 375 for paddy in respective taluks. The average annual prices of rice and ragi between 1947 and 1960 in rupees per seer were as given in Table IX.

The Directorate of Economics and Statistics collected the retail and wholesale prices of agricultural commodities from 1962-63 under four categories namely, cereals, pulses, oilseeds and others, selecting a few representative villages of each taluk. Since the erstwhile Bangalore district had all the taluks of the rural district, the average retail prices so collected for the said district could as well serve as fair indicators of the price trend in this rural district. A table of retail prices for some commodities of common use are given

from 1963 to 1988 of which the figures for 1983 and onwards in the table actually refer to the rural district and those of earlier years are of the erstwhile Bangalore district as given in Table X.

PRICE OF SILK

The Ramanagaram Silk Marketing Centre founded on 28-11-1980 occupies the second place in the volume and value of silk transaction of the State. Ramanagaram has also been a centre for cocoon marketing from a long time. The average maximum and the minimum prices per kilogram of ordinary reeling cocoons respectively were (in rupees) 31.10 and 12.60 in 1976, 21.30 and 8.90 in 1977, 22.20 and 6.90 in 1978, 23.40 and 9.30 in 1979, and the average price of bivoltine cocoons per kg was 33.10 and 18.60 in 1978, 35.20 and 21.70 in 1979 and 35.50 and 20.20 in 1980. Regarding the price of raw silk in the Silk Exchange at Ramanagaram, the following table gives the quality-wise transactions:

Price per kg in Rupees.

Year	Filature silk	Charaka silk	Duplon silk
1980-81	294.75	101.27	-
1981-82	441.84	331.73	192.10
1982-83	428.36	334.84	247.62
1983-84	458.70	347.77	277.29
1984-85	466.64	381.44	288.62
1985-86	513.73	384.27	311.94
1986-87	532.65	374.93	308.17
1987-88	629.31	473.11	432.57

WHOLESALE PRICES

Normally, wholesale price mechanism differs from the case of retail prices and as such, a certain gap exists between them. Wholesale prices are considered to be more sensitive to the changes in industrial and trade atmospheres. Variation in the commodity price during early period was practically a function directly connected with agricultural conditions and seasonal variations but in the present century from 1905 and onwards in particular, it has become an international phenomena. During the last years of the 19th century, the annual average wholesale prices of certain staple food articles in the erstwhile Bangalore district which included all the eight taluks of

the rural district of Bangalore were Rs 53.04 per 10 maunds (82.268 lbs) of rice and Rs 22.62 per 10 maunds of *ragi* in 1897. By 1904, the prices had gone down to Rs 35.46 for 10 maunds of rice and to Rs 13.36 for the same quantity of *ragi*. In respect of other commodities, the average price per 10 maunds of commodity in 1897 and 1904 respectively (in rupees) was 31.91 and 16.80 for Bengal gram, 50.8 and 58.05 for *jinjili*, 409.49 and 342.85 for ghee, 63.23 and 58.04 for *gur*, 206.46 and 205.71 for cotton, 340.80 and 311.42 (inclusive of Octroi of Rs 103.00) for tobacco leaf, and 73.08 and 39.22 for turmeric. During 1905 to 1913, the price increased considerably though there was a little fall in prices around 1910. Thus in 1913, the annual average price per 10 maunds of rice was Rs 70.00 and in respect of others, it was Rs 28.92 for *ragi*, Rs 31.17 for Bengal gram, Rs 77.83 for *jinjili*, Rs 654.98 for ghee, Rs 342.86 for cotton, Rs 240 (including octroi) for tobacco leaf and Rs 154.98 for turmeric. The price of plough bullocks per pair increased from Rs 91.67 to Rs 150.00 between 1897 to 1913.

During the period of First World War and the post-war years, the effect on the prices was moderate. In the wholesale market, during the post-war years of 1918-1924, *ragi* and paddy would be available for around Rs 22.00 and 21.00 in Hoskote and Nelamangala taluks, Rs 36.00 and 30.00 in Devanahalli, Rs 20.00 and 33.00 in Dodballapura and Rs 30.00 and 20.00 in Magadi taluks.

As a consequence of economic depression, the commodity prices at the wholesale market also fell considerably. *Ragi* and paddy per 10 Bengal maunds were priced at Rs 20.00 and 42.50 in Channapatna and Kanakapura taluks upto 1939-40. By the end of the war in 1945, the prices in these taluks had gone up to Rs 60.00 for *ragi* and Rs 68.00 for paddy for ten maunds. The prices being continuously inclining, the sale value of *ragi* and paddy by 1947 was Rs 75.00 and Rs 68.00. After political independence, the implementation of economic plans and the increased supply of money for financing the plan programme, etc., caused a steep rise in prices. The following table shows the average wholesale prices of *ragi*, paddy and groundnut during the 1930s to 1960s in Channapatna and Kanakapura taluks:

in Rupees per Bengal maund

Year	Channapatna			Kanakapura		
	Ragi	Paddy	Ground-nut	Ragi	Paddy	Ground-nut
1	2	3	4	5	6	7
1931	2.00	4.25	4.50	2.00	4.25	4.50
1934	2.00	4.25	4.50	2.00	4.25	4.50
1939	2.25	5.00	5.50	2.00	4.25	4.50
1941	2.25	5.00	5.50	2.25	5.00	5.50
1944	6.00	6.80	5.50	6.00	6.80	5.50
1948	7.50	6.80	5.50	7.50	6.80	5.50
1952	9.50	8.50	9.00	7.50	6.80	9.00
1956	11.40	12.80	14.70	11.40	8.50	14.70
1958	13.30	15.50	14.50	13.30	12.80	14.70
1960	15.50	17.00	22.50	15.20	15.50	22.50

In respect of other taluks, the average wholesale prices of rice, ragi and horsegram during 1930 -1960 are tabulated in Table XI.

The wholesale prices of staple commodities had registered a substantial appreciation between 1961 and 1968. In 1969 and 1970, the prices had declined to a little extent only to rise to a higher level in 1971. The upward trend was at its peak by 1975. During the years of 1976 and 1978, the price level was comparatively lower than it was in 1975, but in subsequent years, the upward trend was much more than in the earlier decades. The wholesale prices for the rural district of Bangalore have not been exclusively worked out as the district has been recently carved out of the erstwhile Bangalore district. Therefore the wholesale prices pertaining to the erstwhile Bangalore district for some commodities in respect of a few years are tabulated in Table XII to indicate the general trend of wholesale prices.

Large quantities of foodgrains arriving at the regulated market centre are either auctioned or disposed of by tendering quotations. At present, Bangalore, Channapatna and Dodballapura markets cover the entire area of the district except Magadi taluk which is attached to Kunigal market. However, the growers are free to take their produce to any market place at their will. In 1976-77, only at Bangalore and

Channapatna regulated markets existed and the farm harvest price as it is so called, of a few commodities in Bangalore and Channapatna respectively was (in rupees per quintal) 105.00 and 118.5 for paddy, 125.00 and 99.9 for *ragi*, 110.00 and 122.0 for horsegram, 250.00 and 180.00 for groundnut (unshelled), 210.00 and 162.90 for jaggery, 700.00 and 567.1 for coconuts per 1,000, 280.00 and 238.60 for tamarind, 100.00 and 90.9 for potatoes, 80.00 and 39.4 for onions and 1,000.00 and 813.50 for dry chillies. The table (XIII) gives the farm harvest prices of the commodities that arrived at the markets in Bangalore, Dodballapura and Channapatna for 1982-83, 1986-87 and 1987-88.

PRICE STABILISATION

The economic depression of the 1930s required the Government to arrest the falling prices of food and other essential commodities. So several measures had to be taken to relieve the growers from the adverse effects of the depression. On the other hand, during the later half of the 1940s, the problem was to restrict the upward movement of the prices. Therefore, among the measures intended to control the rising prices, fixing the prices of essential commodities from time to time, setting up the district committee at the district level, establishing a separate Department of Civil Supplies in 1942-43 for ensuring equitable public distribution system, introduction of quota system of essential food grains in 1942 were important. During 1944-45, further steps like Promulgation of Food Acquisition (Harvest) Order, extending ration system to towns having a population of 10,000 and above, imposing severe punishments on the offenders who infringe the orders of Hoarding and Profiteering Prevention (Emergency) Act, etc., were adopted. Around 1946, decreasing the scale of rations to the bonafide card holders, opening free kitchens in scarcity areas, enforcing austerity measures of Mysore Food (restriction in the service of meals in catering establishments and others) Order, passing statutory orders to regulate and to control the supply and also the prices of goods like cloth, paper, jaggery, bread, oil and oilseeds, potatoe, onion, tamarind, chillies etc., were some of the steps implemented. From 1-7-1948, the statutory rationing was removed in towns and however, for the benefit of the common public, informal rationing was continued. In November 1948, Articles of Food Acquisition (Harvest) Order 1948 was enforced and procurement prices of paddy and other essential articles were increased. In 1949, a separate Department of Food Production was set up to ensure more effective implementation of "Grow More Food" Campaign which was started in 1942, to discourage the growers from raising commercial crops in preference to food grains. From 1-1-1950, supplies of imported food grains on the

basis of pool prices were given to the public and in 1950-51, ban on polishing of rice was imposed. Restriction was imposed on the travelling public from transporting even small quantities of food grains. From 12-8-1952, the statutory rationing was again called off and procurement of rice through mill owners was started. During 1954 and 1955, rice and ragi were supplied to the staff of the State Government on credit basis.

From 1956-57, Government of India supplied to the State, imported rice under its price stabilisation scheme and the State on its part imposed restriction on the inter-district movement of rice. Enactments to regulate the supply and also the prices of several commodities such as cloth, cement, etc., were made. From 1965-66, the State Government announced its food policy and consequently procurement of food grains, informal price control measures, controlled distribution of various articles of civil requirements, effecting regulations connected with licensing of dealership, display of prices and stock position of commodities of essential consumption, etc., were being taken up. Even today, many of these above mentioned measures and many more such steps to ensure protection of consumers are in force to keep the prices under control and also to see that the consumer should not be exploited for his ignorance of the current ruling prices in the market. Of late, several fair price depots and Janata Bazaars are being operated in many places in whom the consumer could be more confident of his interests being safe guarded.

LAND VALUE

Around the 13th century, in the old Mysore area, the land measuring one *kamba* was valued at 3 *pana* in 1231 and 3 *gadyanas* in 1226, 80 *kambas* valued at 10 *gadyanas* in 1262. The value of land just like any other consumer good, has appreciated over these decades particularly in the last quarter of this century. Some of the factors contributing to this appreciation are increased purchasing power of the people due to increased income, decreased purchasing power of a rupee, increased land-man ratio on account of rising population, conversion of agricultural land for industrial and urban development over the years, etc. Vicinity of a piece of land to a newly created road or railway line and increased irrigation facility have also been factors leading to price rise. Besides, the craze of status in the society as an owner of land had its share in the increased demand for land. In the later decades, the splitting of the joint families into small independent units had also contributed to the increased demand for land and building sites particularly in urban areas.

In 1941, the Census department conducted an economic survey of selected villages in the district when it enquired about the then current value of land in villages. In these villages, the average value of land ranged between Rs 40.4 and Rs 338.1 per acre of dry land, Rs 101.3 and Rs 620.4 per acre of wet land and Rs 113.0 and Rs 740.5 per acre of garden land. The nearness of the towns had caused much appreciation of value just as in the case of Chikkamalur which is near Channapatna town. The average value of dry, wet and garden land respectively per acre in the village were (in rupees) 55.2, 101.3 and 114.1 in Hindiganal of Hoskote taluk, 74.2, 268.2 and 331.9 in Bettakote and 54.9, 194.4 and 202.3 in Viswanathapura of Devanahalli taluk, 58.9, 191.1 and 210.1 in Koneghatta, 71.9, 241.6 and 283.85 in Doddabelavangala and 44.7, 287.5 and 220.8 in Gunjur of Dodballapura taluk, 58.4, 307.7 and N.A. in Gabbur, 61.9, 198.8 and 190.0 in Narsipur and 122.2, 205.7 and 113.0 in Obalapura of Nelamangala taluk, 64.4, 277.3 and 158.5 in Halasabele, 40.4, 108.0 and 140.0 in Attingere and 79.1, 430.1 and 260.0 in Doddamudigere of Magadi taluk, 338.1, 620.4 and 740.5 in Chikkamalur and 161.2, 393.4 and 336.0 in Mogenahalli of Channapatna taluk, 114.6 for dry land in Archakarhalli, 75.7, 317.9 and 317.9 in Sugganahalli and 83.2, 473.7 and 401.5 in Kylanacha of Ramanagaram taluk, 99.3, 458.1 and 140.0 in Marasandra, 79.3, 200.0 and 392.0 in Hosadurga, 142.3, N.A. and 225.5 in Chikkalahally and 61.4, 337.2 and 276.6 in Chikkamaralawadi of Kanakapura taluk.

Immediately prior to the second revisional settlement i.e., 1961, the average price of dry, wet and garden lands in the villages of the taluks have been estimated to be respectively (in rupees) 311, 910 and 1,170 in Hoskote, 463, 975 and 2,700 in Devanahalli, 470, 1,220 and 2,500 in Dodballapura and 710, 1,950 and 1,400 in Nelamangala taluks. In Magadi taluk, the average value of dry and wet land was Rs 770 and Rs 2,800 respectively. There were occasions particularly in Channapatna taluk that dry, wet and garden lands have been valued at Rs 3,500, Rs 8,500 and Rs 9,000 respectively and this was a case in particular at Akkur village.

The registrations of land transactions in some villages of taluks around the year of 1959-60 revealed that the average value (in rupees) of land was 1,417, 2,752 and 2,920 for dry, wet and garden lands in Channapatna and it was 1,010, 1,861 and 1,662 in Kanakapura and 1,334, 2,763 and 2,000 in Ramanagaram.

The sale value of land in the peri-urban areas will be more than what would be in rural areas. A survey of towns of Karnataka State conducted by Indian Statistical Institute has mentioned the sale value

of lands in the peri-urban areas of Nelamangala and Channapatna during the later half of the 1950s. According to the survey, the sale value ranged between Rs 1,000 and Rs 3,500 for wet land, Rs 250 and Rs 1,000 for dry land and Rs 3,000 for garden land in the vicinity of Nelamangala, and it was around Rs 4,000 to 5,000 for wet land, Rs 3,000 for dry land and Rs 4,000 to 5,000 per garden land around the proximity of Channapatna. The average value of land as expressed by the villagers of the respective villages during the enquiry of the Settlement Officer around 1960-61 was as given in Table XIV.

The approximate land value as declared by the transacting persons before the Sub-Registrar and as per the details of the registered documents furnished by the Sub-Registrar was as given in Table XV for the three taluks during recent decades. It is felt that in order to minimise the registration charges (expenditure on stamp paper), chances of declaration value being reduced cannot be ruled out.

SURVEYS: Education survey in Mysore 1927-28.

The first educational survey in the State was conducted in 1922 with a view to convert aided schools of each district into Government institutions in order to rescue them from gradual extinction. The second survey was conducted in 1927-28 with particular reference to Bangalore district, by K.N. Kini, an Officer of the department, being assisted by K.B. Madhava. The survey covered the rural district of Bangalore and touched several aspects such as strength of pupils, occupation of parents, particulars of drop-outs, enrolment to the primary and middle school classes, particulars of the teaching staff and their emoluments, boarding and lodging facilities to pupils, expenditure and income, etc., as at the end of March 1927. Some salient particulars about the district (taluk-wise) as revealed in the survey are given in Table XVI.

The survey report concluded that facilities of education should be extended to every village and also to every class of population. The achievements in the non-urban areas as compared with those in the towns impel greater attention to be bestowed on the public instruction of rural children. The survey advocated the elimination of single teacher schools through a process of consolidation to form a multi teacher school with norm of one teacher per class and suggested the necessity of upward revision of salary structures for enhancing the zeal and efficiency of the teaching staff.

During this period, an intensive survey was conducted in Solur, a village of Magadi taluk with a view to estimate the extent to which people who once received some education lapsed into illiteracy on

leaving the school. It was found out that 50 per cent of women lapsed into illiteracy after entering life while among men, only 20 per cent became illiterate.

ECONOMIC SURVEY OF 1941

Economic survey was conducted in 21 villages of the district as part of 1941 census covering various aspects of the village economy such as location and proximity of the village to industrial or trade centres, approachability by road or rail, size of the land holdings, means of livelihood, sources of income and pattern of expenditure, indebtedness, value of land in the village, existing wage rates in the village, etc. The villages surveyed were Hindiganal of Hoskote tq, Bettakote and Viswanathapura of Devanahalli tq, Koneghatta, Doddabelavangala and Gunjur of Dodballapur tq, Srinivasapur (Gabbur), Narasipura and Oblapura of Nelamangala tq, Halasabele, Attimere and Doddamudigere of Magadi tq, Chikkamalur and Mogenahalli of Channapatna tq, Archakarahalli, Sugganahally and Kylanchara of Ramanagaram tq, Marasandra, Hosadurga, Chikkalahally and Chikkamaralawadi of Kanakapura taluk. Agriculture was the prime occupation in almost all the villages. Out of the 2,639 families surveyed, 2,256 (85.5%) families were engaged mainly in agriculture either as cultivators or labourers and the rest of 383 families being in non-agricultural occupations. In all these villages, the earners formed 25.6 per cent of the total population (14,306) of these villages at the time of the survey and the remaining being dependents. The principal handicrafts of the villages were carpentry, oil extraction, smithy, tailoring, weaving, goldsmithy, pottery, basket making, etc. Beedi rolling was carried on by a few families of Oblapura and Mogenahalli villages. The survey also listed the various sources of income and items of expenditure in the villages and their value in rupees. Salt, kerosene and clothings were procured either locally or from outside. The survey also assessed the value of various categories of lands, livestock, etc., as also the indebtedness the village under both the secured and unsecured debts.

Conditions of agricultural workers in Archakarahalli in 1949 was studied by the Ministry of Labour of Government of India in June 1949, in order to collect data on employment, earnings, standard of living and indebtedness of agricultural labourers with a view to initiate protective measures such as fixation of minimum wages, etc. At the time of the survey, the village had a population of 557 with 86 families; of which, 49 followed agriculture and the remaining 37 engaged in non-agricultural occupations. During the slack season, roadmaking, work at the mills of Ramanagaram provided subsidiary

occupations. The average income and expenditure respectively of the agricultural families owning the land were Rs 427.4 and 488.0 per annum and in respect of the families not owning the land were Rs 421.7 and 469.0. Normally, the volume of employment in the village would be 5,400 man-days of work of which, 3,785 man-days were contributed by 45 men and the rest by 34 women. During the agricultural operations, wage rate paid was one rupee per day for men, 75 paise for women and 50 paise for children. Though payment in cash was practised, yet on certain occasions, *ragi* would be given at the rate of three seers a rupee. Indebtedness prevailed among the workers and the per capita debt varied from Rs 8.00 to 36.00. The average debt per indebted family owning land was Rs 145 and that for landless family was Rs 96.00. Expenditure on food was the major item of agricultural workers. Out of the annual average expenditure of Rs 483.2, Rs 346.5 was spent on food, Rs 76.10 on clothes, Rs 12.4 on fuel and lighting, Rs 2.3 for rent and repairs, Rs 5.7 for services and Rs 40.2 on miscellaneous items covering soaps (Rs 2.7), tobacco and pan (Rs 14.9), drinks and others (Rs 20.4), medicine (Rs 1.0) and Rs 1.2 on education.

VILLAGE SURVEY OF 1961

Iggalur of Channapatna taluk was one of the three villages taken for the survey for studying the socio-economic conditions that prevailed at the time of the survey. Iggalur had no bus service from any direction upto 1961. When a bus was introduced between Channapatna and Nurnur in 1961, the people of the village had to walk about three miles to catch the bus at Nurnur. The village had a population of 1921 of which the Vokkaligas formed a majority. The most common type of houses in the village was *thottimane* and none of the houses in the village were provided with latrines though a few of the well-to-do had a separate bathroom. Agriculture formed the major occupation followed by 314 households out of the 359 in the village. In addition to *ragi*, jowar, and millets, the major cash crops raised were groundnuts, *til*, horsegram, etc. In 1951, 97.6% of the population were engaged in agriculture and in 1961, it reduced to 95% and the rest followed non-agricultural occupations namely manufacturing, transport and commerce, etc. Between 1951 and 1961, agricultural labourers had increased from 4 to 184. About 67% of the total land owners owned only less than five acres of land each and the size of land holding was uneconomically small. The village income of Rs 1.53 lakhs was mostly derived from agriculture, the other sources being live-stock, mulberry and production of cocoons. In a couple of years, the households engaged in sericulture increased from 17 to 94 and this development of sericulture was mostly due to steady prices of cocoons in the previous decade and also the regulated market facility available at Ramnagar.

Though the village is far from urban area or town, still urban influence, particularly in the use of garments, wrist watches, cycles, radios, etc., could be perceivable in the later years of the 1950s. The average monthly income and expenditure respectively per adult male from various occupations were (in rupees) 18.7 and 18.14 in cultivating owned lands, 27.1 and 21.87 in the cultivation of lands on lease, 14.0 and 16.21 in agriculture labour, 13.0 and 13.04 in household industry, 26.25 and 23.5 in other occupations. The pattern of expenditure revealed that the villagers spent very little on education, whereas the habits like smoking, chewing and use of tobacco, use of beverages involved considerable part of their expenditure. The financing of the villagers for their productive and non-productive activities had been mostly by the private money lenders at an exorbitant rate of interest.

Survey in Aralumallige of Dodballapura taluk, a village with a population of 1,282 in 230 households, is located about three miles from the taluk headquarter town on the main road to Nelamangala. Agriculture is the main occupation followed by 89% of the people and the rest of 143 persons depended on other means of livelihood, namely, manufacture, commerce, transport and other services. Between 1951 and 1961, the dependance on agriculture increased by 10% due to increased number of cultivators of land on lease and agricultural labourers engaged in cultivation of sugarcane to manufacture jaggery. There were 642 workers distributed under principal occupations, namely, cultivation (359), agriculture labour (186), live-stock rearing (25), household industry (11), trade (12), and 49 in other services. Gur making, tailoring, gold and blacksmithy were important household industries in the village, the first one being a subsidiary occupation to 520 persons. Between 1951 and 1961, commerce as a means of livelihood lost its glamour attracting only three persons in 1961 as against 43 in 1950. The average monthly income and expenditure per equivalent adult male per household (according to Lusk's co-efficient) was respectively (in rupees) 23.79 and 22.03 in cultivation of owned lands, 16.36 and 15.50 in cultivation of leased lands, 13.65 and 13.47 for agriculture labourers, 19.12 and 19.30 in household industries and 20.77 and 20.11 in other occupations. Under the pattern of expenditure, expenditure on food consumed 69.6% of income of cultivators of owned land and 77.3% of income of agricultural labourers. Chewing of tobacco was common to all people irrespective of their economic status, consuming about three to six per cent of income. Education was the most neglected aspect, requiring not even one per cent of income for getting it. The proximity of Dodballapur to the village gave employment opportunity to many as well as facilities of education, entertainment, trade and commerce, hotels, communication media, marketing, etc., at

Dodballapur. The commuters to the town from the village were many in number.

Survey in Chakrabhavi of Magadi taluk revealed that the village with a population of 1,234 in 245 households had 520 workers, of which, 282 engaged in cultivation of owned lands, 54 in cultivation of leased lands, 110 as agricultural labourers, 10 in household industries and 64 in other services. Between 1951 and 1961, the agricultural class decreased from 87.07 to 82.00 per cent whereas the non-agricultural class increased from 12.8 to 18.0 per cent. However, the agricultural labourers in the agricultural class increased by 15.5 per cent during the said decade, due to non-availability of any other kind of labour and also due to the unfavourable seasonal and scarcity conditions driving most of the small cultivators to work as labourers during preceding years to 1961. Livestock rearing, mostly by cultivating households was meant mainly for cultivation and manurial purpose. However, the rearing of sheep and goat, production of milk and occasional selling of eggs supplemented the income to some extent. Pottery, oil extraction, manufacture of jaggery and silk worm rearing were some of the village industries. The village had about 10 retail traders and on a weekly shandy about 35 temporary shops would be set up. The average annual income and expenditure per equivalent adult male in the village were (in rupees) 268.5 and 287.2 for cultivators of owned lands, 226.3 and 254.5 for cultivators of leased lands, 221.5 and 226.5 for agricultural labourers, 219.6 and 240.8 in household industries and 335.9 and 324.0 in other services. The proportion of expenditure on food was directly related to the income level and this was true for beverages and clothings also. Education was the most neglected aspect attracting negligible expenditure by most of the occupational categories.

Kenchankuppe in Ramanagaram taluk was taken up for socio-economic study by the Centre for Habitate and Environmental Studies under the Indian Institute of Management, Bangalore during August 1976 to August 1978. The village had 863 persons with 149 households, following agriculture as the main occupation and all other activities were directly linked with agriculture. Out of 149 households, 114 were of cultivators, and the rest of them belonged to the landless agricultural labourers. Besides agriculture, 44 households reared silk worms, 42 households worked on other farms, eight households did business, seven households undertook services and eight households followed their hereditary occupations to supplement their income. Sugarcane crushing, brick making, collection and selling of fire wood, cattle rearing, smithy, pottery, etc., were a few other means of living. Of late, farming has been conceived as business and practised as such.

The well-to-do farmers think that their sons should become educated and work as professionals, officials, etc., rather be cultivators.

A study of the evaluation of the success of welfare measures in Bangalore district was done by Indian Institute of Management, Bangalore in 1981 selecting two sample villages, of which, Bhavi, a village in Magadi taluk was one. The study concentrated on the scheme of Janata housing programme (Peoples Housing Scheme) and its success in meeting the needs of the poorest. The village as such was predominant in agriculture without practically any alternative source of employment. Of its 226 land holdings, about 80% were less than five acres in size. These small marginal cultivators on account of low yield in agriculture had to work in the field for wages along with the other nine landless labourers. In this village, 12 beneficiaries under the scheme got the Janata houses, of which, three were agricultural labourers, six land owners, three professionals. This allotment revealed that PHS had not met the needs of either economically or socially weakest sections of the society. Such people could not get the benefit of the scheme much. The conditions stipulated in the scheme such as incurring the construction expenditure in advance for foundation, etc., bureaucratic delays in release of instalments by the Government agencies, the inherent delay and rising cost of construction of the house between Rs 2,500 to Rs 7,000 and above all, the incidentals to be paid in cash were the reasons which deterred to fulfil the purpose of the scheme. The study concluded that the existence of merely 12 Janata houses in the entire colony spoke for the lack of success of the scheme even in terms of the number of houses built. Further, the index devised by the Government to identify the poorest was not adequate and the initial investment of Rs 500 to build the foundation could not be met by the poorest.

Survey of Industrial Potentiality of Bangalore (Rural) district including Anekal taluk was undertaken by the Economic Division of Small Industries Service Institute, Bangalore in 1984-85 at the request of the General Manager of the District Industries Centre at Bangalore. The survey was conducted in order to assess the scope for new industries to be started and also to identify such industries for the guidance of the prospective entrepreneurs. The survey suggested that 279 industries in the small scale sector and 35 in medium and large scale sector can be newly started taking into account several existing factors like infrastructural network, corporate, co-operative and banking financial institutions, available technical knowhow, manpower and training facilities in some taluk headquarter towns, proximity of Bangalore city with well developed facilities of marketing, technical collaboration and innovation, etc., which have created a

total congenial atmosphere for industrial development. The Institute also suggested that industries based on agriculture, horticulture, sericulture and many available natural resources would be profitable but as much scope did not exist for ancillary development. Several measures to promote industrial development were suggested of whom, entrepreneurs development programmes like arranging seminars, study tours for new entrepreneurs, etc., construction of more industrial estates, improving road conditions to enable easy and quick traffic, adoption of backward taluks by philanthropic agencies were notable. The report attempted to familiarise the prospective entrepreneur about the available incentives, concessions and other benefits offered to them in setting up new industries as well as the several procedural matters to be attended to by them in their endeavour.

A pilot survey by the Forest Utilisation Division was conducted in June 1985 to study the impact of fuel wood plantations on the fuel consumption pattern in the villages. For this purpose, two villages, Nagaranahalli and Doddahullur as representative villages of 'A' category where plantations were present in the neighbourhood, and other two villages: Peddanapalya and Ramahalli as representatives of 'B' category villages where no plantations or forests existed nearby. The survey covered 97 representative houses of 'A' category and 99 representative houses of 'B' category covering a total population of 1,315. The average size of the family was calculated to be 6.76 and the yearly average income was found to be Rs 2,653.

The survey revealed that all the 196 houses used more than one source of fuel and each house used the firewood including lops and tops. Besides the firewood, 165 houses supplemented the fuel requirement with brush wood, 127 houses with cowdung cake, 109 houses with barks and leaves, 83 houses with kerosene oil and eight houses with electricity. Excepting those families which supplemented with kerosene and electricity, no other family spent any money for their fuel requirement. Such families fetched fuel wandering about three km and spending about 3.2 hours each session per person on an average. The consumption of fuel per household per day was around 15.75 kg on an average but the efficiency of its use was extremely low.

further, the survey revealed that due to lack of better fuel, 'B' category villages utilised more of brush wood (99%) and also agricultural residue (77%) as against 'A' category villages, as the latter were enabled to consume more of lops and tops, barks and leaves due to the presence of eucalyptus plantations nearby. The consumption of brushed wood and the agricultural residue as fuel by 'A' category villagers was 68% and 34% respectively.

I.S.E.C. made a study of Socio Economic conditions of wooden toy and lacquerware artisans of Channapatna taluk around 1979. The census survey of 1975 which was updated in 1978 revealed that 440 artisans were in Channapatna taluk only, out of the 789 in the State. Channapatna town itself had 320 artisans engaged in wooden toy and lacquerware works. In the present survey of 1979, 101 artisans were interviewed of which 80 were from Channapatna, 11 from Neelasandra, three each from Sunnaghatta and Honganur, two from Harisandra and one each from Devarahosalli and Muniappanadoddi. Among the 101 workers, 59 owned the place of work, which was also their residence, 16 worked in the premises of the manufacturer, 22 in rented places and four in their own separate places. Only 16 were working on wages whereas 85 artisans carried on production, with their own capital and family labour and sold the products to the dealer in the local market directly. The wages paid to the artisans was 80% of the balance of proceeds after deducting all the costs like raw materials, rent, power charges, interests, etc. The average number of earners per household was 2.01 males and 0.29 female in a household and the dependance ratio was 60% of the household members. The proportion of earners was the highest among the SCs being 45.9%, and the percentage in other communities being 40.5 in the Muslims, 34.4 in the Vokkaligas, 31.7 in the Kurubas and 33.3 for others. The artisans supplemented their income through other income generating activities of which beedi rolling, business and casual labour being prominent with Muslims, cultivation, factory work and casual labour being common to the SCs, the Vokkaligas and the Kurubas. However, the rural Muslims entirely depended on toy making whereas earning by other sources was common to urban Muslims and persons of other communities. The average annual income per artisan household from all sources was Rs 3,640 for Muslims, Rs 4,180 for SCs, Rs 2,954 for the Vokkaligas, Rs 2,618 for the Kurubas and Rs 2,949 for other castes. Where the *per capita* income was considered, the annual average *per capita* income was highest among the SCs being Rs 693.20, and in the case of other communities it was Rs 633.05 for the Muslims, Rs 581.77 for the Kurubas, Rs 482.67 for the Vokkaligas, and 491.5 for others. The study revealed that 70% of the artisans were below the State *per capita* income and 65% of the Muslims, 82% of the Vokkaligas, 60% of the SCs, 50% of the Kuruba and 100% of other castes artisans were below the *per capita* income. The study found out that despite several measures to encourage and assist the artisans of toy-making implemented by the Government, through the Karnataka State Handicrafts Development Corporation Ltd., the number of beneficiaries was pitifully small. Further, the actual price the artisan would get for his manufactures would be almost half of the retail price. The sale price would be significantly large and the difference varied from

25% to 150% more to the consumer and 6.3% to 112.5% more to the retailer as compared to the price given to the artisan. The survey suggested that producer's co-operative guilds founded by the artisans themselves would lessen the demerits of the present system so as to enable the artisans for marketing their goods assured of a reasonable sale price and avoid the middlemen or agents who have played havoc during the pre-state intervention period.

Studies on the regeneration of plant species under complete protection from biotic interference such as annual fire, cattle grazing, lopping of trees for firewood and leaves, etc., was initiated by Forest Department, selecting Ramadevarabetta of Magadi taluk, situated about 40 km from Bangalore. The vegetation in the area was very sparse, mostly due to biotic interference. Out of 348 ha of the forest area at the hill, 80 ha was completely protected with barbed wire fencing in 1976, and the remaining area was treated as unprotected. Planting of different species in gaps, cultural operations like soil working and fertiliser application were carried out for the first four years. The regeneration efforts showed that complete protection against biotic interference had resulted in significant improvement by 1988 in the growing plants and species and that considerable scope existed for restoration of degraded forests through this simple measure. A few indicators of improvement in the protected area per 100 sq m area (the figure in the bracket refers to unprotected area) were as follows: Plant density: 122.7 (46.0), Species density 9.25 (6.00), average basal area 1352.29 (212.96) and average bole volume 0.67 (0.04).

URBANISATION

The growth of urban population as a measure of urbanisation between 1871 to 1921 (ie. span of 50 years) in the district was very slow and in some years was even negative between 1881 to 1921. During this period of 50 years, the annual growth rate was about 0.2 per cent. The percentage increase during 1911 to 1921 was better, being 2.2 per year. It was only after 1921, the growth rate was comparatively better, being 5.8 per cent per year in the next 60 years. Between 1961 and 1981, the growth rate was 4.3% annually as against 3.6 per cent between 1971 and 1981, as compared to the growth rates of the erstwhile Bangalore district which were 6.76 and 7.1 per cent annually for the corresponding span of years. The annual rate of growth of urban population in the state for 1961-81 and 1971-81 was respectively 5.19 and 5.06. Thus, the district compares unfavourably with the state as well as the erstwhile Bangalore district. However, during the recent decades of 1961-71 and 1971-81 comparison of the

growth rate of some towns with that of the state would be interesting. Since 1941, memorable events like Second World War, inflation after the Second World War, consequent impetus for setting up new industries, implementation of economic plans from 1950s, stress upon increasing exports and reducing imports, measures to encourage import substitution, etc., encouraged urban growth. Between 1941-1981, however, an uneven trend of urban growth could be seen in the district among the towns and also between the decades. The growth rate (in percentage) of certain towns during 1941-1951 revealed that Kanakapura had the highest rate being 95.90, Ramanagaram 80.38, Dodballapura 52.93, Channapatna 45.84 and Nelamangala 43.17; Dodballapur having the highest growth rate of 50.77, and Magadi 30.96 in 1951-61, Ramanagaram registering the highest rate of 79.15, Vijayapura 40.46, Kanakapura 39.04, Nelamangala 36.75 in 1961-71, Channapatna having 55.66 Vijayapura 49.00, Kanakapura 48.6, Nelamangala 46.2, Hoskote 44.19, Ramanagaram 43.19 in 1971-81 with the remaining towns being in the trail in respective decades in the descending order. The growth rate of the urban population in the district and the state respectively were 49.57 and 61.71 for 1941-51, 18.28 and 18.26 in 1951-61, 35.70 and 35.23 in 1961-71 and 36.88 and 50.65 in 1971-81. Bangalore city being very near to these towns, many a thousand commuters exist in these towns who have active income generating professions in Bangalore city. The development of industrial employment, higher educational facilities, the spares and services required for agriculture and other allied activities have increased the urban population in these nearby towns having easy communication and conveyance network.

The number of towns decreased from 10 in 1871 to nine in 1981 contrary to the trend of growth in the number of towns in the State. This decrease was due to the declassification of Thyamagondlu in 1981. The growth of population in each town presents varied rates. Most of the towns exhibited mixed trends and even negative growth of population excepting Channapatna and Magadi in which population increased continuously upto 1901. This situation of mixed trend in the population growth in each town continued for another two decades. It was only from 1931, the population in each town was increasing except in Devanahalli where the acceleration started from 1941. Table XVII gives the population of each town from 1871 to 1981 and the growth rate for some decades.

The urban population constitutes only a small proportion of the total population in the district. It was 10.3 in 1871, 13.7 in 1881, 12.8 in 1891, 11.1 in 1901, 8.7 in 1911, 10.1 in 1921, 10.3 in 1931, 10.7 in 1941, 13.1 in 1951, 13.5 in 1961, 15.8 in 1971 and 17.4 in 1981.

The towns of the district have changed classes slowly between 1901 to 1981. There were five towns in class VI, four towns in class V and only one in class IV in 1901. All the towns had been upgraded by 1961 excepting in the case of Dodballapura which maintained the same status. By 1981, Thyamagondlu was declassified and all other nine towns had improved their status. A decadal change of class of all the 10 towns of 1901 were as follows:

Town	1901	1911	1921	1931	1941	1951	1961	1971	1981
Channapatna	IV	V	IV	IV	IV	III	III	III	II
Devanahalli	V	V	V	V	IV	IV	III	III	III
Dodballapur	V	V	V	V	V	V	V	IV	IV
Hoskote	VI	VI	VI	VI	V	IV	IV	III	IV
Kanakapura	V	VI	V	V	V	IV	IV	III	III
Magadi	VI	VI	V	V	V	V	IV	IV	IV
Nelamangala	VI	VI	VI	VI	VI	V	V	V	IV
Ramanagaram	V	VI	V	V	V	IV	IV	III	III
Tyamagondlu	VI	VI	VI	VI	VI	V	V	V	D
Vijayapura	VI	VI	VI	VI	VI	V	V	IV	IV

D = Declassified

The development of towns in the district was rather slow and only one town, namely, Channapatna could attain the class II status only by 1981. In respect of other towns, the improvement of status was visible by 1971. The following table provides the percentage of population of towns under each class to the total urban population of the district.

Class	1901	1911	1921	1931	1941	1951	1961	1971	1981
II	-	-	-	-	-	-	-	-	20.12
III	-	-	-	-	-	20.92	26.52	58.87	35.43
IV	19.04	-	21.06	21.18	30.51	40.38	38.57	32.84	44.45
V	46.42	45.87	52.28	53.68	52.71	38.70	34.91	8.29	-
VI	34.54	54.13	26.66	25.14	16.78	-	-	-	-

The growth of a town depends upon its functional categories as conceived by the Census authorities, namely, 'mono' (having 40% or more of total workers in one economic activity) 'bi' (having 60% or more of total workers, confined to two economic activities) and 'multi' (having 60% or more of total workers connected with more than two economic activities. The growth of a town directly depends on the diversification of the economic activities. Between 1961-1971, five towns, namely, Ramanagaram, Devanahalli, Vijayapura, Thyamagondlu and Dodballapura were 'mono functional', the last one having industrial workers and the first four being concentrated with workers in primary sector activities such as agriculture, mining, quarrying, fisheries, forestry, etc. Kanakapura and Hoskote were 'bi functional' towns with majority of workers engaged in both industries and in primary sector activities. Among the remaining three towns which were 'multi functional' Channapatna was prominent with workers relating to industries, trade and commerce and services. The other two were, Magadi with a majority of workers related to industry, primary and trade and commerce activities and Nelamangala with the predominance of industrial, primary and services activities.

LEVEL OF DEVELOPMENT

The Planning Commission and also the State Government ranked the districts on their level of development based on the weighted mean ranking system, using 14 indicators between 1961 and 1963. Later, Planning Department used 22 indicators to assess the composite index for ranking the districts. The Bangalore (Rural) district being formed in 1986 could not be ranked so far.

The State Government had considered all the taluks of the rural district as industrially backward till the end of May 1980 and had included them in Group II for purpose of granting concessions and incentives to the entrepreneurs who started new industries. In order to ensure industrial development to reach the interiors of the district, the State Government declared Channapatna and Ramanagaram as industrially backward taluks. During December 1988, as per the new industrial policy of the State, five taluks of the district, namely, Hoskote, Nelamangala, Devanahalli, Ramanagaram and Dodballapura were grouped in Zone I or in other words considered as industrially developed, rendering the entrepreneurs who would start any industrial unit afresh as ineligible for any concessions. The remaining taluks, namely, Magadi, Kanakapura and Channapatna were considered to be semi-developed.

The Institute for Social and Economic Change, Bangalore assessed the level of development of each taluk around 1979-80 taking into account the development status of various economic and service sectors which were classified into four groups, namely, a) productive sector consisting of agriculture, industry and small scale industries, b) Infra-structure (transport, communication and power), 3) Financial Institutions (banking and co-operative network) and d) Social Institutions covering health, education etc. According to the study, the taluk of Hoskote was highly developed, Devanahalli and Dodballapur taluks being moderately developed, Channapatna and Ramanagaram as average, Nelamangala being backward, and Kanakapura and Magadi were highly backward taluks. The sector-wise development status of each taluk along with its composite development index as assessed by the Institute are shown in Table XVIII.

According to the composite index of development, the taluks in the decending order of development status (together with scores) are as follows around the reference period of 1975-76 to 1979-80: a) Hoskote 11.066, 2) Devanahalli 4.453, 3) Dodballapur 1.045, 4) Channapatna 0.976, 5) Ramanagaram 0.486, 6) Nelamangala 4.222, 7) Kanakapura 6.243 and 8) Magadi-7.962. The above figures indicate the degree of variation even among the developed and also backward taluks. The taluks of Hoskote, Devanahalli, Dodballapur, Channapatna and Ramanagaram which have attained development in Agriculture and Power Sectors, but backward in industries, require concentrated efforts and planning to develop backward sectors for overall progress. Kanakapura, which was backward in all sectors except power, required an entirely new strategy of action starting from a survey of the potential and the resources. The remaining taluks which were developed only in co-operative sector and either average or backward in other productive sectors required a concentrated attention and effort for a planned development.

Some selected indicators of development for the district and its taluks also are given for some periodical years in Table XIX.

The I.S.E.C. in its study of the development level of the district, attempted to explain the reasons for agricultural development and also composition in industrial sectors. According to the report, Hoskote with 74.138 as composite index of agriculture, Devanahalli with 65.451 were better off mainly due to irrigation facilities, the former taluk having a rich potential for supporting a big urban area like Bangalore through supplies of vegetables, fruits, milk, eggs, etc., besides sericulture as an important feature. The backward-

ness of Magadi, Ramanagaram, Nelamangala and Kanakapura in agriculture was mostly due to lack of irrigational facilities though these taluks were prominently agricultural tracts. Kanakapura taluk was considered backward in agriculture since the irrigated lands were restricted to commercial crops only.

The Institute, in its study of inter-taluk disparities in industrial development, taking into consideration three indicators, namely number of units, number of workers and use of capital concluded that all the taluks more or less were in a comparable position having low level of industrial spread. Food and beverage, mechanical industries are the only two industries commonly found in these taluks, followed with textile industries only in a few taluks like Dodballapur, Ramanagaram taluk had more units with sophisticated technology whereas Dodballapur was famous for its silk industries, employing more of traditional technology. Magadi, Nelamangala and Devanahalli taluks had less industrial units with more of technological backwardness.

DEVELOPMENT UNDER PLANS

Planned economic development had been a familiar concept even prior to the Second World War. Economic Conferences of 1911-1931 were a landmark in the direction. Several reconstruction programmes to bring back the wartorn economy of the Second World War period to its normalcy were conceived both at the district level and the State level. Development schemes were formulated in 1946, estimated to cost about Rs 48.99 crores; of this, Rs 12.00 crores had been spent on the schemes upto 1950-51.

After Independence, from 1951-1952, the First Five Year Plan gave top priority to irrigation works. During the Second Plan, agriculture, social services, irrigation programmes were given priority, and at the Third Plan special attention to utilisation of man-power, employment, correction of regional imbalances, etc. However, the foreign wars, failure of rains and scarcity conditions during the middle of the 1960s did not promote the targetted achievements in many sectors.

The Fourth Plan was implemented from 1969-70 to 1973-74 after the Annual Plans of 1966-1969. The position of the district in some productive sectors and programmes at the end of 1969-70 and also 1973-74 respectively was as follows: 2.989 and 3.066 lakhs hectares of net sown area, 5,726 and 6,922 hectares of area under multiple cropping, production (in lakh tonnes) of 1.721 and 1.964 of food grains, 0.137 and 0.146 of oilseeds and 2.162 and 3.751 of sugarcane, 12.48 and

30.81 thousand hectares of area under high-yielding varieties in agriculture and horticulture crops; 48.84 and 43.17 thousand hectares of net irrigated area under irrigation; 11,657 and 14,223 hectares of area contour banded under soil conservation; 673 and 1,172 villages electrified and 11.62 and 18.33 thousand pumpsets energised under power; 16 industrial sheds being completed under industries sector; 65 and 69 health institutions and family welfare centres being in existence under health sector; functioning of 1930 and 1978 primary schools, 68 and 79 secondary schools, enrolment of 88,519 and 1,29,421 pupils to the classes from I to IV under education; 1,571 and 1,730 km length of surfaced roads, 443 and 555 km of road length per thousand sq km area under transport; 913 and 978 co-operative societies (both credit and non-credit) functioning under co-operative sector. The severe drought conditions which prevailed in this district also had its adverse effects on the productive sectors of the economy resulting in the partial success of the Plan.

The fifth Five Year Plan began from 1974-75 at a time of unsuitable economic situations due to the drought conditions of the preceding years, prevailing inflationary circumstances and global crisis. This situation called for the short term management of the economy and as such the entire plan had to go by Annual Plans starting with the Annual plan of 1974-75. During these Annual Plans, much emphasis was laid on increasing the agricultural production, irrigated lands and other primary sectors to give an impetus to help industrial development. Generation of power and increasing its potential, expanding employment opportunities in the rural sector, programmes and activities to benefit the weaker sections of the society were given due concentration. After the four Annual Plans from 1974-75 to 1977-78, the Fifth Plan was treated as concluded and mid-term Plans of 1978-79 and 1979-80 were implemented. The physical achievements in the district at the conclusion of the Fifth Plan (1977-78) were as follows in certain important sectors: the position of agriculture (area in lakhs hectares) 3.263 under net sown area, 1.437 under high-yielding varieties, 0.235 under paddy, 1.62 under ragi, 0.043 under sugarcane, 0.147 under groundnut, 0.574 under irrigation, 0.127 under mulberry; 59 veterinary dispensaries; 2,862.5 metric tonnes of fish catch; fertiliser distribution:- 16,635 of Nitrogen, 14,692 of phosphate, and 3,514.8 of Potassium, all in metric tonnes; two hospitals, 35 dispensaries, 21 primary health centres and units, 15 family welfare centres and 137 bed strength in hospitals and dispensaries under health; 1,229 villages electrified and 25,141 irrigation pumpsets serviced under power as on 31-3-78; 26 nursery, 1,674 lower and 421 higher primary schools and 85 secondary schools under education; 943 co-operative credit societies, 1.45 lakhs members in all

types of societies, advancing of Rs 100.85 lakhs of short-term and Rs 35.37 lakhs of medium term loans under co-operative sector; 57 commercial banks, 20 co-operative banks and eight P.L.D. banks functioning and having advanced loans of Rs 6.74 lakhs under banking; 163.7 km of State Highways, 836.3 km of district roads, 1496 km of village roads, 16 major bridges, 302 post offices including branches and 34,579 radios in use under transport and communication.

Even during the 1978-79 and 1979-80 which were the years of Mid-Term Plans, social and community services were not neglected. Reduction of regional imbalances received greater attention in the allotment of Plan outlay for 1978-79 and 1979-80. The employment affirmation scheme introduced in 1978-79 practically offered an insurance scheme for the poor people in the rural areas in the slack season of agriculture. Intensive rural development programmes were introduced from 1978-79 and in order to improve the income level of the small/marginal farmers and agricultural labourers, additional employment opportunities were given through the employment affirmation scheme in the blocks of which Nelamangala was one.

The Sixth Plan was implemented between 1980 and 1985 after the conclusion of the Mid Term Plan of 1978-79 and 1979-80. The primary objectives of the Plan were to increase the gainful employment opportunities and secondly fuller utilisation of the resources and for a better redistribution of income in favour of the weaker sections of the society especially the SCs., STs., other backward classes and minority. The achievements at the conclusion of the Sixth Plan in some sectors were as follows at the end of 1984-85: under agriculture, the net sown area and the area under multiple cropping were (in lakhs hectares) respectively 3.14 and 0.21; the area under high-yielding varieties was 1.38 lakh hectares of which, the bifurcation (in thousand hectares) under different crops being 14.5 under rice, 116.2 under ragi, 7.2 under maize and the balance of area being under other crops; the total area under irrigation was 54.7 thousand hectares; the total fertiliser consumption was 21.7 thousand tonnes; the area (in thousand hectares) and the production (in thousand tonnes) respectively were 20.6 and 44.96 for rice, 156.6 and 249.1 for ragi, 16.15 and 29.81 for groundnut, 192.03 and 331.9 for total cereals, 50.18 and 15.71 for total pulses, 3.15 and 283.86 for sugarcane; the area (in thousand hectares) under fodder, horticulture and sericulture respectively were 10.83, 26.7 and 15.10 and 24,377 hectares were covered under contour bunding in soil conservation; under fisheries, the total number of persons engaged in pisciculture was 6,352; under power, the total consumption was 1,91,624 thousand kWhs with the per capita consumption for the district being 119.6 units, 1,75,109

electric connections, servicing of 39,329 pumpsets and supplying power to 1,771 inhabited villages accounting for 92 per cent of the villages in the district; under industrial sector, 22 large and medium scale units, 1,257 small scale units, 2,598 handloom and 663 cottage industrial units had been in the district, and out of the 1,257 small scale units, 586 were agro-based, 143 forest and plantation based, 135 mineral based and 393 miscellaneous units; under health, 12,482 sterilisations, 492 beds in hospitals, 95 hospitals including dispensaries, Primary Health Units, Primary Health Centres and other types of institutions, 17 Family Welfare Centres and 17 Maternal and Child Welfare Centres; under animal health, 24 veterinary dispensaries, 36 rural veterinary dispensaries, six artificial insemination centres, and 239 milk co-operatives were functioning; under education, 187 nursery, 2,202 primary, 116 secondary schools, 22 other institutions like colleges, polytechnics, teachers training institutions, etc., were working; 5,034 km of road-length, 159 km of railway, 312 post offices, 2,383 telephones, 55 telegraph offices, 8,994 registered motor vehicles existed in the district under transport and communication; under banks and co-operative sector, 95 commercial banks and 13 co-operative banks at the end of June 1985 serving 17,467 people per bank, advancing of (in lakh rupees) 341.1 short term, 106.38 medium term and 182.39 long term loans by agricultural credit co-operatives, 149 co-operative godowns with a total capacity of 22,920 tonnes and nine fishermen co-operative societies had been in the district.

The estimated weaker sections were 47,113 small farmers and 86,416 marginal farmers as per the agricultural census of 1980-81, 1,05,858 agricultural labourers as per 1981 census and 26,209 artisans in the district as per the study of Economic Advisers Division in 1975. During the Sixth Plan several measures benefiting the weaker sections were in force. The particulars of achievements at the end of 1984-85 in the existing schemes were as follows: 16,444 persons were granted 40,051 acres of land under land reforms; 1,21,933 siteless persons distributed with house sites, 25,760 houses distributed to houseless persons under relevant schemes and programmes of housing; 2,244 released bonded labourers were extended Rs 92.4 lakhs of credit under Rehabilitation of Bonded Labourers; under scholarships and hostels, 27,156 pre-matric and post-matric scholarships were given to the SCs/STs, the DTs/NTs and other backward communities and 5,715 pupils were provided with hostel accommodation. Among other schemes, 2,111 persons were allotted fair price shops; 56,669 were granted old-age pensions, 6,900 were relieved of their indebtedness; under NREP and RLEGP, respectively, 23,023 and 6,190 persons were benefited with 23.23 and 6.18 lakhs of man-days of work; under minimum needs pro-

gramme, 269 sub-centres and 19 PHCs worked for rural health; enrolment of 16.4 lakhs pupils made for classes I to IV and 61,800 pupils for classes V to VII, 428 adult education centres with 12,960 participants under education; 62.8 thousand children served with mid-day meals under Nutrition programme; 407 villages connected by rural roads; 5,338 borewells sunk covering 2,935 settlements under borewell programme; 77 schemes completed under piped water supply; 8,287 persons benefited by advancing loans of Rs 243.3 lakhs and subsidy of Rs 80.81 lakhs under IRDP; 1,055 persons assisted with Rs 32.763 lakhs of loan and Rs 10.73 lakhs of subsidy under Anthyodaya; 114 persons assisted with Rs 3.45 lakhs of loan and Rs 1.54 lakhs of subsidy under Negilubhagya; 516 persons assisted with Rs 51.03 lakhs of loan and Rs 13.1 lakhs of subsidy under 100 wells programme, 1,183 benefited with Rs 27.96 lakhs of loan, Rs 14.45 lakhs of subsidy under S.L.P.P. (Calf rearing) and 38 persons with Rs 2.04 lakhs of loan and Rs 0.654 lakhs of subsidy under S.L.P.P. (Piggery) programmes.

The Seventh Plan of 1985-90 was implemented from 1985-86 with the main objectives of accelerating the growth of the economy with greater emphasis given to reduction of poverty, improving the supply and quality of public goods and services, reduction of inequalities of wealth and incomes by providing greater economic opportunities to the weaker sections of the society and encouragement for self-employment. Major thrust during this Plan was on the social and community services, transport and development of roads, agriculture and allied activities, power and irrigation. Despite the drought conditions which affected major part of the district adversely during the years of 1983, 1984 and 1985, the Seventh Plan was implemented from 1985-86. Even during 1985-86, the drought conditions continued to be severe in many parts putting constraints on development. However, the conditions in 1986-87 were greatly improving though drought relief programme had to be continued till the first quarter of the year. The year of 1987-88 was not much encouraging due to unsatisfactory rainfall conditions. In spite of the best efforts made to maintain the tempo of development activities, the results were not upto the mark. The year of 1988-89 was promising particularly in agriculture and power sector. The achievements in the district in some sectors at the end of 1985-86 of the VII Plan were as follows: The coverage under agriculture was 3.043 lakh hectares of net area sown, 14.88 thousand hectares under multiple cropping, 1.33 lakh hectares under high-yielding varieties, the area (in '000 hectares) and production (in '000 tonnes) respectively being 13.92 and 30.43 in respect of rice, 160.76 and 255.77 under *ragi*, 231.89 and 342.04 under total food grains, 19.39 and 28.37 under groundnut, 1.81 and 173.4 under sugarcane; 15,183 hectares under mulberry, 47,145 hectares under irrigation, 27,507 hectares contour

bunded under soil conservation; under power, consumption of electricity being 3,890 lakh kilo watts, 1.963 lakhs electric connections made, 42,672 pumpsets energised; 98 health institutions including primary health units and primary health centres, 17 family welfare centres, 15 maternal and child welfare centres and 492 beds in hospitals existed and 14,229 sterilisations were done; 36 rural veterinary dispensaries, 24 veterinary dispensaries, 49 artificial insemination centres and 414 co-operative milk societies came into existence under animal husbandry; 82 nursery, 2,284 primary and 132 secondary schools, enrolment of 1.738 and 0.652 lakhs pupils in I to IV and V to VII classes respectively and 457 adult literary centres existed in the education sector; 5,024 km of total road length, 312 post offices, 2,626 telephones, 55 telegraphic offices and 11,766 registered vehicles were under transport and communications; 135 commercial and co-operative banks worked under banking sector and Rs 699.5 lakhs had been advanced as long, short and medium term loans by co-operative societies under co-operative sector.

Under the benefits to the weaker sections, 8.41 lakhs persons were allotted house sites, 0.3 lakhs with houses; 2,982 released bonded labourers were rehabilitated at an expenditure of Rs 94.12 lakhs; 771 fair price depots had been opened; 60,807 persons received old age pensions, 8,613 with invalid pension and 18,343 with widow pension. Under minimum needs programme, 21 primary health centres and 269 sub-centres existed, 8.58 thousand pupils were served with mid-day meals under Nutrition Programme, 6,078 tube wells were sunk under bore well programme as at the end of March 1986.

District Sector Plans:- Since 1978-79, two tier planning structure namely District Sector and State Sector Plans was introduced by allocating a lump sum to each district exclusively for the District Plan. In 1983-84, the allocations were streamlined and instead of lump-sum allocation, allotment for each minor head was made and freedom was given only to vary the priorities. During 1984-85, sector-wise allocations were made giving full freedom to have the priorities within sectoral allocations. With the establishment of Zilla Parishads, on 1-4-1987, three tier planning structure *ie.* State, Zilla Parishad and Mandal Panchayat Sector Plans came into being. Zilla Parishads adopted the plans in 1987-88 that were already formulated by at the State level. From 1988-89, for the first time, the Annual Plan is formulated on the basis of the plans formulated by Mandal Panchayats and Zilla Parishads. The Plan formulation by Zilla Parishads for 1989-90 is a continuation of the process initiated during 1988-89. The outlay in lakhs of rupees for 1987-88, 1988-89 and 1989-90 respectively was 1,716.90, 1,797.41 and 1,882.13. The

Bangalore Rural Zilla Parishad gave priority to rural development followed by family welfare, rural water supply, etc. During 1989-90, the priorities given are education at primary and secondary levels, rural health, animal husbandry, rural employment and beneficiary oriented programmes. The following table gives the Plan outlay of the rural district for 1987-88, 1988-89 and proposed outlay for 1989-90:

Zilla Parishad Plan Outlay - in lakhs rupees

sl. no.	Sector	1987-88	1988-89	1989-90 (proposed)
1.	Primary and secondary education	36.97	45.73	60.47
2.	Adult education	16.26	17.59	27.32
3.	Indian system of medicine	2.81	8.52	8.64
4.	Rural health	51.19	65.05	88.65
5.	Family welfare	120.52	134.92	116.96
6.	Rural water supply	115.63	128.56	225.80
7.	Housing	34.80	37.00	52.07
8.	Social welfare	19.50	22.24	
9.	Welfare of B.C.M	10.62	12.63	14.63
10.	Stipendiary employment scheme	21.06	24.00	20.00*
11.	District planning unit	2.48	3.50	3.70
12.	Women and children welfare	29.70	36.11	37.59
13.	S.N.P., mid-day meals and food grains for the poor	56.46	49.10	50.75
14.	Agriculture	19.27	17.51	29.54
15.	Horticulture	5.67	4.97	8.09
16.	Soil and water conservation	27.54	25.25	26.50
17.	Animal husbandry	6.87	17.75	34.22
18.	Fisheries	3.90	6.00	6.00
19.	Forestry	81.15	87.35	83.70
20.	Co-operation	20.69	16.11	18.07
21.	Rural development	691.44	645.00	621.94**
22.	Minor irrigation	57.06	63.70	113.22
23.	Sericulture	64.62	84.42	92.84
24.	Village and small scale industries	28.17	26.01	21.50
25.	Roads and bridges	55.73	62.52	76.80

1	2	3	4	5
26. Youth service		0.37	2.00	1.70
27. Mines and geology		3.62	1.98	1.34
28. Special component plan		113.80	151.89	29.19***
28. District level sub-plan		19.00	-	10.00
30 Tribal sub-plan (nil)				
Total		1,716.90	1,797.41	1,882.13

*Zilla Parishad Planning Units.

**Rural Development and Panchayat Raj.

***Welfare of SCs and STs.

The physical achievement at the end of 1986-87 and 1987-88 in a few sectors respectively were as follows: the quantity of rice at low price, distributed to the people was 296.86 and 87.68 thousand quintals; 188.33 and 183.77 thousands pupils were enrolled in classes I to IV and 76.78 and 72.64 thousand pupils in classes V to VII; area of (in thousand hectares) 199.7 and 157.9 were covered under high-yielding varieties, 44.77 and 52.75 under pulses, 27.48 and 21.91 under oilseeds, and consumption of 23.94 and 16.66 thousand tonnes of chemical fertilisers effected under agriculture; under sericulture 16.76 thousand hectares were under mulberry cultivation and the production of raw silk was 9.43 thousand tonnes in 1986-87; under veterinary services, during 1986-87 and 1987-88, 100.17 and 47.68 thousand cases of artificial insemination were attended; under forestry, 54.25 and 71.77 thousand tree saplings were planted and under co-operatives, Rs 718.8 lakhs and Rs 523.4 lakhs were distributed as short, medium and long term loans.

JAYANTI VILLAGES

The Jayanti Villages scheme was implemented from the year 1972-73 as a mark of Silver Jubilee of Independence of India, for taking up intensive development measures in selected villages. Among the development measures, providing drinking water facilities, housing to the weaker sections, facilities of schools, post offices, drainages, electrification, animal and human health care units, balawadis, etc., were important. Besides the village youth were provided with opportunities of cultural activities, sports, folk arts, etc. The villages selected for this scheme were called Jayanti villages and in the Bangalore Rural district area, they were Gangalur, Hulikatte, Kadaramangala, Kaggalahalli, Kodihalli, Maralehalli and Mayasandra.

GROWTH CENTRES

A sustained growth in backward areas could be achieved through Growth Centre Policy which aimed at a decentralised concentration and progressive dispersal of industrial and infra-structural development. These growth centres were identified in four levels in the State by the Department of Planning and in this district, the growth centres were identified only in three levels, namely, a) growth centres, b) market-cum-service centres and c) service centres. Accordingly, the growth centres identified were Channapatna, Ramanagaram and Dodballapur and the six market-cum-service centres were Nelamangala, Vijayapura, Hoskote, Devanahalli, Magadi and Kanakapura. The service centres recognised were Malur and Honganur of Channapatna tq, Harohalli and Kodihalli of Kanakapura tq, Kudur of Magadi tq and Thyamagondlu of Nelamangala tq.

The Bangalore Metropolitan Planning Area had also prepared development plans/Town Planning schemes in respect of towns, namely, Nelamangala, Ramanagaram, Devanahalli, Dodballapur, Vijayapura, Magadi, Hoskote and Kanakapura of the district. Development plans for villages, namely, Bylanarasapura of Hoskote, Thyamagondlu of Nelamangala and Kudur of Magadi taluks had also been prepared.

RURAL DEVELOPMENT PROGRAMMES

Economic planning in the State had fundamentally aimed at the growth of the economy along with social justice, reduction of poverty and its ultimate elimination. Efforts to raise the economic status of the rural masses were taken up through measures which would create a collective infrastructure, more employment avenues in the productive sectors, and measures which generated income. The rural development programmes executed in the district are as follows:

BENEFICIARY ORIENTED PROGRAMME

Beneficiary-oriented programmes which aimed to provide assistance to small/marginal farmers, agricultural labourers and rural artisans held them to acquire productive assets and improve their earning level. Subsidies ranging from 25 to 33 per cent on the institutional loans borrowed to acquire productive assets and also for executing works which improve the existing rural economic infrastructure were provided. The following programmes came under the above category: A/ *Small Farmer Development Agency* put forth its efforts to improve the crop production through intensive agriculture, multiple cropping,

introducing high-yielding varieties, adopting package practices, minor irrigation, land development, etc., introduction of dairying, poultry and sheep rearing for supplementing the income of the rural beneficiaries. This project was taken up in all the taluks of the district from 1970-71 under the State Sector Scheme, and was in operation upto 31-3-1976. During the above period, it had identified in the district 58,631 marginal farmers, 46,828 small farmers and 51,017 agricultural labourers and enrolled 74,708 small and marginal farmers to co-operative societies in the erstwhile Bangalore district. From 1970-71 to 1975-76, the agency had spent Rs 62.95 lakhs benefiting 40,155 persons and had completed 1,000 irrigation wells; had installed 852 IP sets; had supplied 3,000 milch cattle; had established 44 poultry units, 3,379 sheep units, and 139 piggery units in the erstwhile Bangalore district. The Government extended the project for three more years from 1976 with an outlay of Rs 100.00 lakhs; of which, Rs 81.53 lakhs had been ear-marked for the payment of subsidies, and a sum of Rs 10.97 lakhs had been allotted for the payment of risk fund to societies who meet the credit needs of the beneficiaries. Subsequently, the Agency was merged with Integrated Rural Development Programme from 2-10-1980.

B) Integrated Rural Development Programme a Central Sector scheme was initiated during 1978-79 in the erstwhile district of Bangalore, but Doddballapur and Nelamangala taluks were selected under the programme from 1979-80, Devanahalli, Hoskote, Ramanagaram and Magadi taluks in 1980-81 and in subsequent years to come, the remaining taluks of Channapatna and Kanakapura were covered by the scheme. After the Zilla Parishad replaced the D.R.D.S. from 1987-88, the programme is being implemented by the Zilla Parishad to raise the living standards of the poorer families in the rural areas above the poverty line and beneficiaries are selected by the Grama Sabhas. The quantum of subsidy assistance available under the scheme is 25% of the unit cost in respect of small farmers, 33 1/3% for marginal farmers, agricultural labourers, rural artisans, etc., and 50% in the case of STs. Besides, second assistance to old beneficiaries would also be given to those who have not crossed the poverty line. Under this programme, in 1987-88, 6,863 beneficiaries were assisted with an expenditure of Rs 91.902 lakhs. The expenditure for 1987-88 comprises of Rs 35.05 lakhs for 3,953 old beneficiaries and Rs 56.852 lakhs for 2,910 new beneficiaries.

C) Anthyodaya (State sponsored scheme) was introduced in 1983-84 in addition to I.R.D.P. intending to help the five poorest of the poor in each village every year through viable economic programmes. In 1987-88, 283 beneficiaries were assisted expending Rs 5.068 lakhs. The

scheme involved programmes such as grant of old-age and disability pension, allotment of land, employment on wage basis or self-employment, allotment of janata houses on priority, credit for economic activity and allotment of houses to scheduled castes under group housing scheme.

D) *Negilu Bhagya* (a State sponsored) scheme was implemented in this district from 1983-84 to assist ex-tenants in whose favour agricultural land had been confirmed under the Karnataka Land Reforms Act 1964, and also the landless persons who had been given surplus land vested with Government. The assistance in the form of subsidy would be 50% of the cost of one pair of bullocks or Rs 1,500 per family. The subsidy for the former tenants would be 33 1/3% of the cost of the pair of bullocks or Rs 1,000 per family in addition to a maximum sum of Rs 500 for package of agricultural implements and inputs. The number of beneficiaries were only eight persons and Rs 0.080 lakhs were spent in 1987-88. Since the year of 1987-88, the scheme is not covered under Zilla Parishad.

E) *100 Wells Programme* (Centrally sponsored) was launched from 1983-84 by the Government of India and is in operation in the district from that year. The scheme involves development works such as gully plugging, nala bunding, construction of small surface storage structures, deepening the existing ponds, dug wells, shallow tube wells, filter points, renovation of old wells, energising pumpsets, etc. The subsidy as fixed by the Government of India to be paid to a beneficiary would be 25%, 33 1/3% and 50% of the cost of the project for small, marginal and tribal farmers respectively and the cost of the project will be fixed by the NABARD. In 1987-88, Rs 23.052 lakhs were spent to complete 563 works.

F) *National Project on Biogas Development* has been initiated by the Central and the State Governments to harness the bio-energy particularly in rural areas. This project provides subsidy to the beneficiaries. In the district, the project is in operation from 1982-83 and onwards. The number of beneficiaries and the subsidy in lakhs of rupees given in 1987-88 were 331 and 7.385 respectively.

G) *Special Livestock Production Programme* (Central Sector) aims to assist small/marginal farmers, SCs and STs and other weaker sections of the society. Schemes for the production of cross-bred calves, poultry, sheep and pigs are included in this programme. Financial assistance given to the beneficiaries will be 50% to the Small/marginal farmers, 66 2/3% to the agricultural labourers under cross bred heifers/calf rearing schemes and 33 1/3% to the marginal farmers

and agricultural labourers on poultry, piggery, sheep units. This programme has been in operation from 1983-84 and in 1987-88, and Rs 3.162 lakhs were spent benefiting 158 persons.

H) Rehabilitation of bonded labour: The scheme became more effective when it was Centrally sponsored with the grant of assistance of Rs 4,000 per bonded labourer, but subsequently raised to Rs 6,250 from 1-2-1986. The programme involved providing economic assets like sheep, goats, cross-bred cows, buffaloes, etc. The scheme was in operation in 1982-83 and onwards. In 1987-88, about Rs 29.675 lakhs were spent to benefit 815 labourers.

EMPLOYMENT ORIENTED PROGRAMMES

A) *National Rural Employment Programme* which replaced the "Food for work" programme in October 1980, was fully financed by the Government of India till 31-3-1980. Now, it is being implemented on 50:50 sharing basis between the Central and the State Governments from 1-4-1980. The main objectives of the scheme are, generation of additional gainful employment for the unemployed and also under-employed persons, creation of durable productive and community assets and to strengthen the rural economy for its rapid growth. During 1987-88, by the end of 31-3-1988, 2,787 works were completed; of which, 84 related to social forestry, 169 to group housing for SCs. and STs., 89 to school buildings, 964 to public works, minor irrigations and rural roads, and 1,481 to other miscellaneous items. A sum of Rs 431.961 lakhs had been spent in this year on works generating an employment of 34.99 lakhs man-days of work.

B) *Rural Landless Employment Guarantee Programme* (Central Sector), was introduced from 15-8-1983 in order to improve and expand employment opportunities to the rural landless people with a view to provide guarantee of employment to one member at the least, of every rural labourer household for 100 days in a year. Under this scheme, works to improve the rural infrastructure and also to create durable assets, constructive activities under 20 point economic programme, minimum needs programme will be taken up for implementation. The amount of expenditure (in lakhs rupees) and the man-days of employment (in lakhs) generated were 77.412 and 4.268 in 1987-88 respectively.

The following table provides the physical achievements of some schemes for a few early years:

Sl. No.	Scheme	Beneficiaries	1984-85	1985-86	1986-87
1.	I.R.D.P.	Number	8,287	7,621	6,267
2.	Anthyodaya	- do -	1,055	877	310
3.	Negilubhagya	- do -	114	196	154
4.	Biogas plants	- do -	127	307	431
5.	100 wells programme	- do - of works	516	1,290	851
6.	Rehabilitation of bonded labour	Number	275	738	1,209
7.	N.R.E.P.	Lakh man-days	23.23	10.42	6.19
8.	R.L.E.G.P.	- do -	6.18	1.46	4.60

C) Drought prone Area Programme: (State Sector) in the district has been in operation from 1979-80 covering the taluks of Kanakapura and Dodballapura. The programme was introduced mainly to provide employment opportunities to the people of the chronically drought affected areas. Under this programme, works in agriculture, minor irrigation, animal husbandry, forestry, sericulture, etc., would be executed so as to create permanent assets to help quicker growth of the rural economy. In 1979-80, each taluk was allotted Rs 5.00 lakhs. During 1980-81, Rs 7.00 lakhs was allotted to each taluk and a total of Rs 15.742 lakhs had been spent out of the Rs 24.00 lakhs. In the years of 1981-82 to 1984-85, a sum of Rs 120.00 lakhs at Rs 15.00 lakhs per taluk per year was allotted. The financial expenditure (in lakhs of rupees) was 7.1 in 1982-83, 4.685 in 1983-84, 20.786 in 1984-85, 30.375 in 1985-86, 18.706 in 1986-87 and 14.164 in 1987-88. The generation of employment in lakh man-days was 0.544 in 1986-87 and 0.433 in 1987-88.

OTHER SCHEMES

A) Community Development Programme, a significant and comprehensive scheme for improving the rural life was introduced from 2.10.1952 in the State which intended to lay a foundation for the

welfare State. The main emphasis of the activities on top priority related to sectors of Agriculture and allied fields, irrigation and inland fisheries, communication, education, health, training, employment, housing and social welfare. In 1953-54, Ramanagaram and Kanakapura taluks were selected as N.E.S. (National Extension Scheme) Blocks. By 1956-57, Dodballapur, Magadi and Nelamangala had been selected as N.E.S. Blocks and Ramanagaram and Kanakapura as Community Blocks. Thus by 1956-57, 828 villages had been covered with a total population of 3.1 lakhs. About 1959-60, the merger of community development with panchayat administration and adoption of block as a unit of development gave the Taluk Boards a pivotal importance for all development activities.

B) *Rural Water Supply and Sanitation Programme* included i) piped water supply, ii) mini water supply scheme and iii) borewells with hand pumps and the scheme is being carried out by the Zilla Parishad Engineering Divisions of Bangalore and Ramanagaram covering the entire eight taluks. The Bangalore division has the jurisdiction over Devanahalli, Dodballapur, Hoskote and Nelamangala and the other four taluks come under Ramanagaram Division. The physical and financial achievements respectively by the Zilla Parishad Engineering Division, Bangalore for the year 1987-88 were as follows: Under Borewells programme, 127 borewells were sunk with an expenditure of 10.071 lakhs of rupees, the details of which were, eight wells incurring Rs 1.057 lakhs under normal plan (State Sector); 15 wells incurring Rs 3.555 lakhs under Central Sector; 13 wells (Rs 2.231 lakhs) under Special Component Plan (State Sector); three wells (Rs 0.984 lakhs) under S.C.P. (Central Sector) and 88 (Rs 2.244 lakhs) under scarcity. Six works of mini water supply were completed (three in State Sector + three in Central Sector) incurring Rs 7.199 lakhs and five piped water supply schemes were completed (four under N.R.W.S. + one under A.R.W.S.) spending Rs 12.841 lakhs. Similar schemes have also been undertaken in Ramanagaram Division. The achievements in 1987-88 in the division under the State sector schemes were completion of the nine bore wells with hand pumps, four works of mini water supply and ten works of piped water supply schemes and additional seventeen bore wells with hand pumps, under Special Component Programme. The total expenditure during 1987-88 for the above programmes covered under State sector schemes was Rs 12.164 lakhs. Under the Central sector schemes, the achievements during 1987-88 were completion of 23 bore wells with hand pumps, two works of mini water supply and four works of piped water supply, and nine bore wells with hand pumps under special component programme. Under scarcity programmes, 174 bore wells, six works of mini water supply, one work of restoration of

water supply and works under the District sub-plan were executed. The total expenditure under Central sector schemes was Rs 26.948 lakhs.

C) *Twenty Point Economic Programme* was started from 1.7.1975 mainly to keep the prices under control and a New 20 point programme was introduced in April 1982 with modified priorities compatible with the altered economic situation. In 1986, the programme was again enunciated as attack on rural poverty, strategy for rainfed agriculture, better use of irrigation water, health for all, two-child norm, expansion of education, justice to the SCs. and STs., equality for women, new opportunities for the youth, housing for the people, improvement of slums, new strategy for forestry, protection of the environment, concern for the consumer, energy for the villages and a responsive administration. Since January 1983, Karnataka State Government initiated and implemented "Karnataka Development Programme" with many additional schemes. The achievements in this district during 1986-87 and 1987-88 respectively, with the figures of 1985-86 in the brackets were as follows: 6,267 and 6,348 (7,621) persons were benefited under I.R.D.P.; 310 and 292 (877) families benefited under Anthyodaya; 154 and nil (196) benefited under Negilu bhagya; 851 and 657 (1,290) wells were sunk under 100 wells programme; 1,209 and 1,300 (738) released bonded labourers were rehabilitated, 6.19 and 14.34 (10.42) lakhs man-days of employment were generated under N.R.E.P.; 4.6 and 3.93 (1.46) lakhs man-days of employment were generated under R.L.E.G.P. 2,274 and 1,454 (4,382) houses were distributed to the economically weaker sections; 15.59 and 11.32 (23.34) lakhs saplings were planted; 431 and 209 (307) biogas plants were set-up; 165 and 227 candidates were trained under TRYSEM scheme; 451 and 1,282 villages were provided with drinking water facilities; 3,546 and 1,770 families were given construction assistance in rural areas; 1,172 and 961 rural families were distributed with house sites; 1,365 and 4,488 persons were covered under slum improvement programmes; 12,560 and 10,795 sterilisations were performed under Family Welfare Programme; 16 and 29 new fair price shops were opened, 1,116 and 548 rural small-scale units were set up and 340 and 822 Adult Literacy Centres were opened.

Bangalore Rural Zilla Parishad which replaced the District Rural Development Society from 1987-88 has been implementing the rural development programmes.

Special Component Plan was implemented with the specific objective of enabling 50 per cent of the Scheduled Caste families to cross the poverty line in about five years from 1980. The plan was executed through various government departments, namely, agriculture, adult education, forest, sericulture, horticulture, fisheries, indus-

tries and commerce. Water supply division, co-operation sector, Women and Child Welfare, etc., have been allotted funds for the implementation of the plan (see Chapter XVII for details).

Tribal Sub Plan was specifically meant to rehabilitate and uplift the tribal communities who are traditionally forest dwellers but whose traditional living pattern have been very much disrupted in later decades on account of several restrictions and policies of the Forest Department in an attempt to conserve forests and forest wealth. The total population of the Scheduled Tribes as assessed in 1971 and 1981 Census respectively was 5,177 and 39,700 in Bangalore (rural) district. Several programmes are being taken up through the various departments, such as agriculture, horticulture, fisheries, animal husbandry, forest, industries, sericulture, etc. (see Chapter XVII for more details).

Karnataka Land Army Corporation Limited has been executing several development works in the district through its Assistant Director, Bangalore Rural Project, who is under the control of the Deputy Director, Bangalore Rural. Among several works completed in the district upto 1987-88, 917 houses under R.L.E.G.P., group housing scheme for SCs/STs, five works of integrated development of small and medium towns, 19 sericulture works, five ware-houses for K.S.W.H.C., 126 living-cum-worksheds being constructed at Channapatna for Karnataka Handicrafts Development Corporation under its Dutch assistance scheme, seven godowns each of 200 Mt capacity being completed under N.G.R.G. (Rural godowns) and 123 works under N.R.E.P. are worthy of mention which are in addition to a large number of small works scattered throughout the district, entrusted to the Corporation. The total value of works turned out by the Corporation upto 1986-87 was Rs 50.5 lakhs and by 1987-88, it increased to Rs 80.79 lakhs. As at the end of 1987-88, quantum of work for completion was valued at Rs 69.81 lakhs.

POTENTIALITIES OF DEVELOPMENT

Bangalore (rural) district has most of its nooks and corners lying at a distance of a couple of hours' journey from Bangalore city. Marketing facility and other advantages which have developed in the city have stimulated an atmosphere for growth oriented activities in the district. The rural district being well developed in agriculture, provides ample scope for future industrial development which at present may be said to be in its infancy.

Agriculture and allied activities: Agriculture absorbs more than 72 per cent of workers apart from those who marginally depend on it.

Since nearly 34,000 hectares of cultivable land still remains as cultivable waste, extensive cultivation can be adopted to some extent and ultimately intensive cultivation only can increase the production of food grains and other crops substantially in the future. Soil conservation methods like contour bunding is another important step to retain the soil fertility, and in the district, nearly 85 per cent of the sown area still requires to be covered under this method. Since irrigation by tanks and wells occupy the majority of irrigation methods, the success of which in turn depends upon rain conditions, the techniques of dry farming and dry land development measures have greater scope for agricultural development in the district. The total irrigational potential in the district had been estimated to be about 77.1 thousand hectares in 1985-86 (38.1 under surface water and 39.0 under ground water resources); of which, about 52.7 thousand hectares had been irrigated in 1987-88. Since tanks and wells which happen to be the main sources of irrigation, depend upon rain water, the extent of irrigation actually varies with seasonal conditions. Agriculture being considerably developed in the district lends itself for further development of industrial sector. Among the several agro-based small scale industries, a few units of processing of fruits and vegetables, coir and coir products, oil and flour mills, rice and dhal mills, manufacture of agricultural implements, charcoal from coconut shell, bakery articles, *ragi* malt and *ragi* based weaning food, *masala* powder, beaten rice, etc., are worthy of mention. In view of sugarcane being grown in the district with considerable production (16.3 lakhs tonnes in 1985-86), a unit for manufacture of sugar needs to be examined.

Horticulture occupies an important place in the district on account of favourable soil and climatic condition. The total area under horticulture occupies about eight per cent of the sown area in the district and between 1981-82 to 1985-86, the area under horticultural crops had increased by 44.3 per cent. Considering the demand for the produces of this sector both in home as well as external market including the products in this allied sectors, the area of the crops can be increased by another 25% at the least in the coming decades. Area expansion under aromatic and medicine plants, citrus, dry orchards and commercial flowers have good prospects. This sector has created a good potential for several processing industrial units like dehydration of potatoes and manufacture of syrups, squashes, jams, jellies, juices, tomato ketch-up/sauce, fruit juice powder, etc. Devanahalli, Ramanagaram and Hoskote being the prominent taluks of horticultural crops, abundant extension of area under fruits, vegetables, spices, etc., can be possible in the above taluks and also in other taluks. Further, fruits like banana, grapes, mango, sapota, papaya, vegetables like potato, tomato, brinjal, cabbage,

flowers such as jasmine, tuberose, etc., and others, namely, betle leaves coconuts, tamarind, onion, etc., can be good raw materials for industrial sector. The technical know-how developed by CFTRI at Mysore and the research achievements of Indian Institute of Horticultural Research in Bangalore can be of immense value in this field.

Mineral wealth of the district is confined mostly to non-metallic minerals and kaolin, quartz, clay, feldspar, corundum and building and ornamental stones are of economic importance. The value of production exceeded Rs 338 lakhs in 1985-86 and Rs643 lakhs in 1986-87. In 1987-88, the production was 2.33 lakhs tonnes valued about Rs 209.4 lakhs. The minerals of the district provide good raw materials for manufacturing glass, pottery, silica bricks, sand-lime bricks, roofing tiles, terracotta and earthen-wares, LT/HT insulators and stone-ware pipes on a good scale. Many quarries in the district have potential to produce building materials of stone like size stones, slabs, pillers, etc., through the easy process of fire splitting. Besides, good potentiality exists for the manufacture of stone rollers, stone mortars, grinding stones, etc. Apart from the ordinary granites, pink granites of fine grained uniform texture available in plenty in Magadi and Channapatna taluks, chlorite and epidote found in the granitic exposures near Ramanagaram offer good scope for the manufacture of ornamental stones.

Livestock wealth of the district consisting of 12.75 lakh animals in addition to 12.82 lakh poultry offers good scope for several industrial units based on this wealth. Dairying being an important occupation has further potential for growth in view of ever increasing demand for dairy products. In view of the assured level of consumption pattern particularly in the neighbouring cities of Bangalore and also Tumkur, any amount of increased supply will fetch ready market for these products provided adulteration to exploit the consumers does not take place. Both extensive and intensive development of this sector has good scope either in proprietary or co-operative sectors. Sheep rearing is a promising occupation in the district particularly in Kanakapura, Magadi, Hoskote, Devanahalli, Dodballapur and Ramanagaram taluks. Specially the taluks of Kanakapura and Magadi with vast grazing fields serve ideal to this profession. Piggery is also having much scope in the district if extensively reared. Under veterinary services, setting up of a few more Rural Veterinary Dispensaries and upgradation of a few R.V.Ds. to taluk-type dispensaries, increasing the mobile veterinary clinics, will be of great value for improving the animal health services. The wealth of livestock allows great scope for the development of small industrial units relating to milk

products, leather tanning and leather products, cattle and poultry feeds etc. The animal casings and crushed bones have ample scope for further processing units as these enjoy export demand.

Only social and farm forestry have considerable scope in the taluks of the district excepting Kanakapura which has a major concentration of forests. Plantation activities around gomal lands, along the road-side and tank fore-shore with fuel wood and small timber, and farm forestry in the lands quite unfit for agriculture, development of school nursery, farm bunds, home-steads, etc., are the only potential methods of afforestation. The extent of C and D class lands in the district in 1986 was about 29.0 thousand hectares which allow for these two programmes of afforestation. Jojoba, an evergreen shrub which is considered to be extremely drought resistant, and to flourish under marginal soil fertility, high salinity and low humidity can be experimented in the C and D class lands of the district particularly as a landscape and soil conservation plant. The seeds of the plant yield a wax which is said to be of much industrial use as a substitute for sperm whale oil, as a superior lubricant for high speed and high temperature machinery and in cosmetics and pharmaceutical industries. Besides, several units in the manufacture of furniture, soapnut powder, toys, packing materials, synthetic adhesives, etc., have good scope in the district.

Fisheries wealth is also comparatively poor in the district even though more than a thousand major and minor tanks exist with a little more than 23.5 thousand hectares of water spread area. The total fish production was estimated to be 3,080 tonnes in 1986-87 and 4,245 tonnes in 1987-88. The production of fish seed increased from 9.50 lakhs to 24.6 lakhs in the corresponding duration suggesting that with good efforts, the fisheries certainly has tangible scope for development. The present institutional and infra-structural status pertaining to fisheries such as fish co-operatives, fish markets, fish farms, ponds, chilling plants and cold storage are required to be increased and improved while considering the active number of fishermen in the district being more than 6,000. In the event of the above developmental activities being realised, the production of fish can be increased by 25 to 30% more than the present production level.

Sericulture is an important sector in the district with more than 15.1 in 1985-86 to 16.7 thousand hectares in 1987-88 under mulberry. The taluks of Kanakapura and Channapatna under mulberry are being followed by other taluks, except Nelamangala where it can be said to be practically insignificant. Since the climate and the soil are quite

congenial for the cultivation of mulberry in the district, the area under this money crop can be increased considerably in the trailing taluks also. This labour-intensive sector promises greater scope for generation of employment and income through its several stages from soil to silk. Besides mulberry, castor cultivation has also been significant in the district covering about 3,300 hectares of land in 1987-88. Therefore, the economic viability of sericulture (silk-worm rearing by feeding on castor leaves) in the district requires to be experimented. Ample scope exists in the district for many units of rearing, reeling, weaving, dyeing, etc., pertaining to the finished silk fabrics. Silk worm pupae, a by-product in the reeling process is considered to be of great value and the de-oiled pupae can be useful for manurial purpose. The silk worm oil extracted from the pupae is useful for soap industry. The CFTRI at Mysore has also pointed out that the residual of the de-oiled pupae can be utilised in manufacturing dog and poultry feed. Manufacture of silk worm oil in the district has considerable potential for development.

Industries: Industrial development of the district at present compares unfavourably with the neighbouring Bangalore (urban) district which is much advanced. Small industries sector is also very unevenly developed and excepting the taluks of Channapatna and Ramanagaram, the other taluks do not present a bright picture. Thus these taluks have significant potential for the development of small scale and cottage industries in the coming decades, based on agriculture, horticulture, livestock, sericulture, etc. Further, this district enjoys an advantage for industrial development with its towns and villages being easily accessible to the Bangalore metropolitan area which can offer many facilities such as technical know-how, marketing, transport, etc. The District Industries Centre of the Rural district had estimated in 1985 that nearly 4,000 new industrial units under small scale sector apart from the 2,000 units to be started by individual artisans could be set up in the district by the end of 1990. Assuming that the progress achieved annually had been as per the estimation, the district had the potential for as many as 1,800 small scale units besides nearly 1,000 individual artisan units. Measures to educate the entrepreneurs through development oriented seminars, discussions on the common problems affecting the entrepreneurs, study tours arranged within and outside the State for the promising entrepreneurs, development of land as industrial area in the vicinity of taluk towns of Devanahalli, Kanakapura, Ramanagaram, Nelamangala, Magadi and Channapatna and setting up more number of industrial estates in all the taluks, improvement of rural roads for easy and quick movement of goods traffic and also setting up a few demand based large and medium

scale industries will enhance the industrial scope by creating an encouraging atmosphere in the district.

Among the various industries that have considerable potential for a profitable venture, the following are only a few based on resources: two or more units of manufacturing ragi malt ragi based weaning food; one or two units for potato chips dehydration in Dodballapur and a few units for making potato chips; many units to manufacture syrups, squashes, jams and jellies, processed and canned fruits, dehydrated vegetables, fruits, etc., since these commodities have a good export market; a few units for the manufacture of fancy articles, ropes useful in docking the boats and ships using the sisal fibre, plentiful in Ramanagaram and Channapatna taluks; one or two units of modern dhal mills; three to four units to manufacture coir products, ropes, doormats, carpets, brushes, etc., in the taluks of Kanakapura, Channapatna and Ramanagaram with extensive coconut plantation areas; a few units to manufacture tamarind concentrate/powder employing CFTRI process; one or two units to manufacture essential oils (obtaining the technical knowhow from the Central Institute for Aromatic Plants, Regional Centre, Bangalore) extracted from *davana*, citronella, eucalyptus, palm, rose, lemon grass, and sugandharaja flower (grown in plenty in Devanahalli taluk); a few units of brick-making (table moulded and wire-cut) which are in great demand due to increased construction activities. Several items of manufacture due to their everlasting demand can be profitable in the district and a few units of bakery products, biscuits, poultry and cattle feed, aerated water, ready-made garments, paper envelopes, PVC foot-ware, PVC pipes and fittings for electrical and plumbing works, battery separators, ball-pen refills, dyes used in textiles, agarbathis, safety matches, detergents, cosmetics, electrical appliances, insulation tapes, starters for fluorescent lamps, beedi rolling particularly in Hoskote taluk are a few notable manufactures. The District Industries Centre, Bangalore has listed some industries under small scale sector which are resource-based. Apart from the industries suggested as based on agriculture, forest, minerals, livestock, sericulture, etc., earlier a few manufacturing units of handloom and powerloom textiles in cotton silk and art silk, knitted-ware, spun silk, etc., under textile base; paints, varnish, distilled water, wax candle, phenyl, etc., under chemicals; general engineering, automobile repairs, hand-tools, mechanical toys, steel fabrications, etc., under engineering; and several miscellaneous consumer goods have scope in the district. Use of cattle lick to provide balanced nutrients to cattle is becoming very popular. Establishing one cattle lick unit in consultation with the Central Salt Marine and Chemical Research Institute, Bhavanagar can be profitable. Electronic gadgets, voltage stabilisers, tape deck

mechanisms, multi-meters, printed circuit boards are promising items in the electronic sector. The District Industries Centre suggests a few medium scale industries as having good scope for development and profitability of which production of sugar, manufacture of video cassettes, establishing mini-cement plants, production units for telecommunication equipments, drugs and pharmaceuticals are only a few. Though ancillary development has not much scope in the district still manufacture of small size glass bottles, boxes, labels, wooden cases, powder carbon, plastic containers required for the industrial units around Bangalore City are a few items.

Under transport sector, much scope exists for development. The total road-length in the district accounts for nearly 5,040 km in 1986-87 providing sizeable scope for the improvement of the road-conditions to suit the fast moving traffic. The district has nearly 25 villages which are to be connected by roads. Interesting tourist spots in the district provide ample scope for weekend picnicking by city dwellers. The district with its rugged topography along the western parts and hilly areas in Ramanagaram and Magadi taluks are suitable for trekking, adventurous sports etc., and mountaineering training can be fruitfully taken up in the district. The district has considerable tourist potential to attract visitors from far and wide, if sufficient facilities for them for stay and travel are provided. The hills of Shivaganga, Savanadurga and Ghati Subramanya, temples of Ranganatha in Magadi and Aprameyaswamy in Malur of Channapatna, Mekedatu of Kanakapura taluk are only a few among many such popular places.

Table I
Growth of working population in the district in percentage to taluk population.

Taluk	1901	1921	1931	1941	1961	1971	1981	+ or - change
Channapatna	30.9	24.5	31.0	27.6	44.6	34.8	40.2	+ 9.3
Devanahalli	35.7	23.3	41.9	26.7	44.2	35.9	39.5	+ 3.8
Dodballapur	33.7	22.4	38.4	26.8	46.8	33.4	40.9	+ 7.2
Hoskote	36.1	24.8	37.0	25.4	47.5	32.9	41.1	+ 5.0
Kanakapura	31.0	23.9	36.9	24.9	48.7	33.9	40.4	+ 9.4
Magadi	32.6	22.0	38.2	25.2	49.4	33.9	38.3	+ 5.7
Nelamangala	38.3	22.9	36.6	24.9	41.7	32.2	35.4	- 2.9
Ramanagaram	31.2	24.8	31.1	26.2	46.4	33.5	39.9	+ 8.7

Table II
Percentage of female workers to female population*

Sl. No.	Taluk	1901	1921	1931	1941	1961	1971	1981	Difference between 1901 & 1981
1.	Channapatna	8.36 (4.24)	7.54 (3.74)	8.59 (4.27)	6.07 (2.99)	28.78 (14.04)	11.22 (5.45)	24.51 (11.99)	+16.15 (7.75)
2.	Devanahalli	9.78 (4.87)	6.73 (3.32)	20.05 (9.86)	4.67 (2.31)	26.21 (12.93)	12.78 (6.28)	21.53 (10.57)	+11.75 (5.70)
3.	Dodballapura	9.13 (4.56)	6.61 (3.24)	13.59 (6.66)	4.90 (2.39)	30.09 (14.77)	7.90 (3.87)	25.01 (12.29)	+15.88 (7.73)
4.	Hoskote	9.86 (4.90)	7.97 (3.92)	11.05 (5.41)	4.13 (2.03)	31.91 (15.72)	7.94 (3.86)	25.29 (12.31)	+15.43 (7.41)
5.	Kanakapura	8.33 (4.12)	6.71 (3.32)	13.23 (6.51)	4.31 (2.11)	35.17 (17.07)	7.55 (3.65)	21.15 (10.17)	+12.82 (6.05)
6.	Magadi	8.76 (4.36)	6.81 (3.36)	13.26 (6.51)	4.55 (2.23)	38.47 (18.95)	10.16 (5.02)	20.45 (10.07)	+11.69 (5.71)

1	2	3	4	5	6	7	8	9
7. Nelamangala	10.66 (5.30)	7.29 (3.58)	10.67 (5.24)	5.21 (2.54)	23.50 (11.64)	7.94 (3.92)	17.12 (8.44)	+6.46 (3.14)
8. Ramanagaram	8.50 (4.25)	8.55 (4.21)	22.93 (11.33)	4.95 (2.43)	32.75 (15.93)	8.93 (4.31)	22.66 (10.97)	+14.16 (6.72)

*Figures in the brackets indicate the percentage to total population.

Table III
Taluk-wise total workers under each livelihood classification.

Livelihood classification and year		Channa- patna	Devana- halli	Dodballa- pura	Hoskote	Kanaka- pura	Magadi	Nela- mangala	Rama- nagaram
1. Cultivators	1961	41,625	31,116	41,823	40,207	69,584	61,121	36,561	36,531
	1971	29,900	24,917	29,082	28,620	46,304	41,941	27,483	23,593
	1981	35,287	29,802	31,986	33,647	59,119	46,583	31,695	35,087
2. Agricultural labourers	1961	6,883	4,769	4,664	7,921	7,741	5,666	3,148	5,237
	1971	14,672	13,487	8,633	12,360	12,652	7,662	7,523	10,167
	1981	18,003	16,524	7,686	16,005	20,181	8,558	8,046	10,855
3. Household industries	1961	6,365	2,765	5,385	4,353	5,926	4,118	1,449	3,266
	1971	2,577	1,024	3,203	1,144	1,640	2,026	1,165	1,004
	1981	2,621	1,086	2,871	2,260	2,635	2,282	1,670	2,012
4. Others	1961	10,933	6,853	9,157	7,151	13,435	7,278	7,198	6,346
	1971	12,981	7,399	10,723	8,472	13,957	6,946	7,308	10,830
	1981	21,501	18,256	19,248	19,631	19,917	10,819	11,007	16,755
5. Total	1961	65,806	45,503	61,029	59,632	96,686	78,183	48,356	51,380
	1971	60,130	46,827	51,641	50,596	74,553	58,575	43,479	45,594
	1981*	77,412	65,688	61,791	71,543	1,01,852	68,242	52,418	64,709

*Main workers only

Table IV
Sex-wise and area-wise percentage of workers in each livelihood classification

		Cultivators		Agricultural labourers		Household industries		Others		Total
		Male	Female	Male	Female	Male	Female	Male	Female	
1961	Urban	1.28	0.27	0.29	0.13	1.44	0.36	4.46	0.70	8.94
	Rural	45.32	23.92	4.97	3.69	3.00	1.84	6.08	2.25	91.06
1971	Urban	1.62	0.08	0.87	0.30	1.15	0.19	7.80	0.94	12.95
	Rural	52.04	4.64	13.52	5.52	1.53	0.32	8.17	1.31	87.05
1981	Urban	1.15	0.09	0.73	0.35	1.10	0.31	8.88	1.48	14.09
	Rural	45.63	6.92	10.36	7.34	1.29	0.40	11.64	2.33	85.91

Table V
Average wage rate ranging in the district in 1986 and 1987
Wage Range in Rupees

Year	Nature of land	Sex	A Class		B Class		C Class		D Class	
			From	To	From	To	From	To	From	To
1986	Dry	Male	7.20	10.70	6.45	11.60	4.10	-	-	-
		Female	6.25	7.35	5.40	7.95	3.10	-	-	-
1987	Dry	Male	10.90	14.00	11.50	13.50	4.70	-	-	-
		Female	8.00	10.00	8.05	9.60	3.75	-	-	-
1986	Wet	Male	7.70	12.50	8.75	11.85	-	-	-	-
		Female	4.00	8.00	4.50	8.10	-	-	-	-
1987	Wet	Male	11.00	12.50	11.05	11.85	-	-	-	-
		Female	8.10	9.00	7.95	8.25	-	-	-	-
1986	Garden	Male	8.00	12.10	8.75	10.00	-	-	14.10	14.75
		Female	6.80	8.20	6.80	8.00	-	-	6.50	7.20
1987	Garden	Male	10.90	15.00	11.00	11.50	-	-	14.80	19.25
		Female	8.10	9.25	8.25	10.00	-	-	8.00	8.50

Table VI
Minimum wages for some other employments

Sl. No.	Particulars of scheduled employment	Effective from	Range of minimum wages fixed		Remarks
			From	To	
			Rs. P.	Rs. P.	
1.	Roads and building operations	5-6-84	11.00	14.00	Rs. 25.00 for graduates and Rs. 18.00 for diploma in engineering.
2.	Stone breaking in a quarry	25-5-84	9.50	14.25	-
3.	Rice flour or dhall mill	26-5-84	9.50	16.00	-
4.	Tanneries and leather	5-6-84	9.50	12.90	for chrome tanning
	- do -	5-6-84	6.00	-	for other tanneries
	- do -	5-6-84	6.85	27.50	for leather manufacturing
5.	Toddy tapping	25-5-84	9.40	11.00	-
	- do -	25-5-84	243.00	370.00	monthly rate
6.	Ceramics, stone ware and pottery works	25-5-84	9.50	15.50	-
	- do -	25-5-84	247.00	403.00	monthly rate
7.	Printing press	28-5-84	9.50	14.25	-
	- do -	28-5-84	335.00	380.00	for office staff
	- do -	28-5-84	247.00	370.50	monthly rate
8.	Carpentry and saw mills	9-11-84	9.50	14.00	-
	- do -	9-11-84	247.00	364.00	monthly rate

Table VII
Wages of workers in some establishments as existing in 1988

in Rupees

Sl. Name of the establishment	Unskilled		Skilled		Clerical gr. (lower)		Remarks
	Minimum basic wage	Minimum gross wage with allowances	Minimum basic wage	Minimum gross wage with allowances	Minimum basic wage	Minimum gross wage with allowances	
1. National Standard Duncan Ltd., Hoskote	143.00	773.00	291.20	921.20	320.00	965.00	Monthly rates
2. Silk Filature, Kanakapura	410.00	922.00	420.00	939.90	570.00	1,197.70	Monthly rates
3. Sun Crush Fruits (P) Ltd., Dodballapur	300.00	300.00	600.00	600.00	400.00	400.00	+Rs. 4.00 as lunch & conveyance allowance
4. Spun Silk Mills, Channapatna	390.00	616.20	400.00	632.00	490.00	774.20	+Free canteen facility
- do -	410.00	647.80	460.00	726.90	490.00	774.20	After 10 years of service
5. Geometric Tools (P) Ltd., Dodballapura	300.00	450.00	700.00	1,050.00	520.00	820.00	+Free conveyance & canteen provided
6. Gemini Steel Tubes Ltd., Hoskote	350.00	621.30	378.00	649.30	590.00	956.50	-

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Table VIII
Ruling prices of rice and ragi from 1852 to 1892 (in seers per Rupee)

Years	Channapatna		Dodballapura		Hoskote		Kanakapura		Magadi		Nela- mangala	
	Rice	Ragi	Rice	Ragi	Rice*	Ragi	Rice	Ragi	Rice	Ragi	Rice*	Ragi
1852-53	NA	NA	NA	NA	NA	NA	NA	NA	23	101	NA	NA
1855-56	NA	NA	20	43	NA	NA	NA	NA	16	46	NA	NA
1858-59	NA	NA	13	26	NA	NA	NA	NA	12	27	NA	NA
1861-62	NA	NA	15	28	39	58	NA	NA	11	30	30.5	28
1864-65	NA	NA	11	32	38	56	NA	NA	9	30	25	34.5
1867-68	9	25	16	17	35	45	11	30	8	14	22	16
1870-71	10.5	40	16	49	36	50	13	34	10	55	34	50
1873-74	12	38	16	58	40	49	9	25	13	49	35	51
1876-77	6.5	8	9	14	14	12	6	8	8	13	37	33
1879-80	12	32	13	29	44	45	10	30	NA	NA	NA	NA
1882-83	11	30	NA	NA	30	36	12	25	NA	NA	NA	NA
1885-86	10	28	NA	NA	25	30	13	34	NA	NA	NA	NA
1888-89	12	40	NA	NA	NA	NA	13	35	NA	NA	NA	NA
1891-92	8	22	NA	NA	NA	NA	8	25	NA	NA	NA	NA

NA = Not available

*refers to paddy

Table IX
Average annual prices of ragi and rice in Rupees per seer

Taluk	1947		1950		1953		1956		1958		1960	
	Rice	Ragi	Rice	Ragi	Rice	Ragi	Rice	Ragi	Rice	Ragi	Rice	Ragi
1. Channapatna*	0.17	0.19	0.17	0.19	0.21	0.24	0.32	0.30	0.44	0.33	0.43	0.40
2. Devanahalli	0.16	0.16	0.21	0.16	0.26	0.25	0.31	0.31	0.33	0.33	0.33	0.33
3. Dodballapura	0.29	0.10	0.36	0.16	0.57	0.33	0.44	0.31	0.57	0.31	0.67	0.33
4. Hoskote	0.33	0.20	0.36	0.21	0.44	0.23	0.50	0.31	0.50	0.33	0.50	0.36
5. Kanakapura*	0.17	0.19	0.17	0.19	0.21	0.24	0.21	0.29	0.32	0.33	0.40	0.38
6. Magadi*	0.17	0.29	0.21	0.36	0.29	0.66	0.31	0.44	0.35	0.53	0.33	0.57
7. Nelamangala	0.33	0.17	0.36	0.21	0.44	0.44	0.44	0.24	0.50	0.33	0.57	0.33

Note: *the figures under rice refers to paddy

Table X
Annual average retail prices of commodities (in Rupees per kg)

Commodities	1963	1966	1969	1973	1976	1980	1983	1984	1985	1986	1987	1988
1. Rice (coarse)	0.62	1.18	1.42	1.90	1.92	2.63	3.12	3.23	3.15	3.40	3.47	4.04
2. Ragi	0.39	1.05	0.89	1.31	1.26	1.35	1.83	1.79	1.83	1.98	1.85	1.98
3. Turdal	0.61*	1.15*	1.37	1.92*	1.52*	4.90	7.12	7.91	7.53	8.30	11.33	14.15
4. Urid dal	0.81*	1.10*	1.62	2.86*	2.50*	4.49	6.42	7.67	8.15	8.24	8.27	9.67
5. Moong dal	0.73*	1.22*	1.85	2.88*	2.34*	5.14	5.39	6.80	7.71	7.48	7.48	10.22
6. Gram dal	0.61*	1.23*	1.58	1.95*	2.00*	4.19	4.29	5.77	7.34	7.48	7.20	9.04
7. Potato	0.45	0.77	0.82	1.14	1.20	1.79	2.25	2.03	1.87	3.15	2.68	2.85
8. Onion	0.31	0.47	0.50	0.76	0.82	0.94	1.74	1.42	1.53	2.00	2.84	2.67
9. Groundnut oil	1.85	4.17	4.42	7.35	6.21	10.56	15.61	16.72	15.77	19.69	24.41	23.57
10. Castor Oil	2.08	3.57	4.20	7.73	6.75	8.86	12.94	16.26	13.39	12.99	17.04	21.91
11. Dry chillies	3.33	3.45	4.27	5.76	11.31	9.67	10.62	12.08	17.86	13.81	13.27	25.08
12. Gur II sort	1.22**	1.05**	1.48**	1.98**	2.41**	4.27**	3.41	4.19	4.06	4.46	4.86	5.27
13. Tamarind	0.99	1.49	2.17	3.74	4.00	7.46	6.33	10.49	9.29	9.19	9.33	9.28
14. Coconut oil	3.85	5.26	6.71	10.74	11.96	18.05	24.57	39.39	32.44	28.74	38.80	41.16
15. Coconut (each)	-	-	-	-	1.15	1.37	1.81	3.17	2.29	2.28	3.17	3.17
16. Sugar	-	-	-	-	-	-	4.78	5.21	6.22	6.68	6.69	6.99
17. Salt	-	-	--	-	-	-	0.39	0.52	0.61	0.62	0.64	0.63

Note: *refers to the price of wholegrains, **refers to the price of Gur I sort

Table XI
Average wholesale prices in Rupees per Bengal maund

Taluk	Commodity	1931	1934	1939	1941	1944	1948	1952	1956	1958	1960
Devanahalli	Rice	8.42	5.00	5.71	5.71	3.12	8.00	10.00	12.30	13.33	13.33
	Ragi	3.33	1.42	3.07	2.66	2.85	6.12	10.00	12.30	13.33	13.33
	Horsegram	3.33	2.05	2.05	4.44	6.66	16.00	16.00	12.30	13.33	13.33
Dodballapura	Rice	5.51	3.63	7.26	5.71	6.15	16.00	22.85	16.00	22.85	30.00
	Ragi	1.19	1.25	2.22	2.22	3.33	4.44	10.00	9.41	9.41	13.33
	Horsegram	2.22	2.50	4.44	3.33	8.00	16.00	17.77	13.33	14.54	16.00
Hoskote	Rice	5.71	5.00	7.26	8.00	11.48	16.00	17.77	20.00	20.00	20.00
	Ragi	1.16	1.42	2.85	2.85	6.40	8.88	8.88	12.30	13.33	14.54
	Horsegram	2.04	2.05	2.85	3.36	6.34	8.00	10.00	16.00	14.54	13.33
Magadi	Rice	5.00	4.00	5.00	5.33	6.66	20.00	26.66	22.85	22.85	22.85
	Ragi	1.16	1.33	2.35	2.85	6.66	8.88	11.42	12.30	13.33	13.33
	Horsegram	2.05	2.50	3.33	3.55	5.00	10.00	13.33	13.33	14.54	13.33
Nelamangala	Rice	6.15	4.00	3.20	7.26	6.66	11.42	17.77	17.77	20.00	22.85
	Ragi	1.42	1.25	2.50	2.70	8.33	8.00	3.33	9.41	13.33	13.33
	Horsegram	2.04	2.50	3.21	3.07	6.66	13.13	12.30	12.40	13.33	13.33

Table XII
Average wholesale prices in Rupees per quintal

Sl. No.	Commodity	1963	1971	1975	1976	1980	1986
1.	Rice (coarse)	56.75	126.63	230.83	171.88	188.65	341.21
2.	Ragi	35.08	74.92	156.50	114.88	119.75	188.43
3.	Jowar	41.23	70.13	135.83	106.17	136.00	182.40
4.	Horsegram	33.27	84.71	-	114.08	144.79	230.36
5.	Gur I sort	92.78	144.17	240.21	231.46	337.30	437.20
6.	Coconut (1,000)	234.50	548.13	1,023.96	950.63	1,027.29	-
7.	Groundnut oil	174.04	409.09	727.66	596.68	1,038.57	1,896.00
8.	Potatoes	36.44	61.56	-	100.44	143.96	261.60
9.	Onions	23.24	26.15	97.32	56.15	63.67	122.25
10.	Dry chillies	275.94	483.00	1,303.75	925.21	742.19	1,359.33
11.	Castor oil	184.32	436.82	-	636.79	849.46	1,189.58
12.	Tamarind	84.48	196.00	-	346.46	579.38	914.58
13.	Plantains (per 100)	7.06	10.75	-	23.93	16.67	35.29
14.	Wheat	65.75	126.09	220.83	193.75	180.00	-
15.	Bengalgram	52.19	107.73	248.73	178.71	336.75	490.77
16.	Groundnut (unshelled)	58.67	128.83	234.48	213.38	291.88	414.72
17.	Coconut oil	345.25	728.75	1,072.50	1,124.86	1,747.40	-

Table XIII

The farm harvest prices of commodities that arrived in Regulated Markets (in Rupees per quintal)

Sl. No.	Commodity	Bangalore Market			Channapatna Market			Dodballapura Market		
		1982-83	1986-87	1987-88	1982-83	1986-87	1987-88	1982-83	1986-87	1987-88
1.	Rice	360.0	420.2	438.8	257.2	280.6	301.9	262.5	287.9	480.0
2.	Ragi	180.0	167.1	224.8	172.9	152.7	144.7	141.7	170.1	160.0
3.	Horsegram	195.0	230.8	82.1	166.2	-	220.2	200.0*	231.7	-
4.	Groundnut (unshelled)	-	409.3	279.8	401.3	479.8	605.4	253.6	800.0	408.3
5.	Jaggery	420.0	441.1	333.9	218.1	339.3	414.4	196.3	425.0	350.0
6.	Tamarind	550.0	-	430.3	424.3	228.5	441.8	397.2	114.3	-
7.	Potato	270.0	213.6	187.9	152.8	195.8	178.5	114.1	200.0	150.0
8.	Onion	176.0	133.3	132.7	98.1	113.7	147.6	100.0	150.0	200.0
9.	Dry chillies	1,000.0	913.4	746.1	1,000.0	738.9	1,038.2	-	1,000.0	750.0
10.	Jowar	-	-	-	104.9	148.6	175.7	170.0**	182.1	170.0
11.	Coconuts (per 1,000)	1,600.0	1,792.5	2,750.0	964.5	1,134.2	1,845.1	-	-	-

*Figure refers to 1983-84

**Figure refers to 1984-85

Table XIV
Average land value in Rupees per acre around 1960-61

Sl. No.	<u>Group I Villages</u>			<u>Group II Villages</u>		
	Dry	Wet	Garden	Dry	Wet	Garden
I. Channapatna:						
a) Kasba	1,908	4,000	3,708	-	-	-
b) Malur	1,168	2,342	2,268	-	-	-
c) Virupakshipura	675	3,450	3,500	1,510	5,688	3,850
II. Kanakapura:						
a) Kasba	767	2,750	2,175	933	1,300	1,667
b) Harohalli	700	1,833	1,563	-	-	-
c) Maralawadi	516	1,333	1,350	-	-	-
d) Uyyamballi	-	-	-	830	2,250	2,000
e) Kodihalli	-	-	-	-	-	-
f) Sathanur	-	-	-	1,200	2,662	2,417
III. Ramanagaram:						
a) Bidadi	700	3,250	500	-	-	-
b) Kutagal	1,417	3,667	4,000	-	-	-
c) Kylanchara	883	1,625	1,500	-	-	-

Table XV

Land value as per the reports of Sub-Registrars of taluks: average value in Rupees per acre

Taluk	Nature of land	1960-61	1965-66	1970-71	1975-76	1980-81	1985-86	1986-87	1987-88	1988-89 (end of December, 88)
Devanahalli	Wet	265.5	424.9	474.3	1,027.6	3,395.8	4,596.0	7,000.0	8,602.4	9,000.0
	Dry	129.0	173.1	459.8	602.6	1,725.0	4,027.9	5,174.8	5,416.8	7,137.1
	Garden	149.5	411.7	496.9	2,037.4	2,614.9	6,663.2	8,236.4	9,242.7	20,000.0
Magadi	Wet	357.5	600.0	800.0	500.0	890.1	2000.0	4903.8	5,000.0	6,000.0
	Dry	307.4	350.0	500.0	400.0	600.0	1,000.0	1,500.0	1,500.0	2,000.0
	Garden	600.0	900.0	1,200.0	1,545.9	2,419.4	3,756.3	6,261.1	7,069.8	8,587.2
Ramanagaram	Wet	1,099.2	1,598.9	3,941.4	6,902.0	9,702.7	11,432.9	10,774.6	15,241.2	14,001.7
	Dry	337.3	430.8	885.9	1,834.3	2,816.9	6,439.1	5,685.6	5,695.1	8,505.3
	Garden	1,628.9	2,276.1	2,429.9	4,788.9	10,436.1	11,785.0	15,625.0	16,502.6	20,090.3

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Table XVI
Education Survey Particulars as on 31-3-1927

Particulars	Units	Charna- patna	Devana- halli	Docballa- pura	Hoskote	Kanaka- pura	Magadi	Nela- mangala	Rama- nagaram
Various types of schools existed	no.	73	52	113	36	84	114	86	73
Primary schools	no.	65	46	103	80	76	103	75	43
Strength in primary schools	no.	3,621	1,839	3,867	3,089	2,915	4,284	3,318	2,067
Pupils to population	%	4.3	3.0	5.2	4.1	2.8	5.0	4.7	4.1
Boys to male population	%	6.6	4.5	7.8	6.2	4.2	7.1	7.1	6.2
Girls to female population	%	2.0	1.5	2.4	1.9	1.4	2.6	2.3	2.0

1	2	3	4	5	6	7	8	9	10
Pupils completing the primary IV Std. (Base I year = 100)	%	13.6	21.0	19.2	12.8	14.9	21.3	24.1	16.8
Pupils completing the IV year of middle school	%	6.5	7.9	4.6	5.1	3.5	2.2	3.8	6.3
Boys that dropped off after IV Std. primary	%	19.3	12.5	32.0	55.0	14.8	57.8	46.2	29.9
Girls - do -	%	52.3	90.0	54.8	50.0	90.6	77.6	100.0	67.6
Net waste in primary Education	%	*86.4 **(92.77)	79.0 (92.9)	80.8 (95.4)	87.2 (95.4)	85.1 (93.9)	78.7 (94.0)	75.9 (91.8)	83.2 (90.4)
Single teacher schools	no.	33	34	78	60	60	67	49	26

*Wastage in boys education. **Wastage in girls education.

Table XVII
Table showing the population of towns and the growth rate for some years - population in 000's

Name of the town	1871	1881	1891	1901	1911	1921	1931	1941	1951	1961	1971	1981	Annual % rise from		
													1971 to 1981	1941 to 1981	1901 to 1981
Channapatna	8.23	8.99	9.16	10.43	7.62	11.85	13.86	16.49	24.04	26.47	32.59	50.73	4.69	5.19	4.58
Devanahalli	5.77	5.77	6.69	6.65	6.31	5.39	6.15	6.93	9.54	9.53	11.98	15.19	1.48	2.98	2.97
Dodballapur	7.45	7.03	7.14	7.09	7.27	7.59	8.85	11.87	18.15	27.36	35.60	47.17	4.85	7.43	3.62
Hoskote	4.51	4.38	4.92	3.18	4.55	4.53	4.96	6.23	8.37	9.13	12.16	17.54	2.63	4.54	4.61
Kanakapura	4.67	4.36	4.99	5.59	4.87	5.76	7.20	6.34	12.42	14.60	20.30	30.16	4.96	9.39	5.33
Magadi	2.60	3.08	3.45	3.61	3.02	5.13	6.34	7.13	8.52	11.15	13.35	17.62	5.25	3.68	2.90
Nelamangala	4.02	3.74	4.17	4.03	1.67	3.35	3.82	4.12	5.90	6.42	8.78	12.57	1.93	5.13	4.79
Ramanagaram	5.71	4.83	6.23	6.10	3.51	5.55	6.57	8.88	16.02	17.49	31.44	44.01	6.10	9.89	7.58
Thyamagondlu	3.80	3.30	3.75	4.10	3.02	3.39	3.82	4.15	5.38	5.40	6.49	- do -	0.71*	1.41*	1.01*
Vijayapura	4.30	3.42	3.97	4.01	4.38	3.73	3.82	4.61	6.46	8.22	11.55	17.21	2.73	6.83	5.47

D: Declassified

*Percentage rise upto 1971

Table XVIII

The sectoral and composite levels of development of taluks of Bangalore Rural District around 1979-80

Taluk	General indus- trial index	Small scale indus- index	Educa- tion index	Bank- ing index	Co-ope- rative index	Trans- port index	Commni- cation index	Health index	Power index	Agri- culture index	Composite index
Channapatna	B	EB	B	A	D	D	A	B	D	D	A
Devanahalli	HB	EB	B	HB	ED	D	HB	D	HD	ED	MD
Dodballapura	B	B	D	HB	A	D	HB	B	D	D	MD
Hoskote	HB	B	A	B	EB	D	B	EB	ED	ED	HD
Kanakapura	HB	B	EB	B	EB	B	EB	EB	D	A	HB
Magadi	HB	HB	A	HB	HD	A	HB	HB	B	B	HB
Nelamangala	HB	B	A	D	EXD	A	HB	HB	A	A	B
Ramanagaram	B	B	B	D	B	A	HB	EB	D	D	A

Note:- ED=extremely backward; HB=highly backward, B=backward; A=average; D=developed; HD=highly developed; ED=extremely developed & EXD=exceptionally highly developed.

Table XIX
Selected indicators of development in each taluk of the Bangalore (rural) district compared to the District and the State.

Sl.	Sectors/indicators	year	Unit	Channa-patna	Deva-nahalli	Dod-ballapur	Hos-kote	Kana-ka-pura	Magadi	Nela-man-gala	Rama-nagar	Dis-trict	State
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Urban population to total population	1971	%	18.8	18.0	23.0	7.9	9.2	7.7	11.3	23.1	14.4	24.31
		1981	%	23.3	20.0	24.7	8.6	11.1	8.6	7.6	25.5	17.4	28.89
2.	Density	1971	no/sq	319	218	196	231	138	189	207	216	198	153
		1981	km	400	294	242	301	171	219	248	273	248	194
3.	Net area sown as % to total area	1971-72	%	54.0	47.6	47.2	55.6	37.5	53.0	58.6	48.4	48.4	54.24
		1981-82	%	53.0	51.4	48.7	57.5	38.1	57.7	62.8	52.0	50.7	54.55
		1986-87	%	58.3	44.9	39.6	48.7	40.5	54.0	58.6	53.2	47.9	53.4*
4.	Area sown more than once to net area sown	1971-72	%	7.3	3.2	4.6	2.0	2.1	2.8	2.1	3.4	3.2	6.36
		1981-82	%	6.6	7.3	8.2	7.2	3.4	1.7	3.3	4.7	4.9	N.A.
		1986-87	%	8.5	4.2	5.5	7.7	5.7	3.0	4.3	3.6	5.3	9.57*

1	2	3	4	5	6	7	8	9	10	11	12	13	14
5. Net Area irrigated to net area sown	1971-72	%		24.9	20.1	13.9	20.6	8.1	10.1	11.0	13.5	14.2	13.33
	1981-82	%		26.0	27.0	19.0	30.0	11.0	14.0	13.0	17.0	18.2	14.15
	1985-87	%		22.1	37.8	16.5	32.0	10.9	14.4	8.9	15.1	17.6	16.47*
6. Area under high-yielding varieties to net area sown	1971-72	%		5.1	15.7	8.8	5.1	1.3	4.2	4.3	7.4	5.7	5.08
	1981-82	%		37.8	44.9	63.2	55.8	47.1	33.2	47.9	36.3	45.7	26.17
	1987-88	%		39.3	50.5	70.8	53.5	40.1	38.6	60.6	42.1	47.7	26.79
7. Production of:		'000s											
a) Food grains	1971-72	ton-											
	1981-82	ties	23.4	26.4	35.8	33.6	53.2	48.6	38.9	27.0	287.1	6025.1	
	1987-88	-do-	24.6	32.4	45.1	40.7	61.2	59.0	47.9	31.9	342.8	7279.0	
		-do-	26.0	28.8	41.3	33.9	69.9	57.7	51.0	33.9	342.0	5862.0	
b) Oilseeds	1971-72	-do-	3.9	0.5	1.4	0.5	5.6	2.0	1.3	1.7	16.8	876.2	
	1981-82	-do-	4.5	1.0	2.2	1.6	6.9	3.1	2.1	2.7	24.1	834.0	
	1985-86	-do-	9.3	1.2	3.1	0.7	13.3	4.7	3.0	4.7	40.0	986.0	
8. Villages electrified	1971-72	%	42.1	78.2	42.8	56.9	31.9	24.5	26.4	41.8	42.6	37.5	
	1981-82	%	56.7	83.6	57.2	83.2	61.9	60.0	70.1	66.9	69.2	65.7	
	1985-86	%	100.0	100.0	89.3	100.0	90.3	96.5	94.3	100.0	96.3	92.0	

1	2	3	4	5	6	7	8	9	10	11	12	13	14
9. No. of pump sets energised upto the end of March	1972	000s	1.1	4.9	1.4	3.1	1.5	0.6	0.9	1.3	14.8	149.6	
	1982	-do-	2.0	8.3	3.1	7.1	4.0	1.4	1.7	2.8	30.4	332.0	
	1986	-do-	3.4	10.4	4.0	9.9	6.3	2.6	2.4	3.7	42.7	490.0	
10. No. of registered factories	1983-84 nos.		23	1	369	23	10	1	1	19	447	11,073	
	1987-88 nos.		10	1	387	30	11	1	22	13	475	12,095**	
11. No. of general hospitals PHCs, PHUs & others	1971-72 nos.		10	10	6	8	10	8	9	7	68	1,016	
	1981-82 nos.		10	11	10	9	9	11	10	12	82	2,455	
	1985-86 nos.		13	12	12	10	12	13	11	14	97	2,872	
12. Population served by a health Unit	1971-72	000s	17.6	13.4	26.3	19.6	22.2	21.8	15.3	19.8	18.8	28.84	
	1981-82	-do-	21.8	16.0	19.1	22.6	30.3	18.5	16.5	14.4	19.5	15.13	
	1985-86	-do-	18.1	16.2	17.1	22.3	24.3	16.5	16.0	13.0	16.5	12.93	
13. Population per hospital bed at the end of March	1982	-do-	3.1	4.9	4.3	2.7	5.3	5.7	5.9	5.9	4.3	1.02	
	1985	-do-	2.5	3.3	2.7	2.7	4.8	5.0	5.9	2.3	3.3	0.99	
	1987	-do-	2.4	3.1	2.5	2.9	3.8	5.0	4.9	2.0	3.0	0.93	
14. Literacy level of females	1971	-do-	14.4	15.4	20.2	16.2	9.8	14.9	17.9	16.5	15.7	20.97	
	1981	-do-	19.8	22.2	25.9	24.9	14.7	20.7	25.2	20.9	21.4	27.70	

1	2	3	4	5	6	7	8	9	10	11	12	13	14
15. Literacy level of rural Population	1971	%		19.3	23.2	26.2	26.1	15.6	24.8	26.7	21.6	22.5	25.13
	1981	%		24.9	31.1	33.6	35.0	21.3	31.4	36.2	27.5	29.7	31.08
16. Literacy level of total Population	1971	%		24.0	26.1	31.3	27.7	18.2	25.9	29.1	26.2	25.6	31.52
	1981	%		30.0	33.5	38.5	36.8	24.1	32.8	38.0	30.8	32.5	38.50
17. Population served by a primary school	1972	'00s		0.88	0.80	0.58	0.60	0.66	0.64	0.47	0.63	0.63	0.89
	1982	-do-		1.07	0.88	0.72	0.78	0.82	0.57	0.54	0.87	0.77	1.03
	1987	-do-		1.00	0.81	0.61	0.72	0.77	0.55	0.54	0.75	0.70	0.95
18. Population served by a secondary school	1972	-do-		19.2	18.6	15.5	22.0	18.3	10.8	12.3	12.4	15.4	14.22
	1982	-do-		19.8	22.0	15.9	22.6	24.8	9.3	10.3	14.4	15.9	11.95
	1987	-do-		16.8	12.6	10.1	13.6	14.4	8.5	6.4	10.1	10.9	7.63
19. Road-length per 100 sq km	1972	km		60.8	61.8	73.5	48.9	29.1	48.1	69.7	49.7	55.2	26.4
	1982	-do-		72.0	81.0	80.0	115.0	37.0	71.0	94.0	59.0	76.1	53.4
	1986	-do-		80.0	91.0	90.0	126.0	42.0	79.0	104.0	68.0	85.0	58.9
20. Population per post office	1972	-do-		4.09	5.59	4.78	4.24	3.76	3.17	5.09	4.79	4.44	3.48
	1982	-do-		5.89	5.87	5.03	5.99	4.46	3.24	4.72	5.94	5.14	3.90
	1986	-do-		6.53	6.07	5.54	6.38	5.31	4.30	4.64	6.42	5.65	4.04
21. Population per regtd. vehicle	1983	'00s		3.15	1.75	2.21	2.12	5.30	6.11	3.74	3.10	2.99	0.74
	1986	-do-		3.56	0.45	0.66	1.28	3.53	2.89	2.26	3.39	1.36	0.48

1	2	3	4	5	6	7	8	9	10	11	12	13	14
22. Population per telephone	1971-72	'000s		1.31	1.95	0.78	3.42	5.78	5.07	3.46	1.50	1.98	0.50
	1981-82	-do-		0.85	0.85	0.58	0.45	2.02	2.49	2.01	1.06	0.94	0.24
	1986-87	-do-		0.47	0.53	0.30	0.58	0.79	1.69	0.86	0.52	0.58	0.16
23. Population served by a bank (at the end of June	1971	-do-		34.6	65.2	30.9	38.4	44.0	43.1	67.4	22.7	38.6	20.59
	1982	-do-		19.8	14.7	19.1	18.5	30.3	40.8	20.6	24.6	22.0	14.15
	1986	-do-		12.1	7.6	12.0	13.6	14.3	18.5	10.3	10.1	11.9	12.61
24. Livestock served by a veterinary Institution	1971-72	-do-		26.4	34.8	24.9	23.6	61.0	27.9	26.5	28.7	31.8	25.02
	1985-86	-do-		24.8	19.2	13.5	10.9	43.7	18.5	22.7	18.5	21.5	17.01

Note:- * refers to 1985-86 ** refersto 1986-87