

Chapter 4

Imbalances in Karnataka : Then and Now*

1. We have indicated in Chapter 2 that balanced regional development and reduction of regional disparities have been the cherished goals of the Five Year Plans, both at the national level and the state level. However, the realization of these goals has met with numerous difficulties due to a variety of factors. A critical examination of these factors is a task in itself which we do not propose to take up. Suffice it to point out that since the Seventh Five Year Plan determined efforts to reduce imbalances are marginalized, accentuating regional disparities, among the states in India. Karnataka is no exception. However it is noteworthy that the Government of Karnataka have taken up in right earnest the task of achieving balanced regional development, as is reflected among others in the introduction of Panchayat Raj system, which bestows primacy to local area planning and administration based on local needs etc., In fact the setting up of HPC FRRI with the terms of reference already referred to in Chapter 1 is another evidence in this direction.

4.1 Disparities in Socio-Economic Development: INDIA

2. Based on a comparative analysis of the emerging trends in 15 major states in respect of a few key parameters which have an intrinsic bearing on the social and economic developments, Kurian concluded that disparities across Indian states widened between the 80s and the 90s.¹ He noted: “A marked dichotomy between the forward and backward groups of states has been emerging. The forward states are characterized by better demographic and social development, higher per capita incomes and more developed economies, lower levels of poverty, higher levels of revenue receipts and plan and non-plan expenditure, higher per capita resource flows and private investment and significantly better infrastructure facilities”. Tables 4.1 through 4.4 adapted from Kurian’s article substantiate these findings. As the focus of our study is only on Karnataka, we do not propose to elaborate this aspect of inter-state disparities. Nevertheless we intend to show where Karnataka stands vis-à-vis the national average.

* Seven new districts were formed in the State in the year 1997-98. Time series data as per the new configuration of districts for the years prior to 1997-98 are not available. Therefore analysis and discussion in this chapter is done on the basis of old configuration of districts, to facilitate inter-temporal comparison of districts. As a result of this procedure adopted, data/computations relating to districts/regions in this chapter are not comparable with their counterparts, presented as per the new configuration of districts, in the subsequent chapters.

1. See N.J. Kurian, “Widening Regional Disparities in India: Some Indicators”. Economic and Political weekly, Feb 12, 2000, PP.538-550.

3. The relative position of Karnataka among the Indian states in respect of the parameters chosen by Kurian for analyzing the regional disparities presents a mixed picture. In terms of demographic parameters: population growth, sex ratio and urbanization, the state displayed a favourable picture compared to the national average, in the sense of registering a lower growth the national average and its per capita income below the national average, rendering them to be the sources of concern. The economic diversification measured in terms of sectoral contribution rate of population, a higher sex ratio, a higher proportion of urban population, a higher female literacy respectively. But Karnataka's IMR (indicator of the quality of health care) was above to NSDP was not to the extent that was experienced at the country level. Although the percentage share of poor in Karnataka (33.2 percent) was below the national average (36 percent) in 1993-94, did not compare well with many other like Andhra Pradesh , Gujarat, Haryana, Kerala and Punjab. Analysis of State Government expenditure: developmental and non-developmental, an important public policy instrument for economic and social development, between two points of time: 1980-81 and 1995-96, revealed that Karnataka had more than doubled the per capita development expenditure in real terms in 1995-96 as compared to 1980-81. This was also true of the per capita non-development expenditure in the corresponding period. While both development and non-development expenditure increased in real terms, the growth in the latter was faster. In other words, the relative importance of development expenditure has come down in 1995-96 as compared to 1980-81 , which may be surmised to have a negative bearing on reducing regional disparities.

4. The share of Karnataka in private investment proposals from 1991 to 1998 stood at 5.6 percent thus occupying the seventh position in the country. Its share in cumulative financial assistance disbursed by AFIs up to March end 1997 stood at 6.1 percent or sixth position in the country. This remained at 6.1 per cent but with fifth position in the country in the year 2000-01.²

2. For details see, IDBI, Report on Development Banking in India, 1999-2000, Table 3.6.,p.15. Also see chapter 22 of our Report

Table 4.1
Important Demographic and Social Characteristics of Major States

State	Number of Females per 1000 Males	Annual Compound Rate of Growth of Population (1981-91)	Year When Total Fertility rate will be 2.1 - the replacement level(Estimate)	Percentage Share of Urban Population (1991)	Percentage of Literate Females Above 7 years	Rural Female to Male Literacy (percent)	Projected Levels of Infant Mortality for Females during 1996-2001
Andhra Pradesh	972	2.17	2002	26.9	32.7	50.5	56
Gujarat	934	1.92	2014	34.5	48.6	57.9	44
Haryana	865	2.42	2025	24.6	40.5	59.3	57
Karnataka	960	1.92	2009	30.9	44.3	57.7	67
Kerala	1036	1.34	1988	26.4	86.2	91.6	9
Maharashtra	934	2.29	2008	38.7	52.3	58.8	46
Punjab	882	1.99	2019	29.5	50.4	72.3	51
Tamil Nadu	974	1.43	1993	34.2	51.3	62.2	43
Assam	923	2.17	2015	11.1	43.0	66.8	61
Bihar	911	2.11	2039	13.1	22.9	37.3	55
Madhya Pradesh	931	2.38	Beyond 2060	23.2	28.8	38.6	101
Orissa	971	1.83	2010	13.4	34.7	51.3	105
Rajasthan	910	2.50	2048	22.9	20.4	24.4	65
Uttar Pradesh	879	2.27	Beyond 2100	19.8	25.3	36.5	74
West Bengal	917	2.21	2009	27.5	46.6	61.4	56
All India	927	2.14	2026	25.7	39.3	52.8	64

Source: Adapted from N.J.Kurian , "Widening Regional Disparities in India: Some Indicators"
Economic and Political weekly, Feb 12, 2000, PP:538-550

Table 4.2
Development and Non-developmental Revenue Expenditure of the State Governments
(RS. at 1980-81 prices)

State	1980-81			1995-96		
	Development Expenditure Per Capita	Non-Development Expenditure Per Capita	Development Expenditure As a Multiple of Non-Development Expenditure	Development Expenditure Per Capita	Non-Development Expenditure Per Capita	Development Expenditure As a Multiple of Non-Development Expenditure
Andhra Pradesh	207.0	54.8	3.8	392.0	141.0	2.8
Gujarat	253.0	80.1	3.2	483.4	164.5	2.9
Haryana	314.3	79.0	4.0	522.5	396.1	1.3
Karnataka	208.8	74.3	2.8	423.5	155.7	2.7
Kerala	246.1	66.0	3.7	386.5	212.7	1.8
Maharashtra	259.8	104.8	2.5	491.2	178.9	2.7
Punjab	283.7	94.1	3.0	445.5	391.3	1.1
Tamil Nadu	188.7	67.7	2.8	407.0	165.9	2.5
Assam	166.9	54.3	3.1	313.5	139.2	2.3
Bihar	128.0	43.5	2.9	160.5	100.1	1.6
Madhya Pradesh	195.7	47.3	4.1	275.8	109.5	2.5
Orissa	223.5	54.8	4.1	295.3	134.6	2.2
Rajasthan	194.1	63.8	3.0	403.3	204.2	2.0
Uttar Pradesh	152.2	46.5	3.3	206.2	152.6	1.4
West Bengal	163.7	56.6	2.9	253.1	123.8	2.0
All India	207.4	64.9	3.2	367.3	177.2	2.1

Source: Adapted from N.J.Kurian , "Widening Regional Disparities in India: Some Indicators"
Economic and Political weekly, Feb 12, 2000, PP:538-550

Table 4.3
The Structure and Magnitude of State Domestic product and Level of Poverty

State	NSDP Per Capita at current prices in 1996-97 (Rs)	Percentage Share of NSDP from Agriculture 1996-97	Percentage Share of NSDP from Manufacturing 1996-97	Percentage Share of Poor in 1993-94
Andhra Pradesh	9867	30.6	13.6	22.2
Gujarat	13932	21.4	27.1	24.2
Haryana	16199	38.4	19.2	25.1
Karnataka	10279	30.7	15.7	33.2
Kerala	9066	24.2	11.6	25.4
Maharashtra	17295	18.1	24.1	36.9
Punjab	18213	44.1	13.4	11.8
Tamil Nadu	11708	18.3	23.7	35.0
Assam	6663	37.2	9.6	40.9
Bihar	3835	36.9	10.0	55.0
Madhya Pradesh	7445	31.6	16.5	42.5
Orissa	6422	26.3	9.0	48.6
Rajasthan	8481	36.8	10.5	27.4
Uttar Pradesh	6733	35.3	14.3	40.9
West Bengal	9441	30.0	14.1	35.7
All India	10919	27.7	16.7	36.0

Source: Adapted from N.J.Kurian , "Widening Regional Disparities in India: Some Indicators"
Economic and Political weekly, Feb 12, 2000, PP:538-550

Table 4.4
Investment Proposals and Disbursal of Financial Assistance for Investment

State	Percentage Share of Investment Proposals August 1991-December 1998	Cumulative Share of Financial Assistance Disbursed by All India Financial Institutions (up to March end 1997)	Cumulative Share of Financial Assistance disbursed by State Financial Corporation (up to March end 1997)
Andhra Pradesh	8.3	7.2	7.8
Gujarat	18.7	13.5	9.3
Haryana	3.6	2.5	4.8
Karnataka	5.6	6.1	15.5
Kerala	1.1	1.7	4.4
Maharashtra	18.0	21	11.5
Punjab	3.4	2.4	3.6
Tamil Nadu	7.2	9.0	10.6
Sub-total	65.9	63.4	67.5
Assam	0.7	0.5	0.5
Bihar	1.2	1.4	2.0
Mandhya Pradesh	7.4	5.1	3.2
Orissa	2.2	1.8	3.7
Rajasthan	3.9	4.5	6.1
Uttar Pradesh	9.4	7.9	11.1
West Bengal	3.3	3.9	2.5
Sub-total	28.1	25.1	29.1
All -India	100.0	100.0	100.0
(Rs. Cr)	(757316.0)	(312502.0)	(20896)

Notes: 1. Investment proposals include Industrial Enterprise Memorandum (IEM) filed for items under delicensed sectors and letters of intent in respect of items under licensed sector.

2. All-India financial institutions include IDBI, IFCI, ICICI, UTI, LIC, GIC, IIBI and SIDBI.

Source: Adapted from N.J.Kurian , "Widening Regional Disparities in India: Some Indicators" Economic and Political weekly, Feb 12, 2000, PP:538-550

5. The composite index of infrastructure development constructed by CMIE (CMIE, Profiles of States, March 1997) placed Karnataka below the national average. However within the individual items of infrastructure, Karnataka's position was above the national average in respect of registered vehicles per 1000 persons and telecom lines per 100 persons; was equal to the national average in terms of power consumption per capita, and much below the national average in respect of irrigation. Since the introduction of economic reforms with their

concomitants of liberalization and globalization, our country has allowed divergence in the development of the regions which is a disturbing trend. It is so in Karnataka also.

4.2 Inter-District Disparities in Karnataka :

6. Against this background, we proceed to present a micro-view of disparities in Karnataka at the district level in respect of per capita income, poverty, human development and overall backwardness followed by a discussion on changes in the sectoral composition of state/district income between 1980-81 and 1996-97.

4.2 (i) Disparities in per capita income :

7. Per capita income may be considered as a crude measure of relative economic development. Despite the limitation, comparing per capita income at different time- points serves as a useful initial point to measure the trend in disparities across the districts in Karnataka. Therefore to get such an overview, we present the per capita income, district-wise, at four points of time: 1970-71, 1980-81, 1993-94 and 1997-98. See Table 4.5 for details. (For per capita income in 1999-00, district-wise, as per the new configuration of districts, see Annexure 4.1).

8. The average per capita income in Karnataka increased from Rs.685 in 1970-71 to Rs. 13621 in 1997-98 (at current prices). All the districts in Karnataka registered a growing trend in their per capita income. Notwithstanding this overall trend in per capita income across the districts in Karnataka, the following points acquire a special significance from the point of view of regional disparities.

- a. In 1970-71 and 1980-81 per capita income in nine districts was above the state average. This number was reduced to eight districts in 1993-94 and further to six districts in 1997-98. Region-wise categorisation of these districts having per capita income above the state average was as follows:-

Year	Number of Districts		
	South Karnataka	North Karnataka	Total
1970-71	6	3	9
1980-81	7	2	9
1993-94	7	1	8
1997-98	6	-	6

It is obvious districts which had their per capita income above the State average belonged mostly to South Karnataka

- b. Relative ranks of backward districts: Bidar, Gulbarga, Raichur, Bellary and Utara Kannada of North-Karnataka and Shimoga, Chikmagalur and Tumkur of South Karnataka deteriorated over the years.
- c. Districts which managed to steadily improve their ranks were Belgaum and Dakshina-Kannada only.

9. To sum up, inter-district disparities in per capita income across districts seemed to be narrowing between 1970-71 and 1993-94, but got widened between 1993-94 and 1997-98, as is also evident from the values of coefficient of variation computed for the different time points under reference. (See Table 4.5).

Table:4.5
District Per capita Income in Karnataka: 1970-71, 1980-81, 1993-94 and 1997-98
(at current prices)

Districts in South Karnataka	Per Capita Income							
	1970-71	Rank	1980-81	Rank	1993-94	Rank	1997-98	Rank
Bangalore	699	{ 9	2100	{ 2	12646	1	25740	1
Bangalore(Rural)	-	{	-	{	8865	5	12215	9
Chickmagalur	1176	2	1858	3	11134	3	17609	4
Chitradurga	674	12	1622	7	7076	13	10989	13
Dakshina Kannada	786	6	1701	5	9746	4	20167	3
Hassan	674	10	1381	14	7333	12	12346	8
Kodagu	1851	1	3069	1	12540	2	24623	2
Kolar	481	18	853	19	8181	9	10013	16
Mandya	607	13	1592	8	7612	10	11081	12
Mysore	742	8	1459	10	8416	7	14576	5
Shimoga	968	3	1800	4	8712	6	13970	6
Tumkur	514	16	1172	17	6559	16	9011	18
Districts in North Karnataka	1970-71	Rank	1980-81	Rank	1993-94	Rank	1997-98	Rank
Belgaum	559	15	1399	12	8292	8	13377	7
Bellary	797	5	1579	9	6958	15	12200	10
Bidar	503	17	1329	15	5405	20	7861	20
Bijapur	479	19	971	18	6355	18	10049	15
Dharwad	586	14	1283	16	7051	14	10397	14
Gulbarga	622	11	1381	13	6489	17	9516	17
Raichur	751	7	1447	11	5976	19	8688	19
Uttara Kannada	869	4	1662	6	7074	11	12019	11
State	685		1520		8190		13621	
C.V.(%)	42.31		30.17		24.86		37.70	

Source: Data from Economic Survey of Karnataka (for concerned years)

4.2 (ii) Disparities in Poverty:

10. Imbalances among the districts may also be observed in the matter of incidence of poverty. Latest reliable estimates on poverty ratios, districtwise, are available only for 1993-94³. The picture for Karnataka districts is presented in Table. 4.6

11. It may be seen that Bangalore (Rural), Kolar, Chitradurga and Tumkur in South Karnataka and Bellary, Bidar, Dharwad and Gulbarga in North Karnataka, that is in all eight districts in the State, had poverty ratios above the state average. Bidar with 56.06 percent poverty ratio enjoyed the dubious distinction of being on the top of the list. Poverty ratio was the least in Dakshina Kannada district (8.91 percent).

12. The inadequacy of per capita income as a measure of levels of living or general welfare, the point we have already stressed earlier, comes out clearly from the fact that there is little correspondence among the districts in Karnataka between the poverty ratios and the per capita income. Districts with per capita income higher than the state average, such as Bangalore (Rural) and Shimoga have also poverty ratios above the state average. Districts with per capita income higher than the State average, such as, Bangalore(Urban), Belgaum, Chickmagalur, Dakshina Kannada, Kodagu, and Mysore display poverty ratios below the state average. On the other hand districts with per capita income below the state average such as Bijapur, Hassan, Mandya, Raichur, Shimoga and Uttara Kannada also have poverty ratios below the state average. Correspondence between levels of per capita income and poverty ratios may be seen in the case of three districts Bidar, Chikmagalur and Mysore only.

3. Preliminary poverty ratios from the 53rd Round of the National Sample Survey(NSS) for 1997 and the 54th Round conducted during January-June 1998 show no change in the urban poverty ratio[head count(HC)] index, but a rise in the rural and all-India poverty ratios since economic reforms were undertaken in 1991. However, there has been an on-going debate about the accuracy of these results centred around the issues like 1. appropriateness of price deflators used by the Planning Commission to generate national and state specific poverty lines in reflecting the actual rate of inflation; 2. advisability of 30 day recall period used in most NSS surveys in capturing the household(food) expenditures; 3. growing divergence between the per capita consumption figures that are compiled by the NSS and those given in the National Accounts Statistics. However this debate is outside the purview of our immediate concern. Therefore we leave it at that

Table:4.6
Per Capita Income and Poverty Ratio in Karnataka: District-wise

District in South Karnataka	Per Capita Income (Rs) 1993-94	Rank	Percentage of population below Poverty line [1993-94]	Rank	Per Capita Income (Rs.) 1997-98	Rank
Bangalore	12646	1	31.42	9	25740	1
Bangalore Rural	8865	5	38.17	8	12215	9
Chickmagalur	11134	3	15.61	18	17609	4
Chitradurga	7076	13	39.00	7	10989	13
Dakshina Kannada	9746	4	8.91	20	20167	3
Hassan	7333	12	14.44	19	12346	8
Kodagu	12548	2	20.73	17	24623	2
Kolar	8181	9	48.45	3	10013	16
Mandya	7612	10	30.16	10	11081	12
Mysore	8416	7	28.94	13	14576	5
Shimoga	8712	6	25.56	14	13970	6
Tumkur	6559	16	40.64	6	9011	18
District in North Karnataka	Per Capita Income (Rs) 1993-94	Rank	Percentage of population below Poverty line [1993-94]	Rank	Per Capita Income (Rs.) 1997-98	Rank
Belgaum	8295	8	29.86	11	13377	7
Bellary	6958	15	44.50	5	12200	10
Bidar	5485	20	56.06	1	7861	20
Bijapur	6355	18	28.98	12	10049	15
Dharwad	7051	14	49.75	2	10397	14
Gulbarga	6489	17	45.54	4	9516	17
Raichur	5976	19	25.11	15	8688	19
Uttara Kannada	7470	11	24.97	16	12019	11
State	8190		33.16		13621	

Source: Directorate of Economics and Statistics, Govt. of Karnataka

13. Of late, Government of Karnataka are making efforts to gather data on families below poverty line, taluk-wise, for the purpose of, among others, distributing ration cards. Such

estimates available for the Ninth Plan period are shown in Table: 4.7. It is striking to notice a wide variation in poverty ratios across the taluks ranging from as low as 8 per cent in Mangalore taluk (Dakshina Kannada district) to as high as 75 per cent in Bagepalli (Kolar taluk). Further, if we were to define that a taluk is suffering from abject poverty when not less than 40 per cent of the families in it are below the poverty line, it is evident that such cases belong more to North Karnataka than to South Karnataka : Out of 78 taluks suffering from abject poverty (as defined by us), 48 (62 per cent) belong to North Karnataka and 30 (or 38 per cent) to South Karnataka.

Table 4.7

Percentage of Families Below Poverty Line for the Ninth Plan period, in Karnataka : Talukwise.

Sl.No	District	Taluk Name	% of Families below poverty line
1	Bangalore(U)	Anekal	15
2		Bangalore (N)	16
3		Bangalore (S)	16
4	Bangalore (R)	Channapatna	36
5		Devanahalli	41
6		Doddaballapur	29
7		Hoskote	28
8		Kanakapura	30
9		Magadi	48
10		Nelamangala	34
11		Ramanagaram	40
12	Chitradurga	Challakere	34
13		Chitradurga	45
14		Hiriyur	50
15		Holalkere	32
16		Hosadurga	40
17		Molakalmuru	48
18	Davanagere	Channagiri	22
19		Davanagere	22
20		Harihara	18
21		Harapanahalli	18
22		Jagalur	29
23		Honnali	11
24	Kolar	Bagepalli	75
25		Bangarpet	43
26		Chikkaballapur	63

Contd..

Sl.No	District	Taluk Name	% of Families below poverty line
27		Chintamani	27
28		Gowribidanur	41
29		Gudibanda	26
30		Kolar	23
31		Malur	32
32		Mulbagal	32
33		Sidlaghatta	51
34		Srinivaspura	30
35	Shimoga	Bhadravathi	28
36		Hosanagara	38
37		Sagar	51
38		Shikaripur	32
39		Shimoga	32
40		Sorab	39
41		Thirthahalli	32
42	Tumkur	C.N.halli	32
43		Gubbi	29
44		Koratagere	38
45		Kunigal	36
46		Madhugiri	29
47		Pavagada	39
48		Sira	25
49		Tiptur	32
50		Tumkur	30
51		Turuvekere	24
52	Bagalkot	Badami	21
53		Bagalkot	19
54		Bilgi	23
55		Hunagund	30
56		Jamakhandi	24
57		Mudhol	24
58	Belgaum	Athani	24
59		Bailhongal	22
60		Belgaum	17
61		Chikkodi	15
62		Gokak	24
63		Hukkeri	31
64		Khanapur	24

Contd..

Sl.No	District	Taluk Name	% of Families below poverty line
65		Raibagh	22
66		Ramdurg	30
67		Soundatti	28
68	Bijapur	B Bagewadi	36
69		Bijapur	41
70		Indi	41
71		Muddebihal	49
72		Sindgi	43
73	Dharwad	Dharwad	38
74		Hubli	37
75		Kalghatagi	42
76		Kundagol	34
77		Navalgund	44
78	Gadag	Gadag	58
79		Mundargi	68
80		Naragund	25
81		Ron	33
82		Shirahatti	48
83	Haveri	Byadgi	34
84		Haveri	30
85		Hanagal	35
86		Hirekerur	27
87		Ranebennur	28
88		Savanur	35
89		Shiggaon	35
90	Uttara Kannada	Ankola	27
91		Bhatkal	30
92		Haliyal	29
94		Karwar	35
95		Kumta	30
96		Mundagod	46
97		Siddapur	21
98		Sirsi	22
99		Supa (joida)	35
100		Yellapur	29
101	Chamarajanagar	Chamarajanagar	42
102		Gundlupet	28
103		Kollegal	31

Contd..

Sl.No	District	Taluk Name	% of Families below poverty line
104		Yelandur	43
105	Chikkamagalur	Chikkamagalur	35
106		Kadur	28
107		Koppa	16
108		Mudigere	27
109		Narasimharajapura	29
110		Sringeri	24
111		Tarikere	30
112	D.kannada	Belthangadi	21
113		Buntwal	18
114		Mangalore	8
115		Puttur	14
116		Sullya	16
117	Hassan	Alur	41
118		Arakalgud	10
119		Arasikere	32
120		Belur	25
121		Channarayapatna	11
122		Hassan	10
123		Holenarsipura	48
124		Sakaleshpura	40
125	Kodagu	Madikeri	18
126		Somwarpet	23
127		Virajpet	16
128	Mandya	Krishnarajpet	26
129		Maddur	28
130		Malavalli	38
131		Mandya	32
132		Nagamangala	24
133		Pandavapura	33
134		Srirangapatna	28
135	Mysore	H.D. Kote	30
136		Hunsur	32
137		K.R. Nagar	28
138		Mysore	34
139		Nanjanagud	34
140		Periyapatna	11
141		T. Narasipur	28

Contd..

Sl.No	District	Taluk Name	% of Families below poverty line
142	Udupi	Karkala	28
143		Kundapur	22
144		Udupi	24
145	Bellary	Bellary	45
146		Hadagalli	45
147		H.B. Halli	48
148		Hospet	40
149		Kudlugi	46
150		Sandur	42
151		Siruguppa	46
152	Bidar	Aurad	39
153		Basavakalyan	41
154		Bhalki	40
155		Bidar	40
156		Humnabad	38
157	Gulbarga	Afzalpur	34
158		Aland	34
159		Chincholi	36
160		Chitapur	35
161		Gulbarga	32
162		Jevargi	35
163		Sedam	30
164		Shahapur	34
165		Shorapur	34
166		Yadgiri	33
167	Koppal	Gangavathi	44
168		Koppal	39
169		Kushtagi	42
170		Yelburga	45
171	Raichur	Devdurga	43
172		Lingsugar	44
173		Manvi	40
174		Raichur	44
175		Sindhanur	45

Source: **Below Poverty Line Census for the IX plan period, Govt. of Karnataka.**

4.2 (iii) Disparities in Human Development:

14. In the Report : Human Development in Karnataka 1999, human development index for the 20 districts had been computed for the year 1990-91. This was done taking three parameters: education status, health status and per capita income status. Since it would not be proper to study the disparity levels with 1990-91 index, the High Power Committee for Redressal of Regional Imbalances commissioned a small study for updating the human development index for 1998, the latest year for which most of the required data are available. The methodology adopted for computing Human Development Index is at Annexure 4.2 appended to this chapter. Data/estimate particulars relating to parameters of Human Development in the year 1998 are shown in Table 4.8. Human Development Index shows an improvement from 0.47 in 1991 to 0.63 in 1998 for the State, as a whole, thanks to investment in education, health and overall development in the last 7 to 8 years. There is considerable improvement in the human development index in almost all the districts between 1991 and 1998 (see Table 4.9) . In 1998, human development index for different districts varied from 0.57 for Bidar and Gulbarga to 0.76 for Kodagu. Human Development Index in 10 districts : Tumkur, Mysore, Mandya, Kolar in South Karnataka, Gulbarga, Chitradurga, Bijapur, Bidar, Raichur, Bellary in North Karnataka was below the State average. Seven districts: Uttara Kannada , Shimoga, Kodagu, Hassan ,Dakshina Kannada ,Chickmagalur and Bangalore had a higher human development index, compared to the state average. In three districts : Bangalore(Rural), Belgaum, and Dharwad , human development index was equal to the State average.

15. Along with district-wise estimates of HDI and per capita income in 1991 and 1998, the ranks of districts in respect of these parameters are also shown in Table 4.9. It may be noted that ranking of some of the districts in North Karnataka like Bellary, Gulbarga and Uttara Kannada has worsened in terms of per capita income with the marginal or no change in their ranks in HDI index. In the case of districts like Dharwad, Hassan, Kolar, Mandya and Mysore improvements in ranks in per capita income is accompanied with improvement in ranks in Human Development Index.

Table 4.8
Components of Human Development Index for Districts of Karnataka, 1998*

Sl. No.	District	Estimate of Adult Literacy Rate 1998	Adult Literacy Index 1998	Combined Enrolment Index 1998	Education Index 1998	Estimate of LEB 1998	LEB Index 1998	Per Capita Income(in Rs.) 1998	Real GDP Per Capita Income 1998 [PPP\$]	Income Index 1998	Human Development Index 1998
1	Bangalore	83.75	0.84	0.86	0.85	69.00	0.73	25740	4200	0.62	0.73
2	Bangalore[R]	55.50	0.56	0.81	0.64	69.49	0.74	12215	1993	0.50	0.63
3	Belgaum	60.83	0.61	0.75	0.66	69.00	0.73	13377	2183	0.51	0.63
4	Bellary	56.46	0.56	0.71	0.61	64.52	0.66	12200	1991	0.5	0.59
5	Bidar	52.27	0.52	0.72	0.59	67.24	0.70	7861	1283	0.42	0.57
6	Bijapur	55.74	0.56	0.79	0.63	66.26	0.69	10049	1640	0.47	0.60
7	Chickmagalur	71.57	0.72	0.87	0.77	69.52	0.74	17609	2873	0.56	0.69
8	Chitradurga	63.00	0.63	0.78	0.68	65.28	0.67	10989	1793	0.48	0.61
9	D.Kannada	81.67	0.82	0.99	0.87	72.32	0.79	20167	3291	0.58	0.75
10	Dharwad	67.79	0.68	0.79	0.72	66.62	0.69	10397	1696	0.47	0.63
11	Gulbarga	44.93	0.45	0.70	0.53	67.40	0.71	9516	1553	0.46	0.57
12	Hassan	67.27	0.67	0.79	0.71	70.30	0.76	12346	2014	0.50	0.66
13	Kodagu	78.25	0.78	0.99	0.85	72.94	0.80	24623	4018	0.62	0.76
14	Kolar	59.05	0.59	0.82	0.67	66.02	0.68	10013	1635	0.47	0.61
15	Mandya	56.72	0.57	0.79	0.64	68.31	0.72	11081	1808	0.48	0.61
16	Mysore	52.74	0.53	0.72	0.59	66.75	0.70	14576	2378	0.53	0.61
17	Raichur	43.13	0.43	0.53	0.46	67.65	0.71	8688	1418	0.44	0.54
18	Shimoga	70.89	0.71	0.78	0.73	66.29	0.69	13970	2279	0.52	0.65
19	Tumkur	62.36	0.62	0.84	0.70	64.49	0.66	9011	1470	0.45	0.60
20	U.Kannada	75.35	0.75	0.81	0.77	71.50	0.78	12019	1961	0.50	0.68
	State	63.66	0.64	0.78	0.68	66.05	0.68	13621	2222	0.52	0.63

* The Committee is most thankful to Shri V.Shantappa , Ex-Director, Directorate of Economics and Statistics and former Co-ordinator, Human Development in Karnataka, 1999, for updating the HDI, 1991 to 1998.

Table - 4. 9
Estimates of HDI and Per Capita Income : 1991 and 1998.

Sl. NO.	District	HDI 1991		HDI 1998		Per Capita Income (Rs) 1991		Per Capita Income (Rs) 1998	
		Value	Rank	Value	Rank	Value	Rank	Value	Rank
1	Bangalore	0.601	2	0.73	3	9242	2	25740	1
2	Bangalore[R]	0.472	8	0.63	9	4788	10	12215	9
3	Belgaum	0.471	9	0.63	8	5088	6	13377	7
4	Bellary	0.429	17	0.59	17	4995	7	12200	10
5	Bidar	0.419	18	0.57	18	3555	20	7861	20
6	Bijapur	0.443	14	0.60	16	4181	15	10049	15
7	Chikkmagalur	0.524	5	0.69	4	7348	3	17609	4
8	Chitradurga	0.466	10	0.61	12	4534	12	10989	13
9	D.Kannada	0.592	3	0.75	2	6384	4	20167	3
10	Dharwad	0.459	11	0.63	10	4158	16	10397	14
11	Gulbarga	0.412	19	0.57	19	4592	11	9516	17
12	Hassan	0.473	7	0.66	6	4288	14	12346	8
13	Kodagu	0.630	1	0.76	1	11270	1	24623	2
14	Kolar	0.443	15	0.61	13	3787	19	10013	16
15	Mandya	0.444	13	0.61	11	4309	13	11081	12
16	Mysore	0.440	16	0.61	14	4805	9	14576	5
17	Raichur	0.399	20	0.54	20	3918	18	8688	19
18	Shimoga	0.483	6	0.65	7	4993	8	13970	6
19	Tumkur	0.447	12	0.60	15	4091	17	9011	18
20	U.Kannada	0.533	4	0.68	5	5480	5	12019	11
	State	0.47		0.63		5357		13621	

4.2 (iv) Disparities in General Backwardness:

16. The above salient points together with the discussion on the growth and variation in per capita income across districts in Karnataka already made (Chapter 1), and poverty ratios in different districts, though useful in appreciating the regional disparities in Karnataka, do not throw light on the growth and variations in the sectoral development like agriculture, industry, transport, social services etc., of the districts. Therefore reference has to be made to the physical level of development registered in different districts covering various sectors and sub-sectors. This may be captured by computing a composite index of development of different districts. The composite index of development presented for the districts for different time points, (See Table 4.10) helps understand the nature of regional disparities from this perspective.

17. Between 1960-61 and 1998-99, Belgaum, Bidar, Bijapur, Chickmagalur, Kodagu, Gulbarga and Kolar districts have been pushed to lower ranks compared to what they enjoyed in 1960-61. Relative ranks of Bangalore, Belgaum, Chitradurga, Hassan, Mandya, Mysore, Raichur and Tumkur have improved in the corresponding period. It is to be noted, however, that the relative degree of backwardness or that of development can vary from period to period in so far as the development effort has not been stagnant.

Table :4.10
Composite Index of Development of Districts in Karnataka: 1960-61, 1971-72,
1976-77 and 1998-99.

Districts in South Karnataka	1960-61		1971-72		1976-77		1998-99	
	Development Index	Rank	Development Index	Rank	Development Index	Rank	Development Index	Rank
Bangalore	218.00	2	206.26	1	206.42	1	209.00	1
Bangalore Rural	-	-	-	-	-	-	76.50	13
Chikmagalur	123.74	7	92.66	12	84.56	16	75.80	15
Chitradurga	100.24	11	104.00	9	107.02	7	83.54	6
Kodagu	124.15	6	107.79	7	103.44	8	72.80	17
Hassan	90.03	13	87.21	13	86.22	14	81.02	9
Kolar	136.53	4	129.65	4	107.55	6	79.11	10
Mandya	114.70	10	111.96	6	112.94	4	91.16	5
Mysore	124.60	5	123.35	5	112.09	5	92.59	4
Shimoga	180.15	3	141.07	3	118.05	3	94.22	3
Dakshina Kannada	230.21	1	187.04	2	172.86	2	119.21	2
Tumkur	84.52	5	83.47	16	88.64	13	77.44	12
Districts in North Karnataka								
Belgaum	91.12	12	95.06	11	91.89	12	75.96	14
Bellary	89.23	14	83.90	15	100.09	10	78.76	11
Bidar	64.28	17	86.85	14	85.86	15	69.22	19
Bijapur	71.66	16	77.38	18	79.99	17	71.14	18
Dharwad	118.54	8	103.19	10	98.74	11	82.28	8
Gulbarga	60.10	19	63.19	19	66.83	19	66.44	20

Contd..

Table :4.10 (concluded)**Composite Index of Development of Districts in Karnataka: 1960-61, 1971-72, 1976-77 and 1998-99.**

Districts in South Karnataka	1960-61		1971-72		1976-77		1998-99	
	Development Index	Rank	Development Index	Rank	Development Index	Rank	Development Index	Rank
Uttara Kannada	118.24	9	106.17	8	102.05	9	82.30	7
Raichur	63.04	18	80.53	17	76.34	18	73.17	16
State	100.00		100.00		100.00		100.00	

Note: Composite Index of Development computed using 22 common indicators .

Source: For 1960-61, 1971-72 and 1976-77: Five Year Plans of Karnataka. For 1998-99: HPC FRRI Estimates.

4.3 State Income and District Income: Changes in Sectoral composition:⁴

18. Relevant data on State income and District income for two time-points 1960-61 and 1996-97 are presented in Tables 4.11 and 4.12. The economy of the state which was predominantly agrarian in character at the time of its reorganization in 1956, got recognizably diversified by 1980-81 as is evident from the sectoral contributions to the State Gross Domestic Product (GDP). In 1980-81 while about 43 per cent of the state GDP only was contributed by the primary sector, relative contributions of the secondary and tertiary sectors were 23 per cent and 34 per cent respectively. Diversification of the economy which was witnessed in 1980-81 got further accentuated by 1996-97, with the tertiary sector's relative contribution to the state GDP outstripping that of the primary sector. However, the relative contribution of the secondary sector remained by and large stable if not stagnant. (Relative contributions of the primary, secondary and tertiary sectors in 1996-97 are of the order of 34 per cent, 24 per cent and 42 per cent respectively). This is as it should be given the theoretical construct based on several countries' growth experience that as an economy develops, the relative importance of the primary sector diminishes and that of the secondary and tertiary sector improves. However the real point of concern in Karnataka (as well as in many other states) is that the share of the work force dependent on the primary sector reveals a doggedness (74 per cent in 1960-61 and 67 per cent in 1990-91), which is not commensurate with its corresponding shares in income. This should help appreciate why the returns to population dependent on primary sector (of which agriculture is the major component) are not commensurate with their employment level.

19. This dichotomy in the contributions of sectors to state income vis-à-vis levels of employment in these sectors means that the bulk of the work force continues to depend on the primary sector for its livelihood. Moreover considering the fact that agricultural workers (cultivators and agricultural labourers) constitute a major proportion (58 per cent as per 1991 census) of the total work force implies that in general the pressure of poor people continues to be on the primary sector. As the primary sector has close inter-links with the natural resources: land, forests, fisheries, minerals etc, this means that the pressure of the poor people is effectively on the natural resources.

20. Compared to the state-level picture what changes have taken place in the composition of district income? Which districts have experienced a structural transformation? We attempt to answer these queries in the following.

4. District income as per the new configuration of districts worked out for the year 1999-00 by the Directorate of Economics and Statistics, Government of Karnataka is given in Annexure 4.1.

21. The relative contribution of primary sector to district income declined in all the districts with the solitary exception of Bijapur. Within the primary sector, the corresponding decline in the contribution of agriculture (including animal husbandry) was mainly responsible for this phenomenon. However, in the districts of Uttara Kannada, Kodagu and Chikmagalur districts, in addition to the agriculture sector (including animal husbandry), considerable decline in the contribution of forestry and logging sector also mattered in pulling down the relative importance of the primary sector in the sectoral composition of district income. While in Chikmagalur district, mining and quarrying emerged as an important contributor to district income, in Kolar district its role got considerably diminished. Twelve districts spread over both South Karnataka (Kolar, Tumkur, Mysore, Mandya, Hassan, Kodagu) and North Karnataka (Belgaum, Dharwad, Uttara Kannada, Gulbarga, Bidar, Raichur) registered an improvement in the relative contribution of the secondary sector to the district income and was particularly considerable in the districts of Mandya, Uttara Kannada, Bidar and Gulbarga. Chitradurga and Shimoga experienced a relative decline while Bellary, Chickmagalur and Dakshina Kannada experienced no change in the secondary sector's contribution to district income- All the districts registered noticeable improvement in the relative contribution of the tertiary sector to district income on account of transport, trade, hotels, restaurants, banking and insurance sub-sectors correspondingly acquiring greater importance. (Data particulars on sub-sectors are not presented in Tables 4.11 and 4.12. These may be obtained from the Directorate of Economics and Statistics, Govt. of Karnataka).

22. Notwithstanding the decline in the relative contribution of the primary sector to district income (except Bijapur), the primary sector continues to be the major contributor (more than 40 per cent) in Belgaum, Bijapur, Raichur, Bellary (4 districts) in North Karnataka and Chitradurga, Kolar, Chikmagalur, Shimoga, Tumkur, Mandya, Hassan, and Kodagu (8 districts) in South Karnataka. Comparatively conspicuous gains in the share of the secondary sector were experienced by six districts only : Dharwad, Uttara Kannada, Gulbarga and Bidar, (4 districts) in North Karnataka and Mandya and Mysore (2 districts) in South Karnataka. Even in these districts, secondary sector, however, continued to occupy the third position. (Leaving aside Bangalore district as a special case, secondary sector's contribution to district income ranged from 6 per cent in Kodagu to 29 per cent in Dakshina Kannada). Tertiary sector managed to register almost dramatic and widespread gains in most of the districts over the period 1980-81 to 1996-97 excepting Bijapur and Kolar where gains were moderate. In fact in six districts: Uttara Kannada, Gulbarga, Bidar, Bangalore, Mysore and Dakshina Kannada it outbeat the primary sector to occupy the first position.

23. The point that needs to be highlighted from the above discussion is the reducing role of the primary sector and the increasing role of the tertiary sector in contributing to the state/district income. Excepting a few stray cases, secondary sector did not register conspicuous changes in its relative contributions to state/district income. Thus structural changes taking place in the composition of state/district income reveal that tertiary sector has clearly gained in its relative importance.

24. At the regional level no significant changes in the relative shares of South Karnataka (comprising of 11 districts) and North Karnataka (comprising of 8 districts) in the state income took place over the period 1980-81 to 1996-97. This also holds good by and large in respect of their relative sectoral shares. In other words, South Karnataka continues to hold its sway in the composition of state income with nearly 2/3 of the state income derived from it.

Table 4.11
GDP in Karnataka: District-wise and Sector-wise Composition, 1980-81 and 1996-97
(GDP at current prices)

District	1980-81					1996-97				
	GDP Rs. In lakh	% share of Primary Sector	% share of Secondary Sector	% share of Tertiary Sector	Total	GDP Rs. In lakh	% share of Primary Sector	% share of Secondary Sector	% share of Tertiary Sector	Total
Belagaum	45680	51	19	29	100	446888	44	20	36	100
Dharwad	41178	45	21	34	100	400388	34	24	42	100
Bijapur	25528	47	20	33	100	296551	49	17	34	100
Uttara Kannada	19317	48	17	35	100	155749	31	24	45	100
Belgaum Division	131703	48	20	32	100	1299576	40	21	39	100
Gulbarga	31268	51	20	29	100	302079	35	25	40	100
Bidar	14231	59	13	28	100	104321	40	17	43	100
Raichur	27886	60	13	27	100	220648	47	14	39	100
Bellary	25668	53	16	31	100	229743	46	16	38	100
Gulbarga Division	99053	55	16	29	100	856791	41	19	40	100
Bangalore(U)	118698	10	42	48	100	1094955	3	42	55	100
Bangalore @					100	186796	38	22	40	100
Chitradurga	31390	52	20	28	100	241987	44	18	39	100
Kolar	18214	47	14	39	100	193055	44	15	41	100
Shimoga	32644	50	21	29	100	279718	44	19	37	100
Tumkur	25385	52	17	31	100	236551	46	18	36	100
Bangalore Division	226331	29	31	40	100	2233062	23	30	47	100
Mysore	41183	49	21	30	100	411662	35	25	40	100
Mandya	24927	62	11	27	100	148260	43	18	39	100
Hassan	20189	62	11	27	100	170604	49	12	39	100
Chikmagalur	18266	66	8	26	100	193658	55	8	37	100
Dakshina kannada	44420	38	29	33	100	379919	29	29	42	100
Kodagu	14960	70	6	24	100	113363	57	6	37	100
Mysore Division	163945	53	17	29	100	1417466	41	20	40	100
North Karnataka	230756	51	18	31	100	2156367	41	20	39	100
South Karnataka	390276	39	26	35	100	3650528	30	26	44	100
Karnataka	521032	43	23	34	100	5806895	34	24	42	100

Source: Data on GDP obtained from the Directorate of Economics and Statistics, Govt. of Karnataka

Table 4.12
Districts share in the State GDP and in Sectoral Income,1980-81 and 1996-97.

District	1980-81:District's Share in the State Total of				1996-97:District's Share in the State Total of			
	GDP	Primary Sector Income	Secondary Sector Income	Tertiary Sector Income	GDP	Primary Sector Income	Secondary Sector Income	Tertiary Sector Income
Belagaum	7.36	8.64	6.32	6.38	7.70	9.98	6.42	6.67
Dharwad	6.63	6.79	6.17	6.73	6.9	6.88	6.89	6.91
Bijapur	4.11	4.44	3.64	3.99	5.11	7.28	3.71	4.15
Uttara Kannada	3.11	3.44	2.30	3.23	2.68	2.47	2.66	2.87
Belgaum Division	21.21	23.31	18.43	20.33	22.38	26.60	19.68	20.51
Gulbarga	5.03	5.89	4.36	4.37	5.20	5.30	5.45	4.98
Bidar	2.29	3.07	1.31	1.94	1.80	2.10	1.31	1.83
Raichur	4.29	6.16	2.59	3.60	3.80	5.24	2.23	3.53
Bellary	4.13	5.00	2.94	3.82	3.96	5.30	2.70	3.58
Gulbarga Division	15.95	20.12	11.20	13.72	14.75	17.94	11.68	13.93
Bangalore(U)	19.11	4.38	35.81	27.07	18.86	1.46	33.50	24.59
Bangalore ®					3.22	3.62	2.93	3.05
Chitradurga	5.05	6.03	4.36	4.25	4.17	5.37	3.06	3.83
Kolar	2.93	3.11	1.85	3.43	3.32	4.30	2.02	3.28
Shimoga	5.26	5.98	4.97	4.50	4.82	6.21	3.77	4.28
Tumkur	4.09	4.86	3.12	3.74	4.07	5.42	3.13	3.48
Bangalore Division	36.44	24.36	50.11	42.99	38.46	26.38	48.42	42.51
Mysore	6.63	7.4	6.08	5.99	7.09	7.28	7.33	6.80
Mandya	4.01	5.65	2.02	3.23	2.55	3.24	1.88	2.38
Hassan	3.25	4.57	1.52	2.70	2.94	4.22	1.51	2.71
Chikmagalur	2.94	4.44	1.06	2.26	3.33	5.43	1.09	2.96
Dakshina kannada	7.15	6.28	9.00	7.04	6.54	5.62	7.90	6.51
Kodagu	2.41	3.86	0.58	1.75	1.95	3.29	0.50	1.70
Mysore Division	26.4	32.21	20.26	22.97	24.41	29.08	20.22	23.06
North Karnataka	37.16	43.43	29.63	34.05	37.13	44.54	31.36	34.43
South Karnataka	62.84	56.57	70.37	65.95	62.87	55.46	68.64	65.57
Karnataka	100	100	100	100	100	100	100	100

Source: Computations based on GDP and Sectoral Income data obtained for the respective years (at current prices) from the Directorate of Economics and Statistics, Govt. of Karnataka.

25. The discussion so far has broadly indicated the regional disparities in Karnataka at the district level in respect of per capita income, poverty and overall backwardness and the changes that have occurred in the sectoral composition of income. **Infact a part of the explanation for relative regional disparities that are persisting in the ‘current period’ in the state may be sought in the historical legacy that the state has inherited since its reorganization in 1956.** It is common knowledge that at the time of reorganization of the state in 1956, there were several developmental disparities between the different political units: Bombay-Karnataka, Hyderabad-Karnataka and Mysore-Karnataka, due to a variety of factors : historical, cultural, social and economic.

26. We make an attempt to present the regional disparities in respect of selected development indicators in Karnataka in the “base period” – **liberally defined to include the period around the 1960s and termed “then”** – followed by the discussion, of regional disparities in Karnataka in the “current period”, **liberally defined to include the period after the 1990s and termed “now”** for convenience of analysis. As data on development indicators pertaining to the base period suffer from several inadequacies in terms of their coverage, level of disaggregation, range etc; the scenario of regional disparities in the base period that we build up is by no means exhaustive or comprehensive. Nevertheless it serves us to inform of the **regional disparities then** (Base Period). Against this background., we proceed to take up the analysis of **regional disparities now** (current period) and try to reflect, whether the disparities have widened/ narrowed over time.

4.4 Regional Disparities : Then and Now

27. Data on selected development indicators in the base period : Then and in the current period: Now are presented in Table :4.13 These indicators though limited in number, touch upon important sectors such as human development, agriculture, industry, education, health infrastructure and weaker sections.

4.4 (i) Gender Disparity:

28. Sex ratio can be considered as a rough proxy for gender disparities. In 1961, excepting Dakshina Kannada (1082), sex ratio was adverse to women in the districts of Karnataka. The lowest sex ratio was in Kodagu (862) preceded by Shimoga (898). In 10 districts, sex ratio was below the state average (959), of which three belonged to North Karnataka (Belgaum, Dharwad, and Uttara Kannada) and seven to South Karnataka (Chitradurga, Shimoga, Chickmagalur, Tumkur, Bangalore, Kodagu and Mysore). Thus sex ratio was relatively worse in a greater number of districts in South Karnataka than in North Karnataka. Region-wise, sex ratio was higher in North Karnataka (966) than in South Karnataka (954). Sex ratio in the state improved marginally over the four decades from 959 in 1961 to 964 in 2001. It continued to be adverse to women in all but Dakshina Kannada district. The lowest sex ratio was in Bangalore (916) preceded by Bidar (948). In 2001, Sex ratio was below the state average (964) in six districts, of which four belonged to North Karnataka (Belgaum, Bijapur, Bidar and Dharwad) and two to South Karnataka (Chitradurga and Bangalore). Region-wise, unlike in 1961, sex ratio was higher in South Karnataka (965) than in North Karnataka (962).

Table - 4.13

Selected Development Indicators in the Base Period (Then) and in the Current Period (Now): Districtwise

Sl.No.	District	Human Development							
		Sex Ratio				Literacy			
		1961	Rank	2001	Rank	1961	Rank	2001	Rank
1.	Bangalore	917	16	916	19	40	2	79.69	2
2.	Chikmagalur	903	17	984	5	33	7	72.63	6
3.	Chitradurga	940	15	952	16	29	9	67.49	9
4.	Dakshina Kannada	1082	1	1060	1	38	5	82.13	1
5.	Hassan	969	6	1005	2	29	11	68.75	8
6.	Kodagu	862	19	996	3	43	1	78.17	3
7.	Kolar	968	7	970	9	25	14	63.14	12
8.	Mandya	967	8	985	4	20	16	61.21	14
9.	Mysore	950	13	966	10	25	13	60.34	15
10.	Shimoga	898	18	972	7	33	6	72.90	5
11.	Tumkur	956	10	966	11	26	12	67.19	10
	South Karnataka	954		965				71.63	
1.	Belgaum	951	12	959	15	31	8	64.42	11
2.	Bijapur	976	4	962	14	29	10	57.63	17
3.	Dharwad	951	11	951	17	40	3	69.17	7
4.	Uttara Kannada	946	14	970	8	39	4	76.59	4
5.	Bellary	960	9	967	10	24	15	57.81	16
6.	Bidar	971	5	948	18	17	19	61.98	13
7.	Gulbarga	989	2	964	13	17	18	50.65	19
8.	Raichur	985	3	981	6	18	17	51.83	18
	North Karnataka	966		962				59.43	
	Karnataka	959		964		29.80		67.04	

(Contd..)

Table - 4.13 (Contd..)

Selected Development Indicators in the Base Period (Then) and in the Current Period (Now): Districtwise

Sl.No.	District	Agriculture							
		Cropping Intensity				Percentage of Net Irrigated Area to Net Area Shown			
		1957-58	Rank	1998-99	Rank	1957-58	Rank	2000-01	Rank
1.	Bangalore	101.05	16	110.14	15	10.94	9	19.4	12
2.	Chikmagalur	103.64	8	109.94	16	32.69	2	8.7	18
3.	Chitradurga	105.46	6	114.08	13	7.34	11	24.6	9
4.	Dakshina Kannada	140.21	1	127.93	2	24.67	4	44.5	2
5.	Hassan	102.85	11	115.35	11	15.75	7	21.7	11
6.	Kodagu	100.46	17	101.06	19	6.74	12	2.1	19
7.	Kolar	102.63	12	107.69	17	17.04	6	18.8	14
8.	Mandya	107.03	3	119.56	6	26.00	3	43.8	3
9.	Mysore	106.69	5	121.01	3	11.69	8	29.5	6
10.	Shimoga	103.01	10	118.92	7	41.52	1	61.4	1
11.	Tumkur	102.07	14	107.14	18	9.61	10	19.2	13
	South Karnataka	105.92		114.62		16.50		25.6	
1.	Belgaum	102.51	13	115.14	12	5.93	13	40.7	4
2.	Bijapur	101.94	15	112.00	14	1.83	17	26.4	8
3.	Dharwad	103.39	9	129.31	1	4.96	14	17.3	15
4.	Uttara Kannada	108.10	2	115.50	10	20.50	5	22.1	10
5.	Bellary	104.57	7	117.01	8	3.51	15	32.9	6
6.	Bidar	106.99	4	116.89	9	2.72	16	10.2	17
7.	Gulbarga	100.06	18	120.04	4	1.40	18	13.7	16
8.	Raichur	100.00	19	119.85	5	1.16	19	29.5	7
	North Karnataka	102.19		119.23		3.20		24.3	
	Karnataka	103.39		117.37		7.48		24.8	

(Contd..)

29. It is intriguing that sex ratio worsened between 1961 and 2001 in six districts. Of these four belonged to North Karnataka: Bijapur, Gulbarga, Bidar, Raichur and two to South Karnataka: Dakshina Kannada and Bangalore. It may be noted that in Dakshina Kannada district, despite the reduction, sex ratio continues to be favourable to women.

4.4 (ii) Literacy: ⁵

30. Literacy in Karnataka was 29.8 per cent in 1961. Kodagu ranked first (42.83 per cent) in literacy followed by Bangalore, Dharwad, Uttara Kannada, and Bidar the last (16.96 per cent), preceded by Gulbarga and Raichur. Six districts in South Karnataka (Chitradurga, Hassan, Kolar, Mandya, Mysore and Tumkur) and five districts in North Karnataka (Bijapur, Bellary, Bidar, Gulbarga and Raichur) had literacy rates lower than the state average. Literacy rate was higher for males (42.29 per cent) than for females (16.70 per cent).

31. Literacy rate in Karnataka improved from 29.80 per cent in 1961 to 67.04 per cent in 2001. Improvement in literacy rate was registered in all the districts. But females continue to lag behind males in all the districts even in 2001. (See Census of India 2001, Karnataka, Provisional Population Tables, Paper 1 of 2001, for details). Dakshina Kannada ranked first in literacy followed by Bangalore, and Gulbarga the last preceded by Raichur. Literacy rate is lower than the state average in three districts of South Karnataka: Kolar, Mandya and Mysore and in six districts of North Karnataka: Belgaum, Bijapur, Bellary, Bidar, Gulbarga and Raichur.

4.4 (iii) Irrigation:

32. In 1957-58, net irrigated area in the state was 7.6 lakh hectare. To view it differently about 7.5 per cent of net cropped area in the state only was irrigated in 1957-58. Relative shares of South Karnataka and North Karnataka in the net area irrigated were 71 per cent and 29 per cent respectively (See Table 4.14). Shimoga district enjoyed the prime of place in the relative proportion of net irrigated area in the state total (41 per cent) and Kodagu the last (0.8 per cent). Proportions of net irrigated area to net cropped area was also the highest in Shimoga District (41.5 per cent) and the least in Raichur (1.2 per cent).

5. Literacy rates for 1961 are effective literacy rates based on census figures excluding the population below five years and the literacy rates for 2001 are effective literacy rates based on census figures excluding the population below seven years.

33. Net irrigated area in the state increased more than three-fold from 7.6 lakh hectares in 1957-58 to 25.5 lakh hectares in 2000-01 (Table 4.14). Shares of South Karnataka and North Karnataka in this incremental expansion of net irrigated area in the state were 29 per cent and 71 per cent respectively. Thanks to the growth in irrigated area, which benefitted largely North Karnataka, its relative share in the State total of net irrigated area shot up to 58 percent in 2000-01 (compared to its share of 29 per cent in 1957-58), while that of South Karnataka decreased to 42 per cent (compared to 71 per cent in 1957-58). It is also noteworthy, between 1957-58 and 2000-01, the proportion of net irrigated area to net cropped area increased to 26 per cent from 17 per cent in South Karnataka and to 24 per cent from 3 per cent in North Karnataka and in the State to 25 per cent from 7 per cent respectively. Dramatic transformation in the irrigation scenario to the advantage of North Karnataka is quite obvious.

34. Changes in the relative status of Districts in South Karnataka and North Karnataka in respect of irrigation in the base period (1957-58) and in the current period (2000-01) are captured in a summary from in the following :

Proportion of Net Irrigated area to Net Cropped area	Number of Districts			
	1957-58		2000-01	
	South Karnataka	North Karnataka	South Karnataka	North Karnataka
Less than 5 per cent	-	6	1	-
5-10 per cent	3	1	1	-
Above 10 per cent	8	1	9	8

4.4 (iv) Cropping Intensity:

35. In 1957-58, cropping intensity was the highest in Dakshina Kannada (140.2) and was either nil or negligible (less than 105) in 13 districts Belgaum, Bellary, Bijapur, Dharwad, Gulbarga, Raichur, Bangalore, Chickmagalur, Hassan, Kodagu, Kolar, Shimoga and Tumkur. Among the regions, it was higher in South Karnataka than in North Karnataka.

36. All the districts except Dakshina Kannada, registered an increase in cropping intensity in 1998-99 over 1957-58. At the state level, cropping intensity reached to 117.37 from 103.39 in the corresponding period. Seven districts in the state, that is, Dakshina Kannada, Mandya, Mysore and Shimoga in South Karnataka and Dharwad, Gulbarga, and Raichur in North Karnataka have higher level of cropping intensity compared to the state average.

4.4 (v) Livestock:

37. Livestock serves as an important source of livelihood and as a contributor of economic well-being. Data available on individual livestock are adjusted to be expressed in terms of cattle head units. In 1956 the state had on an average 53061 livestock per lakh population. Two districts: Bangalore and Dakshina Kannada in South Karnataka and five districts : Belgaum, Bellary, Bijapur, Dharwad and Uttara Kannada in North Karnataka had livestock below the state average.

38. It is striking to notice considerable decline in the livestock strength in all the districts of Karnataka with the state average reducing to 31829 (per lakh population) in 1997. This brings out the distressing fact that the growth in human population is much faster than the growth in livestock, imposing additional strain on this resource for livelihood.

39. Five districts in South Karnataka (Mysore, Kodagu, D.Kannada, Kolar and Bangalore) and four districts in North Karnataka (Bidar, Dharwad, Bijapur and Belgaum) are below the state average. Malnad districts display a clear edge over others in the possession of livestock asset.

4.4 (vi) Industry:

40. In respect of indicators of industrial development, such as number of factories and number of industrial workers, a clear regional distinction between South Karnataka and North Karnataka may be discerned, with these development indicators skewed highly in favour of South Karnataka. In 1957, nearly 2/3 of the industrial units (factories) were located in South Karnataka and the remaining 1/3 industrial units in North Karnataka. These were concentrated especially in Bangalore, followed by Dharwad, Belgaum, Dakshina Kannada and Mysore districts in particular. Similarly nearly 3/4 of the industrial workers were concentrated in South Karnataka, particularly in Bangalore followed by Kolar, Dakshina Kannada, and Mysore districts. The point to be specially noted is that within North Karnataka, Belgaum and Dharwad districts displayed levels of industrial development worthy of them to be compared with the relatively advanced (industrially) districts in South Karnataka.

41. South Karnataka continues to be the preferred region for industrial development (Bangalore, Mysore and Dakshina Kannada in particular) . Nearly 2/3 of the industrial units are located in South Karnataka in the year 1998-99, which means in the context of a sizeable increase in the absolute number of industrial units between 1957-58 and 1998-99(four decades) that North Karnataka lags behind South Karnataka in attracting the new industrial units. This explains also why a large proportion of industrial workers in the state continues to be found in South Karnataka.

4.4 (vii) Educational Infrastructure:

No. of Primary schools per lakh population:

42. In 1958 , in the state, there were 96 primary schools for every lakh population. Relatively North Karnataka was ill placed (91 primary schools per lakh population) compared to South Karnataka (99 primary schools per lakh population). Four districts in South Karnataka (Bangalore, Dakshina Kannada, Kodagu, and Mysore) and six districts in North Karnataka (Bellary, Bidar, Gulbarga, Raichur, Bijapur and Dharwad) had number of primary schools lower than the state average.

43. The state average of primary schools (per lakh population) declined marginally to 94 by 1999-2000 caused largely by the corresponding decline in the average number of schools in North Karnataka (from 91 schools in 1958-59 to 84 schools in 1999-2000), as the average number of schools in South Karnataka improved marginally (from 99 to 102 schools in the corresponding period). Four districts in South Karnataka : Bangalore, Dakshina Kannada , Kodagu and Mysore and seven districts in North Karnataka : Belgaum, Bijapur, Bellary, Bidar, Dharwad, Gulbarga and Raichur stood below the state average.

44. However these changes have to be interpreted with caution since some of these districts are educationally forward which only means that the growth in the number of primary schools is not commensurate with the growth in population.

4.4 (viii) Health Infrastructure:

45. No. of Hospital beds may be construed as a good indicator in reflecting the level of health facilities in a given society. In 1958-59, the state average was 54 beds per lakh population. Districts which were above this average were Bangalore, Kolar, Shimoga, Dakshina Kannada, Kodagu and Mysore; all in South Karnataka and Bellary only in North Karnataka.

46. The state average improved to 75 Hospital beds per lakh population in 2001. The corresponding regional averages for South Karnataka and North Karnataka are 85 and 61 respectively, indicating the gap of the latter region compared to the state average. Districts which have these facilities below the state average are, Bangalore and Tumkur in South Karnataka and Belgaum, Bijapur, Dharwad, Bidar, Gulbarga and Raichur in North Karnataka. Districts which have these facilities above the state average are Chitradurga, Kolar, Shimoga, Chikmagalur, Kodagu, Dakshina Kannada, Mysore, Hassan and Mandya in South Karnataka, Bellary and Uttara Kannada in North Karnataka.

4.4 (ix) Electrification of Towns and Villages:

47. Electrification is an important indicator of general development. A meagre 7 per cent of the total towns and villages were electrified in the year 1959. Districts in North Karnataka, with the solitary exception of Bellary, were way behind in the matter of electrification of towns and villages, with less than one per cent of the towns and villages in each of these districts electrified. Bangalore enjoyed the first rank followed by Dakshina Kannada. However, even in these relatively better placed districts, the proportion of towns and villages electrified stood at 21 per cent and 14 per cent respectively.

48. There has been a phenomenal growth in the electrification of towns and villages in the State, touching nearly 100 percent in all the districts. However this achievement gets somewhat undermined, when we notice that only 37.5 percent of the hamlets in the state are provided with this facility. These are concentrated in Malnad and Coastal districts of Karnataka. (See Chapter. 11 for details).

4.4 (x) Road Length:

49. In 1959, the state had 23 Kms road length for every 100 sq.kms of area. Districts which fell below this average were: Chitradurga, Kodagu and Kolar (3 districts) in South Karnataka and Belgaum, Bijapur, Bellary, Bidar, Gulbarga and Raichur (6 districts) in North Karnataka.

50. In 1991 the state average of road length has increased to 70 Kms for every 100 sq.kms of area. Districts which lag behind this state average are Chitradurga and Dakshina Kannada in South Karnataka and Belgaum, Bijapur, Bellary, Bidar, Gulbarga, Raichur and Uttara Kannada in North Karnataka.

4.4 (xi) Number of Vehicles :

51. There were 144 registered vehicles per lakh population at the state level in 1959. Number of registered vehicles per lakh population ranged from as low as 35 in Bidar district to as high as 533 in Bangalore district. Seven districts of South Karnataka (Chitradurga, Hassan, Kolar, Mandya, Mysore, Shimoga and Tumkur) and all the eight districts in North Karnataka (Bellary, Bidar, Gulbarga, Raichur, Belgaum, Bijapur, Dharwad and Uttara Kannada) had vehicles less than the State average. Four districts (Bangalore, Chikmagalur, Dakshina Kannada and Kodagu) which had vehicles above the State average belonged to South Karnataka.

52. All the districts reported a higher density of vehicles (per lakh population) by 2001 compared to 1959-60. Compared to the state average of 6742 vehicles per lakh population, the vehicle density continued to be relatively quite high in South Karnataka (8793 vehicles) than in North Karnataka (3992 Vehicles). But it is to be noted that only four districts: Bangalore, Dakshina Kannada, Kodagu and Mysore in South Karnataka (out of 11 districts) have vehicle density higher than the state average. Within North Karnataka, excepting Dharwad, in all other districts the vehicle density is lower than the state average.

4.4 (xii) Bank Branches (Commercial Banks and RRBs):

53. Access to and intensity of banking institutions facilitate an economy's development. In 1975, average population served by a bank branch was 16 thousand in Karnataka. Compared to the state average, average population per branch was higher in six districts in South Karnataka: Chitradurga, Hassan, Kolar, Mandya, Mysore and Tumkur and in seven districts in North Karnataka : Belgaum, Bijapur, Dharwad, Bellary, Bidar, Gulbarga and Raichur, suggesting relatively poor banking facilities in a large number of districts in the state. Region-wise, South Karnataka enjoyed better banking facilities (13 thousand per branch) than North Karnataka (21 thousand per branch).

54. Average population served by a bank improved to 11 thousand in 1996. Notwithstanding the significant growth in the number of bank branches in North Karnataka between 1975 and 1996, North Karnataka continues to lag behind South Karnataka in the level of banking facilities. Average population per branch in North Karnataka is 13 thousand as against 10 thousand in South Karnataka. Compared to the state average, average population per branch is higher in five districts of South Karnataka (Chitradurga, Kolar, Mysore, Mandya and Tumkur) and in 6 districts of North Karnataka (Belgaum, Bijapur, Bellary, Bidar, Gulbarga and Raichur), requiring them to be upgraded in the level of banking facilities.

4.4 (xiii) Scheduled Castes and Scheduled Tribes Population:

55. Relative concentration of the disadvantaged and weaker sections in certain districts/regions acts as a limiting factor in the development of such districts/ regions. As per the 1961 census, the population of scheduled castes and scheduled tribes together was 33 lakh. Distribution of scheduled castes and scheduled tribes population together across districts reveals their relative concentration in Bangalore, Kolar, Mysore and Tumkur districts; these four together accounting for nearly 40 per cent of the state's total scheduled castes and scheduled tribes population in 1961.

56. Scheduled castes and Scheduled tribes population shot up to 93 lakhs in 1991 from 33 lakhs in 1961. However definitional changes that have occurred during this period in the categorization of scheduled castes and scheduled tribes make their growth partly statistical in nature. In addition to Bangalore and Kolar districts which continue to have relatively higher shares in the state total in 1991, Chitradurga and Gulbarga show up as new entries to this list.

4.4 (xiv) Agricultural Labourers:

57. Both in terms of relative shares in the state total of agricultural labourers and proportion of agricultural labourers to the total workers in the respective district their distinct concentration in the districts of North Karnataka may be observed. The proportion of agricultural labourers to the total workers is more than one-fifth in the districts of North Karnataka with Uttara Kannada and Belgaum being the two exceptions.

58. Nearly 60 per cent of agricultural labourers in the state continue to be concentrated in North Karnataka with their widespread distribution in all the districts of the region, excepting Uttara Kannada.

59. To sum up, an overview of the scenario that obtains in the base period in the state with respect to selected development indicators suggests that in general the districts in North Karnataka lagged behind those in South Karnataka. Nevertheless certain districts of North Karnataka especially Belgaum and Dharwad did not conform to the region's general dismal picture in regard to certain development indicators. But it did not help to brighten the overall regional picture in any significant way. Similarly it is important to recognize that certain districts in South Karnataka, Chitradurga, Kolar and Tumkur districts in particular did not conform to their regional pattern, and lagged behind in respect of certain development indicators making them fairly comparable to those in North Karnataka.

60. The distinct dichotomy between South Karnataka and North Karnataka regions in respect of selected development indicators which was very clearly evident in the base period continues to persist in the current period too. Better off districts in the base period which belonged mostly to South Karnataka have maintained their overall lead. Nevertheless it is noteworthy that some worse off districts in the base period which belonged mostly to North Karnataka have managed to move up the development ladder, but still occupy the lower rungs of it (See Table 4.13). The disparities between the developed and backward districts in the current period are potent enough to send the warning signals. However, it is important to recognize that within the relatively developed South Karnataka, there are districts whose relative development status in respect of certain indicators/sectors seems to be comparable to that of the backward districts in North Karnataka. Likewise there are cases of districts in North Karnataka whose relative status in respect of certain indicators/sectors seems to be comparable to that of the developed districts in South Karnataka.

61. A plausible reason for the relative disposition of districts in South Karnataka vis-à-vis districts in North Karnataka is their relative status with regard to resource endowments, resource development, socio-economic-development-correlates and so on. Analyses undertaken in the following chapters help explain the factors/circumstances behind these regional features/peculiarities and facilitate seeking answers and solutions for the disquieting and persisting trends in regional disparities.

Annexure 4.1

District Income and Per Capita Income in Karnataka, District-wise :1999-2000

Sl.No.	District	Total Income(Rs.Lakh)		Per Capita Income(Rs.)	
		Gross	Net	Gross	Net
1	Bagalkot	252070	232671	15526	14331
2	Bangalore	2056488	1793703	32083	27984
3	Bangalore Rural	318606	283364	17270	15360
4	Belgaum	679588	616746	16439	14919
5	Bellary	354658	313628	17822	15760
6	Bidar	160683	146083	10892	9902
7	Bijapur	264563	242050	14885	13618
8	Chamarajanagar	131314	120752	13859	12744
9	Chickmagalur	239385	215961	21387	19294
10	Chitradurga	190557	174584	12841	11764
11	Dakshina Kannada	741956	639071	39817	34296
12	Davanagere	254748	234627	14486	13342
13	Dharwad	282328	256124	17915	16253
14	Gadag	115972	106020	12142	11100
15	Gulbarga	412888	376438	13446	12259
16	Hassan	248578	227914	14697	13475
17	Haveri	190315	175099	13470	12393
18	Kodagu	158637	147963	29608	27615
19	Kolar	342222	312436	13802	12600
20	Koppal	161714	147164	13789	12548
21	Mandya	264126	243497	15258	14066
22	Mysore	504517	453129	19560	1756
23	Raichur	183733	168494	11344	10403
24	Shimoga	311724	283288	19349	17584
25	Tumkur	351845	315196	13881	12435
26	Udupi	209410	190649	19208	17488
27	Uttara Kannada	235234	212979	17689	16016
	State	9617859	8629630	18561	16654

Source: Directorate of Economics and Statistics, Bangalore.

Annexure 4.2

Technical note

Computing the Human Development Index (HDI):

62. The methodology followed for computing the HDI for districts and the State is broadly the same as that adopted by the UNDP in recent Human Development Reports. The HDI is a composite index, covering three indicators: longevity measured by life expectancy at birth (LEB), education attainment measured by a combination of the adult literacy rate with two-thirds weight and the combined primary and secondary enrolment ratio with one-third weight (UNDP uses the combined enrolment ratio for the primary, secondary and tertiary levels) and standard of living measured by real GDP per capita expressed in Purchasing Power Parity dollars (PPP\$). For constructing the index, minimum and maximum values have been fixed for each of these indicators as follows:

- * Life expectancy at birth: 25 years and 85 years
- * Adult literacy rate: 0% and 100%
- * Combined gross enrolment ratio: 0 % and 100%
- * Real GDP per capita (PPP\$) : \$ 100 and \$ 40000

For each component of the GDI, the index is computed as per the formula given below:

$$\text{Index} = \frac{\text{Actual } X_i \text{ value} - \text{minimum } X_i \text{ value}}{\text{Maximum } X_i \text{ value} - \text{minimum } X_i \text{ value}}$$

63. The construction of the income index is a little more complex. Income is a proxy for decent standard of living. The basic approach in the treatment of income has been driven by the fact that achieving a respectable level of human development does not require unlimited income. To reflect this, income is discounted in calculating the HDI according to the following formula:

$$W(y) = \frac{\text{Log } y - \text{log } Y_{\min}}{\text{Log } Y_{\max} - \text{log } Y_{\min}}$$

64. For computing the HDI at the district level, estimates of LEB for 1998 have been arrived at by projecting values based on LEB estimates of 1981 (worked out by RGI, G.O.I) and LEB estimates of 1991 (worked out in HDR of Karnataka 1999). In the case of districts showing abnormal growth rates between 1981 and 1991, LEB growth rates have been adjusted to 0.4 and 0.5 per year as being done in certain estimates; adult literacy rates for 1991 and adult literacy

rates of 2000 (Study on Literacy rates in Karnataka 2000) by interpolation method. The source for combined enrolments (from I to X standard) is the Commissionerate of Public Instruction. The combined enrolment ratios have been worked out in the age group 6 - 16 years based on the estimates of population for 1998 (by D E & S) and percentage of age group from the study on Literacy Rates. Per Capita income for the districts for 1998 have been taken from the published data of Directorate of Economics & Statistics, Government of Karnataka . District income estimates have been converted in terms of purchasing power parity US \$ (PPP US\$) by using formula $(DPCI / NPCI) * 2077$, where DPCI stands for District per capita income in rupees and NPCI for National per capita income in rupees. The National per capita income for 1998 is Rs.12729 and in terms of PPP US\$ it is 2077.

For different components of HDI(1998) , indices are computed as follows:

$$\text{LEB Index (I1)} = \frac{\text{Actual value} - 25}{85 - 25}$$

$$\text{Education Index (I2)} = (2 * \text{adult literacy index} + 1 * \text{combined enrolment ratio index}) / 3$$

$$\text{Income Index (I3)} = \frac{\log (DPCI / NPC) * 2077 * - \log 100}{\text{Log } 40,000 - \log 100}$$

$$\text{HDI} = (I1 + I2 + I3) / 3$$