

Economic Growth and Development of Karnataka

M. Govinda Rao

Plan of the Paper

- Introduction.
- Growth Performance of Karnataka.
- Problem of discontinuity.
- Inter-sectoral composition.
- Uneven Development of the State.
- Inter-district performance: Outliers and laggards;
- Human Development Index: Backward Regions of Karnataka: Some Explanation.
- Bengaluru – The Silicon valley of India and a technological and Innovation hub.
- Dakshin Kannada and Udupi: Migration, the banking hub and private sector led development.
- Public Policy and economic performance.
- Concluding Remarks

Introduction: A Summary and a Starting Point

- Dramatic transformation of Karnataka from being less than average per capita income state (19%) in 1990-91 to the second large highest per capita income state in 2022-23.
- Karnataka presents a unique development experience. It is a state of contrasts with prosperity in some regions with penury and poverty in others. It gives the experience of private sector led dynamism alongside the struggling state trying to overcome development deficits. It simultaneously exhibits innovation and technological advance alongside medieval feudal practices and values.
- Growth and development of the state can not be explained merely in terms of natural resource endowments or infrastructure and services deficits. Institutions do matter; they determine the structure of incentives.
- The seeds of developmental pattern was sown in the state's reorganization in 1956 itself. The incentive structure in Hyderabad – Karnataka and Bombay Karnataka regions, the infrastructure development in regions under the Mysore royalty was much more advanced and the district in the west coast ceded from Madras Presidency, was entrepreneurial and independent with hardly any government intervention. .

Growth and Sectoral Composition

- Transition to High Income State (Table 1). The second highest per capita NSDP among large states.
- Discontinuity (Figure 1). Structural break in 2011-12. Difficulties in making inter-temporal comparisons.
- Changing composition (Table 3). Sharply increasing share of services sector income and commensurate decline in primary and secondary sectors.
- Growth rate of per capita NSDP (Table 4). Karnataka has a high growth of per capita income throughout the two decades.
- Composition of GVA in States: Karnataka has the highest share of services sector GVA (Table 5) .

Table 1: Per Capita NSDP (Current Prices) Ranking of States (Rs).

	2004-05	Index	Rank	2011-12	Index	Rank	2022-23	Index	Rank
Andhra Pradesh	25959	107.5	13	69000	108.7	14	219881	129.7	11
Bihar	7914	32.8	28	21750	34.3	28	53478	31.6	28
Chhattisgarh	18559	76.9	21	55177	86.9	18	137329	81.0	21
Goa	76968	318.8	1	259444	408.8	1	492648	290.7	2
Gujarat	32021	132.6	7	87481	137.8	11	272451	160.7	7
Haryana	37972	157.3	2	106085	167.2	3	296592	175.0	5
Jharkhand	18510	76.7	23	41254	65.0	23	96449	56.9	26
Karnataka	26882	111.3	10	90263	142.2	9	304474	179.6	4
Kerala	32351	134.0	6	97912	154.3	6	252662	149.1	8
Madhya Pradesh	15442	64.0	26	38497	60.7	26	132010	77.9	22
Maharashtra	36077	149.4	3	99597	156.9	5	252389	148.9	9
Odisha	17650	73.1	24	48387	76.2	21	143765	84.8	19
Punjab	33103	137.1	5	85577	134.8	12	181678	107.2	15
Rajasthan	18565	76.9	20	57192	90.1	17	150653	88.9	17
Tamil Nadu	30062	124.5	9	93112	146.7	8	277802	163.9	6
Telangana	24409	101.1	16	91121	143.6	7	312522	184.4	3
Uttar Pradesh	12950	53.6	27	32002	50.4	27	84126	49.6	27
West Bengal	22649	93.8	19	51543	81.2	20	139442	82.3	20
India: Per capita NNP	24143	100		63462	100		169496	100	

Figure 1: Trends in Per capita Income Karnataka and India 2004-05 to 2022-23 (Rupees)

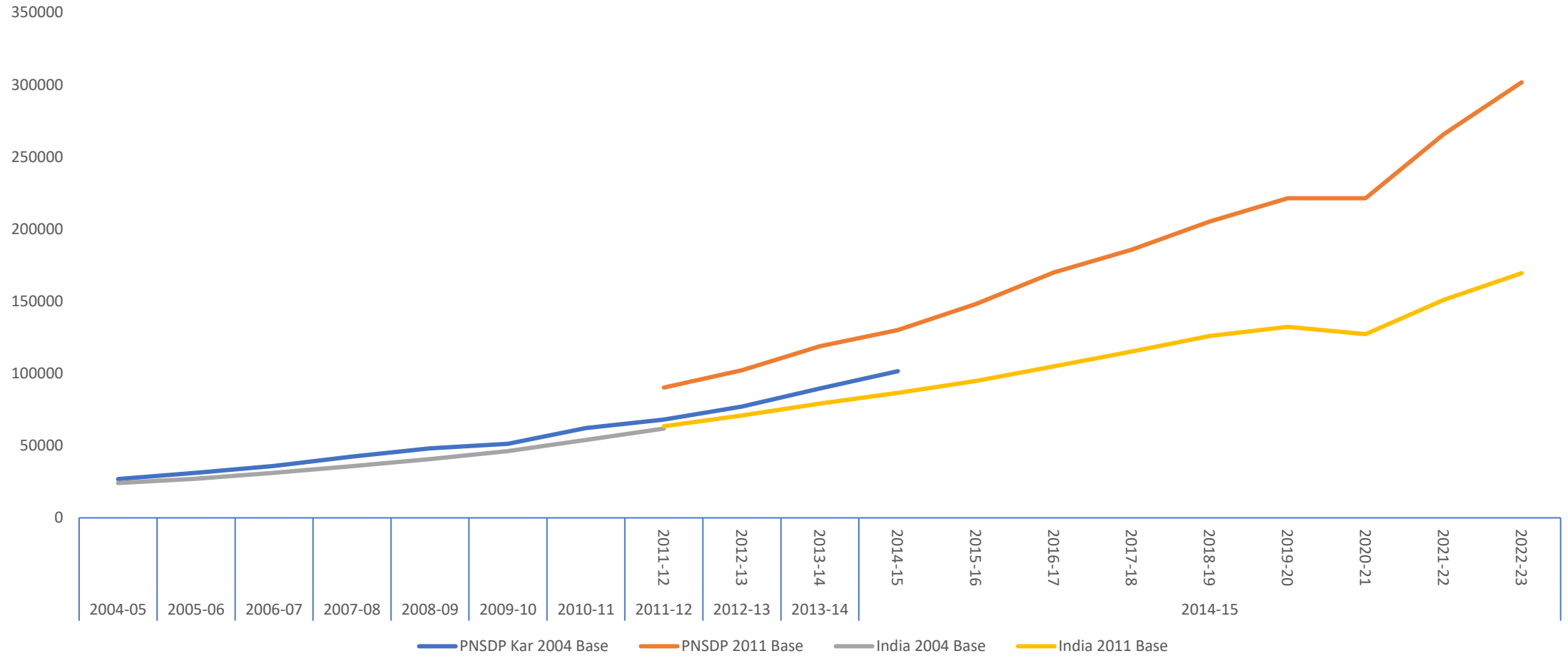


Table 3: Sectoral Composition of GSVA (Current Prices)

2004-05 Series				
Year	Primary	Secondary	Services	Total GVA
2004-05	16.3	31.2	52.5	100.0
2010-11	15.6	29.5	54.9	100.0
2011-12 Series				
2011-12	13.7	29.5	56.8	100.0
2015-16	11.9	24.0	64.0	100.0
2016-17	11.0	24.8	64.2	100.0
2017-18	12.5	24.2	63.3	100.0
2018-19	11.4	24.2	64.4	100.0
2019=20	12.4	21.3	66.3	100.0
2020-21	15.2	20.9	64.0	100.0
2021-22	14.6	22.3	63.1	100.0
2022-23	12.7	20.9	66.3	100.0
2023-24*	12.0	20.7	67.4	100.0
2024-25**	11.7	20.1	68.1	100.0
Average growth 2011-25 (%)	12.2	9.4	13.6	12.4

Table 4:**Per Capita NSDP Growth (Constant Prices)**

States	2004-2011 (2004-5 Base and Prices)	2011-2022 (2011-2 Base and prices)	2004-2022 (2011-12 Base and prices)
Andhra Pradesh	6.09	6.08	5.66
Bihar	8.16	3.02	4.94
Chhattisgarh	5.81	4.11	4.49
Goa	6.80	3.16	4.25
Gujarat	8.36	6.83	7.60
Haryana	7.23	4.62	5.85
Jharkhand	5.42	3.24	4.32
Karnataka	6.39	6.39	6.39
Kerala	7.23	4.12	5.31
Madhya Pradesh	6.31	4.71	5.50
Maharashtra	7.58	3.59	5.02
Odisha	5.02	5.84	5.24
Punjab	5.10	3.40	4.01
Rajasthan	6.71	3.38	4.84
Tamil Nadu	9.15	5.43	6.64
Telangana	8.99	6.18	6.74
Uttar Pradesh	4.97	3.44	3.99
West Bengal	5.30	3.38	3.82

Table 5: Composition of Gross Sectoral Value Added in States (Current Prices)

State	2011-12			2022-23		
	Primary	Secondary	Services	Primary	Secondary	Services
Andhra Pradesh	14.9	32.2	40.9	14.3	25.7	39.3
Bihar	17.6	18.8	55.5	11.8	19.1	56.2
Chhattisgarh	12.1	47.3	34.6	11.6	44.8	34.8
Goa	2.6	63.6	31.3	3.1	48.5	44.6
Gujarat	14.4	43.8	36.7	10.6	48.3	35.1
Haryana	14.9	31.6	44.9	8.8	30.6	51.1
Jharkhand	9.6	45.4	38.5	6.8	41.2	43.7
Karnataka	13.7	29.5	56.8	12.7	20.9	66.3
Kerala	8.6	28.2	57.5	4.1	24.6	65.2
Madhya Pradesh	24.1	30.9	39.1	32.3	21.5	35.9
Maharashtra	8.9	35.8	51.1	7.1	25.8	62.3
Odisha	11.6	43.6	38.5	11.2	45.0	35.6
Punjab	19.7	25.4	43.8	14.1	27.8	46.2
Rajasthan	17.6	32.7	38.7	12.8	27.4	45.3
Tamil Nadu	7.8	36.9	50.5	5.9	34.3	53.0
Telangana	9.6	30.9	52.8	8.3	18.8	64.4
Uttar Pradesh	18.2	27.6	45.5	16.5	27.5	47.5
West Bengal	14.5	26.6	49.9	11.5	24.5	55.1

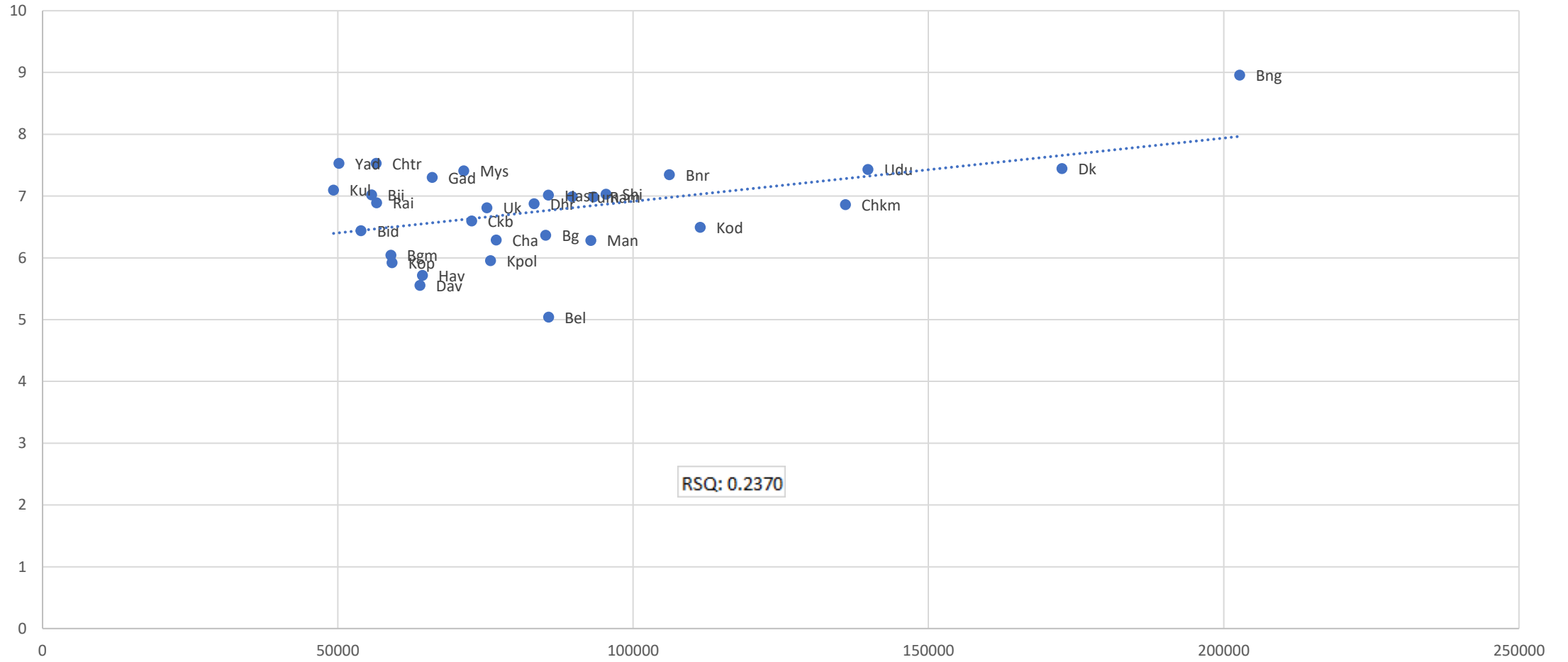
Performance in Other Development Indicators

- Performance in Social Indicators is not commensurate.
- Fast growth in incomes has not translated into a reduction in poverty and improvement in human development. Ranking of the state in respect of Underweight children (22), stunted children (21), dropouts at the secondary level (20), and enrolment and literacy (above 15 yrs. 17) are particularly bad. (Table 6).
- A major cause of this is the uneven sectoral and regional growth within the state.
- The service sector growth has been phenomenal, and that is particularly concentrated in Bengaluru.
- High inter-district differences in per capita NDDP and this has been diverging over time. CV has increased from 0.36 in 2011 to 0.43 in 2022-23. (Figure)
- On 2005-06, there were 8 districts with higher than average state per capita NDDP. In 2022-23, there were only 4. The top three districts account for 48 percent of the NDDP (Table).
- Most districts in Kalyana Karnataka (Hyderabad Karnataka) and Bombay Karnataka(Kittur Karnataka) regions have per capita income levels of about to 50% of the state average (Table).
- Bengaluru and the two west coast districts are outliers.

Table 6: Development Indicators of States

	PCNSDP 2022-23	Poverty Ratio	Underweigh t < 5Yes	Stunting < 5 Yrs	Preg. Fem Anaemic 15- 49	Dropout Secondary	Enrolment HS	Literacy >15 Yrs
		(%)	(%)	(%)	(%)	(%)	(%)	(%)
Andhra Pradesh	219881	6.06	29.8	31.2	53.7	16.3	56.7	68
Bihar	53478	33.76	41	42.5	63.1	20.5	35.9	67.3
Chhattisgarh	137329	16.37	31.3	34.6	51.8	9.7	68.1	74.8
Gujarat	272451	11.66	39.7	39	62.5	17.9	48.3	82.8
Haryana	296592	7.17	21.5	27.5	56.4	5.9	75.5	80.6
Jharkhand	96449	28.81	39.4	39.6	54.8	9.3	46.4	74.6
Karnataka	304474	7.58	32.9	36.4	46.7	14.7	56.6	77.8
Kerala	252662	0.55	19.7	23.4	31.4	5.5	85	94.8
Madhya Pradesh	132000	20.63	33	36.7	52.8	10.1	51.3	72.6
Maharashtra	252389	7.31	36.1	35.2	45.7	10.7	71.5	85.1
Odisha	143765	15.68	29.7	31	61.8	27.3	43.6	75.6
Punjab	181678	4.75	16.9	24.5	51.7	17.2	82.1	81.4
Rajasthan	150653	15.31	27.6	31.8	46.3	7.7	70.4	68.3
Tamil Nadu	277802	2.2	22	25	48.2	4.5	81.5	83.9
Telangana	312522	5.88	31.8	33.1	53.2	13.7	64.8	75.7
Uttar Pradesh	84126	22.98	32.1	30.7	45.9	9.7	50.7	72
West Bengal	139442	11.89	32.2	33.8	62.3	18	62	80.6
India Per capita NNP	169496	14.96	32.1	35.5	52.2	12.6	57.6	76.7
Karnataka's Rank	4	12	22	21	13	20	17	17

Figure 2:
Growth Of Per Capita NDDP 2011-23 Related to Per Capita GSDP of 2011-12



Top 8 Districts with Higher than Average Per capita Incomes

District	2005-06	2011-12	2022-23
Bengaluru -Urban	227.9	205.7	249.7
Bengaluru-Rural	106.9	107.7	95.6
Ballary	131.8	86.9	91.5
Chikamagalur	104.5	137.9	124.1
Dakshin Kannada	147.1	175.1	161.6
Dharwad	100.7	84.4	76.2
Kodagu	143.1	113.0	85.6
Udupi	99.9	141.8	136.1

Low Per Capita NDDP Districts in Karnataka

	Per capita NDDP (Rs)			Per cent of State average		
	2005-06	2011-12	2022-23	2005-06	2011-12	2022-23
Belgaum	23873	54114	84012	61	60	48
Bidar	21328	49614	84042	55	55	48
Bijapur	23070	51077	90886	59	57	52
Kalaburagi	22919	45101	77130	59	50	44
Haveri	27912	59190	87762	72	66	50
Koppal	30066	54401	83942	77	60	48
Vijayanagara	0	0	92029	0	0	52
Yadgir	0	46130	85578	0	51	49

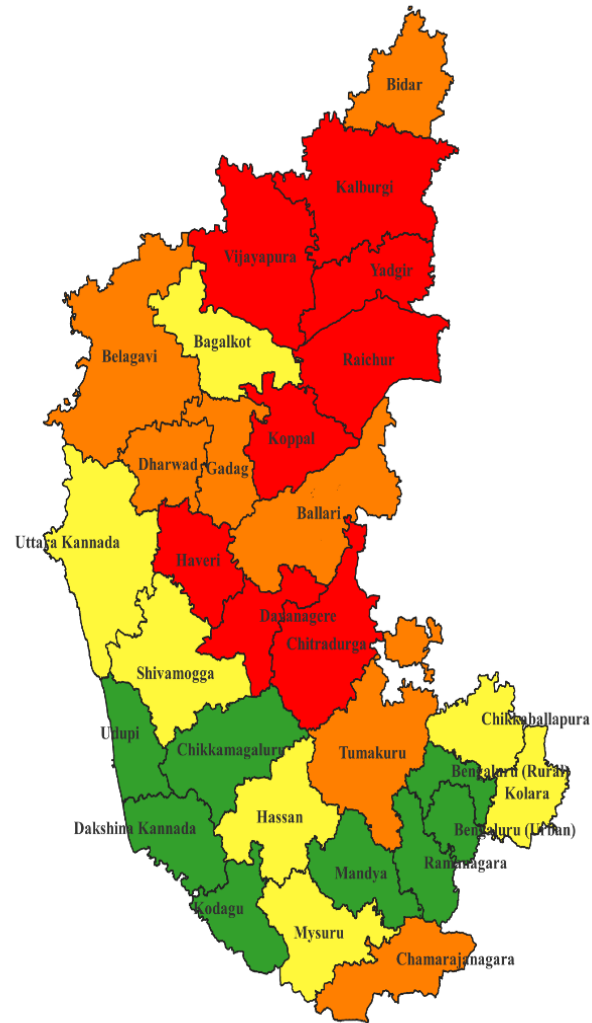
Redressing Backwardness: The effort of two decades

- HPC to Redress backwardness.
- Basic features of the Report: Identification of backwardness.
- Recommendation to incur expenditures to overcome the deficit in infrastructure and services.
- Problems with the recommendation and its implementation:
 - No private sector role;
 - Per capita income is not a factor in determining backwardness;
 - Indicators are a mix of outcome and input variables;
 - Recommendation on expenditure allocation is not for Taluks but aggregated to divisions;
 - Sectoral allocations are done arbitrarily; Low weightage to education and healthcare
- Problems with Implementation;
 - Only 65% spent in real terms; Allocation of funds was done arbitrarily.
 - Politicization.
 - Institutions are created; No trained staff.

Human Development Index in Karnataka Districts (2019-20)

- Estimated by taking the Geometric mean of three multi-dimensional indexes of per capita NDDP, Education, and Healthcare factors;
- Distribution of Districts according to quintile groups shows that the most backward quadrant shows that they are predominantly in northern region of the state. Six of the seven districts in the Kalyana Karnataka fall into this category.
- There are four districts in Southern Karnataka namely, Chickballapur, Kolar, Mysore and Chamarajanagar fall in the second quintile group despite their proximity to Bengaluru.
- The situation has not changed in the last two decades; the backward districts continue to be backward.
- Article 371 (J) amendment; Creation of KKRDB. Not much difference.
- Symbolic recognition by having one-week Legislative session in Kalaburagi and Belgaum,
- GIS Map of Karnataka on Human Development.

Human Development Index in the Districts in Karnataka 2019-20



HDI 2019-20

- Poorest Quartile Group
- Lower-Middle Quartile Group
- Upper-Middle Quartile Group
- Richest Quartile Group

Bengaluru: The Silicon City and Innovation Hub

- Bengaluru is the fastest-growing city, technology hub, and innovation centre. 14th among the global innovation centres. Eight reasons:
 - Knowledge ecosystem. Scientific institutions and the largest technical pool. IISc was created in 1909. 212 Engg colleges (189 private), 200 medical. Best scientific institutions.
 - Elite public sector institutions (HAL, NAL, BEL, ISRO). R&D Centres of ABB, Airbus, Bosch, Boeing, GE, GM, Google, Liebherr-Aerospace, Microsoft, Mercedes-Benz, Nokia, Oracle, Philips, Shell, Toyota, and Tyco.
 - Natural choice for an IT Capital.
 - Salubrious climate.
 - cosmopolitan, multilingual, and multicultural society.
 - Strategic location – well connected.
 - Responsive bureaucracy.
 - Global Connectivity.

Accelerating Development with Little Government Support: The Case of Coastal Karnataka

- Remoteness of government: A Lesson in Self-Dependency.
- Five Distant features:
 - Active migration and large remittances: Temple industry and migration. Fast food restaurants from the place.
 - Private initiative and less dependence on government; the first self-financing private medical college in India.
 - Community-oriented commercial banks, even in a semi-urban setting –banks from 1906; history - nudging the small customer to save (50 years before Richard Thaler wrote about it to get a Nobel prize!) and financial inclusion; the second stage of migration. Female employment and social and economic spillovers.
 - High levels of education – female education, healthcare, and human development.
 - Grassroots and inclusive development based on local resources.
 - Connectivity through private sector initiatives, even in a difficult terrain.

Salient Features of Development

- Value added in agriculture is less than 9%, employing 46% of the workforce; The second most arid state; Rainfed agriculture in large parts of north Karnataka.
- Large investment in irrigation and agriculture in the Mysore-Bengaluru belt; K. R. Sagar dam built in 1911-31; unsustainable agriculture. Staring at a bleak future.
- Declining share of industry. Industrial policy: problem of land acquisition. Concentration in Bengaluru (aerospace, electronics, biotech). Unattractiveness of incentives.
- Attractiveness of services sector; Liberalised labour laws, electronic city, IIT, two large local companies. Presence of all major IT giants. Ecosystem and externalities.

Role of Public Policy

- Developments have concentrated in Bengaluru, two coastal districts, and Chickamagalur. The role of government has been mainly to react to the emerging needs rather than proactively plan for development.
- Large-scale migration of technical and skilled manpower into Bengaluru; The pressure on real estate, infrastructure, and urban services. Inability to undertake the planned development of Bengaluru. Reacting to crises and trying quick fixes rather than planning. Inadequate fiscal resources for infrastructure and services.
- Public finance management:
 - Control over deficits and debt; transparent budgeting.
 - Declining ratio of public expenditures to GSDP (12.3% in 2011-12 to 11.4% in 2023-24);
 - Politically powerful groups, electoral competition and distorted priorities.
 - Sharp increase in expenditures on social security and welfare (0.7% in 2020-11 to 1.4% in 2023-24 or 5.9% of total expenditure to 11.9%)
 - Decline in capital expenditure from 2.4% of GSDP to 1.6%.
 - The five guarantees (Shakti, Anna Bhagya, Gruha Jyoti, Gruha Lakshmi, and Yuva Nidhi) costing the government Rs. 52000 Crore; Redistribution is a legitimate government activity, but it is important to assess the opportunity cost, make it transparent.
 - Fiscal management by compressing capital expenditures and expenditures on human development; Akshara Foundation survey; teacher vacancies in guest teachers without training.
 - Emergence of private sector institutions and the implications for inequality.

Concluding Remarks

- The transformation of Karnataka is impressive.
- The service sector has been the beacon of transformation.
- The development is led predominantly by the private sector.
- The implications of FRBM and the focus on deficit and debt have led to sharp compression in the allocation to social and physical infrastructure. Implication for future growth and inequality. The recent provision of interest-free long term grants has helped the states to substitute their own capital expenditures with the grants. Has it softened their budget constraints?
- The important caste groups spearheading advocacy for large investment in the past in agriculture and irrigation, and inability to levy user charges on water and electricity has led to unsustainable agriculture.
- The state has been mostly reactive to the exigencies and crises rather than actively planning for the growth and development;
- The withdrawal of the state from providing education and healthcare and not filling the posts of teachers and health professionals. The state's exit has resulted in filling the vacuum by the private institutions. This has severe implications for human development and inequality in the future.
- The lack of providing urban infrastructure and services has severe implications for ecologically sustainable living in cities.