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Tackling Poverty Constraint on Human Development: Financing Strategies in Madhya Pradesh

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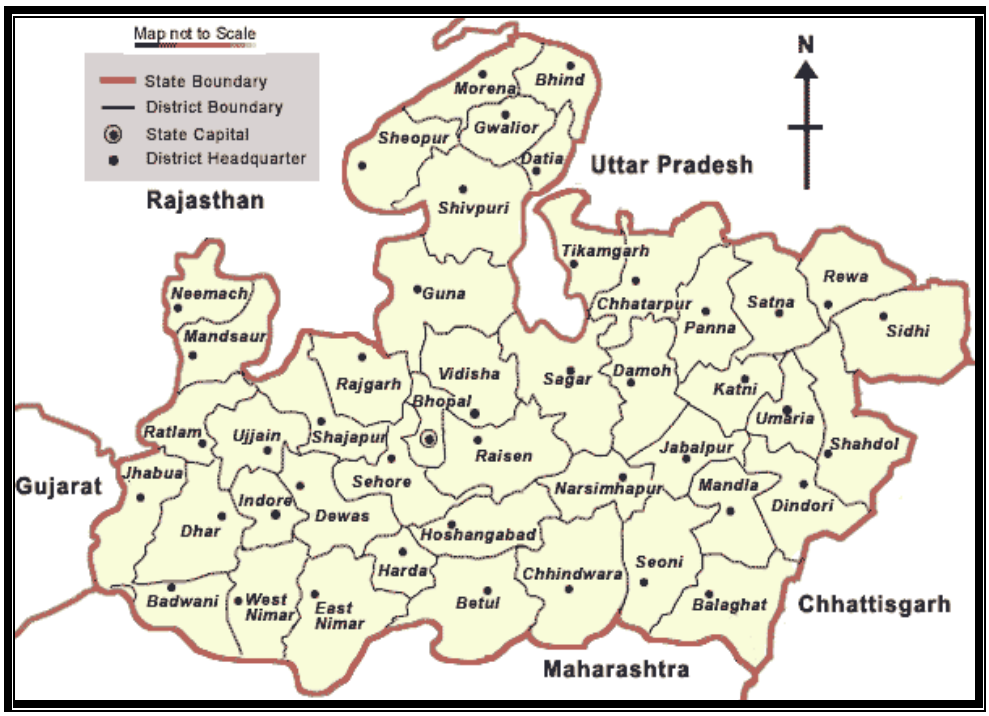

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Preface

This is the first monograph being published under the research programme on **Financing Human Development in India**. This programme has been undertaken by the National Institute of Public Finance and Policy as part of the umbrella project on **Strengthening State Plans for Human Development** executed by the Planning Commission and sponsored by UNDP, India. The umbrella project involves several state governments and other institutions as well.

Under the above mentioned programme, eight individual state studies are to be carried out in cooperation with the respective state governments, and finally a synthesis study also is scheduled at the end of the individual state studies. We plan to disseminate the entire series of individual and synthesis studies in due course of time. Simultaneously, Project Working Papers and Policy Briefs are also being published by the Institute.

The research for this monograph was carried out by a team led by Tapas K. Sen; other members of the team included H. K. Amar Nath, Mita Choudhury and Anit Mukherjee. The Governing Body of the institute does not take any responsibility for the contents of this monograph; such responsibility is to be ascribed to the authors only.

M. Govinda Rao
Director

Acknowledgements

This monograph is part of a process of dissemination of the results of ongoing research on ***Financing Human Development in India*** being carried out at National Institute of Public Finance and Policy, New Delhi. The research project is in turn part of an umbrella programme on **Strengthening State Plans for Human Development,** being implemented by the Government of India through the Planning Commission and supported by UNDP, India.

R. Sreedharan, Rajat Sachar, and Ragini Sahay of the Planning Commission have been actively involved in the execution of the programme. We thank them for their keen interest. From UNDP India, Seeta Prabhu and Suraj Kumar have not only kept us on our toes, but have provided very useful comments on earlier drafts. To all of them, we express our sincere thanks.

The Planning department of the Government of Madhya Pradesh was the facilitating agency for this research work at the state level. Among the officials of the department that extended unstinted cooperation were Amar Singh, Manoj Jhalani, Mangesh Tyagi, S. K. Mitna and Ramesh Kumar Dixit. For a research study with a fairly wide scope like the present one, it requires contribution of several other officials to make a reasonable attempt. Among them were Sumit Bose, Pradeep Bhargava, I.S. Dani, Ashok Barnwal, M. K. Singh, Sitanshu Shukla, Rakesh Munshi and S. K. Srivastava. To all the officials who helped us in our task, named here or not, we express our gratitude.

At the institute, M. Govinda Rao facilitated the work for this study in several ways, the most important being full support and constant encouragement in this venture into what was relatively unfamiliar territory. Swapna Mukhopadhyay gave us the benefit of her comments and suggestions from an early stage of the work and also read through several drafts of the present monograph. We were assisted by Narendra Jena, Sandeep Biswal, and Krishanu Karmakar in our work. Diwan Chand and Geeta Bhatnagar helped us with data from the Institute's database on state finances. We thank all of them for their support. Thanks are also due to Atul Sood of Jawaharlal Nehru University for help with the thematic maps.

Finally, it is a certainty that we have involuntarily omitted the names of some other persons who have helped us in the course of this research work. To all such persons, our deepest apologies; the omissions do not make their contributions any less important. It hardly needs mention that any shortcoming of this study and all errors of omission and commission are the responsibility of the authors.

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I. Introduction

Madhya Pradesh, counted among the low income states of India, has been making steady progress in terms of the human development index, moving up one rank every decade (Planning Commission, 2002), but still ranking 12th among the 15 larger states of India. Its relatively high level of poverty (third highest in the country at about 38 percent in 1999-2000) poses a challenge for the policymakers – that of breaking the 'vicious cycle' of poverty and low human development. Although, the second largest state in India (after Rajasthan) in terms of area even after bifurcation in the year 2000, it ranks seventh in terms of population. This implies a relatively low population density (196/km^2), but this in itself is not a serious limiting factor except at some of the sub-state areas, as several developed countries of the world have even less population density. Centrally located, it is completely landlocked, which has had an impact on its socio-political history in that the European presence – developmental or otherwise – was never strongly felt in the state, unlike some of the coastal states of India. Despite a large number of its predominantly tribal districts becoming a part of the newly created state Chhattisgarh, it still has a substantial percentage of tribal population in the total; the percentage of socially underprivileged scheduled castes is also large, together forming more than a third of the total population of the state, a significant proportion that requires special attention of policy makers.

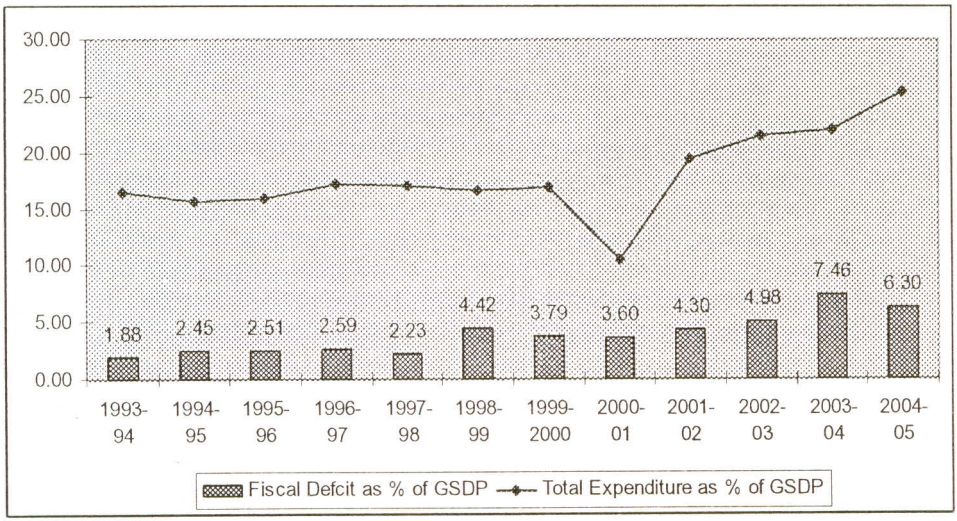
The state ranks 11th in terms of per capita income in current prices (among the 15 larger states including Assam but excluding the new states of Jharkhand and Chhattisgarh) and is below the national average as per the latest Central Statistical Organisation data for 2004-05; considering the same in 1993-94 prices, its rank is the same as in current prices and remains well below the national average. The low per capita income and the high levels of poverty clearly constitute constraints on a vigorous drive for furthering human development. The low levels of per capita income also imply limitations on the state's ability to spend on human development initiatives from its own resources. Despite substantial reliance on central transfers, its Plan size at the margin has to depend upon resources it can raise by itself. The adverse initial conditions in terms of achievements in various sectors and its limited ability to raise its own funds inhibit ambitious Plan targets as can be seen from *Table 1.1*. None of the state level targets aspire to exceed national ones; a few are more modest.

Table 1.1: Comparison of Selected Plan Objectives - India and Madhya Pradesh

Target Indicator	National Goal	State Objective
Poverty Reduction	Reduction by 5 percentage points by 2007 and 15 percentage points by 2012	Bring down poverty to national average
Student Enrollment	All children in school by 2003 (target missed), all children to complete at least 5 years of schooling by 2007	Achieve universal access, then improve access and quality of education; bring down dropout rate, especially among girls and weaker sections
Literacy Rate	75 percent by end of Tenth Plan	75 percent by end of Tenth Plan
Infant Mortality Rate	45/1000 by 2007 and 28/1000 by 2012	From 91/1000 to 45/1000 by end of Tenth Plan
Maternal Mortality Ratio	2/1000 by 2007; 1/1000 by 2012	2/1000 by end of Tenth Plan
Drinking water	Sustained potable water supply in all villages by end of Tenth Plan period	Sustained potable water supply in all villages by end of Tenth Plan period
Gender Inequality	Reduction by at least 50% in identified indicators (wages, literacy rate)	No specific target

The growth performance of Madhya Pradesh has been rather erratic in recent times, as is often the case with states that are predominantly agricultural. Between 2000-01 and now, the state has had negative growth in two years, and the average annual growth has been quite modest, picking up only in the last two years. This has had its impact on other macro variables of the state economy. *Figure 1.1* shows the trends in fiscal deficits and public expenditure ratios for the years 1993-94 to 2004-05. It can be seen that the fiscal deficit as a percentage of GSDP has been rising since 2000-01 (an exceptional year in which the state was split in November 2000, and the new state of Chhattisgarh was carved out) along with total expenditures. In the last two years, particularly in 2003-04, the level of fiscal deficit has been rather high and any realistic attempt to lower it is unlikely to be achieved without a substantive compression of expenditures. This is because the revenue receipts cannot be expected to rise to the extent necessary (at least 3 percent of GSDP) to result in the target fiscal deficit level through receipt-side adjustment alone. This bodes ill for any proposal to substantially augment government expenditures.

Figure 1.1: Macroeconomic Trends in Madhya Pradesh 1993-94 to 2004-05



Source: *Finance Accounts of Madhya Pradesh*

The comparative magnitude of two ratios pertaining to human development is provided in *Figure 1.2.* The share of human development expenditure has been consistently between 40 and 50 percent until 2000-01, after which there has been an obvious decline in the human development ratio, while social priority ratio has been at least 40 percent in all years but one (2002-03). If with rising total expenditures in the recent post-bifurcation period human development expenditures have lost their share somewhat, their prospects for the imminent phase of expenditure contraction can only be modest. It follows that the only realistic possibility of substantially augmenting human development expenditures is contingent upon turning around the modest macroeconomic performance of the state economy. Public sector initiative, in fact, should be less restricted now because of better growth performance in recent years, easing the financial constraints imposed by the state's public finances to some extent.

Figure 1.2: Trends in Human Development Expenditure 1993-94 to 2004-05

Note: a) *Human development expenditure* includes those on social services and rural development. b) *Social priority ratio* includes expenditure on elementary education, rural health, public health, water supply, sanitation and nutrition as percentage of expenditure on social services.
Source: Finance Accounts of Madhya Pradesh.

Many states, including Madhya Pradesh, have passed their own Financial Responsibility legislations in line with the union government's *Fiscal Responsibility and Budget Management Act*. These legislations put a limit on fiscal deficit (hence debt financing of expenditures) and also limit revenue deficit to *nil* by the year 2008-09. Given that in most states a large part of the expenditure is committed expenditures of some sort (salaries, interest payments, loan repayments, and other contractual payments), the discretionary expenditure for development purposes is not a large fraction of the total expenditures. Normally, one would thus expect a substantial contraction in all non-contractual expenditures, including human development expenditures. However, in social services, which include much of the human development areas, salaries in particular, constitute a large part, which may reduce the impact of the legislation. Further, the improved macroeconomic performance would also perhaps help maintain the human development expenditures. Taking a medium term view, on balance, better macroeconomic performance and the resulting rise in per capita income may result in improvements in human development areas through its direct and other effects working through behavioral linkages (e.g., removal of limitations on demand for schooling arising from extreme poverty); the effect on public finances may at best help maintain human development expenditures. However, given the vulnerability of the state economy through that of the agricultural sector that dominates, all the expectations are conditional upon the turnout of the exogenous determinants of agricultural output in the state, particularly rainfall.

The relatively low level of economic and human development, high levels of poverty and their mutually reinforcing nature brings the issue of poverty to the forefront. The *impasse* can be broken only through substantive public initiatives simultaneously on all fronts ensuring that the poor are always

kept into consideration; however, such initiatives are limited by budget constraints. In what follows, we therefore first examine in chapter II, the overall policy towards poverty alleviation as evidenced through the budgetary allocations. We complement this with an indicative analysis of the benefit of public expenditures on the poor. We follow this up with a review of the direct poverty alleviation measures and attempt an estimate of the resource requirements in this area in the third chapter. Two important areas of human development – elementary education and health – are reviewed next in Chapter IV, the objective being to identify sectoral priorities and to make rough estimates of the additional cost of reaching the given targets. The review also leads to some policy recommendations with respect to the individual sectors in the interest of efficiency. Madhya Pradesh has been often discussed as a case study of institutional reform, specifically decentralisation, in several areas and this is the subject that we turn to in Chapter V. Chapter VI contains estimates of additional resource requirements to reach stated goals or norm-based coverage. We then proceed to make rough estimates of possible additional resource mobilisation and examine possibilities of reprioritisation of government expenditures, concluding with an assessment of the sources of additional funds *vis-à-vis* the requirements.

II. Public Expenditure and The Poor

2.1. Poverty in Madhya Pradesh

Madhya Pradesh is among the poorest six states of India that together constitute about 71.65 percent of India's poor and half of the population. Poverty in this state is predominantly rural, although the headcount ratio in urban areas is higher. This is because about 73 percent of the total population in the state resides in the rural areas as per *Census 2001* estimates. Further, several studies over the years have shown particular characteristics of poverty in the state, specifically poverty clustered in particular regions and amongst specific social groups.

Table 2.1: Incidence and Concentration of Poverty in Selected States of India

State	State share of India's		Percentage of poor in total population of the state		
	Poor	Population			
	1999-00	2001	1993-94	1999-00	2004-05
Madhya Pradesh	11.47	7.91	42.52	37.43	38.29*
Maharashtra	8.76	9.42	36.86	25.02	30.75
Orissa	6.50	3.57	48.56	47.15	46.37
West Bengal	8.20	7.81	35.66	27.02	24.72
All India	**100.00**	**100.00**	**35.97**	**26.10**	**27.54**

*This figure represents the poverty ratio in truncated Madhya Pradesh using the uniform recall period. Including the districts in the now newly formed state of Chhattisgarh, the poverty ratio is 39 percent.

Source: Mehta and Shah (2003), based on Government of India, Poverty Estimates for 1999-2000, Press Information Bureau, February 22, 2001 and March 1997; Government of India, 2001, Provisional Population Tables, and Planning Commission, Government of India.

Going by the NSS regional distribution, the southwestern region of the undivided MP is amongst the poorest regions in the country with a high incidence of rural poverty ratio of above 60 according to the 1999-00 estimates. This region includes 6 districts namely Khargaon, Khandwa, Barwani, Betul, Hoshangabad, and Harda. The south and central (now eastern) regions with a poverty ratio between 41-60 also come in the high poverty regions of the country, which includes districts like Jhabua, Mandla, Balaghat, Seoni, Chhindwara, Damoh, Ratlam and others. The Planning commission list of 100 backward districts prepared in 2002 to cover the *Rashtriya Sam Vikas Yojana* (RSVY) incorporates 9 districts of the state as most backward. Also, Debroy and Bhandari's (2003) estimation of district level deprivation identifies 69 districts as most backward where they have listed 6 districts of MP namely, Damoh, Chhatarpur, Dhar, Jhabua, Panna and Tikamgarh as most poor. These two sets of backward districts are mutually exclusive. While the estimates differ due to variations in methodology applied, these exercises underline the fact that barring the northern and the central regions (of the present Madhya Pradesh), and a few districts in other regions, almost the entire state bears the incidence of

income poverty and/or deprivation in the form of food insecurity, lack of education and poor health facilities.

While geographical reasons like the extent of forest cover, the quality of agricultural land and patterns of rainfall explain the widespread rural poverty to some extent, there are also demographic factors involved in the backwardness of large tracts of the state.

According to Census estimates, 20.8 percent of the total state population is scheduled tribes (STs) out of which nearly 90 percent is rural. Out of the total ST population in the country, MP alone comprises of 15 percent. There is also a considerable presence of scheduled caste (SC) population of around 16 percent of the state population. While the SC population is spread around the state, the tribal population is concentrated in a clearly defined belt along the eastern and southern border districts of the state.[1] Most of these districts have either low or medium agricultural productivity, Balaghat being the only exception, and have high incidence of poverty (see figures 2.1 and 2.2). That the incidence of poverty among the tribals is high is well known. The reason primarily has to do with their forced disconnect from the forests, their source of livelihood (*see*, for example, Shah and Guru, 2003). The government has not succeeded in adequately preparing them for an alternative method of generating their livelihood, nor has it been able to provide them enough jobs to compensate. The overall development of these areas has also been relatively slow, implying fewer income generation opportunities in the private sector as well. In fact, empirical analysis by Sundaram and Tendulkar (2002) reveals that the structural variables (as represented by the region of residence) are far more important in the determination of poverty status than policy variables; among the policy variables the most important pertain to presence or absence of a worker in a household and the number of days worked. The poor themselves believe that lack of jobs and lack of education – in that order – are responsible for their status (Srivastava *et. al*. 2007). Other participatory assessments (e.g., one carried out by PRAXIS for the Asian Development Bank) suggest factors like large family size, ill health, lack of infrastructure and low wages; some of these (the first two) only reflect the vicious circle of poverty.

[1] While Balaghat district does not have as high a share of ST population as the other bordering districts, Umaria and Mandla, despite not being border districts (but next to one – Shahdol and Dindori) do have a high share of ST population. Chhatarpur is the only real exception, being on the northern boundary of the state with a high percentage of ST population.

Figure 2.1

Scheduled Tribe Population(in %)
Madhya Pradesh

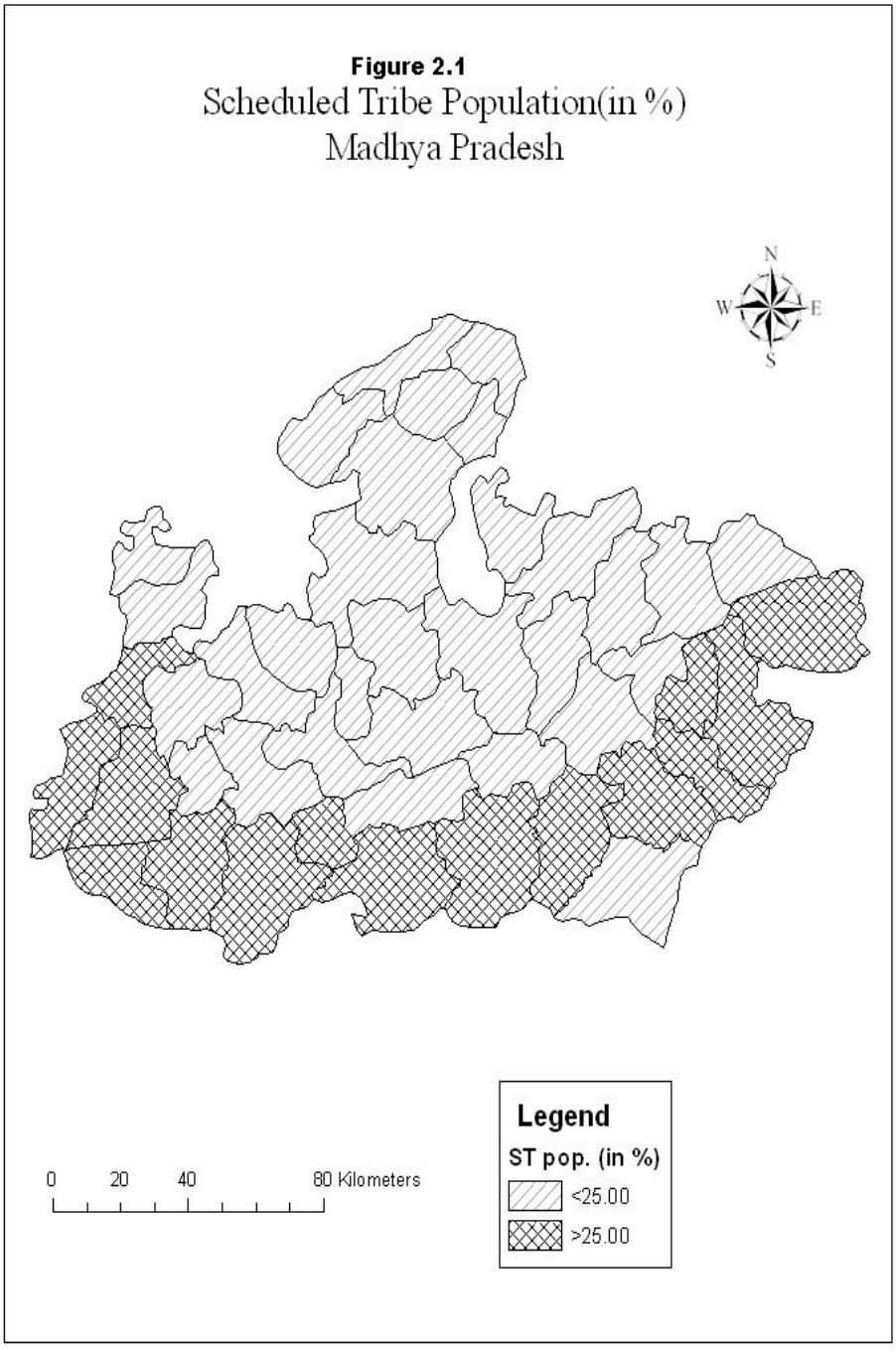
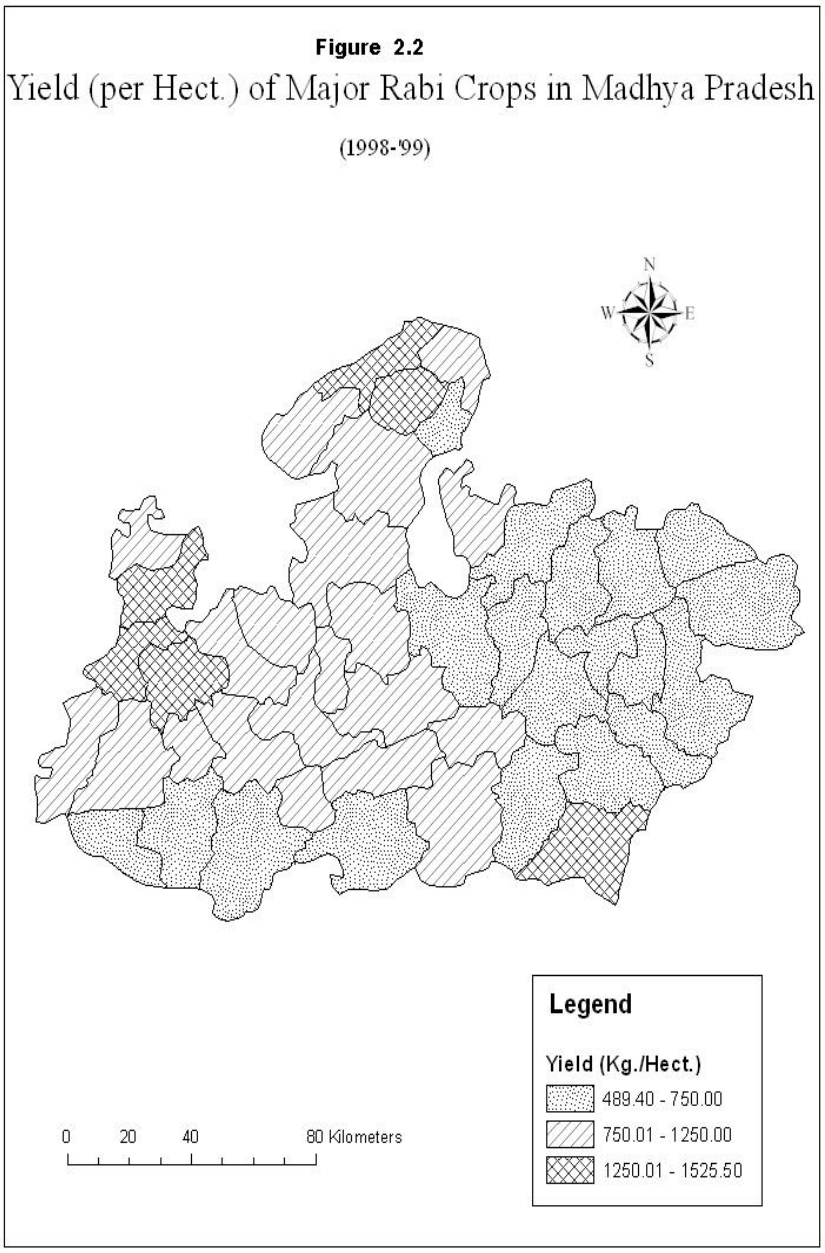


Figure 2.2

Yield (per Hect.) of Major Rabi Crops in Madhya Pradesh

(1998-'99)



2.2. Public Expenditure as an Indicator of Public Policy for the Poor

Public policy towards poverty can be viewed at three levels, "starting from the fact that in intensely poor countries with pervasive poverty, it is arguably legitimate to characterise a vast spectrum if not virtually maximum

government intervention as poverty reducing. These can include in principle investments in social and human capital, physical infrastructure, or even regulatory reforms to enhance economic growth. A first twist of the lens to focus on direct poverty alleviation shows a slew of programmes and interventions that may be characterised as 'activity targeted' interventions, relying on broadly defined targets wherein the benefit incidence is expected to be higher on the poor than the relatively better off. These typically include government expenditures on social sectors such as health and education, particularly primary education, and basic health services. A further narrowing of the lens leads to a focus on government interventions that, within the broad spectrum of activities to reduce poverty, explicitly seek to target the poor, and particularly the poorest of the poor, for impact" (Srivastava, 2004).

In what follows, based on a similar line of reasoning, we separate the public expenditure specifically targeted at the poor, and the rest. However, from both of these we separate out administrative and establishment expenditures, and combining that with pure administrative expenditures in the nature of overheads of the state government, we have a third category of 'administrative expenditure'. The other two are dubbed as 'developmental' and 'pro-poor'. The classification is based on intentions and expectations rather than actual outcomes and does not have a normative content. The implicit assumption is that the pro-poor expenditures are expected to impact directly on the poor, the growth oriented expenditures indirectly and to a smaller extent in the short run, and the administrative expenditures are not expected to directly impact either growth or poverty; such impact may however result indirectly through macroeconomic channels of increased aggregate demand. The classification is done through a close scrutiny of the budget and details of various schemes included therein, as in a previous exercise by Sen and Chand (2004). The purpose of this exercise is a limited one, that of assessing the stance of the state government towards the combination of policies to tackle the complex interactions between development issues and poverty, as revealed by the expenditure pattern.

Table 2.2 provides the summary of the classification exercise. The broad results show that while direct poverty oriented expenditures in Madhya Pradesh were around a quarter of the total public expenditures, the share has increased marginally from 24 to 27 between 2003-04 and 2004-05. This increase is mainly on account of increase in expenditure on rural and district roads in revenue expenditure and, to a lesser extent, on rural electrification within capital expenditure under tribal area sub-plan. The share of pro-poor in revenue expenditures has increased from 23 to 27 percent. The same in capital outlay has increased from 34 to 43 percent. But pro-poor spending by the state government through lending is negligible and declining from 0.33 percent to 0.11 percent. This is primarily because entire assistance to the poor is through direct spending and subsidies rather than lending. It may be noted here that the loans to the poor as part of direct poverty alleviation programmes and priority lending are given by the scheduled commercial banks outside the state budgets.

Table 2.2: Classification of Government Expenditure in Madhya Pradesh

	Amount in Rs. lakh				Shares in			
	Nominal Prices		1993-94 Prices		Respective Totals		in GSDP	
	2003-04	2004-05	2003-04	2004-05	2003-04	2004-05	2003-04	2004-05
A. Revenue Expenditure	1861485	1796065	1106606	1051330	100.00	100.00	18.97	17.43
1. Pro-poor expenditure	422098	492616	250927	288354	22.68	27.43	4.30	4.78
2. Developmental Expenditure	661714	412659	393372	241551	35.55	22.98	6.74	4.00
3. Administrative Expenditure	777673	890791	462307	521426	41.78	49.60	7.93	8.64
B. Capital Outlay	268200	496757	159438	290777	100.00	100.00	2.73	4.82
1. Pro-poor expenditure	92084	212591	54742	124441	34.33	42.80	0.94	2.06
2. Developmental Expenditure	172491	269545	102541	157779	64.31	54.26	1.76	2.62
3. Administrative Expenditure	3625	14621	2155	8558	1.35	2.94	0.04	0.14
C. Net lending	18942	327431	11261	191662	100.00	100.00	0.19	3.18
1. Pro-poor expenditure	62	361	37	211	0.33	0.11	0.00	0.00
2. Developmental Expenditure	18342	325491	10904	190527	96.83	99.41	0.19	3.16
3. Administrative Expenditure	600	1940	357	1136	3.17	0.59	0.01	0.02
D. Total expenditure	2148689	2620614	1277341	1533981	100.00	100.00	21.90	25.43
1. Pro-poor expenditure	514244	705568	305705	413005	23.93	26.92	5.24	6.85
2. Developmental Expenditure	852547	1007695	506818	589856	39.68	38.45	8.69	9.78
3. Administrative Expenditure	781897	907351	464818	531120	36.39	34.62	7.97	8.80

Source (basic data): *Budget Documents*, Government of Madhya Pradesh

In real terms there has been an increase of about 35 percent in the pro-poor spending between the two years examined, but that can be largely attributed to increase in the total expenditures. As percentage of GSDP, of the total expenditures of 21.90 and 25.43 percent in 2003-04 and 2004-05, the pro poor expenditures are 5.24 and 6.85 percentage points, growth-oriented expenditures are 8.69 and 9.78 and the remaining are administrative expenditures. Clearly, the budgetary expenditures favour developmental schemes over direct poverty alleviation schemes; in a relatively less developed state, this is perhaps to be expected, more so when in the recent past, political changes were reported to be linked to the issue of inadequate developmental effort (specifically on power and roads). Somewhat more disturbing is the larger share of administrative expenses compared to the direct poverty alleviation spending. No doubt, high levels of interest payments account for this phenomenon, but it does indicate scope for increasing pro-poor expenditures by reducing those on administration. This seems to be happening to some extent, since the share of administrative expenditures in the total shows a decline from 36.39 to 34.62 percent from 2003-04 to 2004-05.

Considering the broad functional groups of services, social services ought to have a significantly higher share of pro-poor expenditures, since it includes much of the public expenditure that is explicitly targeted towards the poor like the welfare of SCs, STs and OBCs, social security and welfare and

elementary education. Indeed, the share of pro-poor expenditures in social services is around 64 percent in 2003-04 and has increased to 67 percent in 2004-05 (*Table 2.3*). Madhya Pradesh being one of the states in India having larger share of population belonging to scheduled castes and scheduled tribes, the expenditure under *Tribal Area Sub Plan* and *Special Component Plan* are high. The shares of pro-poor expenditures in the totals have been increasing with the increase in the total expenditures in these two years, but in real terms the increase is only five percent. In terms of share in GSDP the total expenditure on social services is around 6 percent in these two years and the pro-poor expenditure is around four percent.

Table 2.3: Classification of Government Expenditure on Social Services in Madhya Pradesh

	Amount in Rs. lakh				Shares in			
	Nominal Prices		1993-94 Prices		Respective Totals		in GSDP	
	2003-04	2004-05	2003-04	2004-05	2003-04	2004-05	2003-04	2004-05
A. Revenue Expenditure	524897	567237	312038	332034	100.00	100.00	5.35	5.50
1. Pro-poor expenditure	334148	376203	198643	220211	63.66	66.32	3.41	3.65
2. Developmental Expenditure	166875	164110	99203	96062	31.79	28.93	1.70	1.59
3. Administrative expenditure	23874	26924	14192	15760	4.55	4.75	0.24	0.26
B. Capital Outlay	53870	44818	32024	26234	100.00	100.00	0.55	0.43
1. Pro-poor expenditure	38268	35949	22749	21043	71.04	80.21	0.39	0.35
2. Developmental Expenditure	15603	8869	9275	5191	28.96	19.79	0.16	0.09
3. Administrative expenditure	0	0	0	0	0.00	0.00	0.00	0.00
C. Net lending	1820	4225	1082	2473	100.00	100.00	0.02	0.04
1. Pro-poor expenditure	0.00	269	0	158	0.00	6.37	0.00	0.00
2. Developmental Expenditure	1820	4225	1082	2473	100.00	100.00	0.02	0.04
3. Administrative expenditure	0	0	0	0	0.00	0.00	0.00	0.00
D. Total Expenditure	580587	616550	345144	360899	100.00	100.00	5.92	5.98
1. Pro-poor expenditure	372416	412421	221392	241411	64.14	66.89	3.80	4.00
2. Developmental Expenditure	184297	177205	109560	103727	31.74	28.74	1.88	1.72
3. Administrative expenditure	23874	26924	14192	15760	4.11	4.37	0.24	0.26

Source (basic data): *Budget Documents,* Government of Madhya Pradesh.

In Economic Services (*Table 2.4*), where most expenditures barring those on rural development, food subsidies and rural electrification are more growth oriented, the share of pro-poor expenditures is comparatively small as expected. Higher priority for rural roads and rural electrification has resulted in increase in the share of pro-poor expenditures from 16.6 percent in 2003-04 to 24.5 percent in 2004-05. The share of pro-poor expenditures is high in capital outlay compared to revenue expenditures as both rural roads and power constitute major expenditures within economic services.

Table 2.4: Classification of Government Expenditure on Economic Services in Madhya Pradesh

	Amount in Rs. lakh				Shares in			
	Nominal Prices		1993-94 Prices		Respective Totals		in GSDP	
	2003-04	2004-05	2003-04	2004-05	2003-04	2004-05	2003-04	2004-05
A. Revenue Expenditure	624394	395619	371187	231576	100.00	100.00	6.36	3.84
1. Pro-poor expenditure	87950	106464	52284	62319	14.09	26.91	0.90	1.03
2. Developmental Expenditure	494839	248549	294169	145488	79.25	62.83	5.04	2.41
3. Administrative Expenditure	41605	40606	24733	23769	6.66	10.26	0.42	0.39
B. Capital Outlay	210705	437318	125259	255985	100.00	100.00	2.15	4.24
1. Pro-poor expenditure	53817	176642	31993	103398	25.54	40.39	0.55	1.71
2. Developmental Expenditure	156888	260676	93266	152587	74.46	59.61	1.60	2.53
3. Administrative Expenditure	0	0	0	0	0.00	0.00	0.00	0.00
C. Net lending	16523	321265	9822	188053	100.00	100.00	0.17	3.12
1. Pro-poor expenditure	62	92	37	54	0.38	0.03	0.00	0.00
2. Developmental Expenditure	16523	321265	9822	188053	100.00	100.00	0.17	3.12
3. Administrative Expenditure	0	0	0	0	0.00	0.00	0.00	0.00
D. Total Expenditure	851684	1154294	506305	675668	100.00	100.00	8.68	11.20
1. Pro-poor expenditure	141829	283198	84313	165771	16.65	24.53	1.45	2.75
2. Developmental Expenditure	668250	830490	397258	486129	78.46	71.95	6.81	8.06
3. Administrative Expenditure	41606	40606	24733	23769	4.89	3.52	0.42	0.39

Source (basic data): *Budget Documents,* Government of Madhya Pradesh.

In sum, the balance of strategies appears to be favouring pro-poor expenditures in social services, and developmental expenditures in economic services, while in the aggregate the developmental expenditures claim the highest share. The strategy thus seems to be broadly growth oriented, with urgent poverty alleviation concerns being addressed through social services and selected areas of economic services.

2.3. Public Spending Across Expenditure Classes: A Benefit Incidence Analysis

Given the intended strategy of tackling poverty and low level of development, the success of the strategy would depend on the implementation. In particular, the ability of the poor to benefit from the public expenditures would substantially affect their current well-being as well as the longer term enhancement of capacity to move out of poverty. To measure the benefits of public spending accruing to the poor, a methodology that has been widely used is that of Benefit Incidence Analysis (BIA). BIA combines information on the unit costs of providing public services with information on the use of these services to estimate the benefits derived by different groups of individuals or households.

This section uses BIA to examine the distribution of public spending on health facilities in Madhya Pradesh as an indicator of the reach of public spending to the poor. This analysis is carried out across expenditure classes and for scheduled castes and scheduled tribes (SCs/STs) in comparison to non-SCs/STs in both the rural and the urban areas of the state. Assuming that expenditure is closely associated with income levels, we use the monthly per capita consumption expenditure (MPCE) to classify the population of the state into expenditure quartiles for the analysis. For information on MPCE and utilisation of health facilities, unit-level data from the 60th round of survey conducted by the National Sample Survey Organisation (NSSO) in 2004 has been used.

Ideally, unit costs of each public service provided in health facilities and their utilisation by households across expenditure quartiles need to be measured for the analysis. However, non-availability of data on utilisation of each public service provided in health facilities combined with the inability to decompose information on public spending on health facilities for individual services restricts the analysis to a relatively aggregate level. Specifically, the analysis here focuses on six services for which information on utilisation was available from the NSSO survey: inpatient services (excluding childbirth), outpatient services, inpatient services related to childbirth, ante-natal care services, post-natal care services and immunisation services. A conceptual problem in the methodology arises from the fact that, apart from public services in health facilities for which information on utilisation is available, there are services like family planning activities, which are provided in health facilities, yet no information on utilisation of these services in health facilities across expenditure quartiles is available. While this compels one to exclude these services from the utilisation aspect in the analysis, the same cannot be excluded from public spending. To the extent that family planning services from public sources are used relatively more by the poorer sections of the population, the benefits of public spending on health facilities accruing to the poorer sections of the population are underestimated in the analysis. Also, apart from spending on health facilities, the state spends a substantial amount on other preventive health care, whose benefits accrue to all sections of the population including the poor. This can again potentially modify the extent of the benefits of public spending accruing to the poorer sections of the population, if properly taken into account.

For the unit costs of providing public services and the classification of public expenditure in health facilities, we broadly follow the methodology used in a recent benefit incidence analysis carried out by the National Council of Applied Economic Research (NCAER) using the 52nd round of NSSO survey conducted in 1995-96 (Mahal *et. al*. 2002). On the basis of facility-level studies, the NCAER study argued that public expenses on a single inpatient were about six times the expenditure on an outpatient in public hospitals. The corresponding expenses in PHCs and dispensaries were about half of those in public hospitals. Also, expenditure on ante-natal care, post-natal care and immunisations was argued to be half of that in PHCs and dispensaries. In our analysis, we have borrowed these norms from the NCAER study. However, as the 60th round of NSSO data does not provide information separately for

PHCs and public hospitals, we assume that expenses for inpatient cases are in general, six times higher than the expense for outpatient visits, that for childbirth about half the expense of that of an inpatient visit for other cases and about one-fourth of that of an outpatient visit for ante-natal care, post-natal care and immunisations. As the 60th round of NSSO data does not provide information separately on immunisations from public and private sources, we assume that immunisations from public sources across quartiles are in the same proportion as that of ante-natal care from public sources. The assumption is based on the fact that both ante-natal care and immunisations are part of maternal and child care activities provided by similar public sources. The state's budgetary (revenue) expenditure on health culled out from the detailed demand for grants in budget documents is used, along with these norms taken from the NCAER study, to estimate the unit cost of each public service. An attempt has been made to include only that expenditure that is directly incurred in health facilities. Again, following the NCAER study, we assume that half of the expenditure on disease control, and medical education and training, whose benefits accrue partly to people outside health facilities also, is incurred through health facilities. Also, expenditure on direction and administration is excluded as in the NCAER study. Budgetary receipts on payments from patients are then deducted from the total state expenditure on health facilities to arrive at the net public spending.

Analysis of the distribution of benefits of public spending across expenditure quartiles suggests that in the rural areas, the benefits of public spending accrue disproportionately to relatively richer sections of the population (*Table 2.5*). This, however, masks the fact that the distribution of benefits from services that are largely preventive in nature (like ante-natal care, post-natal care, immunisations and childbirth) favour the poor while the benefits for curative services in public facilities (inpatient and outpatient services for treatment of morbidity) accrue to the rich.

The lower share of benefits accruing to the poor from public spending on curative services is primarily driven by the low access to health facilities for curative care in the rural areas. With severe shortages in the required number of PHCs and CHCs and vacancies therein, the poorer sections of the population in the rural areas have limited access to curative services in public health facilities. As preventive services like ante-natal care and immunisation are also provided by para-medical staff and health posts like sub-centers, the rural poor have better access to preventive services than curative services.

Table 2.5: Distribution of Benefits of Public Spending on Healthcare Services Across MPCE Quartiles in Rural and Urban areas

(percent)

	Expenditure Classes						
Quartiles	**In-patients**	**Out-patients**	**Ante-natal care**	**Post-natal care**	**Immuni-sations**	**Child birth**	**Total**
			Rural				
lowest 25	18	20	35	32	37	13	21
25 to 50	24	19	27	25	27	43	22
50 to 75	27	23	24	26	20	33	24
highest 25	30	38	14	17	16	10	33
			Urban				
lowest 25	26	20	37	31	44	34	23
25 to 50	28	28	21	14	27	21	28
50 to 75	26	24	27	40	20	39	25
highest 25	21	27	14	14	9	6	24
			SCs/STs and Non-SCs/STs				
			Rural				
SCs/STs	44	38	52	47	56	51	41
Non-SCs/STs	56	62	48	53	44	49	59
			Urban				
SCs/STs	15	21	15	19	18	23	20
Non- SCs/STs	85	79	85	81	82	77	80

The above analyses indicates that while the state is pursuing a mixed strategy of economic development and direct poverty alleviation – with the scale slightly tilted in favour of the former, the large number of poor in the state are not getting as much out of the developmental expenditures as is probably hoped for. Given the impact of poverty even on social development, the mixed strategy is probably inescapable; but the failure of the developmental expenditure to reach the poor to the desirable extent exerts additional pressure on the direct poverty alleviation schemes. This is what we examine next.

III. Poverty Alleviation, Housing, and Social Welfare

3.1. Introduction

As noted earlier, poverty alleviation programmes can be executed in several ways and sometimes it becomes difficult to avoid being arbitrary in labeling a particular scheme as poverty alleviation scheme or otherwise. Besides, the rather complex web of such schemes can even make estimation of actual expenditure on such schemes difficult, even when one is able to identify poverty alleviation schemes on some basis (Srivastava, 2004). When poverty is widespread and growth is sluggish, as in Madhya Pradesh, both the aspects of poverty alleviation policy, *viz*. promotion of economic growth with a longer term perspective and a programme of catering to the immediate needs of the poor with a shorter time perspective become essential. However, it is precisely in such economies that the financial strength of the government is low because of low revenue base. External injection of funds becomes far more important; the role of various centrally sponsored schemes (CSS) on poverty alleviation have to be seen in this light.

Poverty has several dimensions and apart from the considerations of social justice and equity, absolute poverty has to be eliminated in the interest of maximising national wealth, of which the citizens constitute the most important part. Madhya Pradesh being a largely rural state, the number of rural poor constitute the main target group for poverty alleviation programmes; it may, however, be interesting to note that urban poverty rate in the State is actually a little higher than rural poverty rate.

Mainstream rural poverty alleviation programmes address some dimensions of poverty, those arising from lack of employment opportunities in particular, but these have to be supplemented by other welfare programmes targeted at specific groups of beneficiaries that are identified as needing special attention such as the scheduled castes and tribes. Madhya Pradesh is one of those states of India that suffers a larger percentage of disadvantaged population in the total, even after the bifurcation of the state allotted many of the tribal districts to the newly created state, namely, Chhattisgarh.

3.2. State Expenditures and Direct Poverty Alleviation

The state's efforts at direct poverty alleviation are largely confined to the centrally sponsored schemes, many of which actually bypass the state government. The details of anti-poverty expenditures in per capita terms and as percentages of GSDP are given in *Tables 3.1* and *3.2*.

Table 3.1: Per Capita Expenditure on Human Development in Madhya Pradesh

(Rupees)

	Budget description / years	1993-94	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05
1	Total expenditure	1602	2977	2758	2665	2830	3448	4178
2	Expenditure on Human Development	718	1292	1230	976	1173	1132	1230
A	Social services	506	1091	997	778	933	920	1028
i)	Education, sports, art and culture	235	521	461	348	371	373	397
ii)	Health, family welfare, water supply, sanitation and nutrition	131	248	239	198	212	216	231
iii)	Amenities	16	37	37	27	56	56	45
	Housing	7	12	13	10	11	12	15
	Urban development	9	24	25	16	45	44	30
Iv)	Welfare Programmes and Publicity	124	285	259	205	294	275	273
	Welfare of SCs, STs & OBCs	90	191	168	123	150	154	172
	Labour and employment	5	11	10	9	9	9	9
	Social security & welfare	19	67	58	49	69	68	71
	Relief on account of natural calamities	8	11	18	20	60	40	16
	Other social services	1	2	2	1	2	2	2
	Information and publicity	2	4	4	3	4	3	4
B	Rural development	121	134	162	126	137	131	202
	Special programmes for rural development	15	10	12	7	8	11	73
	Rural employment	82	31	18	16	22	19	22
	Land reforms	0	0	0	0	0	0	0
	Other rural development programmes	24	93	132	102	107	100	107
C	Centrally sponsored programmes (outside the state budget)	91	66	71	73	103	82	141
	Direct poverty alleviation (iii + iv + B + C)	**352**	**523**	**530**	**430**	**591**	**543**	**662**

Source (basic data): *Budget Documents*, Government of Madhya Pradesh and Department of Rural Development and *Panchayati Raj*, Government of Madhya Pradesh

Table 3.2: Expenditure on Human Development in Madhya Pradesh

(percent of GSDP)

	Budget description / years	1993-94	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05
1	Total Expenditure	23.25	22.43	22.41	19.23	21.66	22.38	26.35
2	Expenditure on Human Development	10.42	9.73	10.00	7.05	8.98	7.35	7.76
A	Social Services	7.34	8.22	8.10	5.61	7.14	5.97	6.48
i)	Education sports, art and culture	3.41	3.93	3.75	2.51	2.84	2.42	2.50
ii)	Health, family welfare, water supply, sanitation and nutrition	1.90	1.87	1.94	1.43	1.62	1.40	1.45
iii)	Amenities	0.23	0.28	0.30	0.19	0.43	0.36	0.28
	Housing	0.10	0.09	0.10	0.07	0.09	0.08	0.10
	Urban development	0.14	0.18	0.20	0.12	0.35	0.29	0.19
iv)	Welfare Programmes and Publicity	1.80	2.15	2.11	1.48	2.25	1.79	1.59
	Welfare of scheduled caste scheduled tribes & other backward classes	1.31	1.44	1.37	0.89	1.15	1.00	1.08
	Labour and employment	0.07	0.08	0.08	0.06	0.07	0.06	0.06
	Social security & welfare	0.27	0.51	0.47	0.35	0.53	0.44	0.45
	Relief on account of Natural calamities	0.11	0.08	0.15	0.15	0.46	0.26	0.10
	Other social services	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	Information and publicity	0.03	0.03	0.03	0.02	0.03	0.02	0.02
B	Rural Development	1.76	1.01	1.32	0.91	1.05	0.85	1.27
	Special programmes for rural development	0.22	0.08	0.10	0.05	0.06	0.07	0.46
	Rural employment	1.20	0.24	0.15	0.12	0.17	0.12	0.14
	Land reforms	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other rural development programmes	0.34	0.70	1.07	0.74	0.82	0.65	0.68
C	Centrally Sponsored Programmes (outside the state budget)	1.32	0.50	0.58	0.52	0.79	0.53	0.89
	Direct poverty alleviation (iii + iv + B + C)	**5.11**	**3.94**	**4.31**	**3.10**	**4.52**	**3.53**	**4.04**

Source (basic data): *Budget Documents*, Government of Madhya Pradesh and Department of Rural Development and *Panchayati Raj,* Government of Madhya Pradesh

The Government of Madhya Pradesh has spent less than 8 percent of state GSDP on human development in 2004-05. The expenditure on human development has declined to this level from 10 percent of GSDP in 1993-94, whereas in per capita terms, it has declined from Rs. 1,292 in 1999-00 to Rs. 1,230 in 2004-05. This decline is only partly explained by the declining public expenditure ratio. Education and health sectors account for 1.35 percentage points of the decline, which could be on account of decentralisation and consequent shifting out of a part of the expenditures from the state budget. On the other hand, expenditure on direct poverty alleviation programmes such as housing, social welfare, and rural development including various centrally sponsored schemes continue to be major components in human development expenditure accounting for above 3.5 percent of GSDP. Within

the direct poverty alleviation interventions, employment generating programmes under rural development and centrally sponsored schemes constitute the major share (1.38 percent of the GSDP in 2003-04) after welfare programmes like welfare of SCs, STs and OBCs and other social welfare programmes at about two percent of the GSDP. In welfare programmes, the major expenditure on direct poverty alleviation is on old age pensions; in amenities it is on housing for the poor, and in rural development it is on wage employment and self-employment programmes. In this chapter, an attempt is made to assess the coverage, identify the remaining ground to be covered and estimate additional resource requirement to meet the uncovered beneficiaries on the basis of the expenditure on and/or costs of these services.

3.3. Poverty Alleviation and Rural Development Programmes

There are many centrally sponsored and state sponsored programmes under rural development for alleviating poverty in Madhya Pradesh. The funds allocated and expenditure incurred under these programmes is given in *Table 3.3*. These programmes can be divided into wage employment generating, self-employment creating and infrastructure development programmes. *Sampoorna Grameena Rojgar Yojana* (SGRY) and *National Food for Work Programme* (NFFWP) belong to the first category while *Sampoorna Grameena Swarojgar Yojana* belongs to the second category and the remaining form the third category. Though Drought Prone Area Programme and Prime Minister's *Grameen Yojana* or PMGY (roads) form part of the third category i.e., infrastructure development programmes, they also generate wage employment. PMGY (roads) and SGRY are among the dominant ones in wage employment generation and poverty alleviation programme. The other programmes help the poor who are not too far below the poverty line since they require some contribution from the beneficiaries. In addition to the above, there are some programmes such as MP Local Area Development and MLA Development schemes, Madhya Pradesh District Poverty Initiatives Project and Madhya Pradesh Rural Livelihoods Project, to help the people below poverty line in asset creation leading to better living standards. However, it is the wage employment generating programmes which help the poorest of the poor. In most of the other programmes participatory approach makes it mandatory for either financial commitment or loan repayment from the beneficiaries. These schemes provide subsidies in income generating asset creation of BPL families.

Sampoorna Grameen Rojgar Yojana and National Food for Work Programme/ National Rural Employment Guarantee Scheme of late are the prominent wage employment generating programmes. Rural households below the poverty line get daily wage employment under these programmes. Though the Government of India allocates resources under these schemes based on poverty estimates made by the Planning Commission, the selection of actual beneficiaries in Madhya Pradesh mainly depends on the *BPL Census of 1997*. A summary of BPL households in Madhya Pradesh in various districts is given in *Appendix Table A.3.1*. Of the total rural households of 83.51 lakh, 44 percent are reckoned to be below the poverty

line as per the survey. Among the rural households below poverty line, 19 percent belong to scheduled castes, 32 percent belong to scheduled tribes and another 35 percent belong to other backward classes. Nearly 59 percent of rural BPL households are landless labour. Since more than half of the rural BPL households belong to landless labour category, and another 25 percent to agricultural labour who suffer from seasonal unemployment (Mandal, 2006), wage employment generating programmes should play a major role in alleviation of poverty in the state.

Table 3.3: Financial Statement of Employment Generating Programmes in Madhya Pradesh

(Rs. Lakh)

Scheme	Year	Fund release		Total Expenditure	Scheme Share in Total Expenditure (Percent)
		Central	State		
SGRY	2002-03	24993.39	8331.13	33324.51	34.63
	2003-04	29058.63	9686.21	38744.86	34.40
	2004-05	30017.52	10005.84	40023.35	31.21
SGSY	2002-03	4354.50	1456.58	7402.90	7.69
	2003-04	4397.13	1453.32	7040.11	6.25
	2004-05	5516.04	1681.56	7592.17	5.92
DPAP/IWDP	2002-03	7817.90	1728.91	9919.41	10.31
	2003-04	7888.85	2012.53	9756.88	8.66
	2004-05	8088.74	1993.32	8778.07	6.85
	2002-03	1573.80	588.53	2014.49	2.09
DRDA (ADMN)	2003-04	1613.87	518.10	2332.89	2.07
	2004-05	1792.54	624.10	2339.34	1.82
NFFWP	2002-03				0.00
	2003-04				0.00
	2004-05	24741.32		16805.29	13.11
PMGSY Roads)	2002-03	47161.10	2955.30	43566.06	45.27
	2003-04	29273.15	8228.00	54742.87	48.61
	2004-05	21751.00	4200.00	52680.45	41.09
Total Rural Development Schemes					
	2002-03	85900.69	15060.45	96227.37	100.00
	2003-04	72231.63	21898.16	112617.60	100.00
	2004-05	91907.16	18504.82	128218.70	100.00

Source: Department of Rural Development, Government of Madhya Pradesh.

At present, SGRY – the prominent wage employment programme in Madhya Pradesh – created an employment of 533.55 lakh person days with an expenditure of Rs. 454.96 crore in 2005-06 (*Table 3.4*). Assuming that a beneficiary gets an average of 100 days of employment and there is only one from each household, total number of BPL households getting benefited, works out to around 5.33 lakh. This is only a small part of the 30 lakh BPL households, being landless and agricultural labour (*Appendix Table A.3.2*).

Table 3.4: Physical and Financial Performance of SGRY in Madhya Pradesh

	Receipts (Rs. lakh)			Expenditure (Rs. lakh)	Person-days Generated
Year	Centre	State	Total*		
2005-06	32748.53	10510.12	46422	45496.35	533.55
2003-04	14087.69	4427.04	20141	18354.51	247.75
	15890.68	5100.48	22095	20390.35	337.46
2001-02	12276.12	4092.21	17656	16691.83	242.52
	11875.80	3958.60	17591	15143.97	225.82
2000-01	10574.88	3254.96	19411	17211.19	208.44
	16926.34	5642.11	27261	20841.39	265.27

Source: Department of Rural Development, Government of Madhya Pradesh
Note: Total receipts include Opening Balance and other interest receipts.
The two rows of data for the years 2003-04 onwards represent two streams for different levels of PRIs.

District Poverty Initiative Project (DPIP) in Madhya Pradesh is one scheme that was designed keeping the experience of earlier poverty alleviation programmes in mind. Several evaluation study reports of the Planning Commission have shown that the intended benefits did not reach the target groups adequately because of many weaknesses in implementation and procedural techniques. One important criticism of the earlier schemes is that they had a top down approach with the poor being passive recipients of the benefits. But such designs having failed, an approach based on direct involvement of the people in the target groups was undertaken. The DPIP is one such programme that was launched in Madhya Pradesh in March 2001 in 2,932 of its villages, spread over 53 blocks of 14 districts of the state, to improve the economic wellbeing of the poor and was scheduled to be completed in June 2006. It covered both tribal and non-tribal districts of the state. The main strategy and possibly the target groups of DPIP are different from those of the SGSY, SGRY or the other food-for-work programmes. The DPIP strategy was predicated upon a) participatory identification of the poor through wealth ranking at the village level; b) formation of common interest groups (CIGs); c) active support by project facilitation teams (PFTs); and d) a combination of self and public funding. At the aggregate level, the project has been able to cover 31 percent of the target families in the first three years of its inception. As far as the financial performance is concerned, only around 17.4 percent of the total outlay had been used till 2004, of which 26.5 percent was on administration, organisational capacity building, and monitoring (Planning Commission, 2005). In terms of poverty alleviation through this project, the report estimated an increase of beneficiary households' income by 23.6 percent in real terms; most of it has been generated by land-based and other income generating activities like trading, goat rearing, and poultry.

While the identification process has been largely sound, many target poor could not form CIGs, possibly not being able to make the necessary contribution of 5 percent. The project choices were not always sound, and often dependent on expected infrastructure improvements that did not come

about. PFTs were also found wanting in many respects. Organisational structure as envisaged originally did not materialise and the scheme degenerated into 'another government scheme'. Although the programme focused on increased participation of the rural local bodies, none of these were formally involved in the implementation of the programme.

The physical performance, as stated, has been marked by spatial variations due to information asymmetry, inadequate interactions among villagers and partly owing to inability of tribal, nearly destitute families not being able to make the mandatory contributions. The benefits of the DPIP did not reach poor families without assets to the desired extent, the coverage being only 33 percent. On the other hand, the not so poor households that could pay the mandatory contribution as per the rules, could benefit to a greater extent. It has also been noted that the DPIP in MP has not been able to mobilise rural women for the programme. All the same, while as a scheme DPIP has not been very successful, its potential benefits are very clear from the benefits derived by the beneficiaries and the properly constituted CIGS.

Latest poverty estimates for the state (for 2004-05) based on the NSS data on consumption shows that poverty alleviation programmes have not been very successful in reducing poverty. The rural poverty percentage is estimated to have dropped from 40.6 in 1993-94 to only 36.9 while the urban percentage has dropped from 48.3 to 42.1 using methodologically comparable estimates. Clearly, the limited impact of the various schemes, not particularly surprising for many, is a cause for dismay. Several concurrent evaluation studies had already indicated such a possibility, and the large percentage of leakages from the schemes (including for administrative purposes) have been acknowledged at the highest level in the past. Some changes have been made in the design of programmes in response, but the state probably needs to compare its own performance in this area with, say, Rajasthan and introspect on the reasons for a much better performance there despite implementing the same set of schemes, mostly centrally sponsored ones.

National Rural Employment Guarantee Scheme (NREGS) is now expected to develop into the major vehicle for provision of paid employment in the identified poor areas of the entire country. When the *NREGS Act* was passed in the Parliament in August, 2005, it was decided that the NFFWP would be merged into the NREGS. At the national level it started with 200 districts and was planned to be implemented in all the 593 districts gradually. In MP initially 18 districts have been chosen for implementation of the scheme, most of which are in the southern and eastern region of the state, with five northern districts (Sheopur, Shivpuri, Tikamgarh, Chhatarpur and Satna) also included; these are the districts where poverty levels are probably higher than the rest due to reasons mentioned earlier. Also, only four of these (the northern districts excluding Chhatarpur) may be termed as non-tribal districts.

Table 3.5: Physical Performance of the NREGS in Selected States

State	Employment Generated in Lakh Person-Days (Cumulative for the year up to reporting month)								
	SC		ST		Others		Total Person -days	No. of days worked by women	% No. of days worked by women
	Person-days	% Person -days	Person - days	% Person -days	Person-days	% Person -days			
ANDHRA PRADESH	126.78	31.6	50.73	12.65	224	55.75	401.15	203.46	50.72
ASSAM	27.85	9.41	130.41	44.08	138.00	46.51	295.87	64.76	21.89
BIHAR	91.04	42.52	3.00	1.40	120.00	56.08	214.11	38.76	18.11
GUJARAT	4.16	7.06	35.38	60.00	19.40	32.94	58.96	31.58	53.56
HARYANA	7.23	59.51	0.00	0.00	4.92	40.49	12.15	3.36	27.65
KARNATAKA	45.77	32.62	29.81	21.24	64.70	46.14	140.32	75.03	53.47
KERALA	0.51	15.63	0.48	14.62	2.28	69.75	3.26	1.94	59.36
MADHYA PRADESH	263.15	17.71	685.69	46.15	537.00	36.14	1485.70	593.63	39.96
MAHARASHTRA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ORISSA	110.19	24.31	222.39	49.06	121.00	26.63	453.31	148.04	32.66
PUNJAB	8.15	73.56	0.00	0.00	2.93	26.44	11.08	3.82	34.48
RAJASTHAN	107.67	15.19	460.41	64.96	141.00	19.85	708.78	458.63	64.71
TAMIL NADU	39.53	46.57	2.23	2.63	43.10	50.80	84.87	45.92	54.11
UTTAR PRADESH	307.44	56.74	21.63	3.99	213.00	39.27	541.88	87.31	16.11
WEST BENGAL	73.97	31.41	33.98	14.43	128.00	54.17	235.52	32.79	13.92
CHATTISGARH	38.81	10.15	214.88	56.20	129.00	33.64	382.32	203.15	53.14
JHARKHAND	48.04	22.08	92.74	42.62	76.80	35.30	217.59	67.04	30.81
TOTAL	**1319.00**	**24.58**	**2043.00**	**38.08**	**2003.00**	**37.34**	**5365.40**	**2113.10**	**39.38**

Source: www.nrega.nic.in

Available information suggests that the state is making the most of this scheme so far. Madhya Pradesh stands third in terms of total job cards issued to the beneficiaries, next to Andhra Pradesh and West Bengal. The state has fared comparatively better than most of the 15 major states in terms of percentage of job cards issued to those households that demanded employment. Around 59 percent of the households that demanded employment were issued job cards and 98.5 percent have been provided employment. Over 90 percent of the households covered by the NREGS are rural BPL families. Around 67 percent of the total available funds for the programme have been expended and around 50 percent of total work generated stand completed, while the rest are in progress.

The physical performance details show that 1485.72 person-days of employment have been generated so far, which is the highest among all the states. A considerable percentage of around 46.1 percent out of the total person-days generated are accounted for by the tribals and 17.7 percent by the scheduled castes; 39.9 percent of the total have been worked by women.

The implementation in MP was not simultaneous. It began with the West Nimar (Khargone) district and as yet has not been able to cover all the 18 districts evenly. The information provided by the MP government website as also the NREGA website clearly indicates that the implementation of the programme is still not fully laid out. An assessment of its impact will probably have to wait for some more time.

3.4. Related Public Interventions

A potentially important public intervention that can have a strong effect on poverty is the public distribution system (PDS). Mahendra Dev (2006) reports that in Madhya Pradesh, just a little more than 3 percent of the total consumption of wheat and rice was through PDS in 1999-2000, not increasing much from 1993-94, showing poor PDS coverage. The percentage was only slightly higher for the poor at 4.5 percent. This could be partly because of lack of demand, as the poor in the state prefer maize and other foodgrains over rice and wheat supplied by the PDS. But the blame has to be largely accepted by the state government, as in the other states with larger percentages of poor population. However, there is evidence that the state machinery does have the ability to implement it well (*see Box 3.1*); it is more a question of willingness than anything else.

While PDS is the public intervention intended to attend to the problem of food in general, a special case of nutritional deficiency requiring targeted attention is that of the children. Such deficiencies obviously impact on the health and educational achievements of the entire future generations, limiting their capacity to realise their full potential. One way of tackling this problem, given a high level of gross enrolment ratio in primary classes consequent upon the Education Guarantee Scheme of the state, is to provide supplementary nutrition in such schools. This is what the mid-day meal (MDM) scheme aims to do, among other objectives. It therefore deserves attention as a special food programme that has a potential impact on poverty.

That there is a serious problem of nutritional deficiency in the state is indisputable; about half the children in the state are malnourished and about a quarter, severely so. The extent of malnutrition among children is higher in rural areas and among the scheduled tribes (about three-fourths are reported to be underweight and stunted as per a repeat survey of the National Nutrition Monitoring Bureau in 2000).[2] Thus, the MDM scheme has a special relevance in the state, in particular the tribal areas. Unfortunately, non-official assessments are not positive.

[2] The centrally sponsored scheme named, Integrated Child Development Scheme (ICDS) is designed to improve nutrition levels of children below six years of age. The record of Madhya Pradesh in implementing this scheme is not very good; the state, along with eight others, was recently reprimanded by the Supreme Court for tardy implementation of the Court's previous orders relating to ICDS (see Indian Express, March 21 2007).

Box 3.1: Public Distribution System in Jhabua District, Madhya Pradesh

Features:

- No private licensees/agents – FPS run by cooperatives – stock lifting and transportation done by MP Civil Supplies Corporation – sometimes transportation by cooperative transport organisations
- Institutional credit available to cooperatives involved in PDS from coop banks
- State loan guarantee scheme for cooperatives involved in PDS – compensation for cash losses every year upto a fixed limit
- Strong involvement of local community – supervisory role – certification by village level committees of receipt and distribution of foodgrains
- Upto 70 percent of the APL quota grains can be diverted to BPL to meet temporary shortfalls, which is subsequently made good
- Food for Work beneficiaries are given coupons to be exchanged for foodgrains at FPS – adds volume and profit (small fee charged) for cooperatives running FPS
- Mid-day meal quota is also channeled through PDS system

Assessment:

- System works well, no complaints of stock running out or black marketing
- Mobile FPS is an appreciated innovation
- Some problems from the demand side – locals prefer maize to rice and wheat – also lack of purchasing power
- Availability of credit to cooperatives running FPS is a great help
- Good example of integration of Food for Work and Mid-day Meal schemes with PDS

Source: Sharma (2006)

Madhya Pradesh was one of the first states to implement MDM scheme in 1995 in 174 tribal and 123 non-tribal blocks. It could not be sustained, however, and in 1997, cooked food was substituted by foodgrains in non-tribal areas, citing lack of resources. Provision of cooked food was formally restarted in 2002, but until 2003, most schools were providing foodgrains only. Earlier, 'daliya' (porridge) represented cooked food. From February 2004, a modified scheme was introduced in 120 backward blocks on a pilot basis; called *suruchi bhojan,* it included bread/rice cooked vegetable and/or 'dal'. This scheme is to be implemented all over the state in three phases. Financing responsibility was again that of the *Panchayats*,

straining their finances severely. Standard allocation of money per child was Rs. 0.60 per day under the 'daliya' programme, including cooking costs. This was probably too little; the per child expenditure norm was raised to Rs. 1.30 from Rs. 0.60 with the revised scheme. The tribal blocks are funded by state transfers for MDM through the Tribal Welfare department. Other *Panchayats* have to finance the programme from their basic untied grants from the state government.

The *Panchayats* were expected to play an important role in administering the scheme, since administrative arrangements largely depended on them; in non-tribal blocks they were also expected to finance the scheme from their untied grants. In the tribal areas, the programme was largely financed by transfers from the tribal welfare department of the state government.

Afridi (2005), in a thorough case study of the scheme in Chhindwara district of the state, found several problems with its implementation.

- Even the *daliya* programme took away about two-thirds of *Panchayat* resources, the new programme, if implemented by *Panchayats* sincerely, would result in a substantial deficit and would rule out all other developmental activity of the *Panchayats*.
- Given the paucity of untied funds with the *Panchayats*, the quantities of food supplied to children were small as *Panchayats* and schools were cutting costs wherever possible. Village Education Committees and Parent Teacher Associations are expected to monitor the scheme, but actually there is little monitoring by them.
- There is a serious problem with regularity; there are simply far too many 'no-food' days. Quite often, the cooked meal is substituted by dry rations, which usually gets shared with other family members in poor families. The calorie content of even the revised scheme is below the recommended levels, dry rations cut it down further for the children.

Clearly, the programme as organised and implemented has serious financial viability problems, falls far short of recommended calorie content and is neither regular, nor properly monitored locally. Parents, despite problems, consider the scheme as a positive development essentially as 'something is better than nothing'. But given the problems in implementing the scheme for primary students only, there are serious question marks regarding the state's ability to implement the scheme for even upper primary students as required now under central directives.

Other than food, housing constitutes another basic requirement of humans. As per information from *Census 2001* given in *Table 3.6*, nearly 45 percent of the households in the state live in houses that are not categorised as good. Madhya Pradesh ranks second to Mahrashtra in having a large houseless population among major states in India. Around 50 percent of rural households, 55 percent of rural SC households and 60 percent of rural ST households need better living conditions. The share of households in these

categories varies across districts (see *Appendix Table A.3.1*). A centrally sponsored scheme known as *Indira Awas Yojana* (IAY) subsidises these households with a transfer payment of material and cash equivalent to Rs.20,000 per SC or ST household for new houses and Rs. 10,000 for other social groups. Those households living in 'liveable' houses get financial assistance of Rs. 10,000 and Rs. 5,000 respectively for SCs/STs and other social groups for upgradation of the existing houses into 'good' houses. There is a centrally sponsored scheme for assisting the BPL households to construct toilets also.

Table 3.6: Distribution of Households by Housing Conditions

	Total				Shares		
	Total	**Good**	**Liveable**	**Dilapidated**	**Good**	**Liveable**	**Dilapidated**
Total							
Total	10786892	5711312	4684713	390867	52.95	43.43	3.62
Rural	8030661	3961811	3764788	304062	49.33	46.88	3.79
Urban	2756231	1749501	919925	86805	63.47	33.38	3.15
Scheduled Castes							
Total	1837945	847413	901880	88652	46.11	49.07	4.82
Rural	1407453	632078	708142	67233	44.91	50.31	4.78
Urban	430492	215335	193738	21419	50.02	45.00	4.98
Schedules Tribes							
Total	2303664	923230	1264996	115438	40.08	54.91	5.01
Rural	2129075	844464	1182374	102237	39.66	55.53	4.80
Urban	174589	78766	82622	13201	45.12	47.32	7.56

Source: *Census 2001*

Under *Indira Awas Yojana* Scheme, nearly 2.2 lakh houses have been constructed or upgraded during 2000-01 to 2005-06 covering 56 percent of households living in dilapidated houses. A close look at *Appendix Table A.3.2* reveals hardly any relation between the share of households living in dilapidate houses and number of houses constructed, suggesting that allotment of funds across districts is not based on the seriousness of the problem in that district.

Expenditure on housing under IAY for new houses and upgradation of existing houses given in *Table 3.7* suggest that the cost per household was around Rs. 26,000 for new houses and Rs. 8,000 for upgradation of the houses in 2005-06. During 2000-01 to 2005-06 around 2.20 lakh new houses were constructed and 1.20 lakh houses were upgraded at the cost of Rs. 466.64 crore and Rs 120.81 crore respectively. This leaves around 1.71 lakh households living in dilapidated houses without proper housing and nearly 49.5 lakh households living in 'liveable' houses that need to be upgraded. A close look at the *Appendix table* suggests that the allotment of new houses across districts needs to be in proportion with distribution of households living in dilapidated houses for better targeting, unless the distribution of totally shelterless persons changes the inter-district pattern.

Table 3.7: Physical and Financial Performance of Various Housing Schemes in Madhya Pradesh

Upgradation of Houses

	Expenditure (Rs.lakh)				House Upgraded/ Completed (number)				Cost Per House (rupees)			
	SC	ST	Others	Total	SC	ST	Others	Total	SC	ST	Others	Total
2005-06	377.00	487.69	423.53	1288.22	4484	5734	5031	15249	8408	8505	8418	8448
2004-05	885.44	961.12	931.44	2777.99	7871	8815	8136	24822	11249	10903	11448	11192
2003-04	711.87	738.22	708.45	2158.54	6564	7426	6787	20777	10845	9941	10438	10389
2002-03	617.12	598.40	633.81	1849.33	6618	6428	7090	20136	9325	9309	8939	9184
2001-02	621.19	656.92	632.20	1910.39	6873	6915	6725	20513	9038	9500	9401	9313
2000-01	694.65	685.94	716.42	2097.01	6161	6492	6792	19445	11275	10566	10548	10784
1999-00	618.32	699.84	667.64	1985.80	4248	4927	4523	13698	14556	14204	14761	14497

New Houses

	Expenditure (Rs. lakh)				House Completed (number)				Cost Per House (rupees)			
	SC	ST	Others	Total	SC	ST	Others	Total	SC	ST	Others	Total
2005-06	2901.24	3829.93	3419.28	10150.45	13243	16788	8707	38738	21908	22813	39270	26203
2004-05	3450.50	4019.32	3692.78	11162.59	15723	18237	16583	50543	21946	22039	22268	22085
2003-04	2822.40	2955.69	2797.85	8575.95	14096	15925	14970	44991	20023	18560	18690	19061
2002-03	2784.66	2792.27	2780.73	8357.66	14265	14596	14694	43555	19521	19130	18924	19189
2000-01	2887.25	2664.25	2866.24	8417.73	13512	14320	14496	42328	21368	18605	19772	19887
1998-99	4791.41	7741.25	5851.07	18419.10	27493	42173	33235	102901	17428	18356	17605	17900

Source: Department of Rural Development, Government of Madhya.

Apart from the above, the state government implements various welfare programmes through the Social Welfare Department for the benefit of the destitute, aged, handicapped, and widows below the poverty line with financial assistance from the Government of India under several centrally sponsored schemes. These are the dependent population without any capacity to earn their livelihood. Other than assistance linked to better health or education, the major schemes include various pension schemes involving transfer payments to the intended beneficiaries. These are: Social Security Pension Scheme, National Old Age Pension Scheme and National Family Assistance Programme.

The Social Security Pension Scheme assists the aged, widows above the age of 18, people above 14 years of age dependent either owing to ill health or physical handicap, and children in the age group of 6 to 14 years below poverty line for their education. The National Old Age Pension Scheme is for the people aged above 60, with a monthly pension of Rs. 150. The Government of India allocates Rs. 75 to stipulated number of people based on poverty levels and age profile of the population of the state. Under Family Assistance Programme, the state government sanctions Rs. 10,000/ as one time grant to those families below poverty line in which an earning

member of the family in the age group of 18 to 65 years dies due to accident or ill health.

Table 3.8: Financial and Physical Achievement of Pension Schemes in Madhya Pradesh, 2006

(Rs. and No. in Lakh)

Scheme	2003-04		2004-05		2005-06		
	Expenditure	Number of Beneficiaries	Expenditure	Number of Beneficiaries	Expenditure	Number of Beneficiaries	Cost Per Beneficiary (Rs.)
Social Security Pension Scheme	15409.12	11.18	16779.58	12.21	11690.81	10.64	1098.73
National Old Age Pension Scheme	3662.28	4.17	3775.02	4.48	2497.42	3.93	635.15
National Family Assistance Programme	2403.97	0.24	2845.13	0.29	2321.92	0.22	10700.59

Source: Department of Social Welfare, Government of Madhya Pradesh.

Financial expenditure and number of beneficiaries under these programmes are given in *Table 3.8*. With an expenditure of Rs. 116.91 crore under Social Security Pensions, nearly 10.64 lakh people were benefited in 2005-06. Under *National Old Age Pension Scheme* 3.93 lakh people benefited from an expenditure of Rs. 24.97 crore. Family Assistance Programme benefited around 21699 people with an expenditure of Rs. 23.21 crore in 2005-06.

A Profile of the elderly persons in Madhya Pradesh is given in *Table 3.9*. There are nearly 21.55 lakh elderly dependent people. In this, nearly 1.86 lakh are lacking at least one basic minimum need of the three basic needs (food, clothing, and medicines) and nearly 16 lakh do not have any financial assets or property.

Table 3.9: Profile of Elderly Persons in Madhya Pradesh

Madhya Pradesh	Percentage of Fully Dependent Elderly	Widows and Widowers among Dependent elderly	Elderly on the Basis of At least One Basic Unmet Need	Elderly with No Financial Assets	Percentage of Elderly with No property
In Percentage	48.60	56.40	4.20	37.90	36.20
Persons in Lakh	21.55	12.15	1.86	16.80	16.05

Total Population in the Age Group 60+ for MP, 2006-44.34 lakh

Source*:* (Basic Data) Rajan S Irudaya, 2006, "Social Safety Nets for the Vulnerable Poor and Elderly in India", in (*eds.*) Srivastava, Nisha and Praveen Sharma *et. al*, *Protecting the Vulnerable Poor in India – The Role of Social Safety Nets*, World Food Programme, New Delhi; and Central Statistical Organisation, Government of India for Projected Population.

Apart from the above schemes that are designed to help the poor, there are others (e.g., allotment of land and reserving certain types of work of the poor). One usual feature of many of these programmes is that they are palliative in nature; there is no permanent shift in the earning capacity.

Programmes like DPIP, land redistribution and asset distribution are intended to achieve such a shift, but for various reasons like lack of complementary skills/resources/credit and social inertia (in the case of land redistribution), the success of such programmes in achieving their objectives have remained limited. As noted, raising the education levels and keeping them healthy can help the poor considerably; at the minimum, further additions to the rank of the poor can be prevented. We now turn to these subjects.

Appendix Table A.3.1

People Living Below Poverty Line As per BPL Census 1997 in Madhya Pradesh

District	Total Rural Households	Households Below Poverty Line	Share	SC Families	ST Families	Other Backward Castes	Minorities	Others	Land less Labor	Agr. Labor	Small farmers
2	3	4	5	6	7	8	9		10	11	12
Balaghat	283205	180741	64	17270	46162	113113	3476	720	94681	63426	22634
Betul	195935	87148	44	12216	40765	33041	1022	104	48581	21796	16771
Bhind	162954	43202	27	16870	122	19094	1710	5406	20626	17391	5185
Bhopal	64761	22978	35	5777	2053	8879	1473	4796	14934	4761	3283
Chhatarpur	210982	89251	42	30371	8275	40375	1542	8688	44480	25743	19028
Chhindwara	290028	126605	44	17035	59025	46067	4168	310	74739	28900	22966
Damoh	189495	98304	52	25256	19152	37503	3447	12946	66379	21207	10718
Datia	78062	13286	17	5647	946	5924	296	473	5827	5732	1727
Dewas	164081	65288	40	19303	18962	18137	3019	5867	46060	11384	7844
Dhar	258736	100281	39	7117	76697	13066	1873	1528	51537	28906	19838
Guna	234454	101615	43	23004	23852	44143	2447	8169	54810	24781	22024
Gwalior	123996	38044	31	12134	6348	16548	1676	1338	25791	8972	3281
Hoshangabad											
Harda	204759	74221	36	17576	25675	25107	1341	4522	57830	8988	7403
Indore	125600	28124	22	7684	9565	8306	853	1716	22986	3450	1688
Jabalpur											
Katni	399440	228392	57	36185	75992	98077	3195	14943	149731	52582	26079
Jhambua	211997	115256	54	4287	107994	2164	339	472	28320	53248	33688
Khandwa	221444	99269	45	18209	43035	29829	4341	3855	74408	14038	10823
Khargone											
Bhadwani	357294	162092	45	20100	104739	31896	2627	2730	93863	40994	27235
Mandla											
Dindori	305802	178344	58	17982	106144	48000	1289	4929	95880	53663	28801
Mandsaur											
Neemuch	261638	80003	31	22628	9110	39466	3354	5445	44047	26804	9152

Appendix Table A.3.1 (Contd.)

People Living Below Poverty Line As per BPL Census 1997 in Madhya Pradesh

District	Total Rural Households	Households Below Poverty Line	Share	SC Families	ST Families	Other Backward Castes	Minorities	Others	Land less Labor	Agr. Labor	Small farmers
2	3	4	5	6	7	8	9		10	11	12
Morena											
Sheopur	289640	69607	24	17161	14016	28283	1648	8499	40321	21585	7701
Narsinghpur	143842	79737	55	17813	16289	36075	2805	6755	59020	13075	7642
Panna	156591	76441	49	18795	17902	26785	2486	10473	42363	20821	13257
Raisen	176860	89352	51	20809	19338	37326	4050	7829	68435	12520	8397
Rajgarh	169200	80059	47	22293	5297	42682	2956	6831	36188	24863	19008
Ratlam	141819	53425	38	10753	27967	11429	3115	161	18890	23522	11013
Rewa	371963	211493	57	39948	37135	62392	4155	67863	153083	40151	18259
Sagar	287712	148997	52	35424	23815	70336	2522	16900	99935	26383	22679
Satna	305643	157003	51	34402	36351	49771	2576	33903	109291	33861	13851
Sehore	149831	53773	36	18657	11054	21661	2401	0	41551	7758	4464
Seoni	252000	104339	41	15071	37761	42477	3692	5338	62285	25305	16749
Shahdol											
Umariya	343976	147421	43	19326	79779	36184	3817	8315	69533	53580	24308
Shajapur	175797	63766	36	25644	3824	27225	4915	2158	38514	17112	8140
Shivpuri	211649	62684	30	16312	19915	22861	992	2604	31770	20596	10318
Sidhi	294688	166430	56	25190	55939	38096	4302	42903	95695	44428	26307
Tikamgarh	187376	66866	36	17420	8624	35497	2203	3122	29915	26818	10133
Ujjain	180192	52998	29	25466	2206	17645	1505	6176	32662	14047	6289
Vidisha	168305	66291	39	18110	7580	32285	1045	7271	45548	10898	9845
State	8351747	3683126	44	735245	1209405	1317745	94673	326058	2190509	954089	538528

Source: Department of Rural Development, Government of Madhya Pradesh.

Appendix Table A.3.2
District wise Distribution of Households by Housing Condition and Government Response in Madhya Pradesh

District	Total Households	Liveable and Dilapidated Households	Dilapidated Households	Houses Constructed under Housing Schemes during 2001-2006
Balaghat	309560	129289	12726	6892
Barwani	168604	111140	5889	2843
Betul	244218	113798	10141	6524
Bhind	216406	109894	8596	2812
Bhopal	331983	129067	13114	3371
Chhatarpur	261411	110696	5831	3385
Chhindwara	350544	170133	14879	5858
Damoh	220325	114705	8441	3711
Datia	105561	44223	2497	1123
Dewas	220277	109094	10151	7341
Dhar	302023	176324	8499	7975
Dindori	124341	57825	2443	3847
Guna	273454	121499	7354	7728
Gwalior	258918	109654	8665	2638
Harda	80954	41194	7002	2147
Hoshangabad	195398	97461	18430	6788
Indore	411690	155546	14249	5742
Jabalpur	415972	189189	20112	2820
Jhabua	234584	143348	5162	9029
Katni	219718	104944	7429	3120
Khandwa	303537	164110	13092	15017
Khargone	264796	161938	12354	9608
Mandla	187815	92183	6133	4522
Mandsaur	213520	94501	3400	2513
Morena	235398	117513	9961	4131
Narsinghpur	175443	100502	15010	4819
Neemuch	135041	53967	2315	1680
Panna	171519	78178	3971	2725
Raisen	192253	97682	12690	4748
Rajgarh	216052	117773	7831	2580
Ratlam	214374	111876	3949	6846
Rewa	371300	126810	7547	3714
Sagar	364055	185822	17819	4558
Satna	348583	126990	6476	2830
Sehore	181515	90208	12340	7846
Seoni	230905	110298	10389	4888
Shahdol	323832	126374	5854	6795
Shajapur	218072	108300	5928	4601
Sheopur	97457	56392	4470	2354
Shivpuri	243253	114668	10238	5761
Sidhi	334775	123608	6737	5445
Tikamgarh	212378	91153	5409	2692
Ujjain	291564	145143	7160	5755
Umariya	104674	44656	2679	3156
Vidisha	208840	95912	5505	4877
Total	10786892	5075580	390867	220155
Memo Items				
1 Share of Dilapidated and Liveable households			47.05	
2 Share of Dilapidated households			3.62	
3 Percentage of Covered Dilapidated Households			56.32	
Rank Co-relation				
Dilapidated and Liveable Households and Houses constructed			0.24	
Dilapidated Households and Houses constructed			0.20	

IV. Education and Health

4.1. Introduction

Madhya Pradesh is one of the educationally backward states of the country, although the previous decade witnessed impressive advances in the sector. Its health indicators are relatively worse among larger states of India and the reach of its primary health services, unlike in education, is significantly deficient. With a population of 60 million people spread over a diverse geographical and sociological terrain, there are major challenges to overcome if the state has to achieve the goals of reaching its poor, who may need within a reasonable timeframe public interventions in these areas more than others because of the lack of income. In this chapter we examine the status of, and progress in these two sectors before estimating financial requirements.

4.2. Education

The demographic and educational profile of Madhya Pradesh is summarised in *Table 4.1*. The state is predominantly rural, and scheduled castes and scheduled tribes (SCs/STs) constitute over one-third of the population. Of the 346 development blocks of the state, 89 are tribal dominated, where school education system is the responsibility of the Tribal Welfare Department. The overall literacy rate is 63.7 percent, which is nearly equal to the national average. However, the gap between male and female literacy is nearly 25 percent, one of the highest in India.

According to the Integrated Programme Monitoring System (IPMS) of the Government of Madhya Pradesh, the state has been able to enroll almost all of the 15.6 million elementary school-age population, the Gross Enrolment Rate (GER) being 99.6 percent. The Net Enrollment Rate (NER), on the other hand, is substantially lower — 89 and 46 percent for primary and upper primary sections respectively. Moreover, as discussed later, high dropout and low retention rates, as well as quality of education, are significant hindrances in achieving the targets of universal and quality elementary education in keeping with the Millenium Development Goals (MDGs).

Table 4.1: Basic Data for Madhya Pradesh, 2001

Total Population (million)	**60.3**
6-14 Population (million)	15.6
% Urban population	26.5
% SC population	15.2
% ST population	20.3
% 0 - 6 population	18.0
% Enrolment in government schools	81.5
Overall literacy rate	63.7
Male literacy rate	76.1
Female literacy rate	50.3

Source: State Report Cards, NIEPA

On a per capita basis, Madhya Pradesh spent Rs.265 on elementary education in 2004-05, which is higher than educationally backward states such as Uttar Pradesh but substantially less than advanced states such as Tamil Nadu and Maharashtra. The task facing the state is not only to increase its allocation to elementary education (which may be substantial), but also to employ human and technical resources necessary for its expansion. Moreover, these financial and human resources need to be translated into outputs such as better school facilities and improvement in quality of education, and monitor the outcomes of such interventions —- bring down the dropout rates and ensure that all children of school-going age complete a full course of at least elementary education.

In terms of delivery of education, Madhya Pradesh has been a pioneer in decentralisation for some time now. The Education Guarantee Scheme (EGS) in conjunction with the District Primary Education Programme (DPEP) made the local government bodies responsible for increasing access of school facilities to all habitations expressing desire to provide space and teachers for starting schools. The future financing needs will have to look into this decentralisation process in the delivery of basic education. However, since decentralisation has been the defining feature of delivery of public services in general in the state, we discuss this issue separately in a subsequent chapter.

This section discusses the current challenges and the future direction of elementary education in Madhya Pradesh. The focus is defined by the objective of identifying the financing needs subsequently, given the goals for elementary education set out by the *Sarva Shiksha Abhiyan* and the MDGs. Our intention is to identify the existing gaps in infrastructure and human resources for education, with the eventual objective of mapping out the financial requirements in accordance with the alternative burden-sharing arrangements between the centre and the state government. We also try to provide pointers towards the issue of targeting of resources across districts, and how the decentralisation process can be used to increase efficiency of public service delivery in Madhya Pradesh.

4.2.1 Current and Future Challenges for the Education Sector

There are several challenges facing the elementary education sector in Madhya Pradesh at present, and several new ones are likely to occur in the future if corrective action is not taken soon. On the students' side, *Table 4.2* gives a summary of the indicators of enrolment, dropout, and completion for MP over the past three years. As mentioned above, although GER has approached 100 percent in elementary education, the NER indicates that students cannot keep up to the grade appropriate to their age. This is reflected in an average repetition rate of 12.4 percent per grade over the elementary cycle. The highest repetition rate is for Class VIII, followed by Class IV and Class I.

Table 4.2: Enrolment, Dropout and Completion Rates in Elementary Education

	2003-04			2004-05			2005-06		
	Boys	**Girls**	**Total**	**Boys**	**Girls**	**Total**	**Boys**	**Girls**	**Total**
GER Primary	103.6	102.3	103.0	104.1	103.6	103.9	103.5	103.8	103.6
GER Upper Primary	84.4	79.7	82.3	89.1	85.0	87.3	91.5	88.7	90.3
NER Primary			72.5			89.7			
NER Upper Primary			37.6			46.1			
Dropout Rate Primary	12.8	16.8	15.0	20.0	21.8	21.4	19.1	20.6	19.9
Dropout Rate Upper Primary	24.2	25.3	24.7	20.4	22.7	21.5	17.8	20.8	19.1
Completion Rate Primary						57.5			60.1
Completion Rate Upper Primary						53.7			55.0

Source: Integrated Project Monitoring System

Dropout rates in primary education have increased over the period from 2003-04 to 2005-06 from 15 to nearly 20 percent, while it has fallen for the upper primary section from nearly 25 to 19 percent. High dropout rates at the earliest stages of education are inimical to the whole objective of universal elementary education, since a substantial number of children go out of the formal schooling system. Bringing them back to the system requires physical and pedagogical effort, and increases cost of provision. Therefore, the primary challenge for Madhya Pradesh is to correct this imbalance in terms of repetition and dropout rates. While class-wise dropout rates are not available at present, the logical conclusion will be that high repetition rates reflect a lower quality of teaching and learning, which impacts on the decisions of parents to keep their children in school.

Out of the 45 districts in Madhya Pradesh (now, 48), 21 districts accounted for 80 percent of out-of-school children in 2005-06. This indicates that the educational progress has not been evenly spread across the state. Districts like Jhabua, Sidhi, Barwani, Indore, Gwalior, and Jabalpur fare the worst among the backward districts, with a cumulative share of nearly 40 percent of all out-of-school children in the state (*Table 4.3*). The latter three districts have medium-sized cities as their district capitals; hence the data also points to deep rural-urban divide in terms of the number of out-of-school children within the same district.

Table 4.3: Out of School Children (5+ to 14 years) 2005-06 - Main Districts

District	Boys	Girls	Grand Total	% of Total	Cumulative Total	Cumulative %
Jhabua	18514	20440	38954	8.25	38954	8.25
Sidhi	17103	21454	38557	8.16	77511	16.41
Barwani	18349	18370	36719	7.78	114230	24.19
Indore	12749	12810	25559	5.41	139789	29.60
Gwalior	11453	10044	21497	4.55	161286	34.15
Jabalpur	9820	9175	18995	4.02	180281	38.18
Sagar	9804	8894	18698	3.96	198979	42.13
Hoshangabad	9236	8308	17544	3.72	216523	45.85
Khandwa	7040	8512	15552	3.29	232075	49.14
Shajapur	7514	6970	14484	3.07	246559	52.21
Rewa	7456	6880	14336	3.04	260895	55.25
Panna	7034	6733	13767	2.92	274662	58.16
Chhatarpur	6917	6725	13642	2.89	288304	61.05
Tikamgarh	7390	6142	13532	2.87	301836	63.92
Guna	6361	6305	12666	2.68	314502	66.60
Shivpuri	5542	6799	12341	2.61	326843	69.21
Vidisha	6039	5614	11653	2.47	338496	71.68
Dhar	5532	5485	11017	2.33	349513	74.01
Khargone	5537	5472	11009	2.33	360522	76.34
Ratlam	3742	6013	9755	2.07	370277	78.41
Satna	3960	3939	7899	1.67	378176	80.08
STATE	**233438**	**238804**	**472242**			

Source: Integrated Project Monitoring System

Table 4.4: Reason for Being Out of School, 2005-06

	State %	Major OOS Districts %
Working in fields, agricultural labour or other labour work	29.9	33.8
Sibling care	17.8	17.0
Cattle grazing	12.5	11.4
Weak financial condition	13.2	12.7
Migration	13.1	12.8
Lack of educational facilities (middle school)	5.6	5.1
Social belief due to which parents are reluctant to educate children	4.3	4.4
Handicapped or prolonged illness	2.0	1.9
School environment not conducive	1.6	0.8

Source: Out of School Survey, Government of India

District-wise data on the reasons for dropout/never-enrolment have been collected by the Government of Madhya Pradesh by means of a large sample survey in 2005. The data point to the multifaceted nature of the problem facing the government in reducing the number of children out of school; as explained in *Table 4.4*. The survey found that school infrastructure, pedagogy, societal norms and physical disability are minor reasons for

children being out of school. They account for a little more than 10 percent of the out-of-school population. The major reason appears to be the requirement for the child to work especially in agriculture, besides sibling care, cattle grazing, poverty and migration. It is interesting to note that in districts like Indore and Jabalpur having large urban agglomerations, migration is the overwhelming cause of children being out of school, whereas in poorer districts like Hoshangabad, the need for children to work is the most important determinant.

In terms of infrastructure and human resources, there is an immediate need to fill the existing deficits. There are nearly 5500 schools in the state without proper building, a quarter of schools do not have drinking water facility, nearly half have no toilet facility and only one-fifth have kitchen sheds for cooking mid-day meals. As far as teachers are concerned, 20 percent of sanctioned posts in primary schools are vacant, which rises to 30 percent in the case of upper primary schools. Moreover, the quality of education is low due to the fact that nearly half of all primary teachers and 40 percent of all upper primary teachers are untrained.

While the reasons enumerated in the survey may not have been exhaustive, in all likelihood, inadequate quality of infrastructure and teaching might be correlated to the high repetition rates and low quality of schooling. In terms of neoclassical theory, this lowers the expected long-run returns to education, and therefore acts as a disincentive for parents to send children to school. The solution for Madhya Pradesh, therefore, is highly complex. Apart from tackling poverty as an end in itself, demand for education needs to be raised substantially, and upgradation of school infrastructure and quality education needs to be implemented simultaneously. The conjunction of the decentralised framework involving the PTAs and the supply and quality augmenting inputs from the *Sarva Shiksha Abhiyan* can mitigate the situation to a certain extent.

Table 4.5: Total Expenditure on Elementary Education - Madhya Pradesh

(Rs. Lakh)

Year	State Budgetary Expenditure@	Releases for SSA, NPEGEL and KGBV	Total Budgetary Expenditure	Total SSA Expenditure*	Total Expenditure on Elementary Education
2002-03	143325	2674	145999	10802	154127
2003-04	144190	13352	157542	37796	181986
2004-05	158336	13804	172140	60513	218849
2005-06	116897	36969	153866	104978	221875

@ Excluding releases for SSA, NPEGEL and KGBV

* Includes NPEGEL and KGBV

Source: Department of School Education, Madhya Pradesh

4.2.2. State Budget and SSA Expenditure

Expenditure on elementary education through the state budget as a percentage of GSDP increased from 1.20 percent in 2000-01 to 1.67 percent

in 2004-05. Including expenditures under SSA and related schemes outside the state budget, the total expenditure on elementary education shows a rise of almost 50 percent between the years 2002-03 and 2005-06 despite a small rise in 2005-06 –- the budgetary expenditures have actually fallen (*Table 4.5*). *Prima facie*, there appears to be some amount of substitution of state's own funding of education by central transfers. However, with the beginning of the Eleventh Five Year Plan, the state's budgetary expenditures are expected to go up because the matching central grant ratio for SSA will change from 75:25 to 50:50.

We have undertaken a detailed analysis of budgetary data on expenditure by the Department of School Education for 2003-04 and 2005-06. The SSA succeeded the DPEP from 2002-03 onwards, therefore 2003-04 effectively marked the transition phase from DPEP to SSA. 2005-06 is the latest year for which final data are available.

Table 4.6: Budgetary Analysis for Elementary Education, 2003-04 and 2005-06

	2003-04		2005-06	
	Expenditure Rs. in lakh	**Share in total**	**Expenditure Rs. in lakh**	**Share in total**
Administration, monitoring and Evaluation	3396.2	3.0	3104.6	1.5
Teacher salaries and professional fees	89249.1	79.7	145306.8	72.1
Teaching quality and incentives	1564.6	1.4	2104.5	1.0
Direct expenditure on students	1684.5	1.5	3821.6	1.9
Infrastructure	1299.5	1.2	522.8	0.3
Decentralisation	14770.5	13.2	46575.0	23.1
Total	**111964.5**	**100.0**	**201435.2**	**100.0**

The methodology for the analysis of budget data is as follows. First, we mine the budget documents for the two years and list out the expenditure by each scheme from the Detailed Demand for Grants. We then separate out the expenditure falling exclusively under elementary education (budget head 2202.01). Thereafter, we categorise the expenditure under six broad heads: (i) Administration, Monitoring and Evaluation; (ii) Teacher Salaries and Other Professional Fees; (iii) Teaching Quality and Incentives; (iv) Direct Expenditure on Students; (v) Infrastructure; and (vi) Decentralisation.

Table 4.6 shows the distribution of state budgetary expenditure on elementary education. Nearly 80 percent of expenditure goes to cover salaries of teachers in government schools in 2003-04, the share dropping somewhat in 2005-06 despite a much larger absolute amount. Transfers supporting decentralisation is the next biggest category, constituting 13.2 percent of the total expenditure in 2003-04, rising to 23.1 percent in 2005-06. Considering that most of these are in the form of support for appointment of teachers, nearly 95 percent of the state government's expenditure is for salaries. Direct expenditure on students out of state budget is low, but this does not capture the expenditure for free text books which is a part of the SSA initiative. However, compared to an educationally advanced state like

Tamil Nadu, there are few interventions to improve quality of education, which forms only about 1-1.4 percent of the total budget.

Table 4.7: Category-wise SSA Budget, 2006-07

(Rs. Lakh)

	Non-Recurring	Recurring	Total Plan 2006-07	% of Total Plan
1. Administration, Monitoring and Evaluation		7193.41	7193.41	4.41
2. Teacher Salaries		31603.68	31603.68	19.38
3. Teaching Quality	3200.75	17059.50	20260.25	12.42
(i) School grants		2129.86	2129.86	
(ii) Teachers grant		1522.88	1522.88	
(iii) TLE grant to new school	3200.75		3200.75	
(iv) Teachers Training		13406.77	13406.77	
4. EGS/AIE for Out-of-school children		13509.98	13509.98	8.28
5. Direct Expenditure on Students	493.68	7105.72	7599.40	4.66
(i) Free text books		5202.36	5202.36	
(ii) Innovations	493.68	1903.35	2397.03	
6. CIVIL WORKS	67329.94		67329.94	41.29
(i) School buildings	37453.33		37453.33	
(ii) Additional classrooms	28603.26		28603.26	
(iii) Toilets, drinking water (non-TSC urban Areas), kitchen sheds	1273.35		1273.35	
(iv) Maintenance grant		3809.20	3809.20	
7. Decentralisation		17311.17	17311.17	10.62
(i) Training of PTA and VEC members		302.20	302.20	
(ii) Strengthening of Institutions (BRC, CRC, ZSK, MIS)		17008.98	17008.98	
Grand Total SSA AWP 2006-07	**71024.37**	**92049.53**	**163073.90**	**100.00**

Source: AWP&B (SSA) of Madhya Pradesh, 2006-07

The SSA was designed to fill the gaps in infrastructure and teachers, provide alternative learning institutions for out-of-school children, as also to enhance teaching quality and community participation through decentralisation. The whole gamut of SSA interventions is presented in *Table 4.7* under the major categories. Civil works for upgrading school infrastructure and salaries of newly appointed teachers constitute more than 60 percent of the total expenditure. However, substantial resources have also been budgeted for improving teaching quality, providing universal access and retention, and to build capacity and demand for education at the local level. The SSA expenditure, therefore, complements the state's budgetary expenditure on elementary education, as seen at *Table 4.6*.

In the initial stages, Madhya Pradesh faced a problem in utilising SSA resources, possibly due to inadequate capacity to scale-up from DPEP, as seen from *Table 4.8*. The utilisation rate for the district component of SSA was less than 50 percent in 2003-04, but has risen steadily to reach 71 percent of total approved budget by 2005-06. This needs to be improved further to avoid budgeting and implementation bottlenecks due to spillovers from previous years.

Table 4.8: SSA Annual Workplan – Budget (AWP&B) and Expenditure

(Rs.lakh)

	AWP&B	Expend	%	HQ Budget	Exp-end	%	Total SSA Budget	Total SSA Exp	%
2003-04	76412.58	36235.46	47.4	429.84	255.44	59.4	76842.42	36490.90	47.5
2004-05	99851.95	56033.79	56.1	502.11	315.35	62.8	100354.06	56349.13	56.2
2005-06	128384.94	92356.63	71.9	920.56	621.18	67.5	129305.50	92977.80	71.9

The Institute of Public Auditors of India (2004) carried out a study of financial aspects of SSA in the state in general, and a detailed one of two sample districts, Satna and Dewas. Some of their observations relevant here are summarised below.

- Budgetary allocations were lower than base year level (1999-2000) in all subsequent years except, 2002-03. Spending was much less than allocations. Even after allowing for the split of the state in 2000, the actual spending was low in 2000-01 and 2001-02.
- The approved budgetary allocation was not fully spent; actual expenditure was Rs. 635 crore against allocation of Rs. 1,972 crore in 2001-02 and Rs. 1,128 crore against Rs. 2,708 crore in 2002-03 (excluding state contribution for SSA). As a result, the allocation dropped to Rs. 2,267 crore in 2003-04. Within SSA also, the actual expenditure in 2003-04 was about 60 percent of the approved amount under the Annual Work Plan. This was largely because of non-release of state's share that resulted in non-receipt of the central share of a commensurate amount.
- There were huge shortfalls in civil works, equipment for headstart project and teachers' training categories.
- The disbursement of central funds to district level from the state level was often late, affecting implementation of work plan.
- Instead of a single bank account at each level, several accounts were maintained at district level, some of them mixed up with funds for other centrally sponsored schemes, making auditing difficult.
- Actual expenditures were even less than those booked at the district level, as expenditures booked were actually accountable advances.

From the above observations, it appears that expansion of elementary education is not merely a matter of additional funds; the capacity to utilise the available resources gainfully is something that is often incorrectly assumed. The guidelines of SSA are based upon a bottom-up system of planning and budgeting of various activities. In practice, this may not be happening. If widespread, in the best case scenario, this does not allow decentralised capacity building; in the worst case, this could distort sub-state level allocation of funds. In any case, the result would be a failure to realise the goals fully. The design of the SSA scheme is perhaps deficient in this

sense, and would bear reconsideration to build in formal need based allocation.

4.2.3 Elementary Education in Madhya Pradesh: An Assessment

The *Education Guarantee Act* in Madhya Pradesh has unquestionably contributed to the spurt in demand-driven supply of primary education in the state, particularly for those children who did not have access to education so far (Leclercq, 2003). It has resulted in near-universal access to education in terms of schools within reach. In the rural areas, the government is the main provider of primary education since the bulk of rural schools are government-run (state or local); private schools have a larger share in urban areas. Even so, there are problems of inadequate infrastructure (in terms of classrooms, toilets, drinking water etc.), insufficient teachers[3], and poor quality of education. Cost of schooling is high; particularly in formal schools (as against EGS schools, although the outcomes in the latter are not any worse than the former. The perception of parents also confirms such an assessment (Panchamukhi, 2006), although this could be partly a result of low priority attached to schooling as compared to other social obligations. Lack of teacher commitment and inducements to take private tuitions – which could partly be due to the low emolument structure for teachers[4] that needs serious consideration – is also resented by parents, although World Bank (2006) highlights the fact of one of the lowest teacher absence rates in the state – 17 percent as against 15 percent in Maharashtra and 17 percent in Gujarat – among Indian states. This positive feature is attributed to the organisational reform, but in the organisational structure also, there are several improvements needed within the reasonably successful decentralised system. The specific focus areas would be the Village Education Committees (VECs) and Parent Teacher Associations (PTAs) that are often not constituted, or if constituted, do not function properly. The Block Resource Centre (BRC) and Community Resource Centre (CRC) system has become more administrative and less of a quality improvement mechanism – partly the result of staffing them with former teachers – and teachers' interests are at least as much important to them as pupils' interest, leading to little contribution into improvements in teacher behaviour. On the ground, *Panchayats* are less involved in the functioning of schools than envisaged.

Student attendance is generally poor, reflecting the poor quality of education, but the actual teaching time is also much less than official teaching time (sometimes half) because of various reasons (Leclercq, 2003). First-born girls are often victims of the system, as they are made to help in the household chores or take care of siblings; the current incentive system does not address the basic problems. As a result the dropout rates are still

[3] In 2004, the number of all types of elementary teachers deployed was 53635 against 87760 sanctioned posts. We understand that the number of vacancies is not so large now, barring the reserved.

[4] It is interesting to note that there exists an informal market for teachers' jobs despite the low salaries; the change in appointment procedure has reduced corruption but not completely eliminated it (Leclercq, 2003).

high, and there are a large number of children who never enrolled. These problems are more acute with SCs/STs.

Along with their positive contributions, the EGS schools have thrown up an unexpected problem – that of reinforcing unhealthy social stratification. Private schools, government schools, and EGS schools essentially cater to pupils of three income groups in descending order; if increasing the supply of education was thought to be a tool for destroying the extant social hierarchy, it has not happened. Also, there has been some fragmentation of the student population of various habitations, making average school size smaller than what it would have been otherwise. This has exacerbated one major problem, that of multi-grade teaching, causing deterioration in teaching quality. Special training in this area could have ameliorated the problem to some extent, but trainings have not really helped, being rather centralised and ritualistic, with little contribution of the in-service trainees (Dyer, Choksi *et. al.* 2004). In fact, the quality of teacher education is assessed to be poor from several aspects including quality of the trainers themselves (NCTE, 1998).[5] One of the special issues in the general area of teaching quality has to do with student comprehension; for *adivasi* children, language of teaching has been a barrier, Hindi not being the language they speak at home.

4.3. Health and Related Services

This section analyses the achievement of the health sector in Madhya Pradesh with respect to national and state goals in specific areas and tries to provide an assessment of the task ahead with a view to subsequent estimation of the resources required to augment the performance of the health sector. In the process, some other policy issues are thrown up; we try to provide possible public responses to the same.

4.3.1. Mortality and Morbidity

Infant Mortality Rate (IMR) in Madhya Pradesh is one of the highest in the country. In 2003, IMR in the state was 82, lower only to IMR in the state of Orissa [Sample Registration System (SRS), 2005]. Estimate of IMR based on *Census 2001* indicates an even higher IMR in the state; 96 as compared to 86 reported by SRS in the same year.[6] Given the past rate of reduction (between 1998 and 2003), the state is also far off from reaching any of the national goals. The state may, at best, be able to achieve the medium-term goal of the state government to lower IMR to 60 by 2011 (*Table 4.9*).

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[5] "The picture that emerges after the study presents a rather grim situation of teacher education in Madhya Pradesh, with weaknesses outweighing strengths in almost all areas". On the trainers, NCTE observes that the parity of pay scales has resulted in secondary school teachers with little experience of primary level teaching – and others even less qualified for the job – being appointed as educators for primary teachers. The primary teachers themselves, in turn, have little interest or motivation for the type of training imparted.

[6] In general, state-level estimates of IMR provided by Indian Institute of Population Studies (IIPS) based on *Census 2001* are higher that that reported by SRS.

There are no recent reliable estimates of maternal mortality rate (MMR) in the state. The last estimate of MMR for the state made by SRS in 1997 was 4.98 per thousand. The target is to reduce MMR to 2.20 per thousand by 2011. Although information on maternal mortality is not available, indicators closely linked to it suggest that maternal mortality is likely to be relatively high in the state. As per the reproductive and child health (RCH) survey 2002-04, only 34.6 percent of pregnant women in the state had three antenatal check-ups, 64.5 percent had two tetanus injections and just 8 percent received adequate IFA tablets/syrup. These are far off from the national-level targets (*Table 4.10*). Also, in 2002-04, the percentage of safe and institutional deliveries in the state was as low as 35.5 and 28.2 percent respectively (RCH 2002-04). A major cause for concern is the fact that between 1998-99 and 2002-04, the increase in percentage of institutional deliveries has been a mere 7 percentage points (Reproductive & Child Health Survey, IIPS 1998-99, 2002-04). The state is also far off from reaching the Tenth Plan and National Population Policy goals on crude birth rate and total fertility rate (*Table 4.9*).

Table 4.9: Health Goals and Achievement – Madhya Pradesh

Indicator	Millenium Development Goals (MDGs)	National Health Policy (by 2010)	Tenth Plan (by 2007)	National Population Policy (by 2010)	National Rural Health Mission (NRHM)	Medium Term Goals for Madhya Pradesh	Status in Madhya Pradesh
Infant mortality rate		30 per 1000 live births	45 per 1000 live births 28 per 1000 live births (by 2012)	Below 30 per 1000 live births	30 per 1000 live births	62 per 1000 live births (by 2011)	82 per 1000 live births (SRS 2003) 96 per 1000 live births in 2001 (Census) 86 per 1000 live births in 2001 (SRS)
Under-five mortality rate	Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate						26 per 1000 live births (SRS 2003)
Maternal mortality rate	Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio	1 per 1000 live births	2 per 1000 live births 1 per 1000 live births (by 2012)	Below 1per 1000 live births	1 per 1000 live births	2.2 per 1000 Live Births (by 2011)	4.98 per 1000 live births in 1997 (SRS)
Crude birth rate			21	21			30.2 (SRS 2003)
Total fertility rate			2.3	2.1		2.1 (by 2011)	3.8 (SRS 2003)

Table 4.10: 'Output' Goals Related to Child and Maternal Mortality in Madhya Pradesh

Indicator	Tenth Plan (by 2007)	National Population Policy (by 2010)	Status in Madhya Pradesh
Percentage Immunised against all vaccine Preventable diseases	100	100	32.5 (RCH 2002-04)
% of at least 3 ANC	90	100	34.6 (RCH 2002-04)
% received IFA for 3 or 4 Months	100	100	(RCH 2002-04) Consumed 1 IFA tablet regularly 33.3 % Consumed 2 or more IFA tablets regularly 16.5 % Received adequate IFA tablets/syrup 8.5 %
% received two doses of TT	100	100	64.5 (RCH 2002-04)
Institutional deliveries (%)	80	80	28.2 (RCH 2002-04)
Deliveries by trained persons (%)		100	35.5 (RCH 2002-04)

Data suggest that the state is relatively better placed in terms of incidence of malaria and other communicable diseases. If the reported number of cases is used as a proxy for the incidence of malaria in the state, the state seems to have been able to reduce the incidence of malaria substantially over the last few years (*Table 4.11*). At this rate, the state seems to be closer to the goal of halving morbidity due to malaria by 2007. As the reported number of deaths does not represent the mortality rate due to the diseases (data pertain only to reported number of deaths), performance of the state with respect to the mortality goals is not known. Also, information on the incidence of other vector borne diseases in the state is not available. With respect to tuberculosis, the state had a cure rate of 83 percent in 2003-04. This again is estimated on the basis of number of reported cases and, in absence of data on number of unreported cases of tuberculosis, it is difficult to compare the status in the state with the goal of increasing the cure rate of tuberculosis to 85 percent. Large number of cases and deaths due to diarrhoea remain an important cause of concern. In 2003, there were about 4 lakh reported cases of diarrhoea in the state and about 406 persons died of diarrhoea. (*Table 4.12*).

Table 4.11: Reported Number of Cases and Deaths due to Selected Diseases in Madhya Pradesh, 2000-2003

Disease / Year	Malaria			Tuberculosis			Leprosy	
	Cases	Deaths	Slide Positivity Rate (%)	New Cases Examined	Positive Cases	Rate	New Cases Detected	Preval-ence rate
2000	194689	93	2.34					
2001	183118	81	2.10	304176	28942	9.5	19256	2.4
2002	108818	30	1.26	262632	28322	10.8	18868	2.3
2003	99708	22	1.11	229656	30505	13.3	16570	1.9
2004	132094	36	1.16				12699	1.7

Source: Various issues of *Prashashakiya Prativedan* of the Department of Health and Family Welfare, Govt. of Madhya Pradesh; Health Information of India, Central Bureau of Health Intelligence.

Table 4.12: Information on the Number of Cases and Deaths Due to Diarrhoea in Madhya Pradesh, 2000-2004

	Cases	Deaths	% deaths
2000	254151	211	0.08
2001	307208	413	0.13
2002	306892	211	0.07
2003	397030	406	0.10

Source: Various issues of *Prashashakyia Prativedan* of the Department of Health and Family Welfare, Govt. of Madhya Pradesh.

4.3.2. Health Infrastructure

Possibly the most important problem in the health sector is that the *public infrastructure for medical care is extremely inadequate*. *Access to safe drinking water and conditions of sanitation also remain poor in the state.* As of 2004, the state was still far from providing rural health infrastructure as per the national norms. Estimates of requirement of sub-centres (SCs), primary health centres (PHCs) and community health centres (CHCs) based on projected rural population, 2004 (provided by the Registrar General), and the actual availability of these facilities, based on Bulletin on Rural Health Statistics of India (BRHS 2005), suggest that there was a huge shortfall of public health facilities in the rural areas. The state had about 80 percent of the required number of sub-centres; slightly more than two-thirds the required number of PHCs and about half the required number of CHCs in 2004. In addition to the existing medical institutions, the state needed about 2207 sub-centres, 579 PHCs, and 216 CHCs. Despite the poor state of health infrastructure, very little investment in improving the public health facilities in the rural areas has been made in the state during the last few years. Even in the existing facilities, there is a severe shortage of personnel, equipments and other infrastructural facilities. In 2004, 20 percent of the PHCs did not have a doctor in position (BRHS, 2005). Data from the nationwide facility survey conducted by International Institute of Population Sciences (IIPS) in 2002-03 (FS 2002-03) Facility Survey IIPS 2002-03 show an even higher vacancy of doctors (40 percent) in PHCs in the state. The

survey also shows that the posts of female medical officers were vacant in about 90 percent of the PHCs.

There was an even more severe shortage of specialists in CHCs in the state. As per the *Report on Workforce Management Options & Infrastructure Rationalisation of PHCs* submitted to the Planning Commission, there was a shortage of specialists in about 92 percent of CHCs. Similarly, the Facility Survey 2002-03, shows that the posts of obstetrician/gynecologist were vacant in more than 83 percent of CHCs and posts of Pediatricians were vacant in 88 percent of CHCs in the state. State-level figures suggest that nearly two-thirds of the vacant posts of specialists in the state are in the reserved category of scheduled tribes (STs). There is also an acute shortage of support staff in the health facilities. As per the preliminary estimates from the Facility Survey conducted in 41 CHCs in the state, although the post of general surgeon was occupied in about 70 percent of the facilities, none of the facilities had an anesthetist, and about 25 percent did not have nursing staff or pharmacist/compounder.

Apart from personnel shortage, the state also has a poor infrastructure base in the existing facilities in terms of equipments and medicines. As per the Facility Survey 2002-03, only about 26.2 percent of the PHCs in the state were adequately equipped (having at least 60 percent of a set of basic equipments). Even in CHCs, only about 47.2 percent had at least 60 percent of the three apparatus: Boyle's apparatus, shadowless lamp and an oxygen cylinder. Similarly, preliminary data from the Facility Survey carried out in 41 CHCs in the state show that nearly 49 percent of the CHCs did not have Boyle's apparatus and about 59 percent did not have a shadowless lamp. Data from the 60th round of the NSSO survey show that of the out-patients who needed medicines, only 3.5 percent received free medicines in the rural areas of the state.

4.3.3. Water Supply, Sanitation, and Nutrition

Access to water supply and sanitation in the state is also poor. As per *Census 2001*, only about 48 percent of households in the rural areas of the state had access to safe drinking water and only 9 percent of rural households had toilet facilities. On the whole, about 55 percent of households had access to safe drinking water and about 24 percent of households had toilet facilities. Also, as per the National Habitation Survey 2003, 40 percent of the habitations in the state were not getting the minimum amount of safe drinking water (40 litre per capita per day).

Incidence of malnourishment is also relatively high in the state. As per data provided by the Department of Women and Child Welfare, Government of India, in 2004, about 55 percent of the children in the age group of 0 to 5 years in the state were malnourished. Of these, about 1.51 percent were severely malnourished. It may be noted that the incidence of severe malnourishment in the state is among the highest in the country. Also, National Family Health Survey 1998-99, showed that about 54.3 percent of women in the age group of 15 to 49 suffered from anaemia.

4.4. Summing up: Education and Health

In sum, in the area of education, there are positives that can now be built upon to provide a decisive thrust to the sustained campaign for providing elementary education to all children. To be sure, there are areas that need attention –- primary among them would be quality of teaching and the related issue of teachers' training –- but past achievements and current status does make one optimistic with respect to elementary education. The situation with respect to health is qualitatively different.[7] The most important part of healthcare for the poor, primary healthcare appears to be badly constrained. The high share of private spending in total health spending in the state (85 percent as per the latest National Health Accounts – for 2001-02) is a debilitating factor for the poor; it is no consolation that the share is generally high in India. Madhya Pradesh lags behind the national goals in almost all indicators and large investments are required in various sectors if these goals are to be met. Studies have shown that access to basic health infrastructure is a crucial determinant of health indicators, particularly infant and maternal mortality rates (Murthi, Guio and Dreze, 1995, Deolalikar 2004, Hanmer *et. al.* 2003). In view of this, the state needs to make decisive intervention in terms of improving public health facilities in the rural areas. The state also needs to particularly focus on family planning activities in order to reduce the high birth rate and fertility rate in the state. These would be important for reducing the infant and maternal mortality in the state. Besides, access to safe drinking water and sanitation will have to be targeted. Also, keeping in view the malnourishment levels in the state, it may be important to provide nutritional supplements not only to young children and pregnant women, but also to adolescent girls. While investments in health and family welfare in the state is crucial, boosting investments in other sectors that are known to have a significant bearing on health outcomes, particularly female literacy and poverty alleviation would be extremely important, particularly for reducing fertility rates.

[7] The then Chief Minister of the State, Digvijay Singh, said in the 'Foreword' of the 2002 *Human Development Report*: "We are aware that in the area of health we need to strengthen our efforts". Clearly, either the problems in this area are less tractable than in say, education, or the government has not 'strengthened its efforts' adequately, or both.

V. Decentralised Delivery of Services

5.1 Introduction

Madhya Pradesh consciously chose decentralisation as a way of improving basic service delivery, formalising the move with the *Madhya Pradesh Panchayati Raj* and *Gram Swaraj Act 1993*, *Madhya Pradesh Zila Yojana Samiti Act 1995* and several rules, orders and circulars (and amendments) giving effect to the legal provisions and changing them in response to the felt needs. The state now employs the usual three-tier structure of rural local bodies with effectively a fourth, the *Gram Sabha*. The *Gram Sabha-s* have legal standing and are counterpoints to village *sarpanches*. *Gram Sabha-s* are required to elect seven standing committees each covering a given area of vital interest to the rural populace for the purpose of overseeing local development work. The chairpersons of these committees, along with the *sarpanch* and his deputy form the Village Development Committee.

The process of decentralisation was experimental initially, but it evolved over time. As GoMP (2002) puts it, "Management concepts have been creatively used – Rajiv Gandhi missions provided strategic direction; *panchayats* brought in people's demands and local control; the *Gram Sampark Abhiyan* brought in an innovative monitoring system; the District Planning Committees de-concentrated government and took decision making powers to the district – together the government was restructured to become more responsive and deliver results in a way, the earlier arrangement could not. This complex of changes taken together represents new ways of government behaviour…." (p. 107). But the picture is not all that rosy. Madhya Pradesh is a large state and there are, as can be expected, variations in the degree of success across the state. More importantly, there are some problems with the institutional arrangements that can be attended to – hopefully with better results.

The state's thrust towards decentralisation has been complemented substantially by a similar paradigm adopted by many centrally sponsored schemes in the last few years. Various programmes of rural development, nutrition, education, housing, water supply and sanitation, rural roads, and rural electrification, were (re)designed to involve the rural local bodies in their implementation. All new schemes of this type with rural orientation – for example, National Rural Health Mission – build in an important role for the rural local bodies. Obviously, there is an official consensus that such involvement would improve effectiveness of the programmes.

5.2. Decentralisation of Elementary Education in Madhya Pradesh

The gains of decentralisation are most clearly visible in the state in elementary education. Madhya Pradesh has been a leader in terms of decentralisation of school facilities, teacher appointment and monitoring. The Education Guarantee Scheme launched in 1997 heralded nearly a decade of measures towards institutionalising the decentralisation framework in the state. This was formalised in 2002 through the enactment of the *Jan Shiksha Adhiniyam* (People's Education Act), giving statutory recognition to the Block *Panchayats* in teacher appointment, and *Gram Panchayats* in conjunction with the Parent-Teacher Association (PTA) in monitoring school and teacher performance. The full force of the *Act* will ensure that all the three tiers of decentralised governance carry out their duties as per the activity matrix in *Figure 5.1*.

Figure 5.1: Activity Matrix of Functions and Responsibilities in Elementary Education

Broad Function	Responsibility						
	Central Govt	State Govt	District	Block	Village		Service Provider (School)
					Gram Panchayat	PTA	
Standards Setting	■	■					
Planning			■				
Asset Creation			Support		■		
Operation - Non Teacher			Support		■	■	■
Operation – Teacher			Support		■		■
Monitoring and Evaluation	■	■	■			■	

One of the pillars of education decentralisation in Madhya Pradesh has been to declare the regular government teachers as a 'dying' cadre, with no fresh recruitment allowed into it. From 1996, *Shiksha Karmi*-s in Grades I, II and III have been recruited at a considerably lower salary, who were appointed in primary schools on contract by the block or *Janpad Panchayat* (JP). *Shiksha Karmi*-s could become regular *Panchayat* employees on satisfactory performance. From 2001, a new cadre of teachers called *Samvida Shala Shikshak* was started. The former EGS *guruji-s* were transferred to this cadre which also includes all new teacher appointments. These posts are contractual, school specific, and are not eligible for conversion into regular *Panchayat* posts, unlike the *Shiksha Karmi*-s.

Apart from the accountability aspect, decentralisation in teacher appointment has led to substantial savings on teacher salaries for the government. Surveys show that teacher absenteeism in Madhya Pradesh is one of the lowest in India (World Bank, 2006). At present, there are about 80,857 *Shiksha Karmi*-s and 23,937 *Samvida Shala Shikshak*-s divided into three grades within each cadre. Since their salaries are nearly half of the regular government teachers, Madhya Pradesh has been able to reduce expenditure on teacher salaries to a considerable extent.

Table 5.1: Projected Annual Savings from Teacher Decentralisation

Teacher Category	Number of Teachers	Current Salary (Rs.)	Salary of Regular Teacher (Rs.)	Reduction in Expenditure (Rs. crore)
Shiksha Karmi – I	2907	4325	8745	15.42
Shiksha Karmi – II	10588	3584	7950	55.47
Shiksha Karmi – III	67362	2816	6360	286.48
Total	80857			357.37
Sanvida Shala Shikshak - I	1279	4500	7865	5.16
Sanvida Shala Shikshak - II	10603	3500	7150	46.44
Sanvida Shala Shikshak - III	12055	2500	5720	46.58
Total	23937			98.19
Total Expenditure Reduction				**455.55**

Source: School Education Department calculations.

Table 5.1 summarises the fiscal savings from decentralised teacher management and appointment followed in Madhya Pradesh. According to an internal note from the School Education Department of Madhya Pradesh, the reduction in expenditure moving from regular cadre to *Shiksha Karmi*-s is Rs. 357 crore per year. Introduction of the new *Samvida Shala Shikshak* cadre has reduced the expenditure on teacher salaries by another Rs. 98 crore, saving a total of Rs. 455 crore per year.

Sufficient evidence is not available as yet to conclude whether technical efficiency has increased or not due to the decentralisation of teacher management. The fiscal saving generated by systemic change in teacher recruitment may free up resources for expansion and upgradation in facilities projected in the previous section. Therefore, decentralisation may be one way of achieving allocative efficiency in poorer states, if Madhya Pradesh is taken as an example.

5.3. Healthcare Services

In the area of health, the main agencies of decentralisation were the Village Health Committee of the *Gram Sabha* (with a multi-sector mandate) and the *Jan Swasthya Rakshak* (JSR) under the *Swasth Jeevan Sewa Guarantee*

Yojana. The JSR were to be appointed by the *Gram Sabha*. However, neither is fully functional. Instead, it is another type of decentralisation that has acquired high visibility, namely, the *Rogi Kalyan Samiti* (RKS) system. This is a system where medical institutions are granted substantial autonomy and each such institution is run by an RKS with respect to most of the regular day-to-day matters and policies like determination of user charges, utilisation of the resources raised through user charges and waiver of charges for the poor. Essentially, this is a way of decentralising some of the decision-making powers to hospitals and in the process generating additional resources; together, these developments have contributed to better functioning of the hospitals. However, this system can contribute little to the rural primary healthcare supply, except perhaps the lesson that user fees, if reasonable and accompanied by substantive improvement in service, is not necessarily opposed by the citizens provided the poor are exempted. In urban and larger hospitals, cross-subsidising the poor with user fees is feasible because of the large number of non-poor users; in rural areas and where the poor are the dominant users, this system is probably less sustainable. Also, the larger hospitals provide sophisticated diagnostic and therauptic services which can be charged (and yet be less expensive than the alternatives – usually private provision); the smaller and rural institutions mainly provide preventive and promotional services which are less amenable to user charges (Sadanandan and Shiv Kumar, 2006). Nevertheless, the RKS system did succeed in generating significant additional resources (Rs. 77.7 crore between 1996 and 2004); the amount looks small in comparison to total budgetary provision, but was almost half of non-salary and non-wage part (Chaurasia, 2004). Clearly, this is a model worth emulating in large hospitals (similar systems are actually in operation in other states), but it can hardly be a substitute for large scale public intervention, especially in matters of public health and primary healthcare.

5.4. Other Services

For various schemes under the broad group of rural development (and for other purposes) an important prerequisite is the proper identification of the poor. This is where the inputs of the local bodies should be invaluable. The state has prepared a list of BPL persons located in different villages under the central guidelines; however, the list so prepared has been undermined to some extent because of the inherent methodological problems in the guidelines. Further, the usual channel for central funds, the District Rural Development Agency (DRDA) merged with the *zila panchayat* in the state. NREGS identifies *panchayats* as the principal planning and implementation agencies and stipulates that at least 50 percent of the funds must be spent by the village *panchayats*.

In the other areas like nutrition (ICDS and mid-day meal scheme), housing (IAY), water supply (Accelerated Rural Water Supply Programme – ARWSP and *Swajaldhara*) and rural sanitation (Total Sanitation Campaign), the

involvement of the *panchayats* is as per the requirements of the scheme guidelines.

Thus, the *panchayati raj* system, apart from the functions delegated to it by the state government, has on hand, numerous central schemes to plan, implement, and monitor. This obviously calls for substantial upgradation of the capacity of the *panchayati raj institutions*, adequate functionaries, and sufficient funds. It is on these counts that the governance reform does not fully deliver.

5.5. Assessment

We have alluded to certain problems in the context of specific services in previous chapters. Before recounting these, it may be useful to step back and take a look at the broad issue of decentralisation in Madhya Pradesh. First, it is well-known and recognised that this process was a top-down one; there were no demands for such decentralisation from the grassroots level. Apart from the more idealistic reasons of 'power to the people' and 'democracy at the grassroots level', there were practical reasons of (a) improving service delivery and making them more demand-driven, (b) off-loading expensive programmes in a way that may be sustainable with part funding from other sources, and (c) setting up an alternative paradigm of governance that would be more responsive and flexible, providing political returns.

As mentioned above, the whole process was predicated upon the development of a few basic preconditions: essentially capacity enhancement of the bottom tier of government, in terms of administrative acumen, personnel, and resources. These preconditions did not really exist in the state in general; consequently, the decentralisation drive was akin to throwing someone in the water with a hope that (s) he will start swimming. The analogy is, however, not quite apt, because the outcome was not as random. There were differences among the *panchayati raj institutions* within the state with respect to the ability to take up the challenge. This ability was largely shaped by the homogeneity of the population within a jurisdiction; higher the homogeneity, greater was the ability to reach a consensus and respond positively. In part, this ability was also determined by the wealth of the community, or more specifically the financial position of the concerned institution, since those with a financial cushion could absorb the additional responsibilities better than others. In effect, this meant that those communities where the poor dominated in number but a few wealthy persons held sway were the least ready to take up the new responsibilities. In a semi-feudal society like Madhya Pradesh, this is why the *Gram Sabha* had to be given a prominent role and authority concurrent to the village *panchayat*. But this mix of representative democracy and direct democracy has not settled into a stable political equilibrium (McCarten and Vyasulu, 2004). Apart from this, the other obstacles to decentralisation mentioned above are widespread enough to merit considered solutions.

Examples of the difficulties are not hard to find. In the area of education, we have already mentioned that the village education committees and parent teacher associations are not as active everywhere as were envisaged. Similarly, in the area of public health, the decentralisation efforts have not yet fructified. The account of local body involvement in PDS by Sharma (2006) in Jhabua district is very positive, but needs to be replicated in other districts, where matters must be much worse, in regard to poor penetration of PDS in the state overall. Similarly, the unimpressive progress of ICDS in the state also indicates low involvement of local bodies. In mid-day meals, while in general there is no lack of interest among local bodies, their financial difficulties –- not helped by the state –- have impeded full implementation. Implementation of poverty alleviation schemes have sometimes been subject to narrow local political interests, reducing the effectiveness of targeting. The same holds for other schemes aimed at creating local community assets.

The difficulty in terms of financial problems is partly the result of decentralisation of functions without adequate decentralisation of finances, particularly at the *Gram Panchayat* level. While the *Gram Panchayats* are also sometimes guilty of not utilising their revenue handles fully, the state has exacerbated the problem by not devolving sufficient resources/ revenue sources. Afridi (2005), describes how the *Panchayats* were asked to fund their additional expenditures on mid-day meal scheme from their untied grants; compliance would have more than exhausted such funds, which were in any case meant for normal maintenance and running costs of local assets under their charge. Note also that 'untied' grants hardly remain 'untied' when required to be spent on something determined at a different level. This broad issue is something that the State Finance Commission should examine in detail and recommend policy measures; it seems to us that for effective and sustainable decentralisation, there is no option but to decentralise revenue sources (both tax and non-tax). State transfers are at best interim solutions.

The problems of capacity-building and appropriate personnel are distinct but not unrelated issues. With enhanced responsibilities regarding utilisation of public resources, the demands for planning, record-keeping, monitoring, and auditing have risen considerably, without any commensurate increment in the relevant capacities. To meet these challenges, intensive training as well as some innovations like contracting out some functions, developing partnerships with NGOs and grouping together to achieve economies of scale have to be resorted to. Even so, the personnel requirements have to be realistically assessed and provided for. For decentralisation to result in the release of its full potential benefits, the state now has to work in these directions.

VI. Estimation of Financial Requirements

We now move on to costing the gaps between extant position and the stated goals with respect to selected services. It should be mentioned at the outset that these estimations are based on norms/actual per unit costs that may be outdated. We subsequently try to adjust for inflation, but changes emanating from other factors like changing efficiency levels and inherent cost disabilities specific to further expansion of services[8] are not taken into account. Another issue that needs to be pointed out at the outset is that simply spending more cannot ensure actual enhancement in service delivery; this applies not only to what is under discussion in this chapter, but to public spending as a whole. Financial targets may have importance of their own, but achievements relating to actual service delivery are obviously much more significant. There are tools to improve the link between expenditures and physical indicators, the most important being performance measurement and budgeting.[9] We presume that the government is aware of such tools and would ensure minimisation of leakages.

6.1. Direct Poverty Alleviation

With *National Rural Employment Guarantee Act* coming into force guaranteeing a minimum of 100 days of employment with a minimum wage of Rs. 60 per day, the Government of Madhya Pradesh may now cover the entire rural population below poverty line. While maintaining the levels of expenditure under self-employment and capacity building programmes that enable the people to improve their levels of livelihood and earning, BPL households should be provided wage employment so that they rise above the poverty line. To meet the Tenth Plan goals of reducing poverty level by 5 percentage points by 2007 and by 10 percentage points by 2010, the Government of Madhya Pradesh needs to increase its expenditures on wage employment schemes and improve the rural infrastructure and vocational training to expand general job opportunities and impart skills.

There are two estimates of rural poverty in Madhya Pradesh, one by the Planning Commission for 1999-00 based on NSSO consumer expenditure and the other by BPL Census 1997 conducted by the Government of Madhya Pradesh based on criteria defined by the Planning Commission. The Government of Madhya Pradesh is using this survey to identify beneficiaries, subject to an overall limit of the 1999-2000 estimate of the Planning Commission plus ten percent of the same. The latest poverty estimates based on NSSO data for 2004-05 are now available and we base our estimates on these. The 2004-05 estimates are available in two sets, one comparable with

[8] These could arise from, for example, expansion to scattered small habitations or habitations in more difficult-to-reach areas.

[9] For a general introduction to the subject, *see* Schiavo-Campo and Tommasi (1999) Chapter 15, and Bouckaert and Halligan (2006). For an application to an Indian state, *see* Sen (2005).

the 1999-2000 estimates and another comparable with the earlier (1993-94) estimates. We use the latter, since the 1999-2000 estimates were not well-accepted because of methodological difficulties. To meet the two goals of reducing poverty level by 5 percent and 10 percent points on 2007 and 2012, number of person-days that need to be generated is estimated assuming the norm of Rs. 60 daily wage and 100 days of employment. Assuming that the employment generating programmes are necessary for at least five years to bring the beneficiaries above poverty line, and that the same population is covered each year, the existing level of expenditure on wage employment could meet the first target. To meet the second target by 2012, an estimated additional expenditure of Rs. 33.6 crore is required

Table 6.1: Resource Requirement to Meet the Targets to Reduce Poverty

	(figures in lakh)	
Poverty Estimates Based on Planning Commission 2004-05	151.75	46.8%
Goal 1 by 2007		
To reduce BPL population by 5 percent points (target no. of beneficiaries)	16.21	41.8%
Converted into households (5.5 per family as Census 2001)	2.95	
Number of person days to be generated*	295	
Net of Employment generated under SGRY with expenditure of Rs 45,496 lakh	534	
Additional funds required to meet Goal 1	Nil	
Goal 2 by 2012		
To reduce BPL population by 10 percent points from 2007 level (No. of beneficiaries)	32.43	31.80%
Converted into households (5.5 per family as Census 2001)	5.90	
Number of person days to be generated*	590	
Net of Employment generated under SGRY (Rs. 45,496 lakh)	534	
Additional funds required to meet Goal 2		
100 days of employment per household with daily wage of Rs. 60	3360	
To cover entire rural population below poverty under NREGA norms in entire State		
Population below poverty line 2004-05	151.75	
Converted into households (5.5 per family as Census 2001)	27.59	
Person days to be generated as per NREGA norms	2759	
Total funds required (Rs. Lakh)	165545	
Existing SGRY expenditure (Rs. Lakh)	45496	
Additional funds (Rs. Lakh)	**120049**	

Note: * Assuming Rs. 60 as wage and 100 days of employment

BPL population in Madhya Pradesh being above the national average, targeting of these programmes can make a difference to the actual impact. The composition of BPL population being dominated by the landless and agricultural labour on one hand, and by the scheduled castes and tribes on the other, the Government of Madhya Pradesh should focus on appropriate targeting in addition to increasing the expenditure.

Targeting of a wage employment scheme to tackle poverty in a phased manner is, however, not an easy task, particularly when poverty

levels are as high as 47 percent. It is difficult to concentrate only on 5 percent or ten percent of the poor. Two alternatives to tackle this problem are: either cover the entire BPL population in the state, or cover selected districts with high intensity of BPL population *in toto*. The first one would need large amount of scarce funds, and the second one may lead to some regional disparities, and possibly inter-district migration of the poor. The second one would also be politically difficult to implement. On balance, despite the problems of financing, one should think of covering the entire population below poverty line through wage employment for next five years and increase the expenditure on wage employment. Taking the latest Planning Commission estimates of people below poverty line, the state government should spend Rs. 1200.49 crore per annum based on *Employment Guarantee Act* norms, namely, 100 days of employment per household with a wage of Rs. 60.

6.2. Housing and Social Welfare

6.2.1 Housing

To cover the uncovered population living in dilapidated houses (1.71 lakh) at the existing average cost of Rs. 26,000, the Government of Madhya Pradesh needs Rs. 444.60 crore. With existing annual expenditure of Rs. 100 crore on construction of new houses it may take another 4 to 5 years to cover the entire population living in dilapidated houses and no additional expenditure may be needed.[10] To cover the uncovered population residing in liveable houses (about 50 lakh) with upgradation at the existing cost of Rs. 8,000 per house, the Government of Madhya Pradesh needs around Rs.3900 crore in next five years. Assuming that half of these households live above or around the poverty line and other employment generating programmes will enable them to upgrade by themselves, the Government of Madhya Pradesh still needs around Rs. 2000 crore. To cover these households with upgradation of their houses in the next five years, an existing expenditure of Rs. 150 crore should be hiked to Rs. 400 crore, i.e., an additional expenditure of Rs. 250 crore per annum.

6.2.2 Social Welfare

To cover all the dependent elderly people (21 lakh), the state government needs Rs. 388 crore per annum at the existing assistance rate of Rs. 275 per month, Rs. 401 crore to cover dependent widows/widowers, and Rs. 554 crore for the elderly without any financial assets. At present (2005-06), the Government of Madhya Pradesh is spending Rs. 141.8 crore towards old age pensions and social security pensions, net of central assistance. To cover all the elderly widows/widowers or elderly without financial assets the Government of Madhya Pradesh requires an additional Rs. 251 crore per

[10] We do not consider the issue of totally shelterless here, assuming that (a) the number of such households may be small, and (b) the issue in those cases may be wider than simply not having a house.

annum of own resources, which will be supplemented by an additional central assistance of Rs. 7.86 crore under the National Old Age Pension Scheme.

6.3. Costing Gaps in Elementary Education

Madhya Pradesh faces substantial challenges to achieve the goal of universal elementary education, and in improving the quality of education. Broadly, the infrastructural and personnel gaps are in three areas:

- Infrastructure facilities in terms of school buildings, additional classrooms and school amenities like toilets, and drinking water;
- Teacher recruitment to fill up vacant posts, upgrading the EGS centers to primary schools, and upgrading primary schools to upper primary schools as per the norm of one upper primary for every two primary schools;
- Bringing children currently out-of-school into a formal stream, through intermediate bridge courses and providing alternative and innovative institutions.

Table 6.2: School Infrastructure Gap, 2006-07

	Primary	Unit Cost (Rs. lakh)	Total Cost (Rs. lakh)	Upper Primary	Unit Cost (Rs. lakh)	Total Cost (Rs. lakh)	Fixed Cost	%
Buildings for new schools	0	4.32	0.00	1011	4.32	4367.52	4367.52	3.4
Buildings for existing schools	2658	4.32	11482.56	11125	4.32	48060.00	59542.56	46.8
Additional Classrooms	22190	1.89	41939.10	9928	1.89	18763.92	60703.02	47.7
Drinking water facilities	2406	0.30	721.80	566	0.30	169.80	891.60	0.7
Common toilet units	3159	0.20	631.80	662	0.20	132.40	764.20	0.6
Girls toilet units	3439	0.20	687.80	1888	0.20	377.60	1065.40	0.8
Total cost			**55463.06**			**71871.24**	**127334.30**	**100.0**

Notes:
a. The unit cost of new school buildings is the average of four types of school buildings
b. Unit cost of buildings for existing schools is assumed to be the cost of major repairs
c. Drinking water facilities costed at the rate used in AWP&B for urban areas
d. Toilet units costed at the rate used in AWP&B for urban areas

The cost for filling the gap in the above three components is estimated in *Tables 6.2, 6.3* and *6.4*. The data are taken from the Annual Work Plan and Budget (AWP&B) of the SSA for Madhya Pradesh. Unit costs for infrastructure are as per the norms provided in the AWP&B, whereas teacher requirement is costed at Rs. 3,500 per month for all new recruits under *Samvida Shikshak–II* scale. Out of school interventions include residential bridge courses (RBC), Non-Residential Bridge Courses (NRBC) for rural and New Human Development Centers (NHDC) for urban out-of-school children. The combined unit cost is calculated as a weighted average of the three

interventions, assuming that the shares of out-of-school children in these are 20, 60, and 20 percent respectively.

Table 6.3: Access and Teacher Gap: Cost Estimation

(Rs. Lakh)

		Recurring Costs				Fixed Costs
	Gap	**Teacher @ 3500**	**School Grant @ 2000**	**Teacher Grant @500**	**Total Recurring Cost**	**TLE Grant (10000 for PS; 50000 for UPS)**
Filling of vacancies-primary	37479	1311.76			1311.76	
EGS to PS upgrading	250	17.50	5.00	2.50	25.00	25.00
PS to UPS upgrading	16375	1719.38	327.50	245.63	2292.50	8187.50
Cost of Access and Teacher Gap					3629.26	8212.50

Note: Unit costs as per AWP&B

Table 6.4: Interventions for Out-of-School Children

Category	No. of Children per Course	Unit Cost	Cost per Child
Residential Bridge Course	100	600000	6000
Non-Residential Bridge Course	25	20000	800
New Human Development Centre	50	45000	900

Unit Cost assuming 20 percent in RBC, 20 percent in NHDC and 60 percent in NRBC: Rs.1860
Total Cost for Out-of-School (in lakh): 8783.70

Table 6.5: Additional Requirement for School Facilities and Personnel

(Rs Lakh)

Category	Gap as on 31.3.2006	Unit Cost	Total Cost	
			Fixed	Recurring
I. Infrastructure Cost				
School buildings (New Schools)	14794	4.32	63910.08	
Additional classrooms	32118	1.89	60703.02	
Drinking water facility	2972	0.30	891.60	
Toilets	9148	0.20	1829.60	
Total			127334.30	
II. Teacher Cost				
Teachers - primary	37979	0.42		15951.18
Teachers - U primary	16375	0.42		6877.50
Total				22828.68
III.Out of school children	472242	0.02		8783.70
Total Cost			**127334.30**	**31612.40**

Source:
1. Gap figures from AWP&B, 2006-07
2. Unit cost of Out-of-School is a weighted average of three interventions

The consolidated figures are given in *Table 6.5*. The total cost for bridging the infrastructure gap would be a fixed cost of Rs.1273.34 crore, while teacher recruitment and Bridge Course/AIE interventions would incur a cost of Rs.228.28 crore and Rs. 87.83 crore respectively. Therefore, assuming that the terminal year for achieving universal elementary education is until the end of the Eleventh Five Year Plan, the cumulative expenditure on infrastructure and the recurring cost of teachers would be an additional Rs. 1589.46 crore.

However, the cumulative expenditure on teacher salaries would depend on the phasing-in of new teachers over the next plan period, and in the success of mainstreaming the current 4.72 lakh children out of school. The projected year-wise costing and the alternative scenarios are provided below.

In addition to the infrastructure and personnel, teacher training will also be a major head of expenditure necessary to improve the quality of education. This is particularly important in the case of Madhya Pradesh since the EGS scheme had appointed teachers without proper training and qualifications. For the resource requirement exercise, it is necessary to estimate the costs of upgrading of EGS to primary schools and of re-training of *guruji's*. We assume that all primary and upper primary teachers currently numbering 2,44,008 will undergo 20 days training at a cost of Rs.70 per day.[11]

[11] Figures from *Sarva Shiksha Abhiyan* AWP&B 2006-07.

We also assume that the new teachers phased in during the next five years will also undergo the same training as existing teachers.

Table 6.6: Additional Resources Required for Elementary Education, 2007- 12

(Rs. crore)

	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Infrastructure	260	260	260	260	228	1268
New teacher salary	46	91	137	182	228	684
Teacher training	5	6	8	9	11	40
Out-of-school	18	18	18	18	16	88
Total	**328**	**375**	**422**	**469**	**483**	**2080**

Notes:

1. Infrastructure and new teacher requirements are phased out over the next five years
2. Teacher training costs calculated by assuming all existing and new teachers undergo 20 days training @ Rs.70 per day as per norms

The financial requirement for teacher training calculated as per norms, and resources required for meeting the requirements of enrolment, infrastructure and new teachers between the years 2007-08 and 2011-12 are summarised in *Table 6.6*. Nearly 60 percent of Rs.2080 crore will be required for meeting the additional infrastructure needs, while the next biggest expenditure will be on teacher salaries (cumulatively nearly 30 percent of total expenditure). Annual additional expenditure is expected to increase from Rs.328 crore in 2007-08 (nearly 15 percent of 2003-04 expenditure) to Rs.483 crore in 2011-12 (nearly 25 percent of 2003-04 expenditure).

Table 6.7: Projected Requirement for Elementary Education, 2006 – 12

(Rs. crore)

	2007-08	2008-09	2009-10	2010-11	2011-12
Baseline budgetary expenditure	1935	2067	2144	2257	2376
Required additional expenditure	328	375	422	469	483
Expenditure by other departments					
welfare of SC	32	33	33	34	34
welfare of ST	39	39	40	40	41
welfare of OBC	69	70	71	72	73
Scenario 1: SSA continues as usual					
Budgetary expenditure	2157	2303	2394	2520	2645
Central support through SSA	246	281	317	352	362
Scenario 2: State SSA share 50%					
Budgetary expenditure	2239	2327	2428	2566	2693
Central support	164	188	211	235	242

Table 6.7 outlines the two alternative scenarios, assuming that the expenditure on elementary education by the School Education Department and the Department of SC/ST/OBC Welfare increases in the next five years at the average annual rate between 2001-02 and 2003-04. *Scenario 1* is the hypothetical case where the current sharing formula for SSA (75:25) is maintained in the next plan period. *Scenario 2* gives the expenditure time-path recognising that the sharing formula becomes 50:50 in the next plan period as originally envisaged. In the first case, central support to SSA would be Rs.1559 crore, while in the second, it would be Rs.1039 crore. Therefore,

the change in the sharing formula will result in the Government of Madhya Pradesh incurring an additional expenditure of Rs.520 crore over the next plan period, a little over Rs.100 crore a year. Mobilisation of resources from state's own revenue will be crucial in that case.

6.4. Estimating Requirement of Resources for Healthcare

Estimates of resource requirement in meeting the shortfall (in 2005) from national norms on provision of SCs, PHCs and CHCs in the state suggest that a capital investment of Rs. 601 crore is required for meeting the norms on these facilities.[12] Apart from the capital investment, establishment of these facilities will increase the recurring expenditure of the state by about Rs. 124 crore annually.[13] Besides, to recruit personnel against most of the vacancies of medical staff and paramedical staff in health facilities (as of 2005), the state would have to incur an additional recurring expenditure (over and above the expenditure incurred in 2005-06) of about Rs. 44 crore annually. Together, the state requires a minimum capital investment of about Rs. 601 crore (only for meeting the norms on rural health facilities) and a minimum increase in recurring expenditure (over the level incurred in 2005-06) of about Rs. 168 crore.

Estimates of resource requirement for providing additional equipments, particularly in rural health facilities require a list of the equipments available in these facilities. The state has already conducted a facility survey to examine the availability of equipments in CHCs (data of which is currently being entered). Similar surveys are also being done for SCs and PHCs to examine the availability of equipments in these facilities as per the recently released Indian Public Health Standard (IPHS). Once these data are available, the additional capital investment required in the state to provide adequate equipments in public health facilities can be added.

Estimate of resources required for ensuring adequate medicines to all population in the state indicates that an additional of Rs. 220 crore would be required annually over and above the expenditure incurred on medicines in the state in 2005-06. This is based on information on the percentage of population receiving free or partially free medicines in the state from the 60th round of NSSO survey and the proportion of population using public facilities reported by the same survey. The current per capita expenditure on medicines in the state is much lower than the per capita expenditure for relatively better off states like Tamil Nadu. However, the new drug policy in the state has proposed to establish a centralised drug supply system, as is done by the Tamil Nadu Medical Services Corporation (TNMSC). If we assume that with the centralised system of the supply of drugs in Madhya

[12] Cost of building an SC was assumed to be Rs. 8 lakh, that of building a PHC was Rs. 30 lakh and building a CHC Rs. 1 crore to arrive at the estimates. These unit costs included the cost of providing equipments at these facilities.

[13] The recurring expenditure includes salaries, medicines, stores, equipments and other contingencies.

Pradesh would be able to improve the efficiency with which drugs are supplied, the requirement of resources at the state-level may be reduced.

Reducing fertility rates in the state requires investment primarily not in the health sector, but towards improving literacy rates and reducing poverty levels. A large literature on fertility transition in various states and countries has shown that the two most important determinants of reduction in fertility rates are spread of mass education and reduction in income poverty. Interventions towards improving literacy and reducing poverty are, in general, found to be more effective in reducing fertility rates than direct interventions towards improving sterilisation rates or adopting family planning methods. Besides, mass campaigning and providing information on family planning methods have also been found to be useful. We do not specifically estimate any additional requirement of expenditure in the health sector for reducing fertility rates, but suggest significant additional investments in education and poverty alleviation programmes.

Requirement of resources for providing universal access to safe drinking water in the rural areas is estimated to be about Rs. 1065 crore. This is based on the percentage of households having access to safe drinking water (defined as water from taps, hand pumps and tubewells located near the premises or nearby) reported by Census 2001.[14] The corresponding estimate of resources required for the urban areas is about Rs. 630 crore. For urban areas, information from Census 2001 on percentage of households having access to safe drinking water is combined with per capita costs of water supply schemes in urban areas (provided by the Planning Commission) to arrive at the estimates.[15] Together, the cost of providing universal access to safe drinking water in the state is about Rs. 1695 crore. Similarly, information from Census 2001 on the percentage of households having toilets is used to estimate the total requirements for providing all households with toilet facilities. The total requirement of resources for providing toilet facilities is about Rs. 829 crore.

Resource requirement for providing nutritional supplements to all malnourished children in the age group of 0 to 6 is estimated to be about Rs. 780 crore. This is based on estimates of the percentage of malnourished children reported by the Department of Women and Child, Government of India in 2004 and the government prescribed rates for providing nutritional supplements to undernourished children. Additionally, an amount of Rs. 294 crore is required for providing nutritional supplements to pregnant and lactating mothers. This is based on the number of pregnancies estimated from the crude birth rate, percentage of women suffering from anaemia in the state and the government prescribed rates for providing nutritional supplements to pregnant women and nursing mothers. With the state

[14] Cost of providing piped water supply to rural areas is taken to be about Rs. 1,200 per capita and that of providing hand pumps Rs. 140 per capita, based on information provided by the Department of Drinking Water Supply, Govt. of India. It is also assumed that 70 percent of the population will be provided by hand pumps and 30 percent by piped water supply.

[15] The Planning Commission figure for 1983 was updated to 2003-04 prices. The per capita cost of implementing new water supply schemes turned out to be Rs. 1780.

spending about Rs. 163.27 crore for providing nutritional supplements in 2005-06, an additional expenditure of Rs. 911 crore is required annually for providing nutritional supplements.

Together, assuming that the capital expenditure requirements would be spread over a period of 5 years, the state needs to increase its expenditure by Rs. 2084 crore annually over and above the expenditure incurred in 2005-06 on health, family welfare, water supply, sanitation and nutrition to meet certain minimum requirements in these sectors (*Table 6.8*). This required additional expenditure was about 2.1 percent of GSDP of the state in 2003-04. With the state spending 1.4 percent of GSDP on the above sectors in 2003-04, this would mean that the state would need to spend a total of about 3.5 percent of GSDP to meet some of the minimum requirements in the health sector.

Table 6.8: Additional Expenditure Requirements in Different Healthcare Sectors, Over and Above the Expenditure Incurred in 2005-06

(Rs. crore)

Expenditure Head	Revenue Expenditure	Capital expenditure (annually)
Building New SCs, PHCs and CHCs	124	601/5= 120
Improving manpower in existing facilities	44	
Medicines	220	
Access to safe drinking water	160	1695/5 = 339
Providing toilets		829/5 = 166
Nutritional supplements	911	
Total annual increase	**1459**	**625**

It is however important to remember that apart from the additional required expenditure in the above sectors, the state needs to make significant investments to increase literacy and reduce poverty levels. Without these interventions, improving health indicators, particularly infant and maternal mortality rates, would be difficult.

Table 6.9: Projections for Mid-day Meal Scheme, Madhya Pradesh

	2007-08	2008-09	2009-10	2010-11	2011-12	Total
1. Primary Enrolment 5 - 9 (in Rs. lakh)	78.66	78.64	78.61	78.59	78.56	
2. State's cost @ Rs 0.50 per child with 5% inflation	41.30	43.35	45.50	47.76	50.13	228.04
3. State's cost per year @ 200 school days (Rs.crore)	82.60	86.70	91.00	95.52	100.26	456.09
4. Total amount to be budgeted (centre + state share)	330.39	346.79	364.01	382.08	401.05	1824.34

6.5 Mid-day Meals

We have earlier mentioned the fact that the state government has essentially shifted the burden of financing the state's share of the cost of mid-day meals to the rural local bodies in non-tribal blocks. This position has created serious difficulties of implementation on the ground which needs to be corrected. *Table 6.9* makes a rough estimate of the annual costs (total and for the state's share only). Out of this, while the state's share can be treated for our purposes as additional expenditure requirement (to be transferred to the local bodies instead of asking them to meet the expenditures not funded by central grants from their basic untied grants), the total expenditures are estimated for the sake of completeness only.

In estimating the above, we have used baseline figures (2006-07) as per the latest guidelines of September, 2006. Since cost of cooking materials and wage costs may increase over time, these have been factored into the assumed inflation rate of 5 percent. An average of 200 working days for schools has been assumed, which is in line with the data from State Report Cards. As per the new guidelines, the centre bears the cost of foodgrains and cooking costs, the latter upto Rs.1.50. To receive the full grant, the state has to bear the cost @ 50 paise per student per day. It may be noted that although amounts against item 3 indicate the state's costs, they actually provide an upper limit of the required *additional costs*, since the tribal welfare department already provides assistance for this in the tribal blocks of the state, and for these blocks no additional expenditure will be required.

Summing up, in terms of meeting the Plan goals of reducing poverty, the financial requirements are not large if the same group of poor can be consistently assisted for a minimum period. However, in practice, concentrating on 5 or 10 percent of the poor is not generally possible. Targeting by social groups (SCs, STs and OBCs plus the landless labour) may be feasible and perhaps required, but even such targeting will imply wider coverage. The alternative of targeting specific districts (or even blocks) with high incidence of poverty has serious potential difficulties. The ideal approach would be to cover all the poor, but the financial costs of that course of action are estimated to be as large as Rs. 1200 crore per annum. An additional policy question in Madhya Pradesh involves a large number of what V.M. Rao (2002) calls "forgotten villages". He characterises these villages by "small size, poor accessibility, weak infrastructure, and stagnant economy. Many of such villages are settlements of disadvantaged groups which may explain the past processes giving rise to a powerful combination of factors hindering their progress." (pp. 73-74) Such settlements are to be identified and special packages have to be developed for them to make the poverty eradication programme effective. The housing deficit can probably be tackled in another 5 years if the expenditure on housing can be raised to about Rs. 400 crore per annum. In the meantime, there should be better targeting of the expenditure, keeping the district-wise allotments roughly in line with the need for new houses or upgradation of existing ones for each district. In terms of providing for the elderly, the state would require to spend about Rs 250 crore additionally to cover all the potential beneficiaries by

another five years. While this is not a large amount, compared to actual expenditures in recent years, this would indeed constitute a large increase. The annual estimates of required additional own expenditures, building in the difference in the matching ratio of central grants, range between Rs. 260 crore and Rs. 317 crore with the assumed scheduling of additional expenditures. This implies a hike in own expenditures on elementary education of around 15 percent over and above the trend projections. The largest increases, however, are required in the area of healthcare and related services (water supply, sanitation, and nutrition). Given the large shortfalls in these areas, norm-based (or full, as the case may be) coverage is estimated to require a little more than Rs. 2000 crore annually over and above the actual expenditure level of 2005-06. Additionally, to allow the village *panchayats* the freedom to spend their basic untied grant as per their own preferences, the state has to provide them an amount of Rs. 40-50 crore annually towards the implementation of the mid-day meal scheme. This estimate takes into account only primary classes; to extend the scheme to all pupils up to class VIII, the required amount will obviously be higher. On the other hand, the tribal welfare department does provide some assistance to the *Panchayats* in the tribal blocks; [16] the required additional resources would be lower to that extent. Together, these additional spending requirements constitute a large amount. Possible ways of raising this amount constitutes the theme of the next chapter.

[16] Revised estimate of budgetary provision on this count for 2006-07 was around Rs. 27 crore.

VII. Financing Additional Spending Requirements

7.1. Introduction

For the states in India, financing additional expenditures on any (group of) head(s) has to come from one of the following sources: (a) additional resource mobilisation; (b) increased borrowings; (c) reallocation of total expenditures; and/or(d) increased central transfers. Of these, option (b) is one we do not consider, as the state already has a substantial debt burden that has to be serviced; any additional debt that does not result in an immediate investment that yields in a stream of returns will add to the deficits. This the state cannot afford, having committed itself to deficit targets set in its fiscal responsibility legislation.

Bilateral/multilateral assistance can be an optional source of funds, but technically it is part of the central transfers since all such assistance is channeled through the central government. Similarly, greater expenditure efficiency will also result in freeing up resources that can be used for additional expenditure in designated areas; but these will also take the form of reallocation of expenditure across services or perhaps intra-service reallocation.

Finally, private funds can also be mobilised to share the costs of additional expenditure responsibilities through private-public partnerships (PPP). This is an option that not only is feasible, even perhaps desirable under various scenarios. However, due to its very nature, it is difficult to estimate with any degree of confidence. We have, therefore, discussed the scope and alternative mechanisms of private funding of public initiatives for human development in the context of specific services and do not include it here except as a residual.

7. 2. Estimated Resource Requirements for Selected Services

Gathering the additional resource requirements from the preceding discussions, the total of those identified works out to Rs. 2820, 2987, 3163, 3350, and 3527 crore, for the years 2007-08 to 2011-12 after building in inflation (wherever applicable) of 5 percent per annum. These sums represent a little less than 10 percent of the total expenditures of the Government of Madhya Pradesh in 2006-07 (revised estimates). If normal increases are around 10 percent every year, the increased expenditures would roughly imply almost 20 percent increases every year instead of 10 percent from 2007-08 consistently until 2011-12. This would be a tall order indeed. We carry out illustrative estimates of two of the sources listed above that are within the control of the state: additional resource mobilisation and reallocation of expenditures.

7.3. Estimate of Additional Resource Mobilisation

The methodology for the estimation essentially assumes that the overall revenue base is the GSDP of the state. For this exercise, we consider tax revenue only as that is the major revenue source for the state, as in nearly all other states. Accordingly, we express the own tax revenue receipts of the state as a ratio of the GSDP for a number of years. Identifying the highest ratio – which happens to be the last year of our data set, 2004-05 –- as defining the tax revenue envelope, we estimate the revenue potential of any year by applying this ratio to the (estimated) GSDP to derive the potential own tax revenue. While this methodology oversimplifies the process of tax revenue generation, it is a reasonably good approximation because of the strong and overwhelming relationship of GSDP with own tax revenues that most empirical studies exhibit. Further, we use the highest ratio historically achieved by the state so far in the belief that postulating the state's own best effort is more appropriate and realistic than using a norm derived from a cross-state comparison. These estimates are then compared to 2006-07(RE) figures to assess the prospects of additional resource mobilisation in the next five years. *Table 7.1* provides the results of this exercise.

Table 7.1: Additional Revenue Mobilisation through State's Own Taxes

(Rs. crore)

Year / Item	**2004-05 (Actual)**	**2007-08 (Estimate)**	**2008-09 (Estimate)**	**2009-10 (Estimate)**	**2010-11 (Estimate)**	**2011-12 (Estimate)**
Own Tax Revenue	7769.91	10819.99	11849.36	12976.66	14211.20	15563.20
Additional from 2006-07 (RE)	--	652.82	1682.19	2809.49	4044.03	5396.03
Additional Resource Requirement	--	2820.00	2987.00	3163.00	3350.00	3527.00
GSDP	107926.35	144260.01	157984.31	173014.27	189474.13	207499.90

Clearly, for the next three years (2007-08 to 2009-10), the estimated additional resource requirements are higher than the estimated additional tax resource mobilisation. Further, it is not our contention that the entire additional resource mobilisation will be available for only the required additional expenditures that we have estimated. There are normal increases (in current prices) in almost all heads of expenditures, and there will also be competing claims for extra resources from several other departments. This exercise thus underlines the fact that the bulk of the additional expenditure requirements cannot be financed from the state's own resources under reasonable assumptions, even if we allow for the fact that the above exercise does not cover non-tax revenues. Non-tax revenues constitute a smaller part of the total revenues at present, and the large subsidies or unrecovered costs in several services termed as 'non-merit' goods do indicate substantial scope for additional

revenues from this source as well. Still, for the next three years, the state will find it difficult to cover more than 20 percent of the additional expenditures estimated by us. The next possibility that we explore is that of reallocation of expenditures to generate resources for human development concerns.

7.4. Reallocation of Expenditures

Apart from generating additional resources through tax or non-tax measures, reworking the priorities in government expenditure can make available such resources to preferred services by allocating smaller resources to or by economising in non-priority areas. In what follows, a crude but objective method is applied to data for the state of Madhya Pradesh to assess the prospects of such reallocation of resources. The method is based on the assumption that each state compares its own progress in various areas with other states on the basis of available physical indicators, and priorities are assigned to various services according to the distance of the state's indicators relative to the best achieved by any state. The priorities are supplemented by unit costs of supply to arrive at the 'desired' budgetary allocations, the sum of which is adjusted to correspond with overall fiscal limits.[17] This leads to some recommendations on the reprioritisation of government expenditure in the state.

Table 7.2: Actual and Estimated Expenditures on Selected Services in Madhya Pradesh

(Rs. lakh)

Sectors	Actuals 2004-05	Estimated 2004-05
1. Education	257598.44	237577.78
2. Health	8980932	79923.16
3. Water Supply	46538.26	46403.51
4. Housing	8587.68	7109.68
5. Labour and Employment	5750.78	5747.98
6. Rural Development	100826.54	83252.61
7. Urban Development	16333.71	28010.43
8. Agriculture and Allied	130270.59	119825.67
9. Irrigation and Flood Control	199873.18	135427.16
10. Energy	321298.50	428264.10
11. Industry & Minerals	8767.17	7455.64
12. Transport	68719.97	75376.40
Total of the above	**1254374.14**	**1254374.14**

The sectors to which we apply this method of prioritising government expenditure in Madhya Pradesh and the achievement indicators used for each of the sectors is listed in Sen and Karmakar (2007) (*see*, section III page10). It may

[17] *See* Sen and Karmakar (2007) for details.

be noticed that the general services have been kept out of the analysis, primarily because it is difficult to think of an indicator for the purpose. Also, the general services are overwhelmingly either contractual payments (interest and salaries) or on goods and services that are in the nature of "overheads of the government'. We have also excluded some other sectors where the expenditures are primarily in the nature of transfer payments and associated administrative costs. The results of the exercise using the expenditure data for Madhya Pradesh for the years 2003-04 and 2004-05 (it may be remembered that this method is applied to the *change* in the overall expenditure envelope) are reported in *Table 7.2*. The table provides the estimated expenditure pattern that would have resulted from application of this methodology in 2004-05 as against the actual pattern.

It can easily be seen that the estimated allocation pattern is not drastically different from the actual. Of course, this is partly because of the fact that we are using the normative method of allocation only at the margin, that is, on the change from the previous year. However, it may be noticed that (a) the estimated allocation shifts expenditures from rural development to urban development to a considerable extent; (b) provides substantially larger funds for power and transport sector; and (c) leaves total allocation for human development sector largely unchanged. The lesson, of course, is that we may not expect any substantial reallocation in favour of human development sectors.

It should be noted here that although the methodology used implicitly assumes no interrelationship between sectors, this assumption can only be a simplifying one; in practice, it is well-known that improvements in one sector can and do have positive impact on the indicators in other sectors as well.

7.5. Central Transfers

Central transfers do account for a large part of the state's expenditures. In 2005-06, current transfers from the central government in the form of shared taxes and grants-in-aid were as much as Rs. 9,274.77 crore in the total revenue receipts of Rs. 20,596.80, or 45 percent, in the state.[18] In recent years (2002-03 to 2005-06), growth in receipts from shared taxes has considerably outpaced that in the states' own tax collections. The same holds for receipts from central grants as against the states' non-tax revenues. Grants are broadly of three types, (i) statutory grants mandated by the Finance Commission that also mandates the sharing of tax revenues of the central government; (ii) Plan grants; and (iii) discretionary grants from various line departments of the central government. Of these, the Finance Commission transfers (tax sharing plus statutory grants) are awarded for a five-year period, hence remain fixed, once awarded. The plan grants are largely decided on the basis of a formula, while discretionary grants can be exactly that, or in some cases, formula based. In general, the relative

[18] Grants not flowing through the state budget (e.g., central transfers under SSA) are not included.

backwardness of Madhya Pradesh makes it eligible for higher transfers on a per capita basis for all the formula based transfers since they usually consist of one or more progressive elements. Ultimately, the probability of getting higher central transfers would depend largely on the revenue turnout of the centre, particularly tax revenues because of tax sharing and the fact that some specific purpose transfers are linked to tax revenues in the form of cesses (education cess).

In the last two years, share in central taxes has been growing at a rate of 20-25 percent annually. Even assuming a lower rate of increase in future at 15 percent per annum, the additional revenues in the next five years will rise from about Rs. 1145 crore to Rs. 2000 crore. Taking this into account, the problem of financing shortfalls is seen to be serious only in the first two years –- 2007-08 and 2008-09. Taking into account likely growth in grants-in-aid further reduces the financing problem, although it is still likely to be substantial for 2007-08 and less so in 2008-09. Altogether, the shortfall in 2007-08 is likely to be around Rs. 1,500 crore and in 2008-09 Rs. 1,000 crore, even after taking into account likely central transfers. These are amounts that should be manageable by backloading the expenditures a little or other methods of short term financial management in view of the fact that from 2009-10 onwards no resource shortfall is envisaged. Overall, the continuing growth of the economy can only augur well for the central revenue collections, with benefits for the states through that route, apart from the direct benefits.

Of particular interest is the fact that education cess collections are substantial and growing because of the strong revenue performance of the taxes to which it is tagged on, the benefit of which should be shared by the states, in particular the education sector. Further, an increase in the education cess has been proposed in the last central budget for the secondary education sub-sector. Also, the centre will share a part of the burden of implementing the *Employment Guarantee Act*. Similarly, transfers under the *National Rural Health Mission* would underwrite a substantial part of the health expenditures, presumably with some increase on the combined transfers under various extant health related schemes. With these specific-purpose transfers, the utilisation of total central transfers is likely to be oriented more towards human development sectors than before.

However, one aspect of central transfers is particularly relevant for a state like Madhya Pradesh. This relates to the matching ratios for some of the transfers. These matching ratios are uniform across States, which is politically convenient, though illogical. This is particularly ironic for the poverty alleviation schemes: a state like Madhya Pradesh is allocated greater amount of funds than many others because poverty is assessed to be higher. But the state government has to itself allocate a greater amount of matching funds than others, despite the well known and easy to understand fact that the state's capacity to match the increased transfers is less than others. Ideally, there should have been a system

of matching ratio varying inversely with the level of poverty, but that is not the case.

In sum, the best historical tax efforts may not garner the state sufficient additional resources to cover a large part of the additional requirements estimated by us. A substantial amount of additional funds may be expected from the centre, and the financing gap would probably be a problem only in 2007-08 and 2008-09. While prudent financial management could reduce this gap further, any remaining gap will have to be made good through additional non-tax revenue mobilisation and/or infusion of private funds.

The last mentioned is not really the residual that it appears to be here; actually, there are many reasons why the private sector should be involved in several areas of social service delivery anyway, efficient management being one of them. The government has already been tapping this source for various purposes (e.g., through the 'fund a school' programme). Involving the private sector for healthcare, however, has not been so successful yet. Innovative schemes for such involvement need to be called for. For example, some primary/community health centres/sub-centres can be experimentally handed over to reputed NGOs for a fixed period, with some agreed financing.[19] In fact, the government scheme of financial assistance for pregnancy cases handled by private doctors is also an example of private-public partnership (PPP). By their very nature, such schemes are experimental and need to be monitored closely for possible malfunctions and refinement, at least for the first few years. But there is scope for many more such schemes. The exact manner of the involvement of the private sector will depend on the sector, the actual service concerned, and the ground conditions.

7.6. Some Policy Options

From a broader point of view, the basic problem of human development in Madhya Pradesh is the intertwining of widespread poverty and relatively low human development. Each of these problems reinforces the others, making it difficult to break this nexus as it simultaneously requires a massive all-out attack on all fronts simultaneously. However, such a colossal effort requires huge resources in terms of money, organisational and management capacity, skilled personnel and medium-to-long term perspective. Ironically, all these are rarely available by the very nature of underdevelopment. In a practical sense, therefore, there are only two ways of breaking this impasse: exogenous shocks and/or bringing the size of the problem to a manageable level. While exogenous matters are by definition beyond the control of the state, it can do something about the other strategy. Given that a substantive part of the problem is concentrated in particular socio-economic groups as well as geographically (as noted in *Chapter*

[19] In Gujarat, a similar experiment is considered to be highly successful (the concerned NGO was SEWA), although the replicability of the financing pattern is an issue.

2), the payoffs to a concerted development effort targeted to these groups/areas are likely to be large, since the initial push would also have a subsequent positive snowballing impact. If resource limitations force a choice between particular groups of citizens (primarily scheduled tribes) and identified geographical areas (primarily the districts along the southern and eastern borders of the state), our preference would be for the latter, simply because the impact will in that case not get diffused or lose its strength. There are already tools available for such an effort – the tribal area sub-plan being the most suitable. At present, it represents the putting together of plans and programmes of various departments determined almost independently of each other. If this can be transformed into a fully integrated plan incorporating all relevant services — and here the distinction between human development and infrastructure development needs to be jettisoned in view of the fact that if creation of physical infrastructure like rural roads can often have the strongest impact on poverty, then focusing such plan on selected districts can pay rich dividends. Simultaneously, the external shocks like centrally sponsored schemes, schemes supported by bilateral/multilateral agencies would be chipping away at different aspects of the problems in other areas of the state as well. Such a strategy should quickly reduce the tasks to a more manageable scale.

In terms of specific sectoral policies, the reforms in the education sector have already shown positive results. We have no doubt that the infrastructure shortfalls will be relatively quickly attended to and eliminated; the more difficult, but equally important issue to be tackled is the quality of education. Decentralisation is conceptually an effective way of ensuring appropriate monitoring, which is an important element of quality improvement. But the weakest link in the system appears to be teachers' training, an area where efforts have to continue to improve matters, particularly in the context of multi-grade teaching. Perhaps private contributions in this area in terms of quality trainers for teachers can be engaged. Similarly, some NGOs can be zeroed in to design TLM that would be context-sensitive and more interesting for the children. To a lesser extent, filling in the posts of required teachers, particularly for interior and inaccessible habitations is also a problem. In such places, a similar problem is likely to be faced for provision of health facilities as well. The solution lies partly in making them accessible through construction of rural roads. Given the relatively modest requirement of qualifications, the extant decentralisation of teacher appointments should largely solve this problem. If not –- and this can probably happen only when an area simply does not have available persons with even the modest qualifications required, an interim solution may lie in identifying such areas and providing financial incentives for those outsiders who are willing to serve in these areas. Ensuring effective implementation of mid-day meal scheme with a realistic assessment of the costs and suitable assistance to local bodies entrusted with this responsibility should also help in reducing the number of out-of-school children significantly. In the implementation of SSA, specific problems have been noted earlier that need to be attended to. These include fuller participation of local institutions in planning, implementation, and monitoring

of the programme. Also, utilisation of the available funds for this purpose can probably be improved by ensuring timely flow of funds and proper monitoring to ensure actual utilisation instead of parking funds in bank accounts.

The state's performance in implementing poverty alleviation programmes has also been reasonably good. An important one among these was DPIP, which was designed to be more participatory than the others. Experience with the programme so far suggests that while some aspects of this programme are indeed improvements over the top-down approach, the poorest are unable to benefit from it because of their inability to put up even the smallest share of funds that they are required to. Also, the non-realisation of expected infrastructure improvements have adversely affected the success rate. One possibility emanating from this experience is to reorient the programme towards a community rather than a group of individuals, with contributions according to ability, as decided by the community itself subject to a minimum prescribed. Benefits can be oriented more towards the poor through a process of vetting. In effect, the redesigned programme would be more like the *Janmabhoomi* programme of Andhra Pradesh for creating community assets, with the difference that the programme could create assets or generate income earning activities, for the community or for a specific group. Further, some fine tuning of the definition of a day's work may be needed in a large state like Madhya Pradesh with varied geography. For example, digging a trench of a given size may require varying amounts of effort in different parts of the state, and this usually works against the desperately poor. Also, other programmes like the public distribution system that helps in softening the impact of poverty need to be strengthened. We have earlier discussed the well-functioning system in Jhabua, a tribal and poor district within the state itself. If this can be replicated in other parts of the state, particularly the poorer areas, it can help in combating the problem of poverty. Finally, given the special concerns about the tribals and their traditional dependence on forests, their alienation from the forests needs to be stopped and reversed. Alternative paradigms have been suggested that are based on community ownership and maintenance. These can perhaps be examined for suitability and possible implementations.

The area requiring urgent step up in public intervention is health care, as also related areas as water supply, sewerage and sanitation, and nutrition. While there are large public expenditure requirements for infrastructure in these sectors, the personnel problem with respect to doctors is not an easy one to tackle, given that the skill requirements are much larger than, say, for primary education. There are three possible solutions to this problem, a combination of which may be required: (i) lowering the skill requirement, i.e., building a primary health care delivery system around a cadre of medical personnel less qualified than an MBBS doctor but well-trained to handle ailments more common in rural areas and family welfare – these could be women health workers as proposed under NHRM or special short-term medical diploma holders; (ii) making rural service compulsory for government doctors to be eligible for promotion (such

requirements are applicable in commercial banks, for example) and/or for admission into medical post-graduate courses (as in Tamil Nadu); and (iii) identifying 'difficult' areas and providing financial incentives in the form of extra allowances to doctors posted there (as in Orissa). There are also some possible technical improvements that can be made. The communications aspect, especially for village health workers, can be easily improved by providing them cellular phones, and formally attaching them with specified doctors (possibly less easily available) through this route for emergency advice. The medicine distribution system has been centralised, but it will function well only when there is a system of fast transfer of indents from health centres and response in terms of supply of the required medicines. This can be speeded up through an IT-based system. The IT-based system can also be used to explore the possibilities of telemedicine, and this is another area where PPP can contribute significantly. In water supply, the state can consider raising resources through user fees designed to cover at least the variable cost in urban areas. If this requires installing water metre, then even a loan for this purpose would be worthwhile, since metering not only raises revenues, it discourages wastage and thereby cuts costs. Sanitation also holds scope for PPP, given the available expertise in the private sector (e.g., *Sulabh Shauchalaya*). Sewerage, however, has to be a government responsibility either at the state level or the local. At least in urban areas, if needed, it should be possible to raise additional revenues for this purpose through a temporary special cess or surcharge on property tax in the areas where such work is actually taken up. It has been observed in other instances that such temporary tax measures are not resented provided the taxpayers can relate it to some actual improvement work.

Decentralisation as a strategy for improving delivery of public services is widely accepted to be effective. In a state like Madhya Pradesh where it does not occur in natural course (demand from the grassroots level), the state government has to carefully nurture it and ensure that the process is not hijacked or defeated by vested interests. While the empowerment of local agencies has taken place to a substantial extent in the state, it is by no means complete, as discussed earlier. The critical steps to ensure that local bodies, particularly rural ones, become more effective in service delivery, have been well-summarised in a recent report of the Expert Group appointed by the Ministry of *Panchayati Raj*, Government of India (2006):

- Ensuring that clearly demarcated roles are assigned to *Panchayats*, through activity mapping;
- confining centrally sponsored and state schemes to a small number of important programmes to achieve declared national and state goals;
- undertaking a well structured process of fiscal devolution that matches the fund availability at each level of *Panchayat* with the functions assigned to it;
- providing capacity to the *Panchayats*, in the widest sense of the term to perform their responsibilities effectively;

- ensuring benchmarking of services so that *Panchayats* can be clearly judged in terms of outcomes;
- putting in place systems of accountability so that citizens, the ultimate recipients of services from *Panchayats*, are enabled to hold them to account for any inadequacies in service delivery; and
- spreading public spiritedness on the part of all concerned.

In conclusion, it should be reiterated that the state has achieved much in recent years, but the momentum needs to be maintained in the coming years for the vicious circle of poverty and low human development to be broken. Financing necessary interventions may be a problem, particularly in the initial years, but sustained high level of tax performance on the part of the state, buoyant central transfers both general-purpose and specific-purpose, and some buy-in of the private sector can help to mitigate it. The strategy of decentralisation needs to be persisted with, ensuring adequate finances for them, to improve service delivery, and to tailor such services to local needs.

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