

Intra-State Disparity in Government Expenditure: An Analysis

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This paper analyses the intra-state disparities in government expenditure in six states, Bihar, Uttar Pradesh, Jharkhand, Chhattisgarh, Madhya Pradesh and West Bengal, based on the actual treasury data on government expenditure made in the social sectors of education, health and supply of drinking water, captured from the databases of the accountants general of these states. The disparities that it finds within most of these states are shocking, to say the least.

A combination of historical, social, political and economic factors has consigned Bihar to the periphery of India's economic growth. In addition to having a very low per capita income, Bihar today finds itself at the bottom of all the major states in India in respect of almost all socio-economic parameters. It is also one of the most ruralised states in India, with about 90% of its population living in more than 39,000 villages, where poverty and deprivation have assumed endemic proportions over the past several decades. It is only now that an earnest attempt is being made to change this scenario. Until 1993-94, the poverty ratio in Bihar, both urban as well as rural, was the highest among all the major states of India. Even in 1999-2000, with about 44% of the rural population below the poverty line, Bihar was the second poorest state in India, next only to Orissa. Poverty, especially rural poverty, remains the primary concern of the government's development policy in the State. As of 2000, undivided Bihar accounted for one-sixth of all the poor in India, and one-fifth of all the poor living in rural areas (Table 1, p 232). Worse, over the past two decades, Bihar's share of national poverty has continued to increase; in 1999-2000, there were more poor people in Bihar than in 1987-88, despite a decrease in the poverty ratio. Politicians and administrators had failed miserably to address this problem.

Further, within the state, though the levels of poverty are high in all the regions, there are wide variations in the levels of poverty – the urban poor seemed to be concentrated in north rather than in south Bihar in 1999-2000, while rural poverty seemed to be concentrated in south rather than north Bihar (Table 2, p 232).

Core versus Periphery?

Any decline, like improvement, takes place over a period of time, and to be visible in an overt fashion, there has to be an accumulation of many factors, all impeding development and growth, working together over a relatively long period of time. Some of these are legacy problems inherited from the past, some arise due to lack of vision and some arise from administrative failures and bottlenecks. The situation of Bihar may be contextualised in terms of core-periphery mapping, conceptualised by Myrdal² most appropriately in the politico-economic perspective of regional development and disparity to distinguish between advanced and backward regions, where the core develops at the cost of the periphery that is left impoverished. There is a concentration of growth and resources in the leading urbanised, industrialised regions or the "core" that becomes the resource

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frontier, while there is an absence of resources and growth in the backward regions or the “periphery”. The core thus develops by drawing resources from the peripheral zones, leaving the latter without the means or resources to progress. Over a period of time, this process widens the development gap between the most and the least prosperous regions and, in the absence of economic and infrastructural linkages, triggers a mechanism by which new resources are always directed towards the core that attracts people from the periphery, leaving the periphery even more disadvantaged and impecunious, till the time that the disparity level becomes socially unsustainable. We believe that not only in Bihar, but in all the states that we have studied, and by implication also in the states outside the scope of our study, the situation is fast approaching that stage and would assume serious proportions if not addressed at this point of time.

Table 2: Intra-State Disparity – Bihar: Headcount Index Estimates at the Regional Level¹

	Rural		Urban	
	1993-94	1999-2000	1993-94	1999-2000
North Bihar	49.3	38.0	30.6	35.3
South Bihar	44.4	44.1	20.8	23.3
Chhotanagpur Plateau (current Jharkhand)	52.6	45.0	24.6	19.7

Source: Deaton, 2003, cited in “Bihar, Towards a Development Strategy”, A World Bank Report, 2006, 13.

In the case of Bihar, Patna still remains the only visible urban centre in the state. The development and changes that have taken place in Bihar are visible only in a few districts like Patna and the beneficiaries are only a handful, but the rest of Bihar continues to languish in acute poverty and severe backwardness. Very few districts have received benefits from the development initiatives launched by successive governments, and this has enormously widened the disparity across the districts in the state. The disparity that we see within the states is self-augmenting, resources tend to get allocated to the few districts that form the core, while the others are left largely to fend for themselves and continue to be neglected and ignored.

Disparity – An Inherent Weakness?

The Economic Survey of Bihar for 2007-08 for the first time pointed out that the government expenditure in respect of health and education was overwhelmingly concentrated in Patna district. We had suspected that this would be the case with most

other states as well and the present paper is an attempt to analyse government expenditure in more exhaustive detail across several states with a similar socio-economic milieu Chhattisgarh, Jharkhand, Madhya Pradesh (MP), Uttar Pradesh (UP) and West Bengal. But before attempting such an analysis, let us look at the

socio-economic scenario in these states, and compare their situations in terms of some accepted parameters of social and economic development (Table 3).

We note the following from Table 3:

- Per capita income in all the states except West Bengal is far less than the national average; in Bihar it is abysmally low.
- Except in West Bengal, the percentage of people

living below the poverty line in all the other states is far higher than the national average.

- The infant mortality in West Bengal, and also in Jharkhand, is far less than the national average; while in Bihar and Chhattisgarh, it is comparable to the national average, in UP and MP, it is substantially higher than the national average.
- Life expectancy at birth showed some variation across the states and is more or less comparable to the national average in all the states except MP.
- Except in Bihar, UP and Jharkhand, the literacy rates, both male and female, are comparable to the national average. In Bihar, UP and Jharkhand, both male and female literacy rates are much below the national average.
- Bihar not only has the lowest per capita income among all the states, but also the highest poverty ratio (41.4% as compared to

Table 1: Comparative Levels of Poverty in Bihar and India (Number and percentage of people below poverty line)

Year	Persons Below Poverty Line (in lakh)						Bihar's Share of Poor in India (%)		
	Bihar*			India			Rural	Urban	All
	Rural	Urban	All	Rural	Urban	All			
1983	417.7 (64.37)	44.35 (47.33)	462.05 (62.22)	2,519.57 (45.65)	709.4 (40.79)	3,228.97 (44.48)	16.58	6.25	14.31
1987-88	370.23 (53.63)	50.7 (48.73)	420.93 (52.12)	2,318.79 (39.09)	751.69 (38.20)	3,070.49 (38.86)	15.97	6.74	13.71
1993-94	450.86 (58.21)	42.49 (34.50)	493.35 (54.96)	2,440.31 (37.27)	763.37 (32.36)	3,203.68 (35.97)	18.48	5.57	15.40
1999-2000	376.51 (44.30)	49.13 (32.91)	425.64 (42.60)	1,932.43 (27.09)	670.07 (23.62)	2,602.5 (26.10)	19.48	7.33	16.36

* Erstwhile Bihar; Figures in parentheses are percentages of people below poverty line. Figures for people below the poverty line in 2004-05 are given in Table 3.
Source: National Human Development Report, 2001, Tables 2.19 through 2.21, Planning Commission, Government of India (<http://planningcommission.nic.in/reports/genrep/nhdrep/nhdstatatp.pdf>)

Table 3: Some Selected Socio-economic Indicators: A Comparison

State	2001 Census		Literacy Rate 2001 Census		Infant Mortality 2006	Life Expectancy at Birth 2001-05	Per Capita State Income (Rs) 2004-05 (P)	% of Population Below Poverty Line 2004-05	Lorentz Ratio 2004-05	
	Population ('000)	Sex Ratio	Male	Female					Rural	Urban
	Bihar	82,999	921	59.7	33.1	60	61.4	5,772	41.4	0.208
UP	1,66,198	898	68.8	42.2	71	59.8	11,477	32.8	0.287	0.370
MP	60,348	920	76.1	50.3	74	57.7	14,069	38.3	0.269	0.397
Chhattisgarh	20,834	989	77.4	51.9	61	NA	15,073	40.9	0.305	0.439
Jharkhand	26,946	940	67.3	38.9	49	NA	13,013	40.3	0.231	0.354
West Bengal	80,176	934	77.0	59.6	38	64.6	22,497	24.7	0.273	0.376
All-India	10,28,737	933	75.9	54.1	58	62.7	22,946	27.5	0.297	0.373

Source: Economic Survey 2007-08, Government of India.

the national average of 27.5%). Among these states, only West Bengal has a poverty ratio below the national average.

- In the last column, the Lorentz Ratio that reflects the level of inequality shows that rural inequality is lower than urban inequality in all these states as well as at the national level. With increasing income in urban India, the consumption pattern reflects a higher level of inequality across all the states. In Chhattisgarh, the inequality levels are higher than the national average for rural as well as for urban areas.

We shall later try to examine if there is any correlation between these observations and the results of our subsequent analysis on the levels of disparity in government expenditure on social sectors. The purpose of this paper is to find out if government expenditure on the social sectors has been equitable across all

As regards the monthly per capita government expenditure on education and health, we note that the all states' averages have grown by nearly six times between 2004-05 and 2007-08, but the per capita monthly expenditure of the states on health remained more or less the same, while that for education shows an increase

Table 4: Monthly Per Capita Expenditure on Health and Education (Rs: 2004-05)

State	Household Expenditure						Per Capita Monthly Govt Expenditure on		Per Capita Monthly Govt Expenditure on	
	Education		Medical		Total		Education ³	Health	Education ⁴	Health
	Rural	Urban	Rural	Urban	Rural	Urban	2004-05	2004-05	2007-08	2007-08
Bihar	7.25	45.16	13.89	26.12	417.11	696.27	30.10	6.00	49.20	8.96
UP	18.91	62.68	48.31	54.31	532.63	857.05	34.87	10.66	47.56	10.35
MP	10.28	62.90	28.29	44.71	439.06	903.68	33.53	11.70	44.46	12.15
Chhattisgarh	5.95	81.05	31.62	63.61	425.10	989.97	45.09	11.97	63.27	12.92
Jharkhand	6.54	62.23	16.56	49.29	425.30	985.43	41.61	12.61	60.43	9.85
West Bengal	18.12	73.52	38.13	71.20	562.11	1,123.61	54.72	12.43	65.18	14.88
All-India	14.90	52.69	36.96	54.59	558.78	1,052.36	10.77	3.40	68.41 ⁵	19.09

Source: For Household Expenditure: NSS 61st Round: Levels and patterns of consumer expenditure 2004-05 Report No 508(61/1.0/1) Government of India 2006 and the per capita monthly government expenditure is estimated from the data of Finance Accounts of the respective states on the basis of their projected population for the respective years as per the Census report 2001.

the districts within a state and whether there is any significant intra-state disparity in government expenditure on a social sector, and if so, to estimate the level of such disparity. For the purpose of our analysis, we have taken three major heads, education, health and sanitation, and the same six states, Bihar, UP, MP, Chhattisgarh, Jharkhand and West Bengal.

Expenditure on Education and Health

As a first step in our analysis, we compare the per capita household expenditure on health and education with the per capita government expenditure on these two sectors. Table 4 shows the monthly per capita expenditure on health and education in 2004-05 based on the National Sample Survey (NSS) 61st round survey data as well as the per capita government expenditure on these sectors, while Table 5 shows their respective share in the total per capita expenditure, both for households as well as government. From Tables 4 and 5, we note that:

- Bihar, Jharkhand and Chhattisgarh had the lowest per capita monthly expenditure on both education and health in the rural sector, followed by MP; their combined expenditure on health and education was less than 9% of the total per capita monthly expenditure, the national average for rural areas being 9.28%. In Bihar, the combined expenditure on health and education was the least among the states (5% only).
- The per capita monthly household expenditure in Bihar on these two sectors, both in rural as well as urban areas, as well as the per capita monthly government expenditure, was the lowest among the states and much below the national average. The per capita household expenditure on education and health in rural areas of UP and West Bengal was higher than the national average.
- The pattern in rural areas in respect of these two sectors was not reflected in the urban areas. In urban areas, the per capita household expenditure in all the states except Bihar was much higher than the national average; in Chhattisgarh and West Bengal, it was substantially higher than the national average, for education as well as for medical expenditure. The per capita household medical expenditure in other states was lower than the national average.

of around 50% between these two years. Per capita expenditure in Bihar remained the lowest among these states. The interstate variations in per capita government expenditure also remained more or less the same in the states over the years, indicating that priorities remained more or less the same for these state governments as far as social sector expenditure was concerned.

- In rural areas, the share of education in the total household expenditure was almost insignificant in all the states, while in urban areas, it varied between 6% and 8%. Expenditure on health shows no significant variations between rural and urban areas and was between 3% and 9% in all these states. The relatively higher expenditure on health was probably due to the absence of adequate government facilities for health in rural areas. The share of government expenditure on education in 2004-05 was, however, much higher, while that on health was more or less the same as in the case of household expenditure. There is no significant variation in the per capita expenditure on education and health between 2004-05 and 2007-08 in these states.

Table 5: Percentage Shares of Expenditure (2004-05)

State	Household Expenditure				% Share of Education in Total Govt Expenditure ⁶		% Share of Health in Total Govt Expenditure	
	Education		Health		2004-05	2007-08	2004-05	2007-08
	Rural	Urban	Rural	Urban				
Bihar	1.74	6.49	3.33	3.75	21.59	21.90	4.30	4.00
UP	3.55	7.31	9.07	6.34	16.54	19.42	5.05	4.39
MP	2.34	6.96	6.44	4.95	14.29	14.41	4.99	3.78
Chhattisgarh	1.40	8.19	7.44	6.43	16.75	14.72	4.45	2.68
Jharkhand	1.54	6.32	3.89	5.00	20.20	17.68	6.12	2.88
West Bengal	3.22	6.54	6.78	6.34	19.45	17.34	4.42	3.97
All-India	2.67	5.01	6.61	5.19				

Source: Calculated from Table 4.

Macro-Level Perspective

The above analysis suggests that these states (with the exception perhaps of West Bengal), which share a common socio-political and economic background, suffer from various disabilities like poverty that show wide intra-state variations, low female literacy, high infant mortality, and high income inequality in urban areas. Chhattisgarh, however, seems to have made considerable progress in improving its human development indicators during the short span of its existence. Education and healthcare still remain low-priority areas, especially in the rural areas of all these states, and households spend an insignificant share of their total income on these sectors. The household income is mostly spent on the most basic necessities of food and shelter. The per capita government expenditure on these sectors also remains more or

less the same in these states, though the governments seem to spend a larger share of their total expenditure on these sectors.

In these poor states, government expenditure on social sectors, especially on education and health, remains the primary

Table 6a: Maximum and Minimum Per Capita Expenditure within States: Primary Education

State	Maximum Per Capita Expenditure (Rs) (Capital District)	Minimum Per Capita Expenditure (Rs)	District with Minimum Capita Expenditure	State Average (Rs)
Bihar	3,867.18	66.68	Kaimur (Bhabua)	399.72
Jharkhand	2,022.54	257.90	Bokaro	561.76
MP	2,703.97	140.84	Sheopur	359.90
Chhattisgarh	519.18	198.75	Korba	427.16
UP	2,354.43	14.96	Kaushambi	341.22
West Bengal	769.80	75.21	Darjeeling	323.17

Table 6b: Maximum and Minimum Per Capita Expenditure within States: Secondary Education

State	Maximum Per Capita Expenditure (Rs) (Capital District)	Minimum Per Capita Expenditure (Rs)	District with Minimum Capita Expenditure	State Average (Rs)
Bihar	625.94	30.34	Araria	91.79
Jharkhand	397.59	40.35	Bokaro	97.94
MP	429.32	49.47	Guna (including Ashok Nagar)	118.45
Chhattisgarh	267.32	54.58	Korba	141.92
UP	338.41	41.87	Shrawasti	168.94
West Bengal	538.47	204.43	Darjeeling	356.33

Table 6c: Maximum and Minimum Per Capita Expenditure within States: Higher Education

State	Maximum Per Capita Expenditure (Rs) (Capital District)	Minimum Per Capita Expenditure (Rs)	District with Minimum Capita Expenditure	State Average (Rs)
Bihar	1,532.61	0.00	Sheohar, Lakhisera, Kaimur (Bhabua), Arwal, Gaya	88.25
Jharkhand	617.77	0.00	Chatra	65.43
MP	551.20	10.77	Sheopur	55.03
Chhattisgarh	151.77	19.21	Dantewada	59.02
UP	346.06	0.83	Shrawasti	40.61
West Bengal	687.15	9.87	Uttar Dinajpur	90.23

Table 6d: Maximum and Minimum Per Capita Expenditure within States: Medical and Public Health

State	Maximum Per Capita Expenditure (Rs) (Capital District)	Minimum Per Capita Expenditure (Rs)	District with Minimum Capita Expenditure	State Average (Rs)
Bihar	927.23	14.16	Supaul	107.54
Jharkhand	474.78	50.85	Giridih	118.18
MP	1,190.90	58.50	Harda	145.84
Chhattisgarh	797.34	16.32	Jashpur	155.03
UP	2,059.59	31.85	Auraiya	124.21
West Bengal	1,013.09	77.98	Uttar Dinajpur	178.58

Table 6e: Maximum and Minimum Per Capita Expenditure within States: Water Supply and Sanitation

State	Maximum Per Capita Expenditure (Rs) (Capital District)	Minimum Per Capita Expenditure (Rs)	District with Minimum Capita Expenditure	State Average (Rs)
Bihar	170.86	0.00	Arwal	31.06
Jharkhand	61.87	7.95	Pakaur	23.94
MP	266.71	4.37	Sheopur	19.76
Chhattisgarh	356.86	65.30	Kawardha	139.30
UP	714.73	4.72	Pilibhit	28.58
West Bengal	301.29	3.37	Haora	27.05

determinant of the standard of living of the people and has the potential of lifting them out of poverty. The expenditure on education empowers people with skills, knowledge and abilities and is obviously an investment in the human capital of a state. If properly utilised, it has the potential of lifting millions out of poverty. The expenditure on education and health by the government creates an enabling environment that can uplift a state by releasing the creative energy of its people. We shall therefore attempt an analysis of the patterns and trends of government expenditure on these two very important sectors, moving from the state to the district level and examine whether such expenditure is actually contributing towards reduction of intra-state disparity or, on the contrary, increasing it.

Methodology for Micro-Level Analysis

For the micro-level analysis attempted in this paper, we have selected three major heads of accounts, education, medical and water supply and sanitation. Under the major head of account education, three sub-major heads pertaining to primary, secondary and higher education were selected, leaving out technical education and educational administration, since these, by their very nature, would be concentrated in the capital or a few districts and would not be relevant for the purpose of measuring disparity. For medical, the entire expenditure booked under the major head medical was noted. We have also selected water supply and sanitation as a major head and selected the sub-major head water supply under it. For each of the selected major/sub-major heads, the total expenditure booked was noted from the computerised records kept by the accountants general of the respective states from the original records, that is, challans/vouchers paid at the treasuries. From the expenditure recorded at the various treasuries, the total expenditure under a major/sub-major head of account within a district for the year 2007-08 was calculated for each of the six states selected for our study. The per capita expenditure under the respective heads were calculated

Table 7: Expenditure on Headquarters and Capital Outlay, Bihar (2007-08)

Head of Accounts Education ⁸	Revenue Expenditure (Rs Crore)		Per Capita Expenditure Revenue (Rs)
	Headquarters	Others	
Primary	1.44	3,696.40	0.16
			399.18
Secondary	17.65	841.28	1.91
			90.85
Higher	0.83	813.10	0.09
			87.81
Medical ⁹	29.92	968.69	3.23
			104.61

by dividing the estimated population of the district for 2007 from the census data of 2001, assuming existing growth rates for the districts mentioned therein. The districts were then sorted in descending order of the per capita expenditure under each major/sub-major heads. The average expenditure of each state was calculated by dividing the total expenditure in the state under a head by the projected population of the state.

From the average per capita expenditure, the standard deviation, coefficient of variance and disparity ratio⁷ were calculated for each state for each head of account. All these are standard inequality measures and results from them closely correlate,

validating the methodology. The disparity ratios are then plotted in the graphs for each head of account.

The districts were then grouped under five classes according to the per capita expenditure made under each head, the classes being defined at intervals of 20% of the maximum per capita expenditure among all the districts. For example, for Bihar, under the head “primary education”, the maximum per capita expenditure was recorded for Patna district (Rs 3,867). The classes and the number of districts were thus defined as:

Classes	Class Intervals (Rs)	Frequency (No of Districts within the Class)
1 Top 20% (80% to 100% of maximum per capita expenditure)	3,094-3,867	1
2 60% to 80% of maximum per capita expenditure	2,320-3,094	0
3 40% to 60% of maximum per capita expenditure	1,547-2,320	0
4 20% to 40% of maximum per capita expenditure	773-1,547	0
5 Bottom 20% (0% to 20% of maximum per capita expenditure)	0-773	37
Total number of districts	38	

Thus in Bihar, there was only one district in which the per capita expenditure was between Rs 3,094 and Rs 3,867, the remaining 37 districts had an annual per capita expenditure below Rs 773. Obviously, the expenditure was concentrated in only one

Table 8: Disparity in Government Expenditure: Primary Education (2007-08)

	Bihar	Jharkhand	MP	Chhattisgarh	UP	West Bengal
Average per capita expenditure (Rs)	399.72	561.76	359.90	427.16	341.22	323.17
Standard deviation	605.54	393.97	376.72	87.58	112.45	143.23
Coefficient of variance	151.49	70.13	104.67	20.50	32.96	44.32
Disparity ratio (%)	950.80	314.13	719.67	75.02	685.62	214.93

of the 38 districts, the rest being in the bottom 20% category in terms of government expenditure, indicating the existence of high disparity, earlier suggested by the coefficient of variance of

Table 9: Number of Districts According to Per Capita Government Expenditure on Primary Education (2007-08)

State	Number of Districts Lying within the Per Capita Expenditure Range					Total Number of Districts	Expenditure Characteristics of the State (Rs)		
	0-20% of Maximum Expenditure	20-40% of Maximum Expenditure	40-60% of Maximum Expenditure	60-80% of Maximum Expenditure	80-100% of Maximum Expenditure		Maximum Per Capita Expenditure for a District	Minimum Per Capita Expenditure for a District	Average Per Capita Expenditure for a District
Bihar	37	0	0	0	1	38	3,867.18	66.68	399.72
Jharkhand	10	7	0	0	1	18	2,022.54	257.90	561.76
MP	42	0	0	0	1	43	2,730.97	140.84	359.90
Chhattisgarh	0	1	2	4	9	16	519.18	198.75	427.16
UP	63	6	0	0	1	70	2,354.43	14.96	341.22
West Bengal	2	8	7	0	1	18	769.80	75.21	323.17

151% and disparity ratio of 951%. This exercise was carried out for each state and the results were plotted in graphs, where the three intermediate classes between the top 20% and bottom 20% were combined. The results were so evident that no further statistical measures were considered necessary to drive home the point that in almost all the states there existed an alarming proportion of disparity in government expenditure. This exercise also reflected the results from our

earlier exercise on disparity ratios. The analysis and the results are summarised in Tables 8 through 17 and the associated charts (p 237) for the five heads of accounts and the six states as mentioned earlier.

Findings and Conclusions

The summarised results of analysis are shown in Tables 6a to 6e (p 234) for all the states for different heads of expenditure.

- Primary education showed very high disparity in Bihar, UP and MP; the disparity was moderate in Jharkhand and West Bengal and minimum in Chhattisgarh where as many as nine out of 16 districts were in the top 20 expenditure class. Bihar had the highest disparity ratio of 951% followed by MP (720%) and UP (645%), compared to Chhattisgarh (75%), West Bengal (215%) and Jharkhand (314%).

Table 10: Disparity in Government Expenditure: Secondary Education (2007-08)

	Bihar	Jharkhand	MP	Chhattisgarh	UP	West Bengal
Average per capita expenditure (Rs)	91.79	97.94	118.45	141.92	168.94	356.33
Standard Deviation	95.55	83.64	70.30	51.14	68.03	80.27
Coefficient of Variance	104.09	85.40	59.35	36.04	40.27	22.53
Disparity Ratio (%)	648.84	364.75	320.67	149.89	175.53	90.94

- Secondary education showed a similarly high level of disparity, with Bihar being at the top with a disparity ratio of 645%, followed by Jharkhand and MP; the disparity was less pronounced in UP, Chhattisgarh and West Bengal.

- Higher education showed much higher disparities, with Bihar again leading the table with a very high disparity ratio of 1737%; all the other states except Chhattisgarh showed very high disparity in expenditure. Except in Chhattisgarh, the capital district received almost all the funds allocated under higher education.

- In medical expenditure, UP showed the highest disparity with a disparity ratio of 1632%, followed by Bihar (849%), MP (777%) and West Bengal (524%). Even Chhattisgarh showed very high disparity (504%) in medical expenditure; only Jharkhand seems to have less disparity (359%) in this sector.

- Water supply showed the highest disparity in UP (2484%), MP (1327%) and West Bengal (1101%). Bihar showed relatively less disparity (546%) in water supply, while Chhattisgarh (209%) and Jharkhand (225%) had the least disparity.

- It is interesting to note the minimum amounts spent by the state governments in

Table 11: Number of Districts According to Per Capita Government Expenditure on Secondary Education (2007-08)

State	Number of Districts Lying within the Per Capita Expenditure Range					Total Number of Districts	Expenditure Characteristics of the State (Rs)		
	0-20% of Maximum Expenditure	20-40% of Maximum Expenditure	40-60% of Maximum Expenditure	60-80% of Maximum Expenditure	80-100% of Maximum Expenditure		Maximum Per Capita Expenditure for a District	Minimum Per Capita Expenditure for a District	Average Per Capita Expenditure for a District
Bihar	37	0	0	0	1	38	625.94	30.34	91.79
Jharkhand	13	1	1	0	1	18	397.59	40.35	97.94
MP	21	16	5	0	1	43	429.32	49.47	118.45
Chhattisgarh	0	6	8	1	1	16	267.32	54.58	141.92
UP	1	26	23	14	6	70	338.41	41.67	168.94
West Bengal	0	1	6	9	2	18	528.47	204.43	356.33

INTER AND INTRA-STATE DISPARITIES

Table 12: Disparity in Government Expenditure: Higher Education (2007-08)

	Bihar	Jharkhand	MP	Chhattisgarh	UP	West Bengal
Average per capita expenditure (Rs)	88.25	65.43	55.03	59.02	40.61	90.23
Standard Deviation	251.77	145.18	81.19	36.79	45.95	160.67
Coefficient of Variance	285.30	221.89	147.55	62.34	113.15	178.07
Disparity Ratio (%)	1,736.69	944.16	982.15	224.62	850.17	750.60

different districts per capita; for example, in primary education, UP spent only Rs 15 per year per person in Kaushambi district; in secondary education, Bihar spent Rs 30 per year per person in Araria district; in higher education, Bihar spent less than even Re 1 per year per person in as many as 21 of its 38 districts, Jharkhand in three out of its 18 districts and UP in one district (Shrawasti); in medical, Bihar spent Rs 14 per year per person in Supaul district, closely followed by Rs 16 for

Table 14: Disparity in Government Expenditure: Medical (2007-08)

	Bihar	Jharkhand	MP	Chhattisgarh	UP	West Bengal
Average per capita expenditure (Rs)	107.54	118.18	145.84	155.03	124.21	178.58
Standard Deviation	145.60	96.32	171.34	189.25	273.21	211.77
Coefficient of Variance	135.39	81.50	117.49	122.07	219.96	118.59
Disparity Ratio (%)	849.03	358.70	776.50	503.77	1,632.50	523.64

Chhattisgarh in Jashpur district; and in water supply, only Chhattisgarh recorded a minimum expenditure of Rs 65 per capita among its districts; all the other states recorded less than Rs 10 per year per person for providing drinking water in more than one of their districts.

- Overall Chhattisgarh seems to be the only state that has spent its resources in the social sectors in the most equitable manner, followed by West Bengal. Bihar, UP and MP are

Table 16: Disparity in Government Expenditure: Drinking Water Supply (2007-08)

	Bihar	Jharkhand	MP	Chhattisgarh	UP	West Bengal
Average per capita expenditure (Rs)	31.06	23.94	19.76	139.30	28.58	27.05
Standard Deviation	35.30	14.08	39.62	68.49	84.28	69.30
Coefficient of Variance	113.67	58.80	200.46	49.17	294.88	256.17
Disparity Ratio (%)	545.80	225.20	1,327.36	209.30	2,484.32	1,101.29

the most inequitable states as far as expenditure on the social sectors is concerned.

- The implications of this inequity in terms of its potential for social and political unrest, and increasing impoverishment and alienation of the rural sector are grave. The 13th Finance Commission needs to give due consideration and weight to this aspect while recommending transfers to the states.

Limitations and Other Observations

- The analysis in this section has not considered the expenditure incurred under

central-sponsored social sector schemes such as the Sarva Shiksha Abhiyan (ssa) and National Rural Health Mission (NRHM) in the various districts, which might have the effect of reducing the level of disparity under the relevant heads. However, most of the funds spent under such central-sponsored schemes are not routed through the state budget, but directly transferred to the executing agencies identified for such

Table 13: Number of Districts According to Per Capita Government Expenditure on Higher Education (2007-08)

State	Number of Districts Lying within the Per Capita Expenditure Range					Total Number of Districts	Expenditure Characteristics of the State (Rs)		
	0-20% of Maximum Expenditure	20-40% of Maximum Expenditure	40-60% of Maximum Expenditure	60-80% of Maximum Expenditure	80-100% of Maximum Expenditure		Maximum Per Capita Expenditure for a District	Minimum Per Capita Expenditure for a District	Average Per Capita Expenditure for a District
Bihar	37	0	0	0	1	38	1,532.61	0	88.25
Jharkhand	17	0	0	0	1	18	617.77	0	65.43
MP	41	1	0	0	1	43	551.20	10.77	55.03
Chhattisgarh	6	7	1	1	1	16	151.77	19.21	59.02
UP	64	4	1	0	1	70	346.06	0.83	40.61
West Bengal	16	0	1	0	1	18	687.15	9.87	90.23

schemes. So these data could not be captured from the expenditure booked under the state treasuries. The states are yet to develop any comprehensive database of the expenditure made on the central-sponsored schemes. Such expenditure, however, may not radically alter the disparity patterns within the state as it is spent in all the districts throughout the state, though in varying degrees.

Table 15: Number of Districts According to Per Capita Government Expenditure on Medical (2007-08)

State	Number of Districts Lying within the Per Capita Expenditure Range					Total Number of Districts	Expenditure Characteristics of the State (Rs)		
	0-20% of Maximum Expenditure	20-40% of Maximum Expenditure	40-60% of Maximum Expenditure	60-80% of Maximum Expenditure	80-100% of Maximum Expenditure		Maximum Per Capita Expenditure for a District	Minimum Per Capita Expenditure for a District	Average Per Capita Expenditure for a District
Bihar	37	0	0	0	1	38	927.23	14.16	107.54
Jharkhand	13	4	0	0	1	18	474.78	50.85	118.18
MP	41	1	0	0	1	43	1,190.90	58.50	145.84
Chhattisgarh	15	0	0	0	1	16	797.34	16.32	155.03
UP	68	0	1	0	1	70	2,059.59	31.85	124.21
West Bengal	16	1	0	0	1	18	1,013.09	77.98	178.58

- Further, the expenditure on departmental headquarters (secretariat and the directorates), which are mostly located in the capital districts, has also not been allocated among the districts. But as the data in Table 7 (p 234) show, this has hardly any impact on the levels of disparity between the capital district and the others. The expenditure on headquarters for primary, secondary and higher education and health services in Bihar in 2007-08 distributed among the state population would amount to only Re 0.16, Rs 1.91, Re 0.09 and Rs 3.23,

Table 17: Number of Districts According to Per Capita Government Expenditure on Drinking Water Supply (2007-08)

State	Number of Districts Lying within the Per Capita Expenditure Range					Total Number of Districts	Expenditure Characteristics of the State (Rs)		
	0-20% of Maximum Expenditure	20-40% of Maximum Expenditure	40-60% of Maximum Expenditure	60-80% of Maximum Expenditure	80-100% of Maximum Expenditure		Maximum Per Capita Expenditure for a District	Minimum Per Capita Expenditure for a District	Average Per Capita Expenditure for a District
Bihar	4	20	11	2	1	38	170.86	1.35	31.06
Jharkhand	5	8	3	1	1	18	61.87	7.95	23.94
MP	42	0	0	0	1	43	266.71	4.37	19.76
Chhattisgarh	0	13	2	0	1	16	356.86	65.30	139.30
UP	69	0	0	0	1	70	714.73	4.72	28.58
West Bengal	16	0	0	1	1	18	301.29	3.37	27.05

Chart 1: No of Districts Lying within Different Expenditure Ranges Per Capita Expenditure on Primary Education (2007-08)

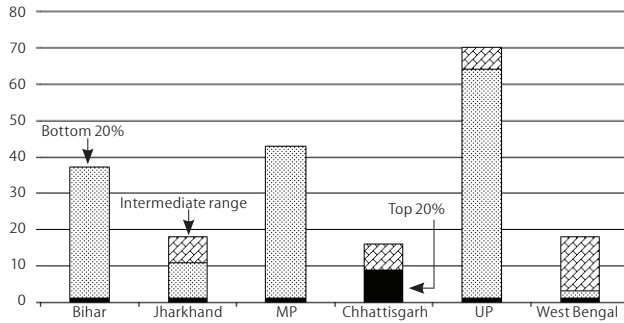


Chart 2: No of Districts Lying within Different Expenditure Ranges Per Capita Expenditure on Secondary Education (2007-08)

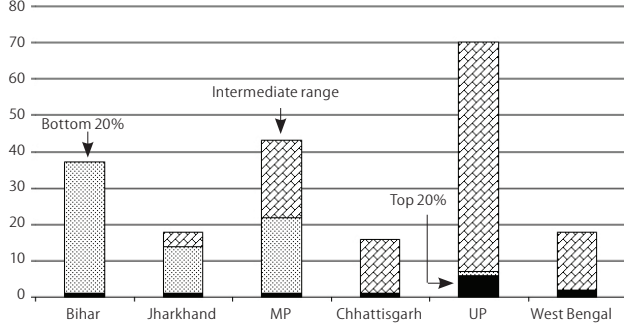


Chart 3: No of Districts Lying within Different Expenditure Ranges Per Capita Expenditure on Higher Education (2007-08)

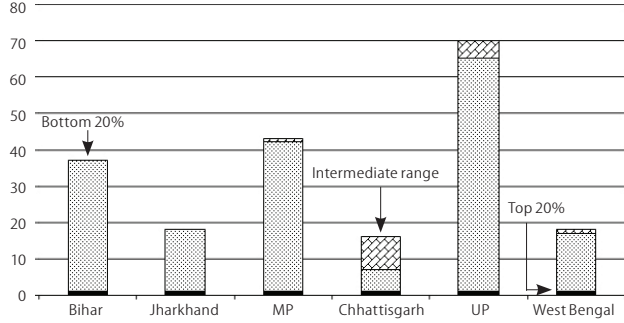
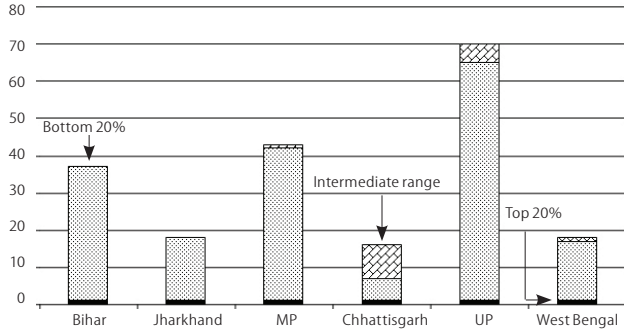


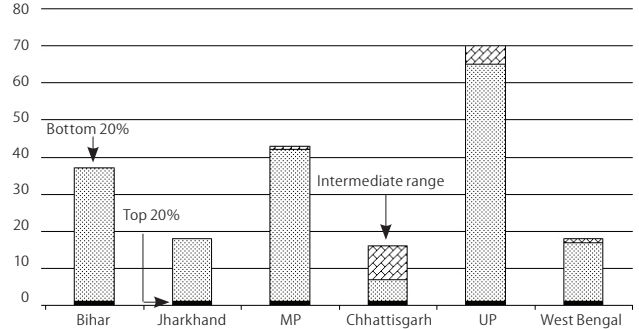
Chart 4: No of Districts Lying within Different Expenditure Ranges Per Capita Medical Expenditure (2007-08)



respectively, which will not materially alter the intra-state disparity patterns in the state.

- The analysis is based on revenue expenditure only; capital outlay has not been considered because it is not significant compared to the revenue expenditure and also because capital outlay is not made in every district every year in respect of each of

Chart 5: No of Districts Lying within Different Expenditure Ranges Per Capita Expenditure on Water Supply (2007-08)



the heads and a time series analysis is better suited to analyse the patterns of expenditure. Thus during 2007-08, no capital outlay was made in respect of primary and higher education; capital outlay in respect of secondary education was Rs 11.49 crore, which in per capita terms amounted to Rs 1.24 only, and is unlikely to alter intra-state disparity patterns in any significant manner. Similarly in health, the actual capital outlays made during the period from 2004-05 to 2007-08 were Rs 22 crore, Rs 138 crore, Rs 168 crore, and Rs 245 crore, respectively; it was reduced to Rs 130 crore in 2008-09 (BE). In 2007-08, the figure was abnormally high and this was because of Rs 120 crore spent for the construction of health sub-centres and additional primary health centres under the NRHM, a one-time plan expenditure. Without this, the per capita medical expenditure would be only Rs 13.49, which is not likely to make any major impact on the level of disparity between the capital district with a per capita medical expenditure of Rs 92.23 and the other districts, the state average per capita medical expenditure being Rs 107.54.

NOTES

- 1 No reliable data on regional poverty estimates are available after 2000.
- 2 G Myrdal, *Economic Theory and Underdeveloped Regions* (London: Duckworth), 1957.
- 3 Per capita expenditure on health and education has been calculated from Finance Accounts for 2004-05, on the basis of the projected population for the respective states for 2004-05.
- 4 Per capita expenditure on health and education has been calculated from Finance Accounts for 2007-08, on the basis of the projected population for the respective states for 2007-08, except for UP, for which the data pertains to the Finance Accounts 2006-07.
- 5 All-India figures have been calculated by dividing the expenditure (BE) of all states for 2006-07 by the projected population of 1.112 billion for the country for 2006. The figures are only indicative.
- 6 Percentage shares have been calculated on the basis of RE for 2007-08 for all states except UP and Jharkhand; as explained earlier, for UP the data for 2006-07 actuals were the latest available both for total expenditure as well as for sectoral expenditure. For Jharkhand, 2007-08 BE was used for total expenditure. Except for UP, while calculating the percentage share, the sectoral data (expenditure on medical and education for 2007-08) captured from the primary records were, however, based on the actual expenditure. Ratios worked out here are only indicative and even though these may undergo minor changes when reworked on the basis of actual expenditure figures, it would not affect the overall patterns and trends and our observations would still remain the same.
- 7 Disparity ratio (%) = [(Maximum per capita expenditure in a district - minimum per capita expenditure in a district) / Average per capita expenditure in a state] * 100.
- 8 Adult education, technical education, language and other education have not been considered in the analysis.
- 9 Public health and family welfare have been excluded from the above analysis.