

Fiscal and Expenditure Patterns: Interstate Comparisons

Madhya Pradesh accounts for 7 .83 per cent of the country's population and 13.48 per cent of the country's geographical area. However, it is among the poorest states in terms of per capita income as well as human development. In fact, Madhya Pradesh along with Bihar, Rajasthan and Uttar Pradesh are often called the BIMARU states, I an acronym that suggests that these state economies are ailing.

There has been renewed interest in human development in recent times. Public provisioning of social sector services has been considered an important instrument for enhancing human development. However, the task of raising the living standards of the people through government efforts presumes a thorough understanding of the general as well as the specific factors influencing human development.

Two factors that have a bearing on the human development levels of a state are:

- the development of infrastructure for delivery of social sector services; and
- the quantum and quality of services rendered therein.

While the above factors are measures that directly affect human development, the rate of growth of the economy has an important impact on per capita incomes which in turn influence the quantum and quality of social sector services demanded. This chapter examines the specific supply-side factors that influence human development across states. The attempt is to place the human development scenario in Madhya Pradesh in perspective through interstate comparisons. The following section presents a comparison of the ranking of various

states on the Human Development Index. This is followed by a discussion on the extent of development of social infrastructure across states. The disparities in the level and pattern of expenditure incurred on social sectors are then discussed. The next section is concerned with various issues concerning the effectiveness of the expenditure incurred by the government. The impact of structural adjustment on social sector expenditure in Madhya Pradesh is discussed briefly before presenting some conclusions of the analysis.

HUMAN DEVELOPMENT INDEX

There have been several efforts at constructing a Human Development Index for Indian states following the derivation of such an index for various countries by UNDP on an annual basis since 1990. Table 2-1 (A) and (B) present three such indices for major Indian states. What is remarkable is that despite differing methodologies2 adopted by the analysts, ranks obtained by states do not differ substantially. Madhya Pradesh and other members of the BIMARU group, i.e., Bihar, Rajasthan and Uttar Pradesh, occupy the lowest positions with respect to human development. A mote detailed picture is available if one examines the indicators that have been used to construct the Human Development Index (Table 2-2). The indicators are per capita state domestic product, life expectancy, and a composite indicator comprising literacy and average number of years of schooling. Along with data on the above, infant mortality rates are also provided as they are crucial determinants of life expectancy. A perusal of the achievement of the states with respect to each of the indicators is quite revealing. Madhya Pradesh's position is particularly poor with respect to infant mortality and literacy.

The low level of human development at the state level is reflected by the very poor levels of attainment in most of the districts in the state. This is revealed in a Human Development Index constructed by K. Seetha Prabhu (1992) for 312 districts in India for the year 1981. The indicators used for the district index were different from those used for the state index as the required data were not available at the district level. Thus, the net value of agricultural production per capita was used as a proxy in place of per capita district income. Similarly, in place of life expectancy, its crucial determinant, infant mortality, was used. Literacy rates alone were used to measure educational attainment. The three indicators were combined using principal component analysis. Since data on infant mortality are not available at the district level beyond 1981, the index had to be constructed for that year only. While further refinements are possible with better availability of data, the present index can serve as a rough approximation of the level of human development of Indian districts. It is evident that except for Indore, the remaining districts in Madhya Pradesh belong to the category of low human development. In fact, 33 out of 43 districts for which data have been presented had secured ranks beyond 200. The lowest rank was that of Jhabua, whose position at 309 was better than only 3 districts of Rajasthan-Barmer, Bhiloria and Jalore. The uniformly low levels of human development of a majority of the districts in the state are a cause for concern.

INFRASTRUCTURE FOR HUMAN DEVELOPMENT

The significance of providing infrastructural facilities for attainment of human development goals cannot be over-emphasised. Public provisioning of schools Fiscal and Expenditure Patterns : Interstate Comparisons

	TABLE 2	?-1(A)		
INDICES	OFHUMAN	DEVELOPM	MENT	
State	HDI1	HDI2	HDI3	HDI4
ındhra Pradesh	0.361	0.3397	0.3928	0.39
ssam	0.286	0.254-2	0.444.1	0.37
lihar	0.14.7	0.1304	0.21 8	0.30
Bujarat	0.566	0.5453	0.4950	0.46
laryana	0.624	0.5995	0.6626	0.51
Carnataka	0.502	0.4772	0.46! 8	0.47
Cerala	0.775	0.774.9	0.734.3	0.65
1adhya Pradesh	0.196	0.1863	0.08!8	0.34
1aharashtra	0.685	0.6430	0.61 6	0.53
)rissa	0.224	0.2132	0.2960	0.34
'unjab	0.74.4	0.7131	0.72, 5	0.58
lajasthan	0.24-6	0.2294	0.3201	0.34
amil Nadu	0.508	0.4873	0.4985	0.48
Ittar Pradesh	0.1 0	0.1095	0.28(12	0.29
Vest Bengal	0.436	0.4176	0.53′ 8	0.46

TABLE 2-1(B)								
RANKING OF STA DE	TES ACC		TO HUMAI	V				
State	HDI1	HDI2	HDI3	HDI4				
Andhra Pradesh	9	9	. 0	9				
Assam	· 0	. 0	9	, 0				
Bihar	. 4	· 4	· 4	· 4				
Gujarat	5	5	7	8				
Haryana	4	4	3	4				
Karnataka	7	7	8	6				
Kerala	1	1	1	1				
Madhya Pradesh	· 3	· 3	· 5	· 3				
Maharashtra	3	3	4	3				
Orissa	· 2	· 2	· 2	· 1				
Punjab	2	2	2	2				
Rajasthan	· 1	· 1	· 1	· 2				
Tamil Nadu	6	6	6	5				
Uttar Pradesh	· 5	· 5	· 3	· 5				
West Bengal	8	8	5	7				
Sources: 1. Tilak (1991), 2.	EPW Res	earch Fou	ındation					

3. Prabhu and Chatterjee (1993), 4. Shiva Kumar (1991)

PMENT IMR 3	Life Expectancy Combined 1981-86 7 58.00 52.40 54.10 56.80 60.60 67.60 52.40 60.20 53.00 64.30 55.10 58.10 49.10 56.60	PC SDP (in Rs.) 1989-90 8 1743 1650 981 2629 3193 2109 1500 678 3281 1557 3658 1669 1864 1572 1989
Yrs. Avg. 1988-90 6 78 89 88 83 80 75 22 116 62 122 61 94 70 113 70	Expectancy Combined 1981-86 7 58.00 52.40 54.10 56.80 60.60 67.60 52.40 60.20 53.00 64.30 55.10 58.10 49.10 56.60	(in Rs.) 1989-90 8 1743 1650 981 2629 3193 2109 1500 678 3281 1557 3658 1669 1864 1572
89 88 83 80 75 22 116 62 122 61 94 70 113 70	52.40 54.10 56.80 60.60 67.60 52.40 60.20 53.00 64.30 55.10 58.10 49.10	1650 981 2629 3193 2109 1500 678 3281 1557 3658 1669 1864 1572
I DEVELOPMENT		
IMR3 Yrs. Avg. 1988-90 6	Life Expectancy Combined 1981-86 7	PC SDP (in Rs.) 1989-90 8
7 11 10 9 8 6 1 14 3 15 2 12 4 13	7 14 11 8 3 4 1 13 5 12 2 10 6 15 9	8 10 14 4 3 5 13 15 2 12 1 9 7 11 6
	7 11 10 9 8 6 1 14 3 15 2 12	7 7 7 11 14 10 11 9 8 8 8 3 6 4 1 1 14 13 3 5 15 15 12 2 2 12 10 4 6 13

and Primary health centers either in the villages or in close proximity to a group of villages has been an important element of government policy. Government's provision of social services comprises two parts: (a) the expenditure on

provision of infrastructure, i.e., capital expenditure; and (b) the expenditure incurred on personnel, materials and supplies which constitutes the revenue expenditure of the Government. Issues of capital expenditure are discussed in this section whereas interstate disparities the revenue expenditure incurred by state government is dealt with in the next section of this chapter.

The infrastructure social services that is currently in existence reflects the fructification of expenditure capital

> incurred over a secular to long-term time-period. By the same token, any neglect or decline in the importance given to capital information is bound to undermine the future development of social sectors.

A typical feature of the social sector expenditure incurred by state governments in India is that the bulk of expenditure is revenue expenditure. Table 2-3 presents the shares of revenue and capital

expenditure in total expenditure for two important social sectors, viz. education and health. In education, the share of capital expenditure was relatively low as compared to revenue expenditure. In health, the share of capital expenditure was the

-P-	
	highest in Rajasthan,
	where large
	expenditures are
	being incurred on
	drinking water and
	sanitation. It is also
	noteworthy that the
1	variation across
	states in the capital
3	expenditure incurred
3	on health is also very
7 3	high.
3	Another significant
3	trend is that the
3	disparity across
5	states in terms of
3	capital expenditure
1	incurred has been
3	increasing. In the
5	case of health, where
4	capital expenditure is
	relatively large the

lth, where enditure is relatively large, the coefficient variation in real per capital expenditure increased from an already high level of 106.96 percent in 1984-87 to 128.43 percent in 1988-91. This can aggravate the existing disparities in the provision of health infrastructure across states. Expert analysis shows that infrastructure is

an important determinant of health attainment.

AND	TABLE 2-3 STATEWISE SHARES OF REVENUE AND CAPITAL EXPENDITURE IN TOTAL EXPENDITURE EDUCATION AND HEALTH: 1988–91											
States EDUC		HEALTH: 19 ation		alth								
	Rev.ex .	Cap.ex . In Tota	Rev.ex . Cap.exp									
Andhra Pradesh	96 2	(3	98. 3	0. 1								
Assam	98. 7	1. 3	98. 4	8. 3								
Bihar	96.)	3.: 1	86 4	13-3								
Gujarat	99. 5	0. 5	88 3	11 7								
Haryana	97. 5	2. 4	96. 4	3.⊢3								
Karnataka	99. 7	0. 3	97. 2	2. 3								
Kerala	98. 7	1.: 3	95. 4	4. 3								
Madhya Pradesh	96. 3	3 3	97 5	2 5								
Maharashtra	99. 3	0. 4	96. 7	3. 3								
Orissa	96. 1	3. 9	95.: 9	4. 1								
Punjab	98. 3	1.: 2	97.⊢7	2. 3								
Rajasthan	97. 3	2.: 4	72 5	27 5								
Tamil Nadu	99. 5	0. 5	96. 3	3. 4								
Uttar Pradesh	98. 7	1. 3	94. 3	5. 1								
West Bengal	99. 9	0. 1	93. 3	6. 7								
All States	98. 1	1. 3	90 7	9. 3								
Source: Based on Reserve relevant years.	e Bank of Ind	ia, article on	State Finance	es for								

The high and rising disparities in the levels of capital expenditure are reflected in the infrastructure provided in the states for social sectors. Tables 2-4 and 2-5 present data pertaining to key indicators in this regard for 15 major states along with a ranking of the states in descending order with respect to each indicator. It is evident that the position of Madhya Pradesh is relatively good with respect to number of schools per lakh population and teacher-pupil ratio, though the same cannot be said in the case of indicators of health infrastructure. In almost all the indicators pertaining to health infrastructure, Madhya Pradesh is at the lower end. This indicates the inadequate development of health facilities, aggravated by the large area and dispersed pattern of settlement of population groups in the state. The number of primary health centres as well as dispensaries per lakh population is 32.5 per cent and 16.4 per cent respectively of the all-India average in this regard. With respect to doctors per lakh population, Madhya Pradesh's provision of around 13 doctors per lakh population is one-third of the all India figure of 39 doctors per lakh population.

The provision of infrastructure is necessary but not sufficient to ensure the attainment of human development goals. What also is required is the provision of adequate quantum and quality of services in the infrastructure provided at public cost. The status with respect to the provision of social sector services as reflected in the revenue expenditure incurred as well as the effectiveness of the expenditure in terms of utilisation of the facilities provided are dealt with in the subsequent sections.

REVENUE EXPENDITURE ON SOCIAL SERVICES

Revenue expenditure on social services is incurred to meet the salary and related expenditure of the personnel appointed as also materials and equipment. This is a critical component of social sector expenditure. The level of revenue expenditure incurred therefore gives an indication of the extent of services provided in publicly funded schools and health centres. The real per capita revenue expenditure incurred on social services, education and health for the years 1988-91 for 15 major states is given in Table 2-6. It is evident that the levels of expenditure incurred by Madhya Pradesh are relatively low, especially in comparison with other states.

Apart from levels, it is important to examine the pattern of expenditure in order to judge its potential effectiveness. Available data points to the distorted pattern of social sector expenditure. Tables 2-7 and 2-8 present intra-sectoral locations for education and health for the years 1985-86 and 1990-91 for 15 major states. The data shows that in 1985 -86, in the state of Madhya Pradesh, the share of elementary education in total expenditure on education was lower than the average for 15 major states.

However, in 1990-91, the share increased sharply from 46.8 per cent to 60.5 per cent and was considerably higher than the 15 states' average in this regard. Despite this increase, the share is lower than the two thirds share that has been recommended for elementary education by the Education Commission (1966) and the three-fourths share suggested by other analysts. Moreover, most of the revenue expenditure incurred on education tends to primarily consist of salary expenditure. "For instance, all-India figures show that salary expenditure of teaching staff constituted 93.6 per cent of recurring expenditure in the year 1983-84 with the salaries of non-teaching staff amounting to another 2.8 per cent. Apparatus, games and sports had a nominal share of 0.1 per cent each while scholarships and other Educational aid amounted

10 15

West Bengal

		INDIOA	TODO OF	TABLE 2-4	INIEDAOTO	ITUDE			
SI.No	State			er lakh Pop			100 Sq. Km	Teacher	
		Primary	Middle	Secondary	Primary	Middle	Secondary	Rati Primary	o Middle
				-				Sch	Sch
1	2	3	4	5	6	7	8	9	10
1	Andhra Pradesh	73.44	9.22	10.09	17.72	2.22	2.43		
2	Assam	129.52	25.58		36.81	7.27	4.39		3
3	Bihar	61.68	15.25	4.75	30.63		2.36		
4	Gujarat	32	41.49	12.33	6.72		2.59	39	
5	Haryana	30.16	8.1	13.89	11.13		5.13	45	_
6	Karnataka	52.54	36.42	11.4	12.27	8.51	2.66	111	2
7	Kerala	23.33	10.03	8.85	17.43		6.61	33	
8	Madhya Pradesh	101.08			15.07	3.15	0.9	45	
9	Maharashtra	49.68	23.94	13.17	12.71	6.13	3.37	39	
10	Orissa	127.04	29.85	15.63	25.71	6.04	3.16	45	
11	Punjab	61.27	7.06	13.59	24.57	2.83	5.45	40	18
12	Rajasthan	68.89	19.66	8.51	8.83		1.09	45	
13	Tamil Nadu	53.88	10.11	9.27	23.05		3.97	45	
14	Uttar Pradesh	55.06		4.31	26		2.04	45	
15	West Bengal	74.76	6.15	10.01	57.27	7.67	7.67	40	
	All States	66.13	17.27	9.31	16.99	4.46	2.39	42	33
	RANKING	G OF STA	TES ACC	ORDING TO E	DUCATION	INFRAS	TRUTURE		
			(DE	SENDING OR	DER)				
SI.No	State	No. of S	Schools P	er lakh Pop	No. of Sc	hools Per	100 Sq. Km	Teacher Rati	
		Primar	y Middle	Secondary	Primary	/ Middle S	Secondary	(1987-	-88)
		Primary	Middle	Secondary	Primary	Middle	Secondary	Primary Sch	Middle Sch
1	2	3	4	5	6	7	8	9	10
1	Andhra Pradesh	5	12	8	8	15	11	2	2
2	Assam	1	4	2	2	5	5	4	(
3	Bihar	7	8	14	3	3	12	3	!
4	Gujarat	13	1	6	15		10	14	:
5	Haryana	14	13	3	13		4	7	
6	Karnataka	11	2	7	12		9	1	14
7	Kerala	15	11	11	9		2	15	
8	Madhya Pradesh	3	6	13	10		15	5	
9	Maharashtra	12	5	5	11	6	7	13	
10	Orissa	2	3	1	5	7	8	10	1
11	Punjab	8	14	4	6	13		11	
12	Rajasthan	6	7	12	14	14	14	6	1
13	Tamil Nadu	10	10	10	7	10	6	8	
	LIII D I I		^	4.5	4		40	_	10
14	Uttar Pradesh	9	9	15	4	8	13	9]

		TABLE	E 2-5	INDICATORS	OF HEA	LTH INF	RASTRUCT	TURE		
Sino.	State	No. of		No. of			No. of	No. of		No. of
		Hospitals		Dispensaries	,	Doctors	Nursing	Hospitals	Dispensaries	Primary
			Beds.		Health		Personnel			Health
			Dandla	ld Denviletien	Centres) 100 C -	1/100	Centres
1	2	3	Per i La	kh Population 5	6	7	8	er 100 Sq. 9	10	11
_	Andhra Pradesh	0.93	55.76				59.64		0.29	0.47
	Assam	0.93	62.79			44.04		0.22		0.47
	Bihar	0.35	32.43							1.15
	Gujarat	3.8				46.57	42.79			0.36
	Haryana	0.47	49.03							
	Karnataka	0.47	78.11	2.31						0.59
	Kerala	7.07	254.88	6.02	3.05		219.13			2.28
	Madhya Pradesh	0.55	33.26	0.55			51.71	0.08		0.27
	Maharashtra	2.39	120.64	11.6					2.97	0.53
	Orissa	0.91	44.43					0.18		0.59
	Punjab	1.31	108.96				240.26			4.04
	Rajasthan	0.61	50.14	2.2						0.31
	Tamil Nadu	0.73	88.07	0.92					0.39	1.07
	Uttar Pradesh	0.73		1.26				0.25		1.05
	West Bengal	0.6								
All Sta		1.2								
510.				TES ACCORE					0.00	0.02
					nding Or					
Sino.	State			No. of			No. of		No. of	No. of
				Dispensaries	Primary		N I			
						Doctors	Nursing	Hospitals		Primary
1			Beds.		Health	Doctors	Personnel	Hospitals		Health
				lib Danislation		Doctors	Personnel	·	·	
1	2		Per 1 La	kh Population	Health Centres		Personnel F	er 100 Sq.	Km.	Health Centres
1	2	3	Per 1 La	5	Health Centres 6	7	Personnel F 8	Per 100 Sq.	Km.	Health Centres
1	Andhra Pradesh	3 5	Per 1 La 4 9	5 10	Health Centres 6 13	7 8	Personnel F 8 6	Per 100 Sq. 9	Km. 10	Health Centres 11
1	Andhra Pradesh Assam	3 5 7	Per 1 La 4 9	5 10 10	Health Centres 6 13	7 8 9	Personnel F 8 6 12	Per 100 Sq. 9 9 7	Km. 10 11 9	Health Centres
1 2 3	Andhra Pradesh Assam Bihar	3 5 7 15	Per 1 La 4 9 8 15	5 10 10 15	Health Centres 6 13 12 7	7 8 9	Personnel F 8 6 12	Per 100 Sq. 9 9 7	Km. 10 11 9	Health Centres 11 12 10 4
1 2 3 4	Andhra Pradesh Assam Bihar Gujarat	3 5 7 15 2	Per 1 La 4 9 8 15	5 10 10 15 15	6 13 12 7	7 8 9 11	Fersonnel F 8 6 12 13 11	Per 100 Sq. 9 9 7 12 2	Km. 10 11 9 13	Health Centres 11
1 2 3 4 5	Andhra Pradesh Assam Bihar Gujarat Haryana	3 5 7 15 2 14	Per 1 La 4 9 8 15 2	5 10 10 15 1 1	6 13 12 7 15	7 8 9 11 7 15	Fersonnel F 8 6 12 13 11 10	Per 100 Sq. 9 9 7 12 2	Km. 10 11 9 13 3	Health Centres 11 12 10 4
1 2 3 4 5	Andhra Pradesh Assam Bihar Gujarat Haryana Karnataka	3 5 7 15 2	Per 1 La 4 9 8 15 2 11	5 10 10 15 15 8	6 13 12 7 15 9	7 8 9 11 7 15	Fersonnel F 8 6 12 13 11 10 5	Per 100 Sq. 9 9 7 12 2 11 13	Km. 10 11 9 13 3 8 7	Health Centres 11 12 10 4
1 2 3 4 5 6	Andhra Pradesh Assam Bihar Gujarat Haryana Karnataka Kerala	3 5 7 15 2 14 9	Per 1 La 4 9 8 15 2 11 7	5 10 10 15 1 1 8 5	6 13 12 7 15 9	7 8 9 11 7 15 3	Fersonnel F 8 6 12 13 11 10 5 2	Per 100 Sq. 9 9 7 12 2 11 13	Km. 10 11 9 13 3 8 7	Health Centres 11 12 10 4 13 7 9 2
1 2 3 4 5 6 7	Andhra Pradesh Assam Bihar Gujarat Haryana Karnataka Kerala Madhya Pradesh	3 5 7 15 2 14 9 1	Per 1 La 4 9 8 15 2 11 7 1	5 10 10 15 1 1 8 5 4	6 13 12 7 15 9 4 2	7 8 9 11 7 15 3 5	Fersonnel F 8 6 12 13 11 10 5 2	Per 100 Sq. 9 7 12 21 11 13 14	Km. 10 11 9 13 3 8 7 11	Health Centres 11 12 10 4 13 7 9 2 15
1 2 3 4 5 6 7 8	Andhra Pradesh Assam Bihar Gujarat Haryana Karnataka Kerala Madhya Pradesh Maharashtra	3 5 7 15 2 14 9 1 12	Per 1 La 4 9 8 15 2 11 7 1 14	5 10 10 15 1 8 5 4 14	6 13 12 7 15 9 4 2 14	7 8 9 11 7 15 3 5 14	Fersonnel F 8 6 12 13 11 10 5 2 8	Per 100 Sq. 9 9 7 12 2 11 13 14	Km. 10 11 9 13 3 8 7 1 15	Health Centres 11 12 10 4 13 7 9 2 15 11
1 2 3 4 5 6 7 8 9	Andhra Pradesh Assam Bihar Gujarat Haryana Karnataka Kerala Madhya Pradesh Maharashtra Orissa	3 5 7 15 2 14 9 1 12 3 6	Per 1 La 4 9 8 15 2 11 7 1 14 3 12	5 10 10 15 1 8 5 4 14 2	6 13 12 7 15 9 4 2 14 11	7 8 9 11 7 15 3 5 14 6	Personnel	Per 100 Sq. 9 7 12 2 11 13 14 3 10	Km. 10 11 9 13 3 8 7 11 15	Health Centres 11 12 10 4 13 7 9 2 15 11 8
1 2 3 4 5 6 7 8 9 10	Andhra Pradesh Assam Bihar Gujarat Haryana Karnataka Kerala Madhya Pradesh Maharashtra Orissa Punjab	3 5 7 15 2 14 9 1 12 3 6	Per 1 La 4 9 8 15 2 11 7 14 3 12 4	5 10 10 15 1 8 5 4 14 2 13	6 13 12 7 15 9 4 2 14 11 3	7 8 9 11 7 15 3 5 14 6 10	Personnel	Per 100 Sq. 9 7 12 2 11 13 14 3 10 4	Km. 10 11 9 13 3 8 7 11 15 4	Health Centres 11 12 10 4 13 7 9 2 15 11 8 1
1 2 3 4 5 6 7 8 9 10 11	Andhra Pradesh Assam Bihar Gujarat Haryana Karnataka Kerala Madhya Pradesh Maharashtra Orissa Punjab Rajasthan	3 5 7 15 2 14 9 1 12 3 6 4	Per 1 La 4 9 8 15 2 11 7 14 3 12 4 10	5 10 10 15 1 8 5 4 14 2 13 3	6 13 12 7 15 9 4 2 14 11 3	7 8 9 11 7 15 3 5 14 6 10	Personnel F 8 6 12 13 11 10 5 2 8 4 15 1	Per 100 Sq. 9 9 7 12 2 11 13 14 3 10 4	Km. 10 11 9 13 3 8 7 11 15 4 14 2 12	Health Centres 11 12 10 4 13 7 9 2 15 11 8 14
1 2 3 4 5 6 7 8 9 10 11 12 13	Andhra Pradesh Assam Bihar Gujarat Haryana Karnataka Kerala Madhya Pradesh Maharashtra Orissa Punjab Rajasthan Tamil Nadu	3 5 7 15 2 14 9 1 12 3 6 4 10	Per 1 La 4 9 8 15 2 11 7 1 14 3 12 4 10 5	5 10 10 15 1 8 5 4 14 2 13 3 6	6 13 12 7 15 9 4 2 14 11 3 6	7 8 9 111 7 15 3 5 14 6 10 11 12	Fersonnel F 8 6 12 13 11 10 5 2 8 4 15 19 3	Per 100 Sq. 9 7 12 21 11 13 14 3 10 4 15	Km. 10 11 9 13 3 8 7 1 15 4 14 2 12	Health Centres 11 12 10 4 13 7 9 2 15 11 8 14 5
1 2 3 4 5 6 7 8 9 10 11 12 13	Andhra Pradesh Assam Bihar Gujarat Haryana Karnataka Kerala Madhya Pradesh Maharashtra Orissa Punjab Rajasthan	3 5 7 15 2 14 9 1 12 3 6 4	Per 1 La 4 9 8 15 2 11 7 1 14 3 12 4 10 5	5 10 10 15 1 8 8 5 4 14 2 13 3 6 6	6 13 12 7 15 9 4 2 14 11 3 6 5	7 8 9 11 7 15 3 5 14 6 10 1 12 2	Personnel F 8 6 12 13 11 10 5 2 8 4 15 1 9 3 14	Per 100 Sq. 9 7 12 21 11 13 14 3 10 4 15	Km. 10 11 9 13 3 8 7 1 15 4 14 2 12 10 6	Health Centres 11 12 10 4 13 7 9 2 15 11 8 14 5 6

to 0.5 percent The situation is not likely situation is not likely to be different at the state level. The negligible share of materials and equipment results in schools that lack blackboards, teaching aids and the like which results in poor quality education being imparted which in turn affects the enrolment of students.

In the health sector, the intra-sectoral allocations were quite low for public health in 1985-86 for most states. In Madhya Pradesh, the share of public health in 1985-86 was 11.4 percent as against the 15 states average of 12.6 percent. In 1990-91

the state's share declined to 7.8 percent and was much lower than the reduced average of 15 states of 10.6 percent. A perusal of the share of salaries and commodities in the health sector is of crucial importance as the need and importance of personnel in health facilities is reduced in the absence of medicines and diagnostic aids. The situation in this respect is revealing. The available data suggest that the share of salaries in the health sector (i.e., medical and public health taken together) in 1974-78 was, on an average, 59 percent

TABLE 2.6 STATEWISE REAL PER CAPITA REVENUE EXPENDITURE ON EDUCATION AND HEALTH: 1988 –91 (Amount in Rupees)

State	Education RPC Rev. Exp.	Health RPC Rev. Exp.
Andhra Pradesh	78.09	34.()1
Assam	98.02	44.65
Bihar	67.31	18.71
Gujarat	107.()8	37.1:4
Haryana	101.()4	40.′ 8
Karnataka	88.1:8	34.03
Kerala	124.9	45.96
Madhya Pradesh	64.57	36. 6
Maharashtra	108.77	43.7
Orissa	70.38	28.67
Punjab	130.02	51.71
Rajasthan	85.()6	42.81
Tamil Nadu	102.79	44.1
Uttar Pradesh	143. 7	28.′ 7
West Bengal	86.84	33.4.4
All States	88.85	36.69

Source: Based on Reserve Bank of India Article on State Finances for relevant years and Report on Currency and Finance, 1992-1993. Real expenditures obtained by deflating nominal expenditure by GDP deflator.

for 15 major states while the share of commodities was 31.3 percent. In 1985-88, the share of salaries increased to 66.1 percent even as the share of commodities declined to 25.3 percent.

the case of Madhya Pradesh, the share of salaries was higher than the 15 states average in 1974-78 and it increased further from 62.8 percent to 70.6 percent during the period under consideration. The share of commodities, which at 29.7 percent was lower than the 15 states' average even in 1974-78, declined further to 23.3 percent in 1985-88.

Such a reduction in a state with high infant mortality rates and low health status is a cause for concern. It needs to be notes further that the rates of growth of social sector expenditures have been decelerating since the mid- eighties as a consequence of the financial. Stringency experienced by the state governments. Although the absolute levels are low, the rates of growth of real per capita expenditure on education have generally been either protected or increased even as the growth rate of real per capita expenditure on health decelerated. In the case of Madhya Pradesh, the growth rate of real per capita expenditure on education increased from 4.10 per cent in 1974-75 to 1984-85, to 6.57 in 1985-86 to 1991-92, whereas for health, it declined from 8.44 per cent to -1.69 per cent during the corresponding periods. Given the synergistic relationship between elementary education and public health, this trend is a cause for concern.

UTILISATION OF SOCIAL SERVICES

The brief picture presented above concerns mainly the level and pattern of expenditures on social sectors. The provision of social sector services by the government presents only one side of the picture. In order to make a dent on human development indicators it is essential that the facilities provided be adequately utilised. A lacuna of the publicly provided social sector services in Indian states is their under-utilisation. Studies have pointed out that this is due to the poor quality of services provided in public health facilities and schools. In the case of health, the 1990 NCAER survey provides data on this aspect across major states in rural and urban areas separately. The same are reproduced in Tables 2-9 and 2-10. It appears from this data that only 1.7 per cent of all illness episodes in rural Madhya Pradesh are referred to primary health centres. In the case of education, the drop-out rate indicates the extent of underutilisation of facilities for elementary education. Table 2-11 provides the relevant data. The high drop-out rate clearly reveals the sad state of affairs. The poor utilisation of the infrastructural facilities in Madhya Pradesh compounds the problem of inadequacy of social infrastructure.

What is also intriguing is that that there is substantial under-utilisation of social sector services despite the subsidies provided. Table 2-12 provides information regarding the per capita subsidies provided in the education and health sectors in major states in the year 1987 -88. It is evident that the level of subsidies provided by the Madhya Pradesh government differs across sectors. While in medical and public health the per capita subsidy (Rs. 31.70) was nearer to the all states' average, in water supply and sanitation it was much above the average. In the case of education, the per capita subsidy of Rs. 88.65 was substantially lower than the all states' average of Rs. 114.19. Subsidies to education and health (including water supply and sanitation) amounted in 1987-88 to Rs. 98.18 crore which accounted for 45.77 per cent of the total subsidies given by the state government in that year. That social infrastructure remains underutilised despite such generous subsidies is a reflection upon the quality of services rendered in the state institutions.

STRUCTURAL ADJUSTMENT AND SOCIAL SECTOR EXPENDITURES IN MADHYA PRADESH

The initiation of structural adjustment policies in the country since mid-1991 has implications for human development. Following the experience of several Sub-Saharan African and Latin American countries which undertook similar policies with unfavourable impact on social sector development, fears have been expressed regarding the repercussions on poverty and human development in India. The Government of India has sought to allay these fears by stating that structural adjustment in India will have a 'human face'. The main responsibility of implementing structural adjustment with a human face rests with the state governments as in the constitutional division of responsibilities, the departments and subjects which ensure attainment of human development goals are with the state governments.

TABLE 2-7
INTRA-SECTORAL ALLOCATION FOR EDUCATION:
1985 – 86 AND 1990 – 91 (PER ECNT)

			1985-86 1990-91								
S.No	State	Ele	Sec.	Univ. and Higher	Adult	Tech	Ele.	Sec.	Univ. and Higher	Adult	Tech
1	2	3	4	5	6	7	8	9	10	11	12
1	Andhra Pradesh	47	29.2	20	0.6	3.1	45.4	29.3	22.3	NA	3
2	Assam	60.1	25.8	10.5	1.4	2.2	58.5	27.7	11.3	0.5	1.9
3	Bihar	63.6	20.7	12.5	1.8	1.4	64.9	21.1	11.2	0.9	1.9
4	Gujarat	60.7	27.6	8.6	0.5	2.6	52.4	33.5	10.5	0.8	2.8
5	Haryana	40.2	42.9	13.6	1.2	2.2	46.2	35.2	14.6	1.6	2.4
6	Karnataka	54.9	22.9	18.4	0.9	2.9	52.8	28.7	14.5	1.2	2.9
7	Kerala	51.9	30	13.2	Negl.	4.9	53.1	30.3	12.4	0.1	4.1
8	Madhya Pradesh	46.8	34.7	13.2	1.4	3.7	60.5	23.7	11.3	NA	4.5
9	Maharashtra	47.6	33.9	14.1	0.6	3.9	41.3	40.7	12.9	0.8	4.3
10	Orissa	42.7	38.9	15	0.9	2.4	55.9	24.7	14.6	0.9	3.9
11	Punjab	35.2	49.5	13.3	0.6	1.3	32.9	50.2	14.6	0.3	1.8
12	Rajasthan	54.4	33.2	10.1	1.1	1.2	55.3	32.6	9.3	1	1.7
13	Tamil Nadu	51.7	26.9	16.7	1	3.6	49.7	35.7	10.5	0.7	3.4
14	Uttar Pradesh	50.3	35.4	9.9	1.1	3.3	58.4	30.3	7.9	0.9	2.5
15	West Bengal	42.3	41.3	13.7	0.6	2.1	36.7	47.2	13.7	0.5	1.9
	Mean	50	32.9	13.5	0.9	2.7	50.9	32.7	12.8	0.7	2.9

Including Pre – University Education

Source : Prabhu and Chatterjee (1993)

T A B L E 2 – 8 INTRA-SECTORAL ALLOCATION FOR EDUCATION: $1\,9\,8\,5-8\,6\,A\,N\,D\,1\,9\,9\,0-91\,(\,P\,E\,R\,C\,E\,N\,T\,)$

			198	85-86			19	90-91	
S. No	State	Medical	Public Health	Water Supply & Sanitation	Family Welfare	Medical	Public Health	Water supply & Sanitation	Family Welfare
1	2	3	4	5	6	7	8	9	10
1	Andhra Pradesh	38.7	14.5	31.5	15.3	50.9	10.6	24.3	14.2
2	Assam	36.4	13.7	38.3	11.6	37.7	6.3	47.6	8.5
3	Bihar	39.5	7.7	38.3	14.5	50	10.4	21.5	18.2
4	Gujarat	41.4	16.3	24.8	17.6	51.1	11.6	24.6	12.7
5	Haryana	28.5	21.1	37.7	12.8	42.6	10.6	36.3	10.4
6	Karnataka	55.3	12.1	15	17.6	61.5	5.8	20	12.6
7	Kerala	63.6	8	17	11.4	57.3	6.3	23.6	12.9
8	Madhya Pradesh	31.4	11.4	43.3	13.9	44.4	7.8	37.5	10.3
9	Maharashtra	25.4	21	43.8	9.8	31.9	27.6	31.1	9.5
10	Orissa	38.9	12.9	34.5	13.8	44.6	12.4	26.6	16.3
11	Punjab	53.5	12.2	23.3	10.8	62	9.5	19	9.5
12	Rajasthan	28.8	6.2	55.7	9.4	34.8	5.2	50.9	9.1
13	Tamil Nadu	52.5	7.6	30.1	9.8	49.5	10.6	28	12
14	Uttar Pradesh	42	14.6	23.1	20.3	43.9	13.2	24.9	18.1
15	West Bengal	62.5	9.5	16.9	11.1	63.8	11.4	13.9	11
	Mean	42.6	12.6	31.6	13.3	48.4	10.6	28.7	12.4

Source: Prabhu and Chatterjee (1993)

TABLE2-9 UTILISATION OF HEALTH FACILITIES:RURAL1990

(Per Cent of Illness Episodes Referred To)

S.No.	State	Govt. Hospital	Est. Hospital	Pvt. Hospital	PHC	Charitable Disp.	Medical Shops	Others
1	2	3	4	5	6	7	8	9
1	Andhra Pradesh	31.47	8.07	29.73	6.18	0.39	12.71	11.45
2	Assam	36.11	3.11	39.62	10.31	1.76	7.65	1.44
3	Bihar	21.35	1.04	48.54	10.93	0.9	9.36	7.88
4	Gujarat	27.82	0.00	66.2	3.11	0.00	1.43	1.44
5	Haryana	20.78	0.00	44.11	10.28	0.00	2.83	0.00
6	Karnataka	39.66	0.00	50.05	1.9	0.00	4.69	3.7
7	Kerala	29.11	2.72	42.01	0.00	2.72	2.23	3.21
8	Madhya Pradesh	29.02	0.22	48.11	1.73	2.55	9.21	9.16
9	Maharashtra	17.04	0.84	49.07	20.79	0.00	8.04	4.22
10	Orissa	61.14	0.05	7.21	15.78	0.34	5.37	10.11
11	Punjab	12.19	0.00	46.96	18.57	0.00	19.57	2.71
12	Rajasthan	8.8	8.67	14.55	0.00	1.61	15.71	10.66
13	Tamil Nadu	6.4	0.00	58.16	2.48	0.00	0.47	2.49
14	Uttar Pradesh	17.94	0.51	58.73	8.61	0.32	6.92	6.97
15	West Bengal	15.54	1.5	16.75	7.09	2.62	40.95	15.55
16	All States	28.03	1.69	43.43	8.18	0.96	10.82	6.89

Source: National Council of Applied Economic Research (1992)

TABLE 2- 10
UTILISATION OF HEALTH FACILITIES: URBAN 1990
(Per Cent of illness Episodes Referred To)

S.No	State	Govt. Hospital	Est. Hospital	Pvt. Hospital	PHC	Charitable Disp.	Medical shops	Others
1	2	3	4	5	6	7	8	9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	Andhra Pradesh Assam Bihar Gujarat Haryana Karnataka Kerala Madhya Pradesh Maharashtra Orissa Punjab Rajasthan Tamil Nadu Uttar Pradesh West Bengal	30.11 58.58 12.17 26.26 8.53 36.96 39.14 30.64 26.44 60.00 13.04 39.45 34.89 23.51 34.54	1.00 7.16 1.73 1.02 3.88 2.10 3.36 3.11 3.1 2.98 0.38 2.3 1.42 1.63 0.83	41.26 20.11 56.41 53.07 76.92 44.63 30.89 49.23 42.8 29.07 62.62 24.54 52.25 55.13 23.36	10.55 5.15 2.1 5.04 0.88 1.97 3.69 0.93 15.95 2.05 6.72 0.00 3.54 9.18 4.59	0.15 0.19 1.66 0.46 0.00 0.00 1.12 0.55 0.32 0.00 1.44 1.22 0.36 4.1	16.28 5.19 24.00 11.64 7.66 8.88 21.26 12.55 7.48 2.47 11.45 32.26 5.22 8.07 27.12	0.65 3.62 1.93 2.51 2.13 5.45 1.66 2.42 3.68 3.11 5.79 0.01 1.46 2.12 5.46
	Mean	31.16	2.1	43.95	5.8	0.88	13.59	2.52

Source: National Council of Applied Economic Research (1992)

TABLE 2-11 STATE-WISE SCHOOL DROP-OUT RATIO		
State Drop Out Rate (%)		
	1987-88 <u>(Classes</u> I-VIII)	
Andhra Pradesh	71.(3	
Assam	72. 4	
Bihar	79.03	
Gujarat	61.07	
Haryana	38.02	
Karnataka	6€ 1	
Kerala	15. 9	
Madhya Pradesh	5. 3	
Maharashtra	59.⊱7	
Orissa	64.∂ 3	
Punjab	63.: 3	
Rajasthan	66.: 5	
Tamil Nadu	48.: 2	
Uttar Pradesh	54 2	
West Bengal	75. ₁1	
All India	62.: 9	

TABLE 2-12 STATE-WISE PER CAPITA SUBSIDIES ON EDUCATION AND HEALTH: 1987-88 (Amount in R.)			
State	Educatior	Heal 1	
Andhra Pradesh	112. 3	36. 5	
Bihar	96. 3	21. 5	
Gujarat	149.: 3	36. 5	
Haryana	144. 2	41 1	
Karnataka	132.: 4	42 3	
Kerala	178. 3	47. 3	
Madhya Pradesh	88. 5	31 7	
Maharashtra	147. 3	44. 7	
Orissa	98. 3	32. 🤄	
Punjab	176 4	56. 7	
Rajasthan	116.: 3	37. 1	
Tamil Nadu	121. 3	37. 3	
Uttar Pradesh	74. 2	25 2	
West Bengal	116.: 2	38. ∋	
All States	114. 9	35. 3	
Source : Mundle and Rao (1991)			

The state governments have been facing severe financial stringency since the mid-eighties. The onset of structural adjustment at the central level has had adverse repercussions on the finances of state governments. Given the fact that in the past financial stringency had led to a slowing down of social sector expenditures, it is essential to examine the trends in this regard in the period following. The state the initiation of structural adjustment. This is particularly important in the case of Madhya Pradesh whose level of human development is already low and where the proportion of population below the poverty line is alarmingly high, at over 40 per cent of the population.

The analyses of the trends in social sector expenditures are conducted in terms of ratios rather than real per capita expenditures as they are more appropriate in the present context of expenditure compression. The ratios used are the Social Allocation Ratio, the Social Priority Ratio and the Priority Allocation Ratio. Social Allocation Ratio (SAR) is defined as the proportion of total revenue expenditure devoted to social sectors. Social Priority Ratio (SPR) is defined as the proportion of social sector expenditure devoted to areas of social priority, in this case elementary education, public health, water supply and sanitation, maternal and child health services and nutrition. Priority Allocation Ratio (PAR) is the ratio of revenue expenditure on sectors of social priority to total revenue expenditure. The data on these ratios for Madhya Pradesh for the years 1990-91 to 1993-94 are given in Table 2-13.

It may be observed from this table that there has been a decline in the relative allocations to social sectors as reflected in the decline of the SAR from 39.41 in 1990-91 to 36.25 in 1993-94. A redeeming feature, however, is the increase in SPR which indicates that within the social sectors, the allocations to areas of social priority are being increased.

CONCLUSIONS

This chapter thus far highlights the fiscal and expenditure patterns of human development in Madhya Pradesh. It is clear that in both aspects of public provisioning, viz. infrastructure development, as well as per capita revenue expenditure incurred, the position in Madhya

Pradesh needs to be improved. This is particularly true in the case of the health sector. Not only is the infrastructure provided inadequate, the level utilisation of of the government facilities is also poor pointing to the low quality of services rendered. Another important aspect is the differential emphasis given to education and health. The education sector has experienced an increasing trend in real per capita government expenditure incurred on it. Within education, the pattern of allocation has favoured

elementary education. In sharp contrast, growth in real per capita expenditure on health has been decelerating since the mid-1980s.

In view of the low level of human development in the state, it is essential that the allocations to both the sectors, and within them to basic level facilities, be increased sharply and simultaneously. Alongside, it is necessary to upgrade the quality of services rendered in the public institutions providing basic education and health services. The mechanisms by which these measures can be implemented require careful thought and commitment at all levels. People's participation, either through Panchayati Raj institutions and/or through NGOs

is necessary and is being implemented through the Panchayati Raj initiatives in the state. It needs to be stressed that human development is a long and arduous task and returns to investment in these sectors would be available only after a considerable time lag. The implementation of a policy of nurturing the social sectors and enhancing human development during a period of fiscal stress is daunting, but not impossible given the requisite political will.

NOTES

TABLE 2 – 13

SOCIAL SECTOR EXPENDITURES

DURING STRUCTURAL

ADJUSTMENT: MADHYA

PRADESH

Social

Ratio

39.41

38.83

37.77

36.25

Years

1990-91

1991-92

1993-93

199.94

(RE)

Social

Allocation Priority Allocation

Ratio

38.92

39.44

40.55

40.36

Priority

Ratio

15.24

15.02

14.9

14.66

The term was coined by Professor Ashish Bose, the eminent demographer, and it lexicon of

slightly different from that of other analysts. The Human Development Index calculated from three indices representing education, health and nutritional attainment. The

indices were arrived at by using principal components analysis. The scores of the three indices were then used along with log of income distribution adjusted per capita SDP, to arrive at the composite index.

The intra-sectoral analysis- of education has been restricted to revenue expenditures. In the case of health expenditures, for the budgetary heads medical, family welfare and public health, the expenditures ate only revenue, whereas water supply and sanitation, capital disbursements are also included as they form a significant proportion of expenditures in a number of states.

has now become part of the development economists in India. 2. The method used by Prabhu and Chatterjee 1993, was