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**REGIONAL DISPARITIES IN KARNATAKA: A
DISTRICT LEVEL ANALYSIS OF GROWTH AND
DEVELOPMENT**

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Study Completed Under
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Abstract:

The study tries to analyse the trends and pattern of per capita income of Karnataka with a special focus on district and division level disparities. This paper also tries to study the relationship among and between per capita income, human development, work force and work participation rate from 1991 to 2007-08. It is found in this paper that social overhead capital is the key factor in promoting higher human and economic development which will reduce the regional disparity.

Key Words: Regional Disparity, Economic Development, Human Development

JEL Classification: R11 and P25

REGIONAL DISPARITIES IN KARNATAKA: A DISTRICT LEVEL ANALYSIS OF GROWTH AND DEVELOPMENT¹

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I. INTRODUCTION:

In India, right from the inception of the planning era, problems of balanced regional development had attracted the attention of economists, planners and politicians. Various Finance Commissions and the Planning Commission laid emphasis on the objective of achieving balanced regional development. In the recent past the issue of regional imbalances in India is mostly a subject for the intra-state analysis rather than the inter-state (see among others for Karnataka- Panchamukhi, 1998; Vyasalu, 1995; Vidwans 1996; Nanajundappa, 1999; Abdul Aziz, 2001; Hanagodimath, 2006; Vivekananda, 1992). Considerable work on regional imbalances has been carried out at the state level; but studies at the district level of an individual state are comparatively less. Further, the regional imbalances within a state are more important than those of inter-state³. No state is an exception so far as the problem of intra-state disparities are concerned but it may be more in some states and less in others. However the problem is present in all states. Many Committees have been set up to examine regional imbalances in some states. In Karnataka regional imbalances are considered as one of those acute issues in Indian states.

History of Karnataka shows that North Karnataka was more developed politically, economically and culturally. This is evident from the fact that most of the Kannada dynasties are from north Karnataka, namely, Kadamba, Rashtrakuta, Chalukya, Kalachuri, Vijaya Nagar and so on. Three gems of Kannada literature Pampa, Ponna and Ranna were from this region. The question is in spite of this, why North Karnataka has at present remained an under developed region. The reason is that, after the collapse of the Vijayanagar

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³ Inter- state disparity is a matter of serious concern at present because there is a lingering fear of separation of Telangan from Andhra Pradesh, Vidarbha and Marthawada from Maharashtra, and Coorg and North Karnataka from Karnataka. These are examples of disparity within the states. The under developed regions are fighting for separate sates and they are not happy with the present administration which will be harmful threat for the unity of the nation and it should be noted that Naxal hit areas are backward regions of different states.

Empire, the members of the royal family went over to , Mysore and Pennukonda of Andhra Pradesh. Over the period, under the leadership of Hyder Ali, Mysore state extended its borders up to most parts of Karnataka, Andhra Pradesh and Tamil Nadu. After his death, his son Tippu Sultan fought with the British and lost the war. Arcot Nawab, Hyderabad Nawab and Maratha's supported colonial power of Britishers to win that war. Hence, Mysore territory was distributed among all of them. Some part of the Mysore was given to Mysore Kings. Northwest part went to Marathas and Northeast part to Hyderabad Nawab. Thus, Mysore state was divided into three parts, namely, Hyderabad Karnataka, Bombay Karnataka and old Mysore (Joshi, 2006; Devaraj, 2007; Palaksha 2005). During the British rule (colonialism) Mysore province was one of the developed provinces in India. Mysore kings planned and implemented various social welfare programmes and policies for the development. On the other hand, Hyderabad Nawab did not follow the example. Hence Hyderabad Karnataka region did not develop. The same was case with Bombay Karnataka region, but it is comparatively better than Hyderabad Karnataka terms of development.

For this reason, regional imbalances in Karnataka have always been studied by dividing the state into North Karnataka and South Karnataka. In North again two parts can be seen, namely, Hyderabad Karnataka and Bombay Karnataka regions. To reduce the regional imbalances Karnataka Government has taken various steps like setting up Hyderabad Karnataka Area Development Board, Bayaluseeme Development Board, Border Area Development Programme, Malanad Area Development Board and so on. Government had also appointed a high power committee for redressal of regional imbalances under the chairmanship of Prof. D. M. Nanjundappa during 2002-03. The committee, using 35 indicators, categorised the 175 taluks into 39 most backward taluks, 40 more backward taluks and 35 backward taluks. The committee found that north Karnataka region was backward in general and Hyderabad Karnataka in particular as more backward. The committee recommended various programmes for reduction of regional imbalances. Karnataka government has started implementing the committee's recommendations since 2007-08. However, serious research on regional imbalances in Karnataka is scanty in general and on the High power committee recommendation and its implementation in particular. The present paper discusses district and division wise imbalances in growth and development.

II. OBJECTIVE OF THE STUDY:

The main intention of the study is to analyse and discuss the district / division-wise domestic product and its growth rate over a period of 18 years from 1990-91 to 2007-08 and identify the developed and backward districts. The study also examines whether size of the workforce and work participation rate are positively associated with per capita income.

Methodology and Data Source:

The study is based on secondary data collected from various issues of government publications like *Karnataka at a Glance*, *Statistical abstract of Karnataka* and *Karnataka Human Development Report 2005(2006)*. The Time period considered is from 1990-91 to 2007-08. Simple statistical tools like averages, percentages and growth rates are used. Scattered diagrams are also presented as visual aids for the benefit of the reader.

Classification of Districts⁴

On the basis of the Per capita income and growth rates, the districts are categorised into four groups i.e. Group I – Advanced, Group II – Semi-Advanced, Group III – Partially Advanced and Group IV – Under developed. For this purpose all the districts are first divided into two groups on the basis of state average values, - one above the state average and the other below the state average. Then two more averages are worked out, one for the group of districts whose values are above the state average and another for the group of districts whose values are below the state average. The districts whose values are above and below the former average are classified as Group I – Advanced and Group II – Semi advanced districts respectively. The districts whose values are above and below the latter average are classified as Group III – Partially advanced and Group IV – Underdeveloped districts respectively.

III. KARNATAKA IN THE INDIAN CONTEXT:

Karnataka has been considered as a middle-income state in the Indian union. States such as Haryana, Punjab, Gujarat and Maharashtra have shown higher economic development in terms of Per Capita Net State Domestic Product (PCNSDP). On the other

⁴ This methodology adopted here is that employed by Dadibhavi (1989) in the report of research project entitled “Regional Variations in Infrastructure Development in India”

hand states such as Bihar, Uttar Pradesh, Madhya Pradesh, and Orissa have lower PCNSDP compared to other states. Karnataka's NSDP which was Rs 7773 crore in 1980-83 did show a significant increase as it reached Rs 20472 crore for the year 2003-06. It means Karnataka's NSDP increased by more than two and half times during this period. The state had a ranking of 10th in 1980-83 and improved its position to reach 7th rank among Indian states in 2003-06. During the period of 1980-83 to 2003-06 Karnataka recorded a compound annual growth rate of 4.43 per cent which puts it among a few states which have recorded a growth rate of 4 percent or more during this period. This stat clearly shows that Karnataka's economy has grown at a healthy rate during this period. In 1983, 38.24 per cent of Karnataka's population was below poverty line, which decreased to 17.4% in 2004-05. This clearly shows that during this period of 20 years or more the population below poverty line declined by more than 50%. According to latest figures, Karnataka is 9th among states of the Indian union with percentage population below poverty line. In Human Development Index (HDI) Karnataka holds 7th rank out of 15 major states in 2000-01, which is founts to a fall of one rank from 1981 (6th rank). Although, the rank has fallen slightly, its HDI value has increased significantly (Economic Survery of Inida and National Human Development Report 2001).

IV. REGIONAL IMBALANCE IN KARNATAKA

Per capita income is a proxy measure to analyse the economic growth of any region, which points to the standard of living of its people. PCNSDP of Karnataka was Rs. 11,186 in 1990-91, which increased to Rs. 29,729 in 2007-08, a rise of more than 2.5 times. But per capita income has not been evenly distributed among the districts and divisions. Going by north and south, south Karnataka has performed better than north Karnataka. Per capita income of south Karnataka was Rs. 12,4757 in 1990-91 which is 1.3 times higher than that of the north region. During 2007-08, north Karnataka registered a per capita income of Rs. 21,326 as against Rs. 28,992 of south Karnataka. Though, per capita income has increased in both the regions, the gap (1.3 times) between south and north remained same. The regional imbalances may be observed from the Coefficient of Variation (C.V.). Regional imbalances have increased from 35.7 per cent in 1990-91 to 50.8% in 2007-08 in Karnataka. The regional imbalances within these regions show that south Karnataka has higher regional imbalances than north Karnataka. Further south Karnataka faced significantly higher district disparity over the period of time. (CV increasing from 36.4% in 1990-91 to 50.6% in 2007-08).

Table 1: District/Division wise Per Capita Income in Karnataka

District	1990-91	Ranks	1998-99	Ranks	2001-02	Ranks	2007-08	Ranks
Belgaum Division								
Bagalkot	9582	17	15899	12	16250	12	21980	14
Belgaum	10464	10	16304	11	15858	14	21482	16
Bijapur	9580	18	12603	22	13518	23	18386	20
Dharwad	12723	6	19120	6	17887	8	30697	6
Gadag	8572	22	13298	21	14535	15	21600	15
Haveri	6948	27	12424	23	12579	24	18145	21
Uttara Kannada	11172	8	16464	10	17128	10	23368	11
Average	9863		15159		15394		21712	
CV (%)	18.8		16.3		12.5		17.3	
Gulbarga Division								
Bellary	10298	11	15356	13	16790	11	29417	7
Bidar	7391	26	11269	26	11515	26	16155	27
Gulbarga	7826	25	12222	25	12522	25	17631	24
Koppal	8020	24	12330	24	16227	13	17654	23
Raichur	8421	23	11071	27	11256	27	16655	26
Average	8391		12450		13662		20786	
CV (%)	13.5		13.8		19.4		35.2	
Bangalore Division								
Bangalore Rural	9413	19	17413	9	24171	4	39590	4
Bangalore Urban	15862	4	28244	3	35283	1	79715	1
Chitradurga	9652	16	13861	20	14008	21	20823	17
Davangere	9867	13	14778	15	14489	16	22615	12
Kolar	9217	20	14561	17	14174	19	22565	13
Shimoga	11422	7	18759	7	17315	9	26518	8
Tumkur	9005	21	14630	16	13535	22	20077	18
Average	10634		17464		18996		32743	
CV (%)	22.9		29.1		42.6		67.2	
CV(%) without Bangalore U	8.9		12.4		25.1		28.8	
Mysore Division								
Chamarajnagar	10205	12	15203	14	14313	17	17738	22
Chikmagalur	15435	5	21433	5	19928	6	24196	10
Dakshina Kannada	21096	2	33085	1	28717	2	40521	2
Hassan	9732	15	13892	19	14260	18	19968	19
Kodagu	23474	1	30737	2	24662	3	40017	3
Mandya	9842	14	14238	18	14114	20	17011	25
Mysore	10542	9	17738	8	19195	7	25623	9
Udupi	16596	3	22666	4	21919	5	32269	5
Average	14615		21124		19638		25709	
CV (%)	37.3		35.1		27.3		36.1	
North Karnataka								
Average	9250		14030		14672		21326	
CV	18.4		18.0		15.8		24.5	
South Karnataka								
Average	12757		19416		19339		28992	
CV (%)	36.4		33.4		33.7		56.0	
CV (%) without Bangalore U.	27.8		33.2		27.4		31.6	
Karnataka								
Average	11198		17022		17265		25585	
CV (%)	35.7		33.6		32.1		50.8	
CV (%) Without Bangalore U.	36.0		32.4		26.0		30.5	
Karnataka	11186		17625		18597		29729	

Source: Various issues of Karnataka at a Glance, GoK

From the division wise analysis it is observed that, Mysore division had higher Per capita Domestic Product followed by Bangalore division which was far better than Gulbarga and Belgaum divisions in 1990-91. In 2007-08, Bangalore Division has achieved significantly higher per capita income of Rs. 32,743 followed by Mysore division, Belgaum division and Gulbarga division. The per capita income of Bangalore division is more than 1.5 times of Gulbarga division. The analysis of regional imbalances within the division reveals that developed divisions (Bangalore and Mysore) have higher regional disparity than the backward divisions. Belgaum division has lower inter-district disparity during 1990-91, which has decreased marginally in 2007-08. Though the Mysore division shows a reduced inter-district disparity marginally in the same period, it has higher inter-disparity compared to Bangalore division. Gulbarga division had the lowest district disparity during 1990-91 (C.V. 13.5%) which has increased drastically in 2007-08 (C.V. 35.2%). If we take out Bangalore Urban district, then district imbalances are found to be significantly lower during 2007-08; during the remaining years of the study period, the gap of district disparity with and without Bangalore Urban is more or less the same. The same is the case with district disparity among southern districts. In case of Bangalore division, inter-district disparity is lower, this means in Bangalore division and south Karnataka region without Bangalore Urban district, there would not be that much of inter district disparity. However, without Bangalore urban district also, south Karnataka's inter-district disparity is comparatively higher than north Karnataka.

The ranks of districts in terms of per-capita income for district are also presented in Table 1. 5 out of 8 districts of Mysore division were in the top 10 ranks during 1990-91, whereas in 2007-08 only 4 districts are in top ten ranks. 3 out of 7 districts of Bangalore division are in top 10 ranks. On the other hand only 1 out of 7 districts and 1 out of 5 districts stand out as top 10 ranks in Belgaum and Gulbarga division respectively. South Karnataka region has more number of high ranking districts than north region. Except Bellary, the remaining 4 districts of Gulbarga division have the lowest ranks in the state. Chamarajnar and Mandya of Mysore division have been ranked below 20 during 2007-08.

Table 2: District/Division wise growth rate of Per Capita Income in Karnataka

District	1991 to 1999		1999 to 2008		1991 to 2008	
	CAGR	Ranks	CAGR	Ranks	CAGR	Ranks
Belgaum Division						
Bagalkot	5.6	5	3.2	20	4.6	10
Belgaum	4.9	11	2.8	22	4.0	18
Bijapur	3.0	25	3.8	11	3.6	23
Dharwad	4.5	15	4.7	5	4.9	8
Gadag	4.9	12	4.9	4	5.1	5
Haveri	6.5	2	3.8	10	5.3	4
Uttara Kannada	4.3	19	3.5	18	4.1	17
Average	4.8		3.6		4.4	
CV (%)	22.1		20.0		14.1	
Gulbarga Division						
Bellary	4.4	17	6.5	3	5.8	3
Bidar	4.7	14	3.6	15	4.3	15
Gulbarga	5.0	10	3.7	13	4.5	12
Koppal	4.8	13	3.6	16	4.4	14
Raichur	3.0	26	4.1	8	3.8	20
Average	4.4		5.1		5.0	
CV (%)	17.6		29.2		16.5	
Bangalore Division						
Bangalore Rural	6.8	1	8.2	2	8.0	2
Bangalore Urban	6.4	3	10.4	1	9.0	1
Chitradurga	4.0	21	4.1	9	4.3	16
Davangere	4.5	16	4.3	7	4.6	11
Kolar	5.1	8	4.4	6	5.0	6
Shimoga	5.5	6	3.5	19	4.7	9
Tumkur	5.4	7	3.2	21	4.5	13
Average	5.5		6.3		6.2	
CV (%)	18.4		50.9		33.8	
Mysore Division						
Chamarajnagar	4.4	18	1.5	26	3.1	24
Chikmaglur	3.6	23	1.2	27	2.5	27
Dakshina Kannada	5.0	9	2.0	24	3.6	22
Hassan	4.0	22	3.6	14	4.0	19
Kodagu	3.0	27	2.6	23	3.0	26
Mandya	4.1	20	1.8	25	3.0	25
Mysore	5.8	4	3.7	12	4.9	7
Udupi	3.5	24	3.5	17	3.7	21
Average	4.1		2.0		3.1	
CV (%)	21.4		40.1		21.8	
North Karnataka						
Average	4.6		4.2		4.6	
CV	20.3		24.3		14.4	
South Karnataka						
Average	4.7		4.0		4.6	
CV (%)	22.5		61.3		38.3	
Karnataka						
Average	4.7		3.9		4.5	
CV (%)	21.3		47.7		29.9	
Karnataka	5.1		5.2		5.4	

Note: CAGR-Compound Annual Growth Rate

Source: Various issues of Karnataka at a Glance, GoK

Analyzing growth rates gives an idea about the sustainability of achieved development of the region. In Table 2 district/division-wise growth rates are presented for the year from 1990-91 to 1999-00 (first 10 years), from 1998-99 to 2007-08 (last 10 years) and from 1990-91 to 2007-08 (entire study period of 18 years). Growth rate of Karnataka is between 5 per cent and 5.5 per cent per annum. There is no considerable variation in growth rates between south and north. During the entire study period of 1990-91 to 2007-08, both the regions have registered a growth rate of 4.6 per cent per annum. Division wise, it is observed that in the first ten years Bangalore and Belgaum divisions have shown comparatively higher growth rate than Mysore and Gulbarga divisions. On the other hand, during last 10 years of the study period Bangalore division has registered significantly higher growth rate of 6.3 per cent per annum. Mysore division has not only continued with lower growth rate among the divisions but also failed to maintain the growth rate of the past 10 years. Belgaum division has also experienced reduced growth rate from 4.8 per cent per annum of first 10 years to 4.4 per cent per annum of the second 10 year period.

Inter-district regional imbalances in growth rates for Karnataka are significantly higher during the last 10 years of the study period than the first 10 years. Inter-district disparities within the region for south and north was more or less similar (20 and 22 per cent respectively) for the first 10 years, whereas it has increased around 3 times more compared to first 10 years in southern region. Inter-district disparity within the districts is higher in both the divisions of south Karnataka during last ten years. In first 10 years, all the divisions of south and north have shown a similar inter-district disparity, whereas, except Belgaum division, the remaining 3 divisions have experienced increased inter-district disparity in the last 10 years. Bangalore division has higher growth rate as well as higher inter-district disparities which means, **Bangalore division has 'growth with disparity'**. Mysore division has not only faced lower growth rate but also higher regional imbalances in the last 10 years of the study period.

The ranking of the growth rates of the districts, shows that Bangalore rural, Bangalore urban, Haveri, Bagalkot and Mysore were in the top 5 position during 1991-99, but during 1999-08, except Bangalore rural and urban, the remaining 3 districts failed to maintain their top positions. Interestingly, Bellary, Gadag and Dharwad have joined Bangalore rural and urban in the group of top 5. Haveri's position declined from 2nd to 10th, similarly, Bagalkot (from 5th to 20th), Tumkur (from 7th to 21st), Shimoga (from 6th to 19th), Dakshina Kannada

(from 9th to 24th), and Mysore (from 4th to 12th) have failed to maintain their earlier position. On the other hand Raichur (from 26th to 8th), Chitradurga (from 21st to 9th), Bijapur (from 25th to 11th), Bellary (from 17th to 3rd), Gadag (from 12th to 4th) and Dharwad (from 15th to 5th) improved their position remarkably.

In Tables 1 and 2 district/division-wise ranks and growth of per capita domestic product are shown. From the data given in these tables regional disparity among districts have also been analysed. Using these two tables another exercise has been done, which categorises districts into 4 groups for both per capita income and its growth rates (Table 3). The districts falling under Group-I (developed and high) can be considered as the best performing districts.

During the first 10 years of the study period Bangalore urban is the only district which comes in this group. Contrary to this, Raichur and Bijapur came under Group IV during the same period. Interestingly both these districts are from north Karnataka. On the other hand during the last 10 years of the study period Bangalore urban maintained its position in Group-I. Whereas, Raichur and Bijapur, by improving their income and growth rates have moved up Chamarajnagar has remained a backward district. Further, excluding Bangalore Urban (the out layer) district another exercise has been done and presented in the Appendix Table 2. With only minor changes there are no significant changes occur in the positions of the districts.

Table 3: Different Group-wise distribution of districts during 1991-2000

Particulars	Group I – Advanced	Group II – Semi-Advanced	Group III – Partially Advanced	Group IV – Under developed
Per Capita income	Bangalore Urban Dakshina Kannada Kodagu	Mysore Shimoga Dharwad Chikmagalur Udupi	Chitradurga Hassan Tumkur Kolar Mandya Davangere Chamarajnagar Bagalkot Bellary Belgaum Bangalore Rural Uttara Kannada	Bidar Haveri Raichur Gulbarga Koppal Gadag Bijapur
	Highest	Good	Medium	Low
Growth Rates	Shimoga Bagalkot Mysore Bangalore Urban Haveri Bangalore Rural	Koppal Gadag Belgaum Gulbarga Dakshina Kannada Kolar Tumkur	Hassan Chitradurga Mandya Uttara Kannada Chamarajnagar Bellary Davangere Dharwad Bidar	Kodagu Raichur Bijapur Udupi Chikmagalur

Table 3A: Different Group-wise distribution of districts during 1998-2008

Particulars	Group I – Advanced	Group II – Semi-Advanced	Group III – Partially Advanced	Group IV – Under developed
Per Capita income	Kodagu Dakshina Kannada Bangalore Urban	Mysore Bellary Shimoga Chikmagalur Dharwad Udupi Bangalore Rural	Hassan Chitradurga Tumkur Gadag Kolar Davangere Belgaum Bagalkot Uttara Kannada	Bidar Raichur Gulbarga Koppal Haveri Bijapur Mandya Chamarajnagar
	Highest	Good	Medium	Low
Growth Rates	Bellary Bangalore Rural Bangalore Urban	Chitradurga Raichur Davangere Kolar Dharwad Gadag	Tumkur Bagalkot Shimoga Uttara Kannada Udupi Koppal Bidar Hassan Gulbarga Mysore Bijapur Haveri	Chikmagalur Chamarajnagar Mandya Dakshina Kannada Kodagu Belgaum

V. Division/district wise share of State Domestic Product:

The analysis of SDP share of north and south reveals that 70 per cent of the domestic product is from south Karnataka. Bangalore division alone contributes more than 50 per cent of the domestic product to the state. Gulbarga division's share is only around 12 per cent which is the lowest among the divisions. Bangalore urban district alone contributes 32.8 per cent of the domestic product. If we compare the share of domestic product with the share of population, north Karnataka contributes only 30 per cent domestic product with 42.9 per cent of the population share (see Table 4). Whereas, south Karnataka's share in domestic product is higher (70%) as compared to its share of population (57.1%) It is also observed that except Bangalore division, the share of the domestic product is lower than the share of the population in all divisions. This gap is very high in Gulbarga division. Further, only four districts, namely; Bangalore urban, Kodagu, Udupi and Dakshina Kannada figures share of domestic product than their share of population. If we consider the share of workers in population there are no significant variations across regions. But seen in terms of work participation rate⁵, south Karnataka stands better compared to north Karnataka. Interestingly, Bangalore urban has second lower work participation rate after Bidar.

Mere analyses of including out-layers in any study leads to wrong conclusions and impractical suggestions. In our study largely Bangalore urban district is a metropolitan city and which has urban oriented growth. Hence an attempt has been made to exclude that district from analysis to obtain meaningful results. Data related to this exercise is presented in next columns of the same Table. From this exercise it is found that, North Karnataka contributed around 45 per cent of the domestic product with 49.3 per cent of the population share. While south Karnataka contributed 55.3 per cent of domestic product with 50.4 per cent of the population share. The gap between north and south is around 10 percentage points in case of domestic product, while it is less than 1 percentage points with regard to population share. Going division wise, both the divisions of north Karnataka contribute lower share of domestic product than their population share.

⁵ Work participation rate is defined as the percentage of total workers (main and marginal) to total population.

Table 4: division/district wise share of domestic product, population, work force and work participation rate 2007-08

DISTRICT	GDP		% of population		% of Total workers		Work Participation Rate
	With Bangalore	Without Bangalore	With Bangalore	Without Bangalore	With Bangalore	Without Bangalore	
Belgaum Division							
Bagalkot	2.3	3.4	3.1	3.14	3.1	3.4	43.6
Belgaum	5.7	8.5	7.9	7.94	8	9.0	44.6
Bijapur	2.1	3.1	3.4	3.41	3.1	3.4	39.7
Dharwad	3.1	4.6	3	3.01	2.9	3.3	42.7
Gadag	1.3	2.0	1.8	1.78	1.9	2.2	47.1
Haveri	1.6	2.5	2.7	2.67	2.8	3.2	46.3
Uttara Kannada	2	3.0	2.5	2.46	2.5	2.8	42.9
Average	18.2	27.0	24.4	24	24.2	27.2	43.8
Gulbarga Division							
Bellary	3.8	5.6	3.9	3.94	3.9	4.4	45.4
Bidar	1.5	2.3	2.9	2.88	2.4	2.7	37.1
Gulbarga	3.5	5.2	6.1	6.05	5.7	6.4	43.1
Koppal	1.3	2.0	2.4	2.35	2.4	2.6	46.4
Raichur	1.8	2.6	3.3	3.26	3.1	3.5	43.9
Average	11.9	17.6	18.5	18	17.5	19.6	43.2
Bangalore Division							
Bangalore Rural	2.1	3.2	3.5	3.45	3.8	4.3	47.4
Bangalore Urban	32.8	**	13.6	**	10.9	**	39.3
Chickballapur	1.3	2.0					
Chitradurga	2	3.0	2.8	2.83	3.1	3.4	47.6
Davangere	2.6	3.8	3.3	3.32	3.3	3.7	43.8
Kolar	2	2.9	4.7	4.69	5.2	5.9	48.7
Ramnagara	1.5	2.3					
Shimoga	2.7	4.1	3	3.02	3	3.4	43.5
Tumkur	3.3	4.9	4.7	4.73	5.6	6.3	51.0
Average	50.4	26.1	35.6	22	35	27	45.9
Mysore Division							
Chamarajnagar	1.1	1.6	1.7	1.73	1.9	2.1	46.4
Chikmagalur	1.7	2.6	2.1	2.09	2.2	2.5	45.3
Dakshina Kannada	4.8	7.2	3.5	3.55	4	4.5	49.9
Hassan	2.2	3.2	3.1	3.09	3.7	4.1	50.2
Kodagu	1.4	2.1	1	1.00	1.1	1.3	48.6
Mandya	1.9	2.8	3.1	3.12	3.6	4.0	47.7
Mysore	4.3	6.4	4.9	4.92	4.7	5.3	42.0
Udupi	2.3	3.4	2	1.97	2.1	2.3	43.9
Average	19.6	29.2	21.5	21	23.3	26.1	46.8
North Karnataka	30.0	44.7	42.9	43	41.7	46.8	43.6
South Karnataka	70.0	55.3	57.1	57	58.3	53	47.1
State	100	100.0	100	100.00	100	100	44.5

Source: Various issues of Karnataka at a Glance, GoK

Mysore division's share is higher (29.2 %) as compared to its population share among the divisions. Gulbarga division contributed only 17.6 per cent of the domestic product with 21.4 per cent of the population share. District wise analysis shows that Dharwad of Belgaum division, Bellary of Gulbarga division, Shimoga of Bangalore Division and Chikmagalur, D. Kannada, Kodagu, Mysore and Udupi of Mysore division have contributed higher domestic product than their population share. Except Dharwad and Bellary, the remaining 6 districts are from south Karnataka only. **Thus, it is clear that even after taking out Bangalore urban district from the analysis, districts of north Karnataka are relatively backward compared to south Karnataka.**

From these findings, one is motivated to think about the cause for higher per capita income. It appears that the main factor for the depressing scenario about north Karnataka region is infrastructure. Infrastructure may be social or physical but it definitely contributes more to increase in income. Many studies have empirically showed that infrastructure brings higher economic growth. Before drawing the conclusion another exercise is done here to study the association between human development index and per capita income which is presented in Diagrams 1 and 2. In respect of human development index also south Karnataka holds higher ranks. If we draw the trend line, human development index and per capita income are positively associated in both the time periods. It means skilled and healthy people are the real wealth of any region. Hence, physical and social overhead capital should be developed for achieving higher economic growth.

Diagram 1: District wise Per capita Income and Human Development Index 1990-91

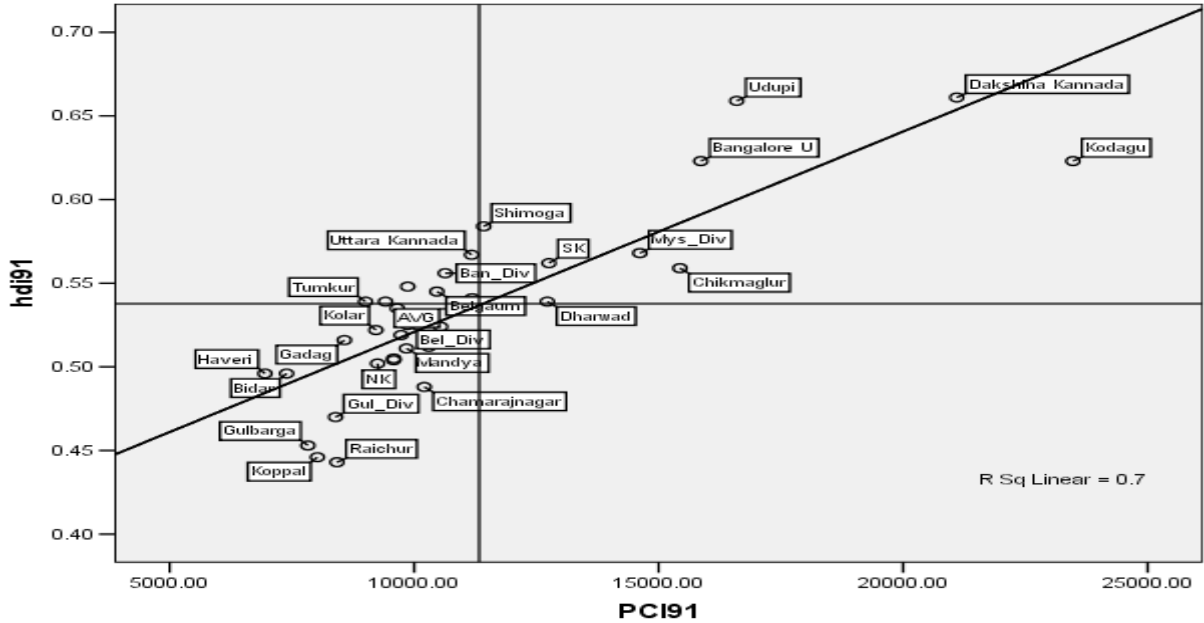
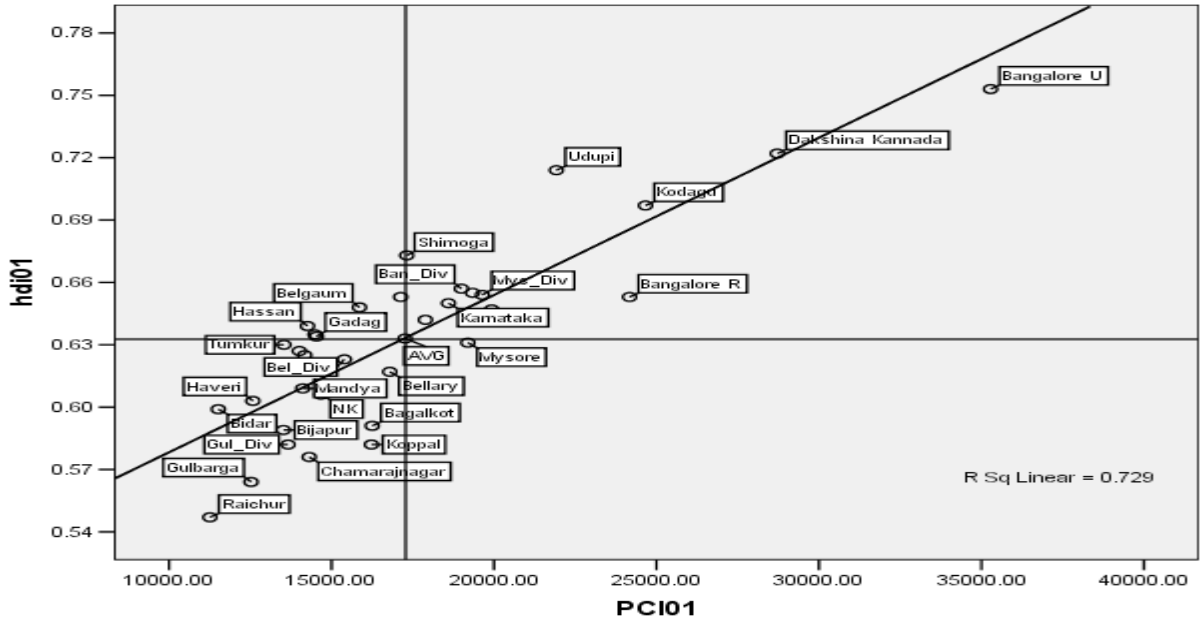


Diagram 2: District wise Per capita Income and Human Development Index 2000-01



VI. Findings:

- Observing the trends of average per capita income of south and north, south Karnataka has 1.3 times more per capita income than north Karnataka. The same trend has continued over period of time. South Karnataka has more number of high ranking districts than north Karnataka. In 1990-91 Mysore had a higher per capita income than Bangalore division. Whereas in 2001 Bangalore division occupied 1st position. On the other hand Belgaum and Gulbarga divisions continued to be in 3rd and 4th positions during both time periods.
- Inter- district disparity in per capita income in Karnataka is not only high, but over the period of time it has been increasing significantly.
- Bidar has lowest per capita income of only around Rs. 16,000 which is 5 times lower than that of Bangalore urban per capita income of around Rs. 80,000. It shows enormous inter-district disparity in the state.
- In respect of growth rates, there is no considerable variation between south and north. Both regions have registered lower growth rate during last 10 years of the study period as compared with the first 10 years of the study period. Belgaum division of north Karnataka, Mysore division of south Karnataka have experienced lower growth rate in the last 10 years than during the first 10 years of the study period. Contrary to this, Bangalore division of south Karnataka and Gulbarga division of north Karnataka have shown higher growth rate compared to previous 10 years.
- Bangalore urban and rural, Bellary, Gadag, Dharwad, Kolar and Mysore have higher growth rate among all other districts. Chikamagalur, Kodagu, Mandya and Bijapur have lower growth rate among the districts in the state.
- In respect of regional imbalances in growth rate terms, all divisions have experienced more or less similar variation during the first 10 years of the study period. Further, except Belgaum division, in all the three divisions inter-district disparity has increased in the last 10 years of the study period. Bangalore division has experienced the highest inter-district disparity, which means Bangalore division growth is with higher inequality.
- Bangalore urban is the only district which comes in the advanced group (high per capita income and high growth rate) during both the study periods. Contrary to this, Raichur and Bijapur came in the under developed group during first 10 years of the study period.

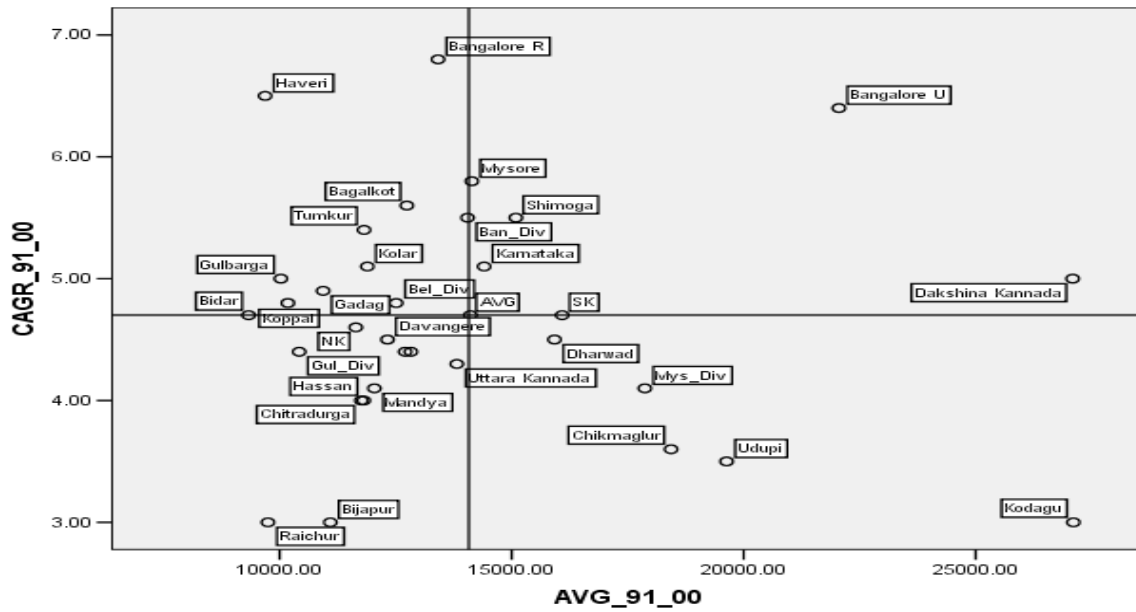
While these districts have improved their position during the last 10 years of the study period. Chamarajanagara entered in to underdeveloped group.

- Despite exclusion of Bangalore urban district, the southern region has higher growth rate compared to northern part of the state but intra regional (inter-district) disparities are higher in southern Karnataka compared to north Karnataka.
- If we include Bangalore urban, the number of districts with higher share of domestic product compared to their population is three; while with exclusion of Bangalore, the number raises to 8. Six among eight districts are from south Karnataka
- In respect of Human Development Index also, Bangalore and Mysore divisions stand higher in human development value compared to north Karnataka divisions Inter-district disparity has decreased in all regions and divisions over a period of time. Values of Human Development Index and per capita income are positively associated which means that human capital contributes for higher economic growth.

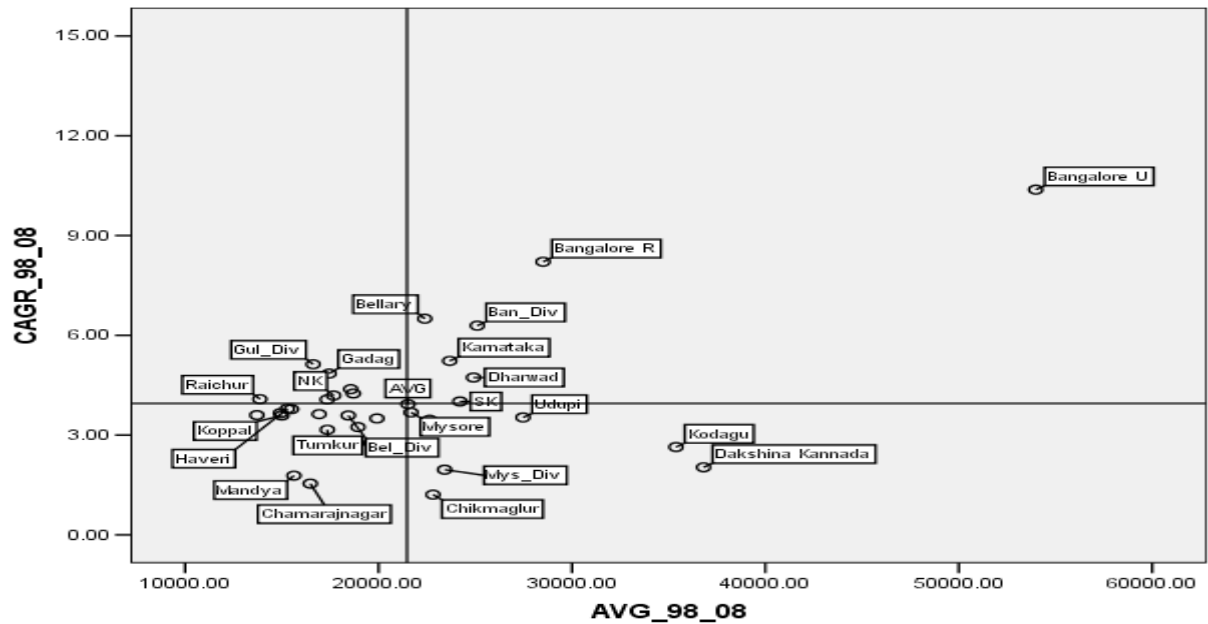
VII. Suggestions:

- Since Gulbarga and Belgaum divisions are more backward compared to Mysore and Bangalore divisions. D.M. Nanjundappa committee suggested that 40 per cent and 20 per cent of the special development plan fund should be spent on different sectors of these division to reduce regional imbalances. That work has to be done at a faster pace at present.
- No doubt, north Karnataka as a whole has to be taken care of but a special attention should be given to south's backward districts like Chamarajnagar and Mandya. Their per capita income is far less than that of many northern districts.
- However, there is no considerable variation in the work participation rate among regions. Most of the districts' share in domestic product to state is less than their population share. The important factor for this is infrastructure. Physical as well as social overhead capital matters a lot. Hence, government has to give more attention for development of these sectors in backward areas in general and rural part of backward areas in particular.
- The major constraint in the analysis of the regional disparities in Karnataka across taluks is the non-availability of data. It will be a help to policy makers if the government generates data at the grass roots level at least all the taluk and Grama Pnachayat level.

Appendix Diagram 1: District wise average per capita income and average growth rates from 1990-91 to 2000-01



Appendix Diagram 2: District wise average per capita income and average growth rates from 1998-99 to 2007-08



Appendix Table 1: District/Division wise Human Development Index

District	2001	Ranks	1991	Ranks
Belgaum Division				
Bagalkot	0.591	22	0.505	20
Belgaum	0.648	8	0.545	9
Bijapur	0.589	23	0.504	21
Dharwad	0.642	10	0.539	10
Gadag	0.634	13	0.516	17
Haveri	0.603	20	0.496	22
Uttara Kannada	0.653	7	0.567	6
Average	0.622		0.524	
CV (%)	4.43		4.99	
Gulbarga Division				
Bellary	0.617	18	0.512	18
Bidar	0.599	21	0.496	23
Gulbarga	0.564	26	0.453	25
Koppal	0.582	24	0.446	26
Raichur	0.547	27	0.443	27
Average	0.581		0.470	
CV(%)	4.75		6.75	
Bangalore Division				
Bangalore Rural	0.653	6	0.539	11
Bangalore Urban	0.753	1	0.623	4
Chitradurga	0.627	16	0.535	13
Davangere	0.635	12	0.548	8
Kolar	0.625	17	0.522	15
Shimoga	0.673	5	0.584	5
Tumkur	0.630	15	0.539	12
Average	0.656		0.555	
CV (%)	6.98		6.36	
Mysore Division				
Chamarajnaragar	0.576	25	0.488	24
Chikmagalur	0.647	9	0.559	7
Dakshina Kannada	0.722	2	0.661	1
Hassan	0.639	11	0.519	16
Kodagu	0.697	4	0.623	3
Mandya	0.609	19	0.511	19
Mysore	0.631	14	0.524	14
Udupi	0.714	3	0.659	2
Average	0.654		0.568	
CV (%)	7.95		12.27	
North Karnataka				
Average	0.60575		0.501833	
CV	5.579729		7.797164	
South Karnataka				
Average	0.6554		0.562267	
CV (%)	7.251852		9.752565	
Karnataka				
Average	0.633333		0.535407	
CV (%)	7.481957		10.3734	
Karnataka	0.65		0.541	

Source: Karnataka Human Development Report 2005

Appendix Table 2: Different Group-wise distribution of districts during 1991-2000, without Bangalore

Year	Group I – Advanced	Group II – Semi-Advanced	Group III – Partially Advanced	Group IV – Under developed
Per Capita Income	Udupi Kodagu Dakshina Kannada	Uttara Kannada Shimoga Mysore Dharwad Bangalore Rural Chikmaglur	Kolar Chitradurga Mandya Hassan Koppal Davangere Chamarajnaragar Bagalkot Belgaum Bellary	Bidar Haveri Raichur Gulbarga Tumkur Bijapur Gadag
	Highest	Good	Medium	Low
Growth Rate	Tumkur Shimoga Bagalkot Mysore Haveri Bangalore Rural	Bidar Koppal Gadag Belgaum Gulbarga Dakshina Kannada Kolar	Hassan Chitradurga Mandya Uttara Kannada Chamarajnaragar Bellary Davangere Dharwad	Kodagu Raichur Bijapur Udupi Chikmaglur

Appendix Table 3: Different Group-wise distribution of districts during 1998-2008 without Bangalore

Year	Group I – Advanced	Group II – Semi-Advanced	Group III – Partially Advanced	Group IV – Under developed
Per Capita Income	Udupi Bangalore Rural Kodagu Dakshina Kannada	Mysore Shimoga Chikmaglur Dharwad Bellary	Tumkur Gadag Chitradurga Davangere Kolar Belgaum Bagalkot Uttara Kannada	Bidar Raichur Haveri Koppal Mandya Gulbarga Chamarajnaragar Bijapur Hassan
	Highest	Good	Medium	Low
Growth Rate	Gadag Bellary Bangalore Rural	Bidar Haveri Koppal Davangere Bijapur Gulbarga Kolar Chitradurga Dharwad Raichur	Kodagu Belgaum Tumkur Hassan Shimoga Uttara Kannada Bagalkot Udupi Mysore	Chamarajnaragar Chikmaglur Dakshina Kannada Mandya

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