
**MADHYA PRADESH
HUMAN DEVELOPMENT REPORT
2007**

Infrastructure for Human Development

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Foreword

We are living in times of unprecedented change. Forces of economic reforms promise to change the face of our nation. These forces also present unprecedented opportunities, which can significantly raise the level of living of our people within our lifetime and ensure that all our people can look forward to leading useful, healthy, and productive lives. For a state, such as Madhya Pradesh, the task at hand today is to seize these opportunities, and ensure that the poor have equal access to them in order to realize the latent promises therein. Strong political commitment and focused action are needed to ensure that the poor and less privileged are empowered to derive benefits from the reforms.

In this context, we see human development as a priority that must be vigorously pursued. Human development is recognized both as an end and as a means of progress. On the one hand, it meets the present needs of human beings, while on the other, it enables the society to achieve higher levels of growth in the future. The idea of human development is particularly relevant for Madhya Pradesh, which has historically been seen as lagging behind other better-endowed states in terms of social indicators. For the people of the state, these low social indicators translate into such things as a lack of opportunities to be educated, lack of access to quality health care, and low levels of living. It, therefore, makes good sense to prioritize and focus attention on human development in the state, which is what our Human Development Reports have been seeking to achieve.

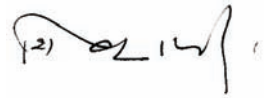
Madhya Pradesh has shown consistent improvement in terms of human development with the human development index going up from 0.245 in 1981 to 0.394 in 2001. The latest figures are not available, however, our efforts in the social and economic sectors since 2001 have increased significantly. We have concentrated more on improving the quality of education and have laid special emphasis on creating enabling environment for girls. We have initiated programmes that directly tackle the issues of high infant and maternal mortality and high out-of-pocket expenditure on health care. To mitigate the problems of poverty and low per capita income, the state has increased the investments on infrastructure and poverty alleviation programmes significantly. Organization of rural women into self-help groups is taking place on a large scale so that the strength of community can be used as a resource for development. I am confident that these developments are bound to reflect in future human development assessments and Madhya Pradesh will surge ahead of many states in the country.

Earlier reports had advocated and set in motion a social sector-oriented state policy, almost to the exclusion of critical drivers of economic infrastructure. This may have been the need of the time. Our assessment is that much more needs to be done in the areas of economic infrastructure. Greater attention needs to be accorded to the key building blocks of infrastructure, in order to ensure that: (i) the opportunities thrown up by the forces of reform are seized; (ii) the pace of progress accelerates; and (iii) the human development potential of the state is fully realized. Building infrastructure—including water, electricity, transport, and communication—supports the processes of growth that are necessary for the eradication of poverty. It also helps the poor to access basic social services that can improve their lives and enhance income earning opportunities.

Realizing the importance of the impact of infrastructure on human development, we have, in our development priorities, focused on *bijli, sadak, pani* (electricity, roads & water resources) as important prerequisites for all-round development of the state, as well as to specifically accelerate and strengthen human

development. The Madhya Pradesh Human Development Report, 2007 touches upon this generally neglected theme of infrastructure and human development, and seeks to provide the analytical thrust to help reinforce these development priorities that are so important for the livelihood of the people of our state.

I trust that the Madhya Pradesh Human Development Report, 2007 will keep our attention focused on the unfinished agenda of human development in Madhya Pradesh, and help guide us to take such action as necessary to effectively tackle this agenda, for the benefit of all the people of our state.



SHIVRAJ SINGH CHOUHAN
Chief Minister
Madhya Pradesh

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Author's Note

Almost twelve years ago, Madhya Pradesh started the process of publishing its Human Development Reports. The first sub national human development report set a milestone in reporting—candid, based on outcomes, owned by the state government, yet written with a mix of independent authors and experts within the government, basing itself on evidence from data, case studies, and field investigation.

Being the first state human development report, the report set down the status of human development in the state and identified areas of concern, both sectoral and spatial. This was also a period when the state had launched a series of policy and programme initiatives in human development in critical areas such as literacy, basic access to schooling, infant mortality, giving support to livelihoods, and so on. The state human development report in some cases pointed to gaps in the state's actions and in programme parameters and in other cases acted as a companion document for the state government in its focus on human development. The human development report, therefore, was as much a way to find the areas where further work was required, as much as it was a statement of intent and purpose for the state.

The second human development report came at a period when the state had been following focused action on quality issues in education, health, and in empowering people's collectives and their panchayats. There was also work going on in promoting livelihoods and livelihood supporting initiatives in several areas such as in forestry and water management. The second report, therefore, carried on with human development reporting and focused on critical issues of livelihoods, while adding a section on action on human development.

The third report came in 2002 when the institutional issues in human development were becoming increasingly important, and the experiences of Madhya Pradesh were being sought elsewhere too. The third report also undertook further innovations in data reporting.

While the decade spanning the three Madhya Pradesh reports saw considerable work and achievements in the quality and software issues in human development services, the hardware issues started becoming more and more important. Basic infrastructure that enables citizens as necessarily as the provisions of other services and opportunities were major gaps in public provisioning.

Human development forcefully advocates for not just building human capabilities, but equally for entitlements of citizens, and the need for an environment that enhances their capabilities, and gives them opportunities to live a life of quality and dignity. As a state, it is essential to ensure that such entitlements are available to all citizens in adequate measure.

Human development calls for the primacy of public action in investing in people, by putting people at the centre of development, building their capabilities as well as enhancing their opportunities. In simple terms, this means that the state has a primary responsibility to focus on and advance investment into education, health, social security, articulating and protecting citizens' rights, and ensuring equality before law. Simultaneously, it also means paying attention to, and investing in, basic amenities, basic infrastructure, and creating an enabling environment and infrastructure that help promote more diversified livelihoods, more efficiency into the economy, and more socially or public owned and developed facilities that can be used by all.

The experience of the last few years saw considerable progress on many fronts in the state, but also brought out in sharp contrast the gaps in infrastructure that became impeders and decelerators in human

development progress. Across the state, basic road connectivity, and basic power availability were turning into development concerns. Along with this, infrastructure related to communications, to urban infrastructure and for credit—three essential forms of infrastructure that are required for growth and providing people equality of opportunities in today’s changing economy were also identified as needing assessment.

This provided the background for the theme of ‘Infrastructure for Human Development’ for the fourth report.

Infrastructure, in the context of human development, is as vast and multidimensional as within the more conventionally understood definition of development. Infrastructure has a much more important role in human development in poorer and backward states than in others where such basic provisions have been largely provided for. The social, economic, and poverty profile of Madhya Pradesh is such that the quality of infrastructure is a bottleneck in more rapid and equitable growth in the state, and thereby growth in human development. The infrastructurally backward zones also correspond to areas where the poorest reside, and human development deficit is the maximum.

The fourth Madhya Pradesh Human Development Report looks at ‘Infrastructure for Human Development’. Previous reports have reflected the concerns in human development and its urgent and imminent issues. The fourth report explores the relationship and issues in some infrastructure areas with human development, discusses the need for public investment in infrastructure and focuses on where public priority is required so that faster progress in human development takes place in Madhya Pradesh.

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The Fourth Madhya Pradesh Human Development Report was prepared as a joint effort of State Government, independent agencies, and experts.

THE PROJECT TEAM

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Finally, the Report owes special thanks to the publishers Oxford University Press, New Delhi, for bringing it out.

Abbreviations

ACZ	Agro-Climatic Zone	DDP	District Domestic Product
ADB	Asian Development Bank	DISCOM	Distribution Company
AIDS	Acquired Immune Deficiency Syndrome	DoT	Department of Telecommunications
ANM	Auxilliary Nurse Midwife	DME	Directory Manufacturing Establishments
ASER	Annual Status of Education Report	DPIP	District Poverty Initiative Project
ASI	Annual Survey of Industries	DRM	Divisional Railway Manager
AUSPI	Association of Unified Service Providers of India	E&I	Economic and Interstate Importance
BIRD	Bankers Institute of Rural Development	ECG	Electrocardiogram
BOO	Build Own Operate	EKVI	e-Krishi Vipanan
BOOT	Build Own Operate Transfer	FM Radio	Frequency Modulation Radio
BOT	Build Operate Transfer	FMCG	Fast Moving Consumer Goods
BPL	Below Poverty Line	GDP	Gross Domestic Product
BRTS	Bus Rapid Transit System	GDR	Gross Domestic Revenue
BSNL	Bharat Sanchar Nigam Limited	GER	Gross Enrollment Ratio
BT	Bitumen Tar	GLIS	Group Life Insurance Scheme
CB	Commercial Bank	GoI	Government of India
CCB	Central Co-operative Bank	GQ	Golden Quadrilateral
CCI	Container Corporation of India	GSM	Global System for Mobile communications
CDMA	Code Division Multiple Access	HDI	Human Development Index
CDR	Credit Deposit Ratio	HH	Household
CE	Chief Engineer	HIV	Human Immunodeficiency Virus
CGAP	Consultative Group to Assist Poor	HLL	Hindustan Lever Limited
CHC	Community Health Centre	HQ	Head Quarter
CIDA	Canadian International Development Agency	HT	High Tension
CMIE	Centre for Monitoring Indian Economy	HUDCO	Housing and Urban Development Corporation Limited
CNG	Compressed Natural Gas	ICD	Inland Container Depot
COAI	Cellular Operators Association of India	ICT	Information and Communication Technology
CPSU	Central Public Sector Undertaking	IFFCO	Indian Farmers Fertilizer Co-operative Limited
CRF	Central Road Fund	IGNOU	Indira Gandhi National Open University
CSO	Central Statistical Organisation	IHSDP	Integrated Housing and Slum Development Programme
CV	Coefficient of Variation		
DCARDB	District Co-operative Agricultural and Rural Development Bank		
DCCB	District Central Co-operative Bank		

ILO	International Labour Organisation	NCAER	National Council of Applied Economic Research
IMMRL	Interactive Multi Media Rich Lessons	NCERT	National Council for Educational Research and Training
IMR	Infant Mortality Rate	NDE	Non-Directory Establishments
IRC	Indian Roads Congress	NFHS	National Family Health Survey
ISRO	Indian Space Research Organization	NFS	Non-Farm Sector
IT	Information Technology	NGO	Non-Governmental Organization
ITC	Indian Tobacco Company	NH	National Highway
ITDG	Intermediate Technology Development Group	NREG	National Rural Employment Guarantee
JNNURM	Jawaharlal Nehru National Urban Renewal Mission	NSDP	Net State Domestic Product
JSA	Jan Shiksha Adhiniyam	NSSO	National Sample Survey Organization
KCC	Kisan Credit Card	NTFP	Non-Timber Forest Produce
KCL	Kilo Calories	OAE	Own Account Enterprises
KCCS	Kisan Credit Card Scheme	OBC	Other Backward Classes
KPC	Kesla Poultry Co-operative	ODR	Other District Road
KV	KiloVolt	OECD	Organization for Economic Co-operation and Development
KVIC	Khadi and Village Industries Commission	OoP	Out of Pocket
KwH	Kilo watt Hour	OPS	Other Priority Sector
LMI	Large and Medium Industries	P&T	Post and Telegraph
LT	Low Tension	PACS	Primary Agriculture Credit Society
MAP_IT	Madhya Pradesh Agency for Promotion of Information Technology	PC	Personal Computer
MAPP	Municipal Action Planning for Poverty Reduction	PDS	Public Distribution System
MD	Managing Director	PHC	Primary Health Centre
MDR	Major District Road	PLP	Potential Link Plans
MFI	Micro Finance Institution	PMGSY	Pradhan Mantri Gram Sadak Yojana
MMR	Maternal Mortality Rate	PMRY	Pradhan Mantri Rozgar Yojana
MoU	Memorandum of Understanding	PO	Post Office
MP	Madhya Pradesh	PPP	Public Private Partnership
MPRDC	Madhya Pradesh Road Development Corporation	PRADAN	Professional Assistance for Development Action
MPRRDA	Madhya Pradesh Rural Road Development Authority	PRI	Panchayat Raj Institutions
MPSEB	Madhya Pradesh State Electricity Board	PTA	Parent Teacher Association
MPUSP	Madhya Pradesh Urban Services for the Poor	PWD	Public Works Department
MPW	Multi Purpose Worker	QE	Quick Estimates
MT	Metric Tonne	R&D	Research and Development
MW	MegaWatt	RBI	Reserve Bank of India
MYT	Multi Year Tariff	RCS	Regular Contract Scheme
NABARD	National Bank for Rural and Agriculture Development	RE	Revised Estimate
NASSCOM	National Association of Software and Service Companies	REC	Rural Electrification Corporation Limited
		REDB	Rural Electricity Distribution Backbone
		GGVY	Rajiv Gandhi Gramin Viduyutikaran Yojana
		RRB	Regional Rural Bank

SAP	Service Area Credit Plan	TV	Television
SC	Scheduled Caste	UA	Urban Agglomeration
SCA	Special Central Assistance	UFW	Unaccounted For Water
SCB	Scheduled Commercial Bank	UIDSSMT	Urban Infrastructure Development Scheme for Small and Medium Towns
SGSY	Swarnajayanti Gram Swarozgar Yojna	ULB	Urban Local Body
SH	State Highway	UN	United Nations
SHC	Sub-Health Centre	UNDP	United Nations Development Programme
SHG	Self-Help Group	UP	Uttar Pradesh
SJSRY	Swarna Jayanti Shahari Rozgar Yojana	USEP	Urban Self-Employment Programme
SLDC	State Load Dispatch Centre	UWEP	Urban Wage Employment Programme
SRS	Sample Registration System	UWSEIMP	Urban Water Supply and Environmental Improvement Project
SSA	Sarva Shiksha Abhiyan	VEI	Village Electrification Infrastructure
ST	Scheduled Tribe	VR	Village Road
SWM	Solid Waste Management	VSAT	Very Small Aperture Terminal
T&D	Transmission and Distribution	WAC	Water for Asian Cities
TCP	Town and Country Planning	WBM	Water Bound Macadam
TERI	The Energy and Resources Institute	WLL	Wireless Local Loop
TEU	Twenty Feet Equivalent Units		
TRAI	Telecom Regulatory Authority of India		

Glossary

<i>Pucca Road</i>	Concrete Road
<i>Kuchcha Road</i>	Non-Concrete Road
<i>Mandi</i>	Wholesale Agriculture Market
<i>Zila Panchayat</i>	Local Democratically Elected Body at District Level
<i>Dhabas</i>	Roadside Eating Place
<i>Gram Panchayat</i>	Local Democratically Elected Body at Village Level
<i>Gawlis</i>	Dairy Owners
<i>Korku</i>	One of the Tribes of MP
<i>Rapta</i>	A small road bridge that allows the water to flow over it during rains
<i>Kirana</i>	Grocery
<i>Dalit Basti</i>	Hamlet of Socially Oppressed Communities
<i>Panchayat Office</i>	Administrative Office of Panchayati Raj Institution
<i>e-Chaupal</i>	Information Centre with a Personal Computer and Internet Connectivity
<i>Sanchalak</i>	Village Based Farmer Managing e-Chaupal
<i>Rajbhogi cities</i>	Royal Cities
<i>Krishi Vigyan Kendra</i>	Farm Science Centre
<i>Jan Shiksha Kendra</i>	Cluster Resource Centre
<i>Gyan Darshan</i>	Exclusive Educational TV Channel of India
<i>Bharat Nirman</i>	Four Year Business Plan for Development of Rural Infrastructure
<i>Gaushala</i>	Shelter for Cows
<i>Swarozgari</i>	Self Employment
<i>Shala Shiksha Kosh</i>	School Education Fund
<i>Gramsabha</i>	Village Assembly

CHAPTER I

Infrastructure and Human Development in Madhya Pradesh

1.1 INTRODUCTION

The positive relationship between infrastructure and economic growth is well-known, and requires little further elaboration. Ironically, however, the links between infrastructure and human development are often less recognized and are not enunciated in terms relevant to policy. After all, the concept of human development was originally advanced to move beyond the relatively restrictive economic analyses based on growth of income alone, and to incorporate both human capabilities and empowerment, which relied much more on social and distributive variables. Nevertheless, it is obvious to anyone that infrastructure contributes directly to conditions of life not only by increasing labour productivity, but also through the provision of a range of amenities that are either necessary or desirable for human existence.

The crucial role played by infrastructure development in creating better conditions of life has been highlighted again and again. Transport and communications infrastructure is important in terms of providing access to basic health services and thereby improving conditions of health and life, particularly of women and girl children. Basic infrastructure such as electrification plays a similar role, apart from changing the quality of life in general. It is now well-known that basic road connectivity to a school, minimum facilities like separate toilets for boys and girls in school buildings are crucial determinants of the enrolment and attendance of girl children, and so on. Of course, the effects of such investments need to be assessed in terms of how the additional infrastructure changes the lives of people in any given area, and what changes would make it more effective and useful. The gender and class dimensions of the linkage effects also need to be examined, not just in terms of the direct

effects, but also in terms of the secondary employment and opportunities created by such infrastructure building, for example, shops and new services that emerge with the construction of a new road.

We briefly examine the interrelationship between infrastructure and human development, and also between infrastructure and poverty reduction, which in itself is perhaps the single most critical human development objective.

1.2 IMPACT OF INFRASTRUCTURE ON HUMAN DEVELOPMENT AND POVERTY REDUCTION

At the core of this report is the idea of the role of infrastructure in fostering inclusive growth and human development. Human development is about expanding choices and inclusive growth is about improving the incomes and lives of all members of society, particularly, the poor. It depends on generating economic growth, sharing its benefits with the poor, and enhancing their access to basic services.

Infrastructure is highly intertwined in our lives. The knowledge that infrastructure, *per se*, is important is widespread. However, measuring the precise



Construction of dam in progress

importance of a particular component of infrastructure is difficult. But as choices need to be made about infrastructure, there is a need to identify the impact on human development, understand how they are channeled, and recognize what they depend on.

Infrastructure provides people with services that they need and want. Access to water, sanitation, electricity, telephones, computers and transport make immeasurable difference in people's lives. The absence of some of the most basic infrastructure services often translates into absence of human development.

Broadly, infrastructure impacts on human development in two ways: first, it supports the processes of growth on which much of poverty reduction depends; and second, it helps the poor access basic services which can improve their lives and income opportunities. At its best, infrastructure can draw poverty reduction, service provision, and growth into a reinforcing virtuous cycle.

Infrastructure also has an important impact on human development and poverty through growth. It is also an intermediate input into production. Without power and water, all but the most basic production would grind to a halt. It raises the productivity of factors of production—by generating the power that allows factories to mechanize, by allowing workers to get to work quicker, or by providing the networks through which information health can pass electronically. Infrastructure connects goods to markets, workers to industry, people to services, and the poor in rural areas to urban growth centres. Infrastructure lowers costs, enlarges markets, and facilitates trade.

Infrastructure has a human development impact on the activities through which people earn their living. It contributes to the health and education that people need to fill jobs, or create them. Some of the channels through which its impact is felt are not very obvious. It may seem intuitive that the ability of people to earn a living is increased when transport, information, power, and water are readily available. But infrastructure has some less obvious impacts, for instance, the impact of transport and electricity on education. The impact of health services may be similarly affected by the ability of the poor to access facilities. A road, or a telephone call, can make an enormous difference.

Research into the impact of infrastructure on poverty has examined the extent to which infrastructure improves access to education and health services (transport, communications, and power infrastructure are likely to play roles here) as well as the impact of improved water and sanitation services on health.

Perhaps, the widest definition of human development focuses on expanding people's choices, enhancing social inclusion, human capabilities and freedom. Such approaches may focus on the impact that transport and communications infrastructure have in improving people's ability to engage in collective activities, access wider sources of information and opportunity, and find time for both economic and non-economic purposes. (This is particularly true of women who bear the principal responsibility of provision of water and energy for the household).

1.2.1 Impact of Infrastructure— Evidence and Experience

Evidence and analysis shed some light on the magnitude of the impact of infrastructure on human development, defined in these ways. In a large exercise, 102 cross country studies were assessed by Fuente and Estache in 2004. Table 1.1 shows the distribution of the study findings. The study found that in a majority of these country studies, the impact of infrastructure on both growth and poverty reduction was positive, while in the case of 12 developing country studies this linkage was a hundred per cent. The role of investment in infrastructure in developing countries shows that these countries have underinvested in infrastructure, and further that any investment here has the most significant impact on pro poor growth and direct impact on reducing poverty, apart from providing the poor with critical services.

Some studies show that access to water and sanitation explains a substantial portion of the difference in infant and child mortality rates experienced by the rich and the poor, that better transportation increases school attendance, and that electricity access allows more study time (see Leipziger et al. 2003). Another study (Calderon and Serven 2004) found that quantity and quality of infrastructure—particularly of water and sanitation—have a strong positive impact on income equality, as well as on economic growth. And, a further study showed that enhanced access to roads

Table 1.1: Distribution of Findings on Impact of Infrastructure Investment on Productivity and Growth

Area studied	No. of studies	Percentage showing a positive effect	Percentage showing no significant effect	Percentage showing a negative effect
Multiple Countries	30	40	50	10
United States	41	41	54	5
Spain	19	74	26	0
Developing Countries	12	100	0	0
Total/Average	102	53	42	5

Source: de la Fuente and Estache (2004).

and sanitation has been an important determinant in reducing disparities between the poorer and the richer regions of Argentina and Brazil (Estache and Fay 1995). Studies of rural roads have shown that they raise the productivity and value of land for poor farmers (see, for example, Jacoby 2000).

Rural roads have been found to have a substantial positive impact on overall poverty reduction in a number of other studies, but there are some interesting nuances. One study found that rural roads were the form of public expenditure that reduced poverty most effectively in India (see Box 1.1). For China,

Box 1.1: Investments in Infrastructure and Impact on Poverty in India

A detailed study was carried out by Fan, Hazell, and Thorat (1999) to understand the role of different types of public investments and their impact on poverty. The study looked at data from different states in India. The primary purpose of this research was to investigate the causes of the decline in rural poverty in India and, in particular, to determine the specific role that government investments have played in the same. The research quantified the effectiveness of different types of government expenditures in contributing to poverty alleviation, and looked at evidence from the 1960s.

The direct effects arise in the form of benefits the poor receive from employment programmes directly targeted to the rural poor. The indirect effects arise when government investment in rural infrastructure, agricultural research, health and education of rural people stimulate agricultural and non-agricultural growth, leading to greater employment and income-earning opportunities for the poor and to cheaper food. Understanding the different effects provides useful policy insights for helping to improve the effectiveness of government expenditure in reducing poverty.

The results from the model show that government spending on productivity enhancing investments, such as on agricultural research and development, irrigation, rural infrastructure (including roads and electricity), and rural development targeted directly to the rural poor, have all contributed to reductions in rural poverty, and most have also contributed to growth in agricultural productivity. However, differences in their poverty and productivity effects are large.

The model has also been used to estimate the marginal returns to agricultural productivity growth and poverty reduction obtainable from additional governmental expenditure on different technology, infrastructure, and social investments. Additional government expenditure on roads is found to have the largest impact on productivity growth. It is a dominant 'win-win' strategy. Additional government spending on agricultural research and extension has the largest impact on agricultural productivity growth, and it also leads to large benefits for the rural poor. It is another 'win-win' strategy. Additional government spending on education has the third largest impact on rural poverty reduction, largely as a result of the increases in non-farm employment and rural wages that it induces.

Source: Fan, Hazell, and Thorat (1999).

the same study found that they were the most effective form of public expenditure on infrastructure, but that expenditure on education and agricultural research and development was a more effective means of reducing poverty. A study of rural roads in the Philippines (Balisacan and Pernia 2002) found that access to roads is important for poverty reduction, and that the impact is increased if the roads are coupled with education expenditure. By contrast, this study found that the poorest households lacked the minimal income and complementary facilities necessary to benefit from access to electricity.

One study into rural road investments suggests that the establishment of a new road in a village raised the per capita income of households by 30 per cent between 1993 and 1998, after controlling for other factors, such as household size and education (Deolalikar 2001). Moreover, the spatial location of roads increased the household probability of moving out of poverty by 68 per cent over the same period of time. It also showed that rural roads expanded school enrolment of children at all levels, and improved the

utilization of public health services. And the spatial and economic benefits of rural roads were significantly larger in poorer provinces than in the richer ones.

A comprehensive study was undertaken on whether infrastructure works for the poor or not. It was conducted through four country studies in Bangladesh, Senegal, Thailand, and Zambia. The study showed clear evidence of a positive relationship. The many ways in which small-scale infrastructure defined in this study as infrastructure that is local, small in scale directly affects lives of people in villages and poor habitations, and has a direct and specific service to provide—a local road connectivity, a local school, a local water management programme etc.—have been outlined in this study (see Box 1.2). With roughly similar conditions of poverty, and backwardness in these countries and the situation in Madhya Pradesh, the findings establish a firm and powerful link between small-scale infrastructure and the impact on reduction in poverty and improvement in the lives of the poor and services needed by them.

Box 1.2: Making Infrastructure Work for the Poor—Summary Findings

The basic idea of the project is to assess, in the context of small-scale, community-level infrastructure, the dynamics of the infrastructure–poverty reduction–governance nexus.

The Case for small-scale, community-based projects

In the context of overall infrastructure–poverty reduction–governance nexus, small-scale, community-based infrastructure assumes a special place. The small-scale, community-based projects may present more insights with regard to poverty reduction. For example:

1. Because of its nature, location, design, and implementation process, small-scale infrastructure may bring about a more direct impact on the lives of the poor people. For example, small irrigation projects contribute immediately to agriculture productivity, bringing tangible benefits to local farmers. A rural feeder road improves the mobility of local communities and reduces transportation costs which have an impact on economic activities.
2. Local communities take part directly in decision making regarding the nature of the infrastructure, location of facilities and design. And, local communities can take part in the implementation process and also be involved in the operation and maintenance of facilities.
3. It also helps to reinforce social capital and consolidate community organizations.

Such infrastructure efforts are complementary to large-scale infrastructure initiatives in many ways. First, they fill in the gaps left by large-scale projects. Second, improvement of access to a high quality main road and transportation system enables improvement of agriculture technology, a stable supply of input goods and improvement in productivity. Third, some of the governance lessons from such infrastructure projects may be replicated and scaled up.

Key Findings of Country Studies

1. *Small-scale infrastructure contributes significantly towards reduction of income poverty and hunger:* Most of the projects included in the country studies have indicated that small-scale infrastructure contributes significantly to reducing income poverty and hunger. This finding was more or less the rule across the four country studies.

2. *Mortality rates are reduced with the expansion of small-scale infrastructure services in health and water areas:* Infrastructure initiatives that improve a community's access to a primary health care centre, with its medical equipment, skilled nurses, and health personnel, who work actively to promote healthy practices and impart health education to community residents, can contribute to reducing mortality rates, particularly, child and maternal mortality rates.
3. *Small-scale infrastructure has a positive impact on education:* The country studies have argued that small-scale infrastructure contributed to educational attainment through various transmission mechanisms. First, better roads led to lower transportation cost and better security: as a result, school attendance improved and drop-out rates fell, particularly, for girls. Second, improvement of school facilities also contributed positively in this area. Third, improved energy facilities, by providing electricity in households and bringing televisions and computers to households, helped students to improve their skills. Finally, there are a series of indirect impacts—enhanced income from other infrastructural development, better awareness of parents, and so on.
4. *The phenomenon of HIV/AIDS can also be influenced by small-scale infrastructure.*
5. *Small-scale infrastructure can move forward gender equality and women's empowerment:* Most projects identified two major trends with regard to gender equality and women empowerment. The first is that interventions can help remove gender inequality in capabilities and opportunities, and the second is that in order to achieve the first goal, the design and location of small-scale infrastructure should be such that women with all their socio-cultural constraints, can derive full benefits from them.
6. *Small-scale infrastructure can enhance environmental sustainability.*
7. *Small-scale infrastructure, if properly oriented, contributes to community building and social capital.*
8. *Small-scale infrastructure in public works programmes, income-generating activities, and irrigation projects contributes directly to income and employment creation, and reduction of poverty and hunger:* It also helps in terms of jobs, income, and food security.
9. *The involvement of the community in small-scale infrastructure* is a must for specific aspects of such projects; while for other aspects, the nature of involvement may vary, depending on the nature of the project.
10. *Institutional and financial sustainability of such projects are essential* for the expected development impacts to be seen.
11. *Capacity development is a crucial element* for the sustainability of small-scale infrastructure.
12. *Proper linkages of local initiatives with national ones* bring good results to the local ones.

Source: Jahan and McCleery (2005).

1.3 HUMAN DEVELOPMENT AND INFRASTRUCTURE IN MADHYA PRADESH

Investment in infrastructure, as all other investments, reflects social choices, in terms of both public policy and private investment, that can be influenced by relative power positions in society. For example, even in expanding a road network, the need for which is universally acknowledged in Madhya Pradesh (MP), there may be excessive concentration on certain types of infrastructure creation. Obviously, the importance of a basic transport network, particularly in, what are known as, relatively less developed or inaccessible areas, cannot be overemphasized in terms of the effects on health and life conditions of ordinary people. However, this means not just that major highways and transport systems need to be developed, but also that

there should be a lot of emphasis on minor transport networks, for example, paved roads extending to every village. The emphasis on major roads, combined with the effort to ensure private sector participation, sometimes presents the possibility that investment in this area may remain largely confined to major roads that effectively become toll highways with restricted access.

It is also important to bear in mind the indirect social costs of infrastructure projects, for example, through possible displacement of local communities. This is now well-known in the case of large irrigation projects, but it also matters where displacement takes place for road construction or other land development for non-agricultural purposes. Infrastructure development policies need to be framed in such a manner as

to minimize such adverse effects, ensure adequate compensation and rehabilitation, and pay particular attention to the special needs of vulnerable groups such as women and socially marginalized sections who may be especially adversely affected.

It can be argued, therefore, that a focus on improving human development implies somewhat different priorities in terms of infrastructure provision than an approach based entirely on maximizing economic growth. This would affect not only which sub-sectors of infrastructure get higher resource allocation, but also the geographical spread, the extent of public versus private provision, the pricing policy for users, and so on. Infrastructure investment directed at maximizing economic growth rather than ensuring better human development for all may be less concerned with regional imbalances, exclusion of citizens from access, affordability of services and utility rates for common people, and more focused on efficient provision in areas that would have the greatest growth impact. This has indeed been the dominant pattern of infrastructure provision, especially in the last decade, where there has been much greater reliance on private provision in a wide range of infrastructure categories.

It is, in this context that the overall infrastructure conditions in MP need to be viewed. In a political context in which elections are fought and won or lost around issues of *bijli, sadak, pani*,¹ the significance of infrastructure is as much a political issue as any other, perhaps even more so. Signals from the citizens have been very clear to the state administrations: there is little compromise that people will accept on basic amenities and basic infrastructure. It is true that investment in infrastructure in MP has been low. However, recent political upheavals and continual social concerns have led to a significant increase in investments. But, the fact remains that the public provision of infrastructure facilities is increasingly expensive, uncertain and inequitable. The poor state of infrastructure in the state continues to generate poor human development outcomes. This is why an examination of the basic state of infrastructure in the state is of such significance.

1.4 GROWTH PATTERNS IN MADHYA PRADESH

Obviously, basic tendencies in economic growth play an important role in determining possibilities of the expansion of human development options. This is not only because of the role of income in overall

Box 1.3: Where does the Private Sector Invest in Infrastructure?

The experience in MP has shown that the private sector participation/investments in infrastructure are markedly biased in favour of economically developed regions and urban zones.

A simple look at data on telephone density shows this adequately. In December 2004, the tele-density of the public service provider, Bharat Sanchar Nigam Ltd. (BSNL), was 2.43, 0.65, and 7.33 in all of the state, rural MP, and urban MP, respectively. When we take all service providers together (public plus private), the tele-density increases to 4.83 for all of the state, and expands to 16.09 for urban areas, but the rural tele-density remains 0.65, showing negligible rural telephones provided by the private service providers.

Similarly, if we take a look at banking, while there were 4735 bank branches in MP (September 2006) (Reserve Bank of India, RBI). The nationalized banks and Regional Rural Banks (RRBs) had 3415 branches, of which 1767 were rural branches (52 per cent), the other Scheduled Commercial Banks (SCBs) (private ownership) had 86 branches with no rural bank branch.

In the case of new state highways/redevelopment of state highways, nearly 2657 km of roads are being constructed under the Bond-Build-Operate-Transfer (Bond-BOT) scheme with private players. However, the entire effort on rural roads lies solely with the national and state government.

The example of roads as well as telecom shows that the role of the state and its agencies will be most critical in building infrastructure for rural and backward zones. The role of the private sector will be seen in urban or prosperous areas, where they like to partner with the state, but their ability, and perhaps even intention is not there to invest in any manner into areas where there is no immediate and extraordinary profit.

The state must continue to remain the only player in critical infrastructure areas—rural roads, rural telephony, rural electrification, irrigation, small credit for consumption and survival, and basic amenities.

¹ Electricity, roads and water.

human development, but because higher aggregate incomes typically allow more fiscal resources to be generated as well, which allow for more per capita public spending in ways that can generate better health, education, and capability outcomes. Unfortunately, recent growth patterns in MP have not been particularly promising in that respect. In fact, Madhya Pradesh has not only shown a rather dismal annual compound rate of growth of income of only 4.5 per cent between 1993–94 and 2003–04 (at constant 1993–94 prices) as against the national average of 6.2 per cent, but also its compounded annual growth rate of per capita income for the same period stands at 2.3 per cent as against the national figure of 4.4 per cent. The state also has the third highest incidence of poverty as well as the lowest rate of poverty reduction among the major states of India.

The fact that the performance of MP has been relatively worse than that of the rest of India in terms of per capita income is indicated by Figure 1.1, which shows a constant increase in the gap between MP and the rest of India over the 1980s and the 1990s, and this trend appears to be continuing even in the current decade.

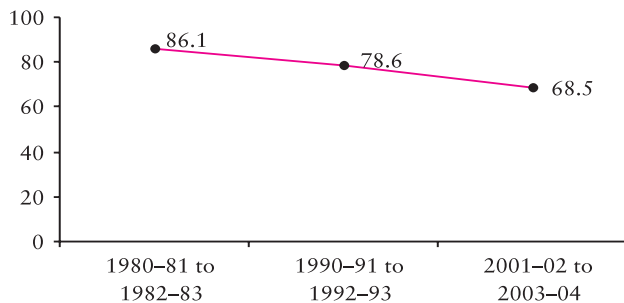


Figure 1.1: Per Capita SDP in MP as a Percentage of the Indian Average

Figure 1.2 shows that while both aggregate and per capita income (in terms of Net State Domestic Product, NSDP) grew between 1993–94 and 1998–99, thereafter they have been quite volatile around a stagnant trend. In fact, per capita income fell sharply between 1999–2000 and 2002–03, and in the later year it was even lower than it was six years earlier, only to partially recover from 2003–04 onwards. This reflected poor investment and infrastructure conditions, as well as caused them, in a vicious circular process.

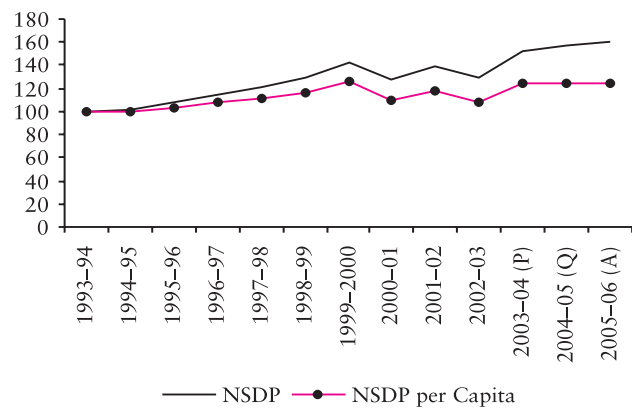


Figure 1.2: Index Number of Real NSDP and NSDP Per Capita

Agriculture sector was the worst affected, showing a deceleration in growth that was even sharper than the average for All India. It is now much more commonly accepted that basic infrastructure in rural areas plays an important role in the expansion of agriculture, and in MP, infrastructure conditions have not been able to give a push to the rapid expansion of agricultural output and incomes. Agriculture is critical for any growth and expansion of welfare and well-being in MP. Agriculture accounts for 36 per cent of the state’s income, and employs over 73 per cent of the workforce, whereas nationally, it contributes 22 per cent of national income and employs 61 per cent of the workforce.

The critical importance of irrigation is too obvious to require further elaboration. In 2000–01, the net irrigated area in MP was only 24 per cent compared to national average of 54.7 per cent, but this has gradually increased to 30 per cent by 2004–05. Agriculture intensity was 124 for MP compared to 134 for All India, and irrigation intensity was 131 compared to 167 nationally (NABARD 2006).

Other infrastructure conditions also matter greatly. Transport conditions determine the access of the farmers to both input and product markets; they allow for the emergence of non-agricultural activities that positively affect agriculture in turn. Power has become increasingly important as more and more farmers become dependent on electricity for pumping water, and both the availability and the price of power affect the viability of cultivation.

The availability of the infrastructure for the provision of organized credit is critical in allowing farmers to purchase the necessary inputs for more productive cultivation. The Credit Deposit Ratio (CDR) in MP remained well below both the national average and the desired CDR of 60 per cent. The CDR in MP in 2004 was nearly 10 percentage points below the CDR of All India (in 2004, CDR of MP was 47.7 and national average was 58.7). However, this has been gradually improving over the last two years, and as of March 2006, the CDR in MP has gone up to 64 per cent, slightly higher than the national CDR.

Of course, agriculture was adversely affected by other processes in the 1990s: the reduced role of price support for crops, the deregulation of inputs, greater exposure to volatile international prices of both inputs and output, and so on. But the paucity of much-needed public investment in crucial areas and the poor quality of rural infrastructure clearly played a major role in the deteriorating performance of agriculture. As evident in Figure 1.3, the share of agriculture in the NSDP fell by nearly one-third, from 41 per cent to 31 per cent over this period.

Further, as Table 1.2 indicates, agriculture continued to be the dominant activity for most of the labour force, with hardly any change in the proportion

of workers employed in cultivation even as the share of agriculture in Gross Domestic Product (GDP) fell. This points to a fall in the per capita agricultural income share. These ratios indicate a greater degree of dualism in MP than in India as a whole, and suggest that the absence of productive employment generation and the enforced stagnation of workers in low productivity agriculture are critical problems in the state.

1.4.1 Patterns of Public Expenditure

It is well-known that in economies such as those of India, and in states such as MP in particular, public investment is the principal source of growth and development both through the creation of employment and infrastructure and as a stimulant of private investment. Capital expenditure by the state government reflects the extent to which such a qualitative and quantitative role was actually played. Since 1990, a declining trend in total capital expenditure of the state government as a percentage of state's income is observed. Aside from a year of 'abnormally' high expenditure in 1997–98 (because of a large outlay for a particular energy project), the late 1990s and the subsequent period till 2000–01 showed continuous declines in aggregate capital spending, to an average of less than 2 per cent of NSDP. However,

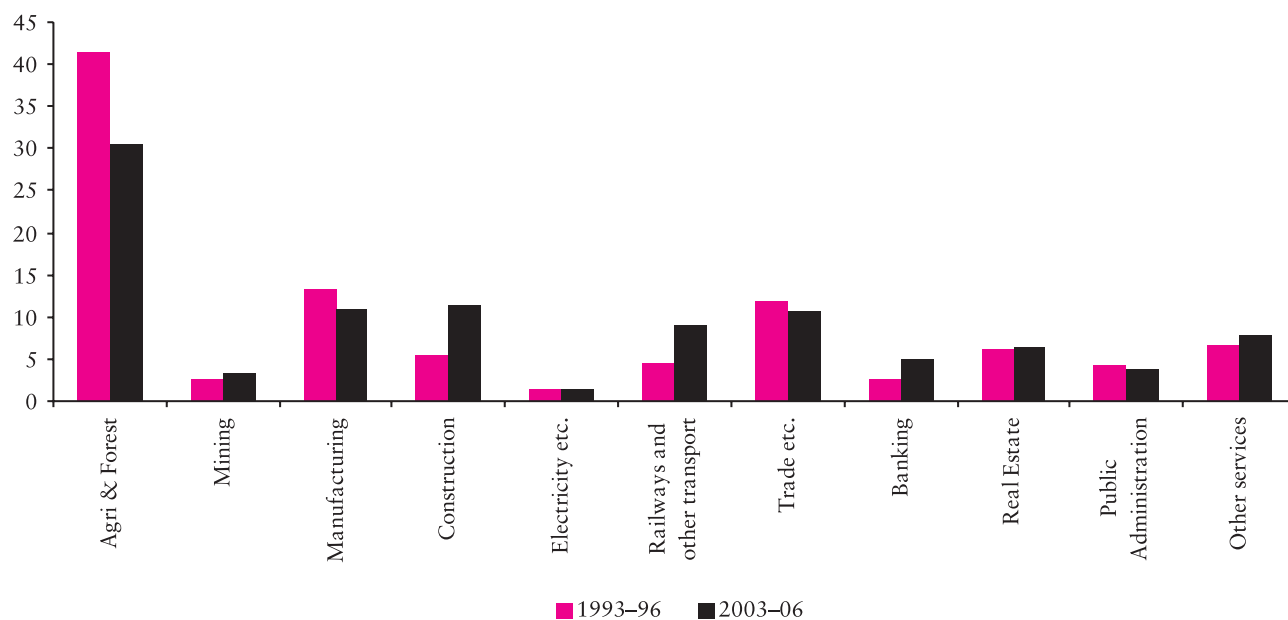


Figure 1.3: Average Share of NSDP

Table 1.2: Share of Agriculture in Income and Total Employment

	Madhya Pradesh		India	
	Share of SDP	Share of workforce	Share of SDP	Share of workforce
1980–81	43.6	76.2	35.7	66.5
1990–91	38.2	75.3	32.1	67.0
2000–01	25.8	72.9	24.3	61.4

Source: Shankar 2005, p. 5015; Ghosh 2005, p. 5503.

the state has experienced a turnaround since 2001–02, and the trend in capital expenditure as a proportion of NSDP has been showing an increasing trend, as is the trend in economic services that constitute the bulk of such expenditure (Figure 1.4).

Within economic services, the expenditure on agriculture actually fell in absolute terms till the mid-1990s, while irrigation stagnated. Expenditure on rural development, in constant price terms, has been fluctuating, with a rise recently in the revised estimates for 2005–06 (Table 1.3). Apart from energy,

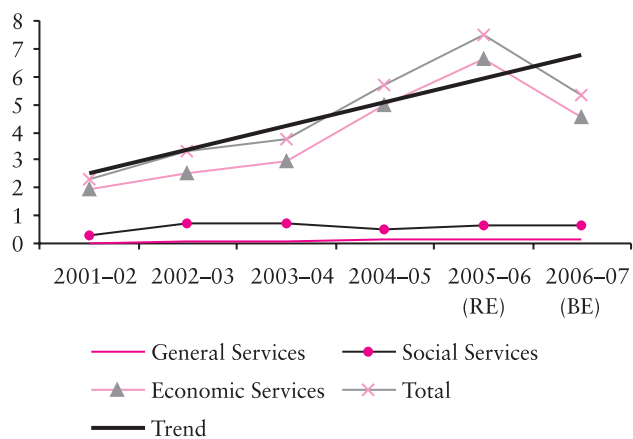


Figure 1.4: Capital Expenditure as a Percentage of NSDP

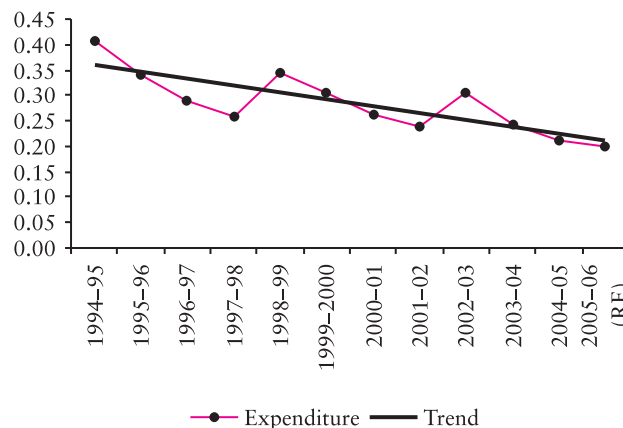


Figure 1.5: Capital Expenditure on Social Services as a Percentage of NSDP

Table 1.3: State Government Expenditure on Economic Services (at constant 1993–94 prices)

(in Rs crore)

Year	Agriculture and Allied	Rural Development	Irrigation and Flood Control	Energy	Industry and Mining	Transport	General Economic Services	Total Expenditure
1993–94	733	668	588	807	86	345	31	8325
1994–95	699	562	586	311	82	363	18	8010
1997–98	864	669	538	949	105	360	23	10367
2000–01	840	648	550	433	62	274	34	10746
2001–02	714	485	598	1395	38	305	25	10000
2002–03	773	525	737	815	47	331	28	10448
2003–04	712	494	803	2543	44	355	26	12734
2004–05	763	590	1170	1881	51	402	23	13455
2005–06 (RE)	820	904	1134	2853	77	640	34	15936

Source: Various budget documents of the Department of Finance, Government of MP.

every other major head under economic services has been either stagnating or rising marginally, except in the last couple of years.

Roughly, half the social sector revenue expenditure has been on education, which peaked in the late 1990s and then declined, and except for social welfare and nutrition, which has quadrupled its share in social sector revenue expenditure and as a percentage of NSDP, this was true of all heads. In the post-bifurcation period, spending on social sector on the revenue account has not kept pace with the slow growing NSDP² on all heads except the category 'Welfare of Scheduled Castes (SCs) and Scheduled Tribes (STs)', which accounts for a very small share in any case.

The pattern of public expenditure in rural terms indicates a generalized stagnation on both capital and revenue accounts. This obviously had direct and adverse effects on economic activity, but was also crucial in affecting the conditions of infrastructure, by reducing the possibilities for its creation through capital spending, or its maintenance through greater revenue spending.

1.4.2 Irrigation Sources

As is true elsewhere in the country, agriculture in MP has increasingly relied upon groundwater irrigation (especially in the form of tube wells which are powered by electricity or diesel). This, in turn, creates real problems of sustainability, causing over-use, declining water tables, and inequitable access to what is essentially a social resource. Despite the introduction of large major irrigation schemes, which have also involved substantial displacement of people, both the spread and the efficiency of surface irrigation, have declined in relative terms. The neglect of traditional tank irrigation sources as well as inadequate maintenance of existing canal sources and feeder channels has meant that the new schemes have to make up for losses of access to surface water that was previously available and, therefore, have had less net positive effects. Clearly, a focused and participatory water policy is called for, one that would emphasize the conjoint use of surface and groundwater, and allows more equitable access and well as more sustainable forms of water use, especially in cultivation.

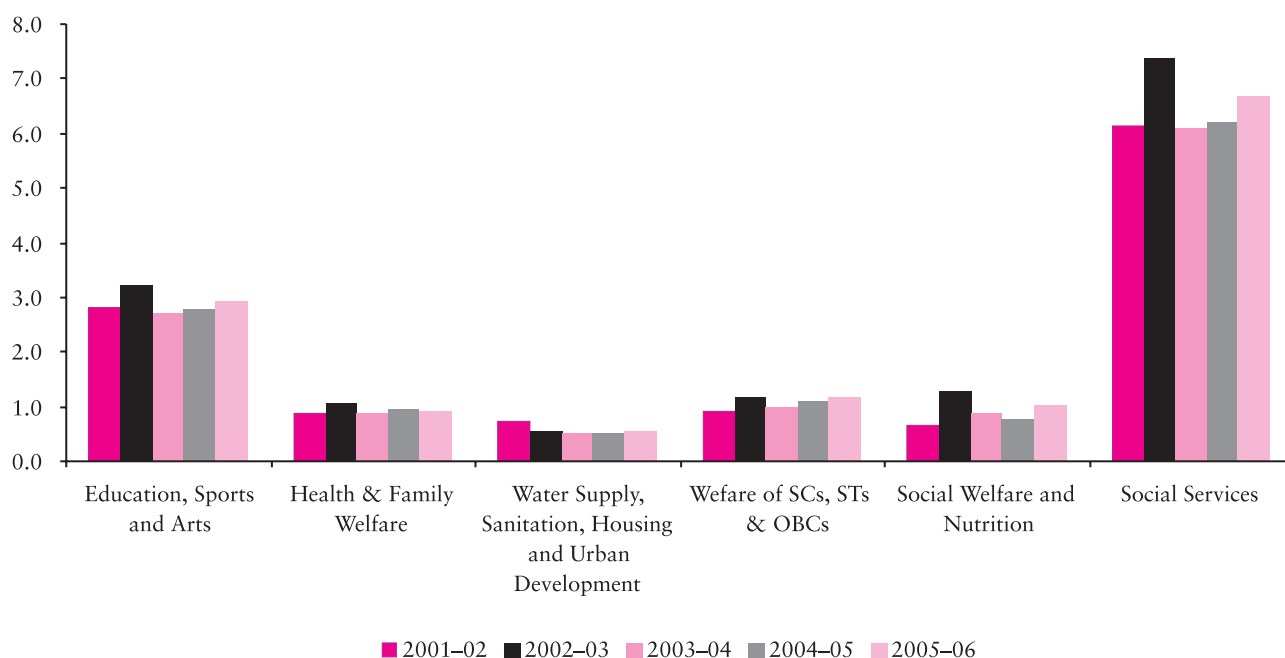


Figure 1.6: Revenue Expenditure on Social Sectors as a Percentage of NSDP

² The state of finances of the Government of MP post-bifurcation went through a period of financial crisis.

Table 1.4: Net Irrigated Area by Source of Irrigation

	Percentage of Net Irrigated Area			Share in Incremental Irrigated Area
	1980–81	1990–91	2002–03	1980–2003
Canals	44	35	29	18
Tanks	6	4	2	0
Total surface water	50	39	31	18
Wells	42	42	35	31
Tube wells	8	19	34	52
Total groundwater	50	61	69	83

Source: Shankar 2005, p. 5015.

1.4.3 Road Connectivity

The relatively inadequate state of road infrastructure has been a major issue in MP for quite some time now, and has also become an important political issue in recent times. The vast size and difficult terrain of the state have meant that road connectivity is relatively hard to achieve, and this has been compounded by the colonial legacy of neglect of large tracts of the hinterland of the state, especially tribal areas.

As a consequence, road connectivity in MP has always been amongst the lowest in India. The road length per 100 sq. km of area in MP was 52 km as compared to the national average of 75 km.

Table 1.5: Distribution of Roads across Major States

States	Road Length per lakh Population	Road Length per 100 sq. km	Population Density
Kerala	474	388	819
Karnataka	289	80	276
Maharashtra	276	87	315
Gujarat	272	70	258
MP	267	52	196
Rajasthan	234	39	165
Chhattisgarh	170	26	154
UP	150	103	690
West Bengal	115	104	903
Bihar	92	81	881
INDIA	239	75	313

Source: Department of Road Transport and Highways, Ministry of Shipping, Road Transport and Highways, Gol (2002) and Census of India, 2001.

The bulk of the state's roads are its village roads, constituting 68 per cent of the total roads in MP. In terms of the percentage of habitations connected by roads, MP was amongst the last ranked states in India in 2000, with only 28 per cent of villages actually connected to all-weather roads. There has been improvement in road connectivity over the last five years (due to efforts under the Pradhan Mantri Gram Sadak Yojana, PMGSY), and the state's own efforts) but this still does not cover in anyway the huge gaps between the availability and the national averages (by the end of January 2006, 55 per cent habitations remained uncovered in MP, compared to 32 per cent across the whole of India).

There has been some improvement, however, in the length of *pucca* roads in MP. As Figure 1.7 shows, every region in MP has shown an increase in the *pucca* road length between March 1999 and January 2006. In fact, all the increase in *pucca* road length that we see over the years across the regions is mostly due to increase in rural connectivity.

A major difficulty relates not just to the actual road length in terms of kilometres, but to the quality of roads, since even many *pucca* roads are found to be unable to provide all-weather access and tend to become at least partially unusable during or just after heavy rains. In addition, the poor quality of most road surfaces makes journeys more difficult and more time-consuming. Therefore, maintenance of roads, so as to ensure reasonable quality and continuous access, is as important, or possibly even more important, than fresh investment in creating new roads.

Table 1.6 provides an indication of village road connectivity in purely quantitative terms, that is

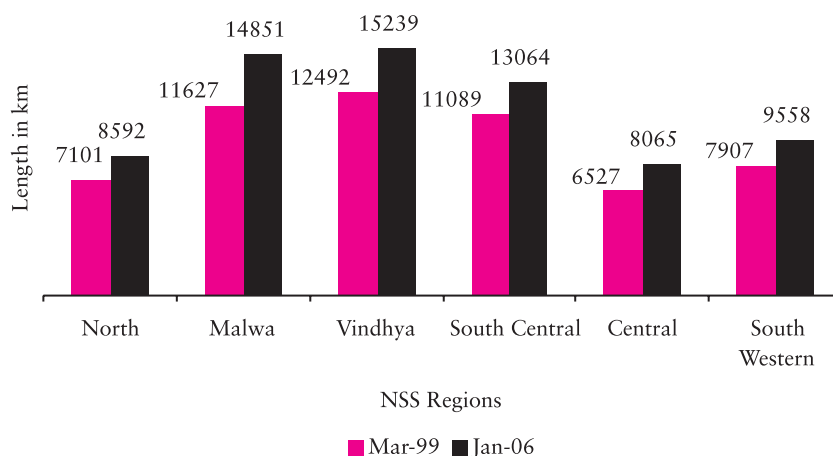


Figure 1.7: Pucca Roads in MP

without taking into account the qualitative dimensions (see Table A1.1 for district-wise details on the number of villages connected by Madhya Pradesh Rural Road Development Authority, MPRRDA since its inception). It is evident that in almost all the districts, more than half—and sometimes as many as two-third—of the villages are not connected by *pucca* road. Thus, the problem of ensuring universal connectivity (that is road access for all villages) is a gigantic task in MP, and one that is not likely to be easily managed in the foreseeable future without massive investments. But here of course, the problem

is that of public resource allocation under very severe resource constraints, when there are numerous equally deserving candidates for additional public spending. It is important to note, however, that this is one area where private investment cannot be expected to meet the gap even with very attractive incentive packages. While private investment may be motivated to participate in major toll highway projects that would generate profits over time, these would also have to be promising in terms of anticipated traffic. In cases, where private returns are potentially quite low and in any case are far outweighed by social returns, as is the case for village road connectivity, the task will clearly have to be taken up using public resources.

The situation with regard to roads is that more than 3200 villages have now been covered under the PMGSY since the end of 2000. Further funding will come from the *Bharat Nirman* initiative of the Government of India. There are no rural roads under Public-Private Partnership (PPP) or toll systems. On 8th April 2003, the state cabinet decided that the maintenance of rural roads being constructed by the MPRRDA would be handed over to the *zila panchayats*³ once the road completes five years of operation. The funds for maintaining these roads would be derived from the *mandi cess*⁴ of 2 per cent, which is currently being levied. Out of this, the *mandi*

Table 1.6: Indicator of Road Access by Habitation

Habitation by Size (with population of:)	MP Total	Habitations connected by MPRRDA as on 31st January 2006	Percentage Habitations still unconnected as on 31st January 2006
1000+	14285	2261	24.8
500–999	16977	620	59.1
250–499	13079	239	69.8
< 250	11378	126	77.5
Total	55719	3246	56.6

Source: MPRRDA.

³ Local democratically elected body at district level.

⁴ A cess on sale of agriculture produce by farmers at the common marketing facility centre call *mandi*.

retains 1.15 per cent and passes on the remaining 0.85 per cent to the Farmers’ Road Fund (*Kisan Sadak Nidhi*). Though, the first road constructed by MPRRDA will complete five years in 2006–07, the *mandi* cess money has already started flowing in the MPRRDA’s kitty. While they have started retaining the required amount for 2006–07, the balance is being passed on to the Public Works Department (PWD) strengthening major/other district roads.

1.4.4 Power Supply

Access to electricity and payment for power sources have become much more than purely developmental issues in MP. A generalized lack of development has been recently compounded by an energy crisis that has been gripping not just the state but the entire northern India, and thus, attempts to move towards a different pricing and management regime are also proving difficult.



Newly constructed power house

Figures 1.8 and 1.9 indicate just how severe the problem of lack of development in the energy sector still is. As late as 2003–04, only 42 per cent of all households had domestic power connections, up from 36 per cent in 1995–96. A larger proportion—70 per cent—had access to electricity in some way, but even this is very far from the national average or the goal of universal access. Predictably, the situation is especially bad in rural areas, where more than 70 per cent of the households do not have

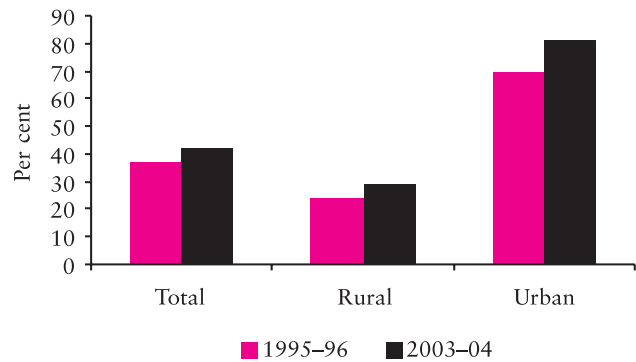


Figure 1.8: Percentage Households with Domestic Power Connections

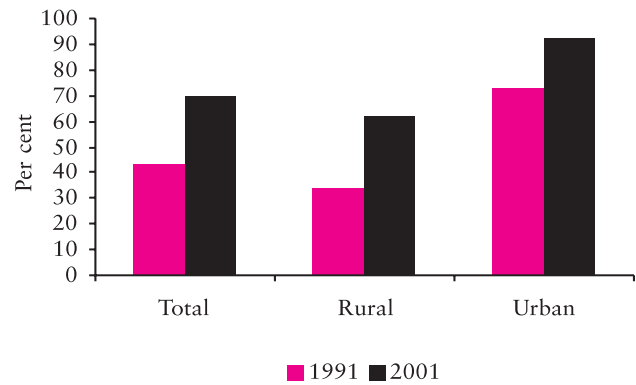


Figure 1.9: Percentage Households with Access to Electricity

their own domestic power connections and nearly 40 per cent of the households still do not have any access to electricity.

It is true that there has been a slight increase in the progress of electrification, as indicated in Table 1.7. However, progress has been painfully slow, with less than 100 villages added to the number of electrified villages in each of the recent years. Once again, regional differences have also intensified. The impact of electricity access on quality of life is so obvious that it surely requires no elaboration, yet in this most basic of indicators, public provisioning has sadly been lacking.

The patterns of electricity consumption are shown in Table 1.8. Domestic electricity consumption has increased, as has aggregate consumption in the period between 2002–03 and 2005–06. While in

Table 1.7: Number of Villages Electrified

State/Zone	Number of Villages		Number of Villages Electrified						
	(1991)	(2001)	1998	1999	2000	2001	2002	2003	2004
Central Zone	15548	15688	15075	15159	15189	15199	15200	15215	15235
Eastern Zone	24046	24186	22864	22982	23023	23028	23046	23124	23178
Western Zone	12212	12212	12038	12052	12059	12059	12060	12061	12061
Madhya Pradesh	51806	52086	49977	50193	50271	50286	50306	50400	50474

Source: Central Electricity Authority: General Review, 1999–2000 to 2003–04.

Table 1.8: Total Electricity Consumed by Different Categories

Category	Year			
	2002–03	2003–04	2004–05	2005–06
Domestic	3243	3311	3762	3753
Non-domestic	652	688	799	851
Industrial	5855	6058	6518	7049
LT	670	651	667	686
HT	5186	5408	5851	6363
Water works	435	463	502	516
LT	154	163	184	195
HT	281	300	318	321
Agriculture	4974	5346	5598	5600
LT	4966	5342	5593	5594
HT	9	5	5	6
Street lighting	121	127	128	143
Total	15280	15867	17307	17912
LT	9805	10155	11133	11222
HT	5475	5712	6174	6690

Note: LT—Low Tension, HT—High Tension.

Source: MPSEB (2006).

2005–06, electricity consumption in the industrial sector comprised 39.4 per cent of the total consumption, its share in total consumption has grown by nearly one percentage point in the period under consideration. Electricity consumption in industrial sector is the highest among all the categories of electricity consumption. During this period, electricity consumption has shown a secular increase across all categories. While the compounded annual growth rate in ‘non-domestic’ category has been the highest at 9.3 per cent, agriculture has grown at nearly four per cent, which is the lowest among all the categories of electrical consumption.

1.4.5 Education Infrastructure

Education is one specific area where there has been substantial improvement in MP. The last decade saw a very high jump in literacy levels from 45 per cent in 1991 to 64 per cent in 2001. This was managed by dedicated work to increase access to adult literacy and schools, especially primary schools. From 78794 primary schools in 1996 in undivided MP, the number of primary schools rose to 82219 in 2000, and stood at 95517 in 2005–06 in new MP. Similarly, the number of middle schools was 19058 in 1996 in undivided MP, rose to 21043 in 2000, and was 24293 in 2005–06 in new MP. There has been a phenomenal increase in primary schools, and within two years between 1998 and 2000, nearly 30000 access-less habitations were provided with a school. A similar initiative for middle schools saw a phenomenal

Table 1.9: Number of Schools by Type of School

	Year		No. of Institutions
	1995–96*	2005–06	
Primary Schools	1995–96*	56647	
	2005–06	95517	
Middle Schools	1995–96*	14393	
	2005–06	24293	
High and Higher Secondary School	1995–96*	5291	
	2005–06	8504	
All Schools	1995–96*	76331	
	2005–06	128314	
Children aged 6–19 years per school	1995–96	141	
Children aged 6–19 years per school	2004–05	138	

Note: *Indicates figures for divided MP.

Source: Various reports of Directorate of Public Instruction and Rajiv Gandhi Shiksha Mission, Government of MP.

increase in these as well. Now, the state claims that all habitations in the state have one primary education centre within one km radius. There is one middle school within 3 km radius of every village in the state.

Although, in terms of schools, the number appears to be adequate now, the situation, as far as other amenities in the schools, is not very clear. Are there enough rooms in the schools? Do girls have separate toilets? Are there blackboards and other teaching aids available in schools? Data for these parameters are not available for recent years as data from the latest educational survey have not been released. Other evidence does show that there is a long way to go towards ensuring adequate rooms, proper school buildings, proper toilets, drinking water facilities and so on.

1.4.6 Health Infrastructure

The three-tier public health system is built on the Sub-Health Centres (SHCs), Primary Health Centres (PHCs) and specific service focused Community Health Centres (CHCs), to the district/civil hospitals; and in the final tier, the referral hospitals. In rural areas especially, the PHC is the most critical health facility. In MP, in the last twelve years, the number of PHCs has actually gone down, mainly because of conversion of many PHCs into CHCs. This change has brought down the population serviced by each CHC from over 3.6 lakh in 1994 to 2.6 lakh in 2006, thus, improving quality of care.

The health infrastructure cannot be called adequate even by Government of India norms as the rural population served per PHC is significantly higher than the prescribed norm of 30000. Similarly, number of SHCs is also less compared to the norm of 5000 population in general and 3000 population in tribal areas. The existing health centres also face an acute shortage of quality manpower meaning thereby that the state needs to do something innovative to improve the access and quality of health care.

1.5 CONCLUSIONS

What we have seen till now is a clear linkage between infrastructure and human development progress. This linkage has some very direct evidence, and then many indirect ways in which infrastructure—both its creation and maintenance at certain standards—promotes and sustains human development growth. Without roads, without basic power, without basic schools and health centres, and without access to credit the poor are the most affected, as their areas are most infrastructure-poor, their dependency on public provision of infrastructure is the highest and thus they are the most direct beneficiaries of public investments.

The case for infrastructure for human development is made powerfully. There is, of course, evidence from studies, empirical evidence, and our own direct evidence and experience that support this. There are two aspects that we have to keep in mind when we

Table 1.10: Health Infrastructure—Time Series Data on Health Institutions and Population Served

Particulars	1994	1998	2001	2003	2006
District and Civil Hospital	97	93	94	96	103
Population served per District and Civil Hospital	501052	523117	642000	656688	668079
Number of CHC	133	203	229	227	265
Population served per CHC	365429	239655	263528	277718	259669
Number of PHCs	1263	1188	1192	1194	1152
Rural Population served per PHC	28752	30592	37232	38715	42665
Number of SHCs	8407	8316	8874	8835	8835
Rural Population served per SHC	4319	4370	5001	5232	5563
Total Health Institutions	9900	9799	10389	10352	10355
Population served per Health Institution	4909	4965	5809	6012	6645

Source: Various publications of Directorate of Health, Government of MP, Bhopal.

define infrastructure. It has been discussed that infrastructure that directly and most efficiently impacts poverty reduction and human development is that which is located where the poor live. It looks after their needs first, is technologically accessible to them, and enables them to break their barriers of physical, economic, and financial limitations. It enables and empowers them to reach out to, to negotiate, and to benefit from the world outside their own domain.

Thus, roads, specially rural connectivity, basic electricity (that helps run their manufacturing units and their agriculture pumps to draw water), basic access to funds/credit that helps them to invest into their livelihood (primarily agriculture)—all these comprise the critical infrastructure that requires either direct investment by the state or investment into establishing systems and agencies that help poor people access services.

Then, there is another set of infrastructure that enables and builds an entire system and economic environment. It helps in reducing poverty, in building options for the poor, in building their capabilities which ultimately help them grow into stronger, more empowered, and more self-sufficient individuals. This infrastructure comprises the bigger roads—the highways—that link areas and help balance out product, opportunity, finance and job rich or deficit areas with each other, and it indirectly builds the overall economic strength and viability of an area, supply and use of electricity, of capability enhancing infrastructure such as telecommunications and Information Technology (IT), and transportation links by rail and air.

Investing into both these scales in infrastructure, especially, the small-scale, local infrastructure has significant and sustained impact on three factors—growth, growth with equity and reduction in poverty by adding efficiency and productivity to assets of poor, and making the resources of poor more reliable.

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Appendix A1

Table A1.1: Rural Road Connectivity by District (January 2006)

District	Percentage of villages not connected by pucca roads #	District	Percentage of villages not connected by pucca roads #	District	Percentage of villages not connected by pucca roads #
Balaghat	36.2	Harda	61.6	Rewa	51.8
Barwani	51.8	Hoshangabad	58.3	Sagar	68.3
Betul	61.9	Indore	44.3	Satna	52.4
Bhind	33.8	Jabalpur	63.6	Sehore	67.5
Bhopal	42.4	Jhabua	48.2	Seoni	68.4
Chhatarpur	56.6	Katni	65.1	Shahdol	59.6
Chhindwara	62.6	Mandla	61.8	Shajapur	67.4
Damoh	57.1	Mandsaur	57.7	Sheopur	39.1
Datia	46.4	Morena	32.1	Shivpuri	62.4
Dewas	64.7	Narsimhapur	62.0	Sidhi	51.3
Dhar	61.8	Neemuch	56.7	Tikamgarh	52.8
Dindori	64.6	Panna	63.3	Ujjain	70.1
East Nimar	43.5	Raisen	68.7	Umaria	59.8
Guna	72.2	Rajgarh	82.3	Vidisha	66.0
Gwalior	29.8	Ratlam	66.7	West Nimar	53.1
Madhya Pradesh		58.7			

Note: # Villages connected by PWD between April 1999 and January 2006 (estimated figure 450) have not been included.

Source: MPRRDA and Annual Reports of PWD for 1999 to 2006.

CHAPTER 2

Physical Connectivity

2.1 INTRODUCTION

Basic physical connectivity, the infrastructure that connects two destinations is one of the oldest forms of infrastructure. This type of connectivity is most visible and manifest as roads, but has other critical and increasingly important forms such as railways, waterways and the airways. Roads are the single most crucial facilitator of movement, of accessing places, and of transporting people and goods.

Roads are the backbone of any economy. They provide the necessary linkages that bring together the various sectors of an economy, bridging the physical distance between demand and supply in different markets. As a result, better roads have invariably been linked with higher economic development. Similarly, railways enable mass travel of people to places as well as the transportation of goods—both perishable and non-perishable—over long distances. Both these help people to break barriers of their own physical limitations and physical reach. Airways transports, but has some other dimensions to itself—it brings people, who are managers, controllers and decision makers of high amounts of capital, intellectual and entrepreneurial wealth into an area and enables them to go out.

The advantages of roads, railways, and airways towards basic economic progress and development of an area are fairly obvious. These forms of physical connectivity also contribute substantially towards human development. Human development is about building peoples' capabilities and expanding their choices. Through such infrastructure, people are able to access resources, be it a school or a college for education, a dispensary or a health centre or a super-speciality hospital to save life and limb and in emergencies, gain access to more markets for trade, access to facilities, and to provisioning and products. Proper roads and connectivity not only make it possible to access many forms of other infrastructure and services,

but also help in accessing them with greater ease, speed and convenience. Furthermore, roads bring along with them many economic activities and attendant services that boost the local economy.

2.2 IMPACT OF ROADS ON HUMAN DEVELOPMENT

Box 2.1: Impact of Roads on Human Development

A statistical analysis was undertaken to assess the impact of roads on human development (health and education, agricultural productivity and employment, and incomes).

- Data from different districts of the MP show that proportion of *kuchcha* road in the total road length in the district has a significant and negative impact on achievement of various vaccination programmes. A higher proportion of *kuchcha* roads restricts movement of people in the area and deters them from availing such services even if they are available.
- In the case of education, we look at female literacy, and relate it to the extent of *kuchcha* roads in the districts. We find that the length of *kuchcha* roads in a district; normalized by the area of the district, has a significant and negative impact on the literacy rates among females.
- Data analysis shows that village roads have a positive and significant impact on agricultural productivity. This is in conjunction with economic reasoning. Village roads are more likely to have an impact on agricultural productivity, than other roads. These results also conform to intuition.

Table 2.1: Impact of Roads on Human Development

- Village connectivity reduces time of travel and reduces physical burden of travel from village to specific services and facilities, such as:
 - health centres, sometimes at critical times;

- local markets;
 - schools not located in the village or at a walkable distance etc., especially for girls, and for middle schools;
- Availability of proper roads makes access to the village possible all year round, especially during the four-month long monsoon period, thus, enabling quicker and easier access during these months.
- Increase presence and efficiency of government service providers and programmes. All government service delivery personnel have a bias towards connected areas as against unconnected areas, and physical connectivity removes this bias, hence enabling better and more effective administration. Kremer and others have shown that teachers' absenteeism increases by 4 per cent in schools that are away from a paved road.¹
 - Bring greater contact with resources into the village. For example,
 - Printed material including newspapers and magazines.
 - Many more numbers of service providers of similar facilities, thereby providing a choice to the people. For example, in a well-connected village more repair units, or more people purchasing re-usable materials such as utensils and agriculture implements, or more people providing health care would approach.
 - Enables public/private transport to either come to the village or enables villagers to access public/private transport from other stops more easily.
 - Increases economic opportunities, such as:
 - Labour from the village, including women, can now more easily go to external work sites, on a daily basis.
 - The choice offered by alternate work places, in the longer run, has an impact on wages.

2.3 ROADS IN MADHYA PRADESH

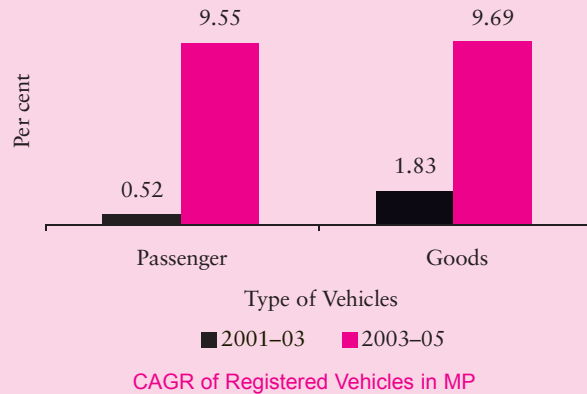
A low population density, large undulating terrain, large forest area, and substantial area under black cotton soil have all acted as physical constraints against a road network in the state. In the last decade or so, the quality of existing roads in the state has become a matter of much political and administrative attention and the broader policy environment at the national level has also been concentrating on building road linkages. The growing concern on the lack of adequate human development, especially in MP, has also made it essential that while software issues in human development are made a priority, the infrastructure issues no longer remain a major constraint.

¹ Kremer, Michael, Karthik Muralidharan, Nazmul Chaudhury, Jeffrey Hammer and F. Halsey Rogers (2004), *Teacher Absence in India*, Study Report of the World Bank.

Box 2.2: Impact of Better Road Conditions and Judicious Policy Change on the Transport Sector

Improved road conditions in the state and the government's action of de-nationalizing the bus routes have resulted in an explosion in the number of passenger and goods vehicles registration.

It can be seen from the figure that the compounded annual growth rate of registered passenger and goods vehicles jumped significantly from 0.52 per cent and 1.83 per cent to 9.55 per cent and 9.69 per cent respectively, from 2001–03 to 2003–05. This may be viewed as a good example of a general expansion in the choices that the transport sector entrepreneurs and general public have experienced owing to better road conditions and appropriate policy changes in the transport sector.



Improvement in road quality—
State Highway constructed by MPRDC

2.3.1 General Overview of Roads

The road connectivity in MP at 267 km per lakh population, compares well with the national average at 239 km per lakh population. However, it does not compare well either with the southern states of Kerala and Karnataka or with neighbouring states of Maharashtra and Gujarat (see Table 2.2). Moreover, considering the sparse population, a better indicator to compare is road length per 100 sq. km of area in which the state lags behind considerably. It has only 52 km of road per 100 sq. km of area compared to the national average of 75 km. The two states with which MP compares favourably are Chhattisgarh and Rajasthan.

In 2005, MP had 72416 km of road. Nearly 6 per cent of these roads were national highways, 11 per cent were state highways, 15 per cent were Major District Roads (MDRs), and the remaining 68 per cent were rural roads (village roads and other district roads). Nearly 12405 km or 17 per cent of the total road length in the state is classified as *kuchcha* whereas the remaining 83 per cent are classified as *pucca*. Nearly half the road length in the state has *pucca* BT surface and 34 per cent of the roads in the state *pucca* WBM surface.

In spite of a historical lag in large highways, the Golden Quadrilateral (GQ) misses MP comprehensively while the two corridors—East–West &

North–South—have a combined length of just 621 km in the state. Again, it may be noted that the East–West corridor has only a fleeting presence in the northern fringe of the state while much of the 621 km of road comes under the North–South corridor. Of the total length of the GQ, only 4.68 per cent passes through the state. Though the state covers 10 per cent of the nation’s area, it has only 8 per cent of the national highways passing through it. In the proposed Vision 2121 Plan, out of the total national highway network, only 6.25 per cent will pass through MP.

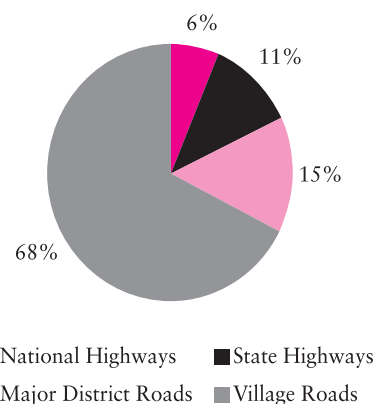


Figure 2.1: Roads Classification in MP, 2005

In terms of habitations connected by *pucca* roads, a survey undertaken by the State Government in 1999 revealed that 62.4 per cent habitations were unconnected, and since then another 6–7 per cent have been connected. This figure does not augur well for the state—more than half the rural habitations are unconnected in the state by a *pucca* road. This

States	Road length per lakh Population	Road length per 100 sq km	Population Density
Kerala	474	388	819
Karnataka	289	80	276
Maharashtra	276	87	315
Gujarat	272	70	258
MP	267	52	196
Rajasthan	234	39	165
Chhattisgarh	170	26	154
UP	150	103	690
West Bengal	115	104	903
Bihar	92	81	881
INDIA	239	75	313

Source: Department of Road Transport and Highways, Ministry of Shipping, Road Transport, and Highways, GoI (2002) and Census of India, 2001.

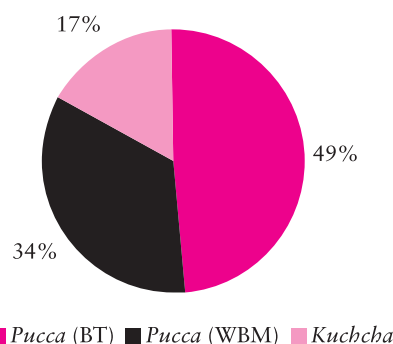


Figure 2.2: Roads in MP by Surface Type, 2005

indicates that three out of every five villages face problems of basic physical connectivity, are not able to access schools or medical centres in case such centres are not located within walkable distance, and the farmers and other persons pursuing livelihoods in the village are not able to transport their produce or skills with ease and speed. Further, lack of a proper last mile connectivity is also been seen to reduce the impact that government programmes bring to an area, as they make implementation more expensive and difficult, officials tend to prefer connected belts to unconnected, hence reducing administrative efficiency.

The PWD is vested with the responsibility of roads in MP. However, there have been some institutional changes whereby two new authorities, the Madhya Pradesh Road Development Corporation (MPRDC) and the MPRRDA have been set up with the specific purpose of handling and managing state highways, by the former, and handling rural roads connectivity, especially implementing the PMGSY, by the latter.

In the current roads network, Table 2.3 shows the principal agencies involved in the maintenance, upgradation and management of roads. The state

highways are now fully with MPRDC, while the PWD takes care of all district roads and shares the Other District Roads (ODRs) and Village Roads (VRs) with the MPRRDA.

Table 2.3: Type of Roads and Institutional Responsibilities in MP

Category	Length (in km)	Responsible agency
National Highways	4676	Gol/CE, NH
State Highways	8333	MPRDC
MDRs	10817	PWD
ODRs/VRs	48590	PWD/MPRRDA
Total	72416	

Source: Public Works Department, Government of Madhya Pradesh, Bhopal.

2.3.2 State Highways

State highways provide crucial links between districts and regions of the state. The total length of state highways in MP was 8333 km in 2005 and the length of state highway, servicing every one lakh population is 13.6 km.² These figures, however, hide the

Box 2.3: Road Development Authorities

The MPRDC was incorporated as a fully owned company by the government with the following objectives.

- To upgrade, construct, and strengthen the total length of state highways.
- To develop projects in the state on the basis of PPP.
- To act as a planning consultant to PWD in the state.
- To act as the State Highways Authority under section 4 of the State Highways Act.
- To upgrade the entire 8333 km of state highways in next three years (by 2008–09).

MPRDC is currently charged with the responsibility of constructing state highways that comprise nearly 11 per cent of the total road length in the state.

The MPRRDA is now involved in most of the VR construction work under the PMGSY. Currently, it has been entrusted with the task of constructing 30000 km of VRs in MP. This is nearly 62 per cent of the total rural roads in the state and works out to nearly 42 per cent of the total road length in the state, thus, making it one of the most important road-constructing agencies in the state.

The PWD continues to work on state highways using funds from Central Road Fund (CRF), Economically Important & Interstate (E&I), and Fast Track Scheme that was devoted to developing roads that were not covered under any other scheme. Of the total outlay for 2005–06 for PWD, nearly 61 per cent were spent through MPRDC. The PWD is also responsible for constructing and maintaining the MDRs, a very small part of the state highways (under E&I, Fast Track, and CRF) and rural roads that include both VRs and ODRs not handed over to MPRRDA. Thus, PWD is currently handling nearly 29407 km or 41 per cent of the total road length of the state. Of the total plan outlay of Financial Year 2005–06; nearly 39 per cent would be spent by PWD *sans* MPRDC.

² Based on the projected population of Madhya Pradesh for the year 2005.

interregional disparities that exist in the state in terms of availability of state highways. For example, Malwa region, which is considered to be economically better-off as compared to other regions,³ has only 9.4 km of state highways servicing every one lakh population. This is only half of the length of state highways per lakh population in the south-central region (17.89 km). The road length servicing every one lakh population stands at 16.56 km for the central region, 14.94 km for the south-western region, 13.44 km for northern region, and 11.11 km for Vindhya region. The length of state highways per 100 sq. km in MP is 2.67 km. Here too, one observes regional disparities, with central and south-central regions faring better than other regions.



Roads connect villages to markets & thus increase income

The condition of state highways in MP was pretty poor in the last few years, and the state government appears to be putting the issue of quality of these roads upfront in its agenda, along with new roads wherever required. As already mentioned, a special agency, the MPRDC has been entrusted with the responsibility as the principal state highways authority. The MPRDC has decided to upgrade the entire network of the state highways to conform to the Indian Road Congress (IRC) standards.

A multi-pronged strategy has been adopted in MP to bring quality to state highways, augment the present infrastructure, and build new roads. New roads have been taken up under different tools, and are being brought under IRC standards. Figure 2.3 shows the different ways in which new state highways are being

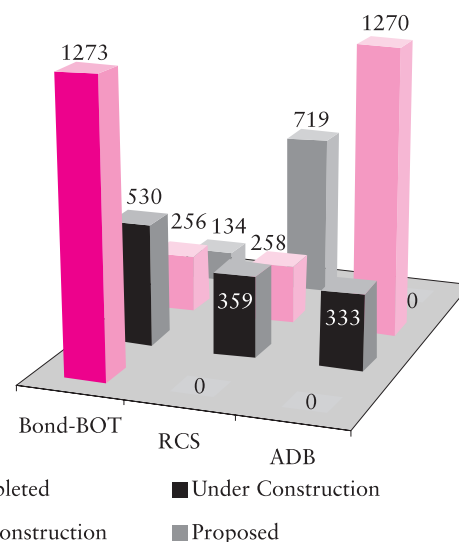


Figure 2.3: State Highways—A Snapshot (as on 7th February 2006)

constructed. There has been successful implementation of the Bond–BOT method, under which 1133 km of roads have already been completed. These roads are currently being tolled by concessionaires and would be transferred at zero cost to the state government at the end of 15 years from the time the construction of the roads commenced. For roads currently under construction, the maximum length is under the Bond–BOT scheme (530 km) out of the total of 1222 km (43.4 per cent).

Another 21 per cent of state highways are currently in the process of being taken up for re-construction, while another 10 per cent of state highways are now proposed to be taken up. Hence the state government, through the MPRDC, has either completed construction, strengthening, and upgradation or is actively engaged in construction/development of 62 per cent of the total length of the state highways. In addition to this, the MPRDC has identified another 1889 kms (22 per cent) of state highways that would be taken up in the coming year, and the remaining highways would be completed in another two years. The State Government has also formed MP Infrastructure Investment Fund Board to raise finances from market to fund these road projects partially.

³ For the sake of comparison, we have adopted the regional division that the National Sample Survey Organization (NSSO) adopts for its surveys on poverty, employment etc. The NSSO has divided the state into six regions.

The current situation of state highways can give a measure of satisfaction. This situation, which appears to be a break from the past, both in terms of speed with which roads are being taken up for reconstruction and the different sources of funds and tools applied (see Box 2.4 for more details), can be a pointer to future activities in the roads sector, especially the highways.

The PPP in roads has been successful if we take the quantum of roads built under this partnership—the entire length of 1133 km of completed state highways having been built under BOT, and of the other 1222 km of state highways under construction, nearly 73 per cent are being completed under the BOT scheme. The state has been successful in attracting private partners for building state highways, especially through the creation of an enabling environment for nurturing PPP. The advantages accruing from such partnership are that the cost of building roads gets shared between the government and the private developers, the government does not have to shoulder the responsibility of maintaining the roads, and the quality and maintenance of roads are better under private development and management.



New roads to prosperity

What we need to look at are three issues. What would be the fate of Bond–BOT roads in the years to come, in terms of user funds, and can they be turned into a financially feasible option in MP? The fate of the first BOT road at Pithampur does not appear to impart too much confidence on this front. Also, Bond–BOT as a strategy would not be applicable for roads that connect financially poor areas, and what will be the fate of alternate non-user fee routes? Would the roads which are not under BOT also have the same quality, as a large part of the poorer population would be travelling on these roads?

Box 2.4: Strategy for Development of State Highways in MP

This technical strategy adopted by MPRDC comprises elements⁴ that enable it to adhere to international standards and practices, such as adherence to IRC prescribed specifications, high-tech laboratories and testing facilities, use of best quality testing equipment and software, techniques of tendering that ensure fairness, capacity building of local contractors, and use of modern and hi-tech construction equipments.

This technical strategy helps in avoiding cost and time overruns and helps the organization to come up with attractive packages. It further helps better monitoring of the work done by the contractors. The overall strategy is geared towards ensuring good quality of the roads being built.

The financial strategy being adopted by MPRDC comprises the following elements:

- The projects are being undertaken on the basis of requirements rather than the budgets.
- Direct funding from the budget has been shelved in favour of loans that are taken from Housing and Urban Development Corporation (HUDCO) and other institutions through Infrastructure Investment Fund Board with repayment being secured through the budget.
- Loans are taken once the detailed project report is ready in order to ensure entire funding right from the day one.
- Year on year increase in the budget outlay so that the repayment capacity of the state increases.
- Private participation is being encouraged as this improves cost and time efficiencies.
- Willingness on the part of the government to provide adequate funds for road projects.
- Overall flexibility in approach and promotion of corporate culture in operations.
- MPRDC has an equity base of Rs 10 crore.
- Toll collection rights of non-BOT and Asian Development Bank (ADB) roads to be transferred to MPRDC.

⁴ Adopted from a presentation made by the MD, MPRDC.

2.3.3 Major District Roads

The roads that provide the gateways into a district and its zones and link state and national highways with parts of the district are the MDRs. The length of MDRs was 10817 km in 2005 (comprising 15 per cent of the roads of the state), and they are maintained and managed by the PWD.

The average for such roads comes to 3.59 km for every 100 sq. km of area. The provision of MDRs, however, is very uneven in the state. While Bhopal has around 17.4 km per every 100 sq. km, the other districts fall way below. Apart from Bhopal, there are only seven districts with more than five km of MDRs for every 100 sq. km of area. These are Bhind, Ratlam, Mandla, Sagar, Ujjain, Chhatarpur, and Dhar. There are 17 districts with an average below 3 km, while Seoni, Raisen, Chhindwara, Umariya, Narsimhapur, Sheopur, Harda and Hoshangabad have less than 2 km of MDRs for every 100 sq. km of area. If we compare with the national average, the situation in MP appears to be pretty dismal, with a national average of 14 km of MDRs for 100 sq. km of area. This seems to be in general consonance with the spread of the road network in the state *vis-à-vis* the national picture. However, what must be kept in mind is that for district roads, the terrain, population density, and character of land are all important and in all these areas MP faces constraints. The terrain of the state is undulating, the state has forest belts far greater and of much better quality than other parts of India, and the state also is more sparsely populated than other states (population density of MP was 196 persons per sq. km in 2001 compared to the All-India figure of 324).

The MDRs and ODRs, are under the management of the PWD. There are many issues related with the better management of roads that need specific attention. One of the main issues is the maintenance of existing roads that itself requires huge resources. Faced with problems of resources, in 2001–02, the state came out with an additional cess of 1 per cent on agricultural produce that is sold in *mandi* (marketing society). 85 per cent of this additional resource termed as Farmers' Road Fund was earmarked for the maintenance of those MDRs and ODRs that were supposedly used by farmers to bring their produce to *mandi*. As the definition was very wide, the state could

cover any road in this scheme. The result has been a massive investment of Rs 600 crore on these roads (starting from 2001–02). One of the major advantages of this *mandi* cess is that state will get additional resources to the tune of Rs 100–125 crore every year, that would be earmarked solely for surface renewal and maintenance of these roads. The importance of this resource should also be seen in light of the fact that a major chunk of the regular budget provided for the maintenance of roads goes into the salary of the contingency staff.

The PWD is not always able to spend the funds allocated to it over years, affecting both the quality of roads and construction of new roads. In 2002–03, the department was able to spend nearly three-quarters of the approved outlay. This increased to 85 per cent in 2003–04, and then in 2004–05 it declined once again to 71 per cent. The utilization improved significantly to above 90 per cent in 2005–06 (see Figure 2.4). It would be pertinent to know that the abovementioned approved outlays and expenditures include the outlay and expenditure for MPRDC as well.

If we look at the trends in terms of the length of roads constructed by PWD, we find that the gap between targets and achievement has persisted despite commendable efforts on the part of the government to speed up the process through institutional and other changes in the last few years. In 2002–03, PWD achieved nearly 66 per cent of its targeted length of 929 km. In 2003–04, this declined to 63 per cent and the declining trend continued in 2004–05 when it posted an achievement of 60 per cent of its target. However, the performance of PWD has improved significantly with achievement of 97 per cent of its target in the year 2006–07. Figure 2.5 shows the gap between the targets set by the government against their achievement (Annual Report, PWD, 2006–07).

The PWD *sans* MPRDC has been working on different types of roads under various schemes over the years. Fast Track scheme has achieved nearly 77 per cent of the target set by the department. This is followed by the performance under Farmer's Road Fund where the department has achieved 73 per cent of the target. The physical achievement under CRF and National Bank for Agricultural and Rural Development (NABARD) funding has been

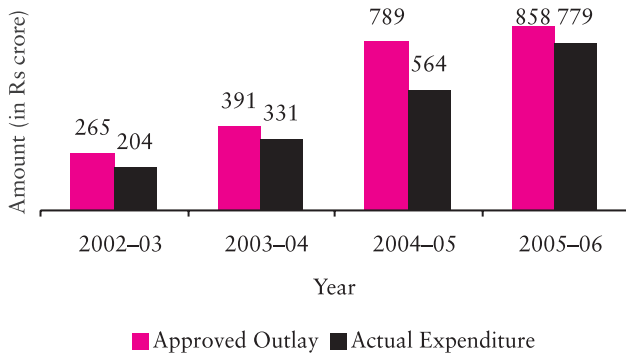


Figure 2.4: Year-wise Outlay and Expenditure of the PWD

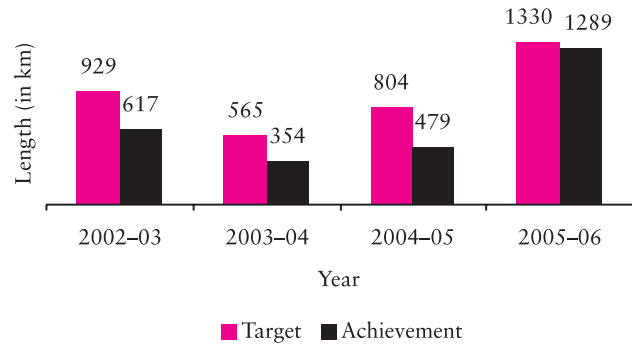


Figure 2.5: Year-wise Roads Constructed by the PWD

68 per cent and 62 per cent, respectively. The achievement under Special Central Assistance (SCA) and E&I stands at 53 per cent and 40 per cent, respectively. Figure 2.6 shows the gap in achievements and targets under the various schemes since their inception. It is clear that the capacity of the works department to utilize its funds and complete its works should be an urgent institutional priority for the state.

The relative success of the rural roads programme, on the other hand, has been due to adequate institutional and management measures undertaken to enable an efficient roads management system.

2.3.4 Village Roads

The final access in rural areas is provided by, (i) VRs that enable habitations to get connected with areas around them—with other habitations, with other districts; and (ii) state roads that connect them to other areas. This is an area that has remained weak across the country and especially in MP. A survey carried out by the State Government in 2000 showed that 62 per cent habitations were unconnected with any form of a proper road. The status is worse if we take smaller habitations with a population below 500 people (as per Census of 2001), where the share of unconnected habitations is over 70 per cent. Smaller

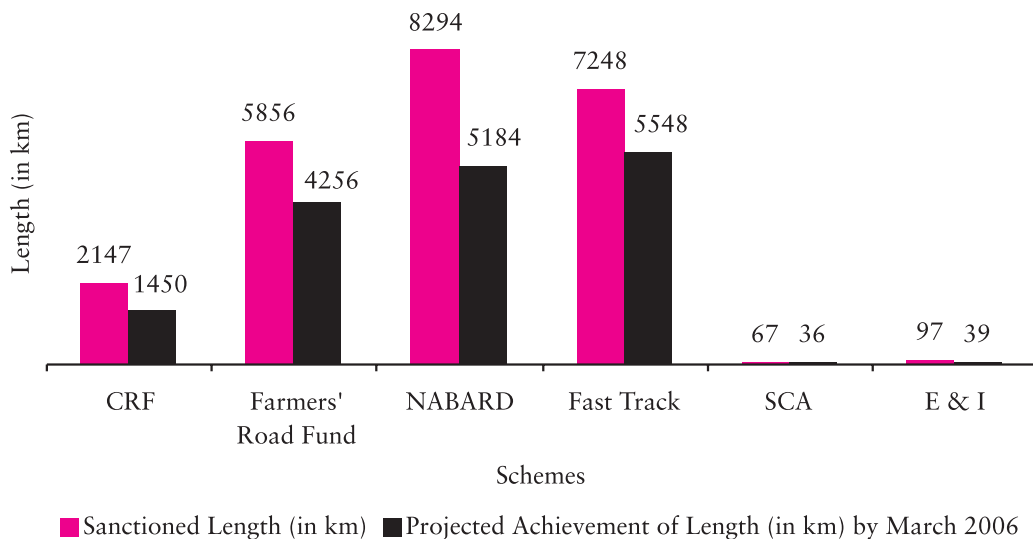


Figure 2.6: Scheme-wise Physical Performance of PWD till March 2006

habitations are usually located in remote areas, in basically unapproachable and difficult terrains and are usually residence to communities belonging to STs and even SCs—comprising amongst the poorest sections of MP. These figures have improved somewhat in the last five years due to the priority accorded to connecting rural habitations by the PMGSY and the complementing efforts by the state government.

The poor connectivity of smaller inhabitations makes the conditions of the poor worse, and their ability to come out of poverty traps even more difficult. Poor last mile connectivity impacts on contact with other areas, reach of government and its services, efficiency of the delivery mechanism and servicing by private service providers for health, small marketing services and so on. The already less-developed and low-economic equilibrium habitations are further sidelined and removed from mainline action. A case study of village Baragda puts the impact of basic connectivity into perspective (see Appendix A2.2).

There was renewed focus on connecting habitations from the year 1999–2000. A new funding source, the PMGSY, was initiated by Government of India, and the state of MP created a new vehicle, the MPRRDA to implement this scheme. The state government also mobilized funds from other sources to strengthen rural connectivity. They along with the PWD have already led to the achievement of basic connectivity of nearly 3502 new habitations till 31st January 2006. Regarding the new village roads being constructed by MPRRDA, 69.7 per cent of connected habitations have a population more than 1000, 19.1 per cent have a population between 500 and 999, 7.4 per cent have a population between 250 and

499, and 3.9 per cent have a population less than 250. Going by the general pace of rural roads works in the last few years, this is commendable. While many reasons are cited for the non-likelihood of achieving stiff targets set for rural road connectivity under *Bharat Nirman*, such as the difficulties being faced in up-scaling MPRRDA's operations owing to small project size, expansion of institutional capacities, and absence of private sector players interested in small projects (those that may be interested have their order books full for the next couple of years), it appears that the work on rural roads would be achieved in substantial measure.

The main responsibility for connecting all habitations now lies with MPRRDA along with some roads built by PWD, and financing is primarily under PMGSY by the central government and other funds provided by NABARD or through the Farmers' Road Fund. While there has been considerable linking in last 3–4 years, nearly 56.6 per cent habitations still remain unconnected. The task of providing rural connectivity remains one of the most daunting challenges that the state faces today. The efforts in this direction are commendable but the operations need to be scaled up if the challenge of providing rural connectivity to all the habitations of the state over the next three years is to be achieved.

Attention is also being paid to continued maintenance of rural roads. A provision built into the contracts for rural roads is that the government will release 10 per cent of the contractor's payment only after the road has completed five years in existence. The contractors are to maintain these roads for the coming five years. The state government has decided to transfer these roads to the *zila panchayats* once

Table 2.4: Connectivity of Habitations in MP

Habitation by size With Population of:	MP Total	Connected as of 25.12.2000	Unconnected Habitations as on 25.12.2000	Habitations connected by 31.01.2006	Habitations still unconnected as on 31.01.2006 (per cent)
1000+	14285	8481	5804	2261	24.8
500–999	16977	6332	10645	620	59.1
250–499	13079	3705	9374	239	69.8
< 250	11378	2430	8948	126	77.5
Total	55719	20948	34771	3246	56.6

Source: Surveys undertaken by MPRRDA, Government of MP.

they complete five years. The funding for maintenance would come from the Farmers' Road Fund created with resources mobilized through *mandi* tax.

In the initial PMGSY plan, it had been decided that no repair work would be financed under the scheme. It was feared at the Government of India level, that in case repair work was also taken up, major portion of the fund would get absorbed in it. Besides, by linking financing of this scheme to repair to be undertaken by the state government an attempt was made to encourage commitment of more funds for road construction. But in the process many links vital for thorough connectivity had to be dropped from this scheme. These portions had been constructed by state government but were in a very bad condition. Most of these portions required complete reconstruction. In order to supplement the efforts of PMGSY and to develop thorough links for the selected villages, such damaged sections were constructed by the state government from the Farmers' Road Fund. Nearly, Rs 35 crore were spent on 112 such links of 237 km length under this scheme between 2002–03 to 2004–05.

To maximize the benefit of investment in rural roads, the state, as per PMGSY guidelines also, is according first priority to connecting habitations with a population of more than 1000 persons. In tribal regions, however, the priority is being accorded to connecting habitations with a population above 500 persons. The criterion for selecting habitations on the basis of population, however objective it may be, does not fairly judge the imminent needs of habitations needing connectivity. As has been argued earlier, the remoteness of a habitation, the presence of members of SC and ST communities, the location of a habitation and its terrain—hilly, undulating, dryland, forested belt—etc. determine far more critically the status of access and quality of education, health and livelihood resources and opportunities. This is not just true of individual habitations, but also of larger regions, blocks or districts with high Infant Mortality Rates (IMRs), low immunization rates, high incidence of malnourishment, low female literacy, low levels of retention rates—these could be equally important criteria for selecting habitations for rural connectivity, rather than purely population measures.

2.3.5 The Challenge of Providing Village Road Connectivity

Since its inception, MPRRDA has executed the work of road construction under PMGSY and through loans from international agencies. The new programme of *Bharat Nirman* launched by the Government of India proposes a very ambitious target for rural roads connectivity, as portrayed in Figure 2.7. While the state of MP, through its agencies could deliver up to a maximum of 4000 km of rural roads in a year, the targets under *Bharat Nirman* far exceed that. Hence, it is quite evident that the state government would need to scale up its operations substantially to meet its target of connecting nearly 7832 habitations through constructing new roads and upgrading existing road lengths.

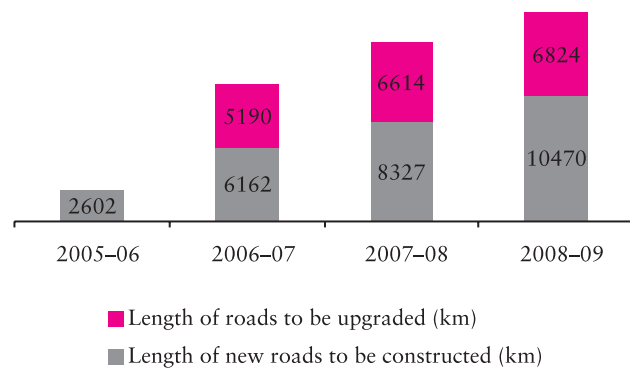


Figure 2.7: Targets under *Bharat Nirman* for MP

2.4 RAILWAY CONNECTIVITY IN MADHYA PRADESH

Railways enjoy a unique and crucial place as a provider of transport, a connector, and a lifeline for our nation. Its role in unifying this country under British occupation and subsequently, in transporting crucial goods such as food grains from food surplus to food deficit areas, as a carrier of minerals from one part to another and as a carrier of people looking for livelihoods from poorer areas to prosperous or high employment zones has made the railways a significant element in the nation's progress.

We now explore the relationship between railways and human development. The railways is, perhaps, the most pro-poor of all mass transport

systems. It offers relatively cheap, affordable, and safe travel for all economic levels, and transports basic goods, food grains, minerals, manufactured goods, and even essential commodities such as medicines and perishable commodities, *e.g.*, fruits, fish, and milk from one place to another; offering better markets to farmers and providing essential commodities to commodity-scarce areas. Access to railways opens up a world of opportunities to labourers, especially during times of distress or to prospective and current migrants. Railways enables long distance migration as well as a lifeline linking back home. Labour from MP travels to Ahmedabad, even up to Kashmir, Delhi, and Mumbai on trains, fishery production from central MP goes as far as West Bengal on the railways.

As a centrally located state, the major North–South rail lines and some East–West rail lines pass through the state. The main junctions in the state are Bhopal, Bina, Gwalior, Indore, Itarsi, Jabalpur, Katni, Ratlam, and Ujjain. The divisional railway headquarters are at Bhopal, Ratlam, and Jabalpur. Madhya Pradesh has a rail density of 15.9 km rail lines per 1000 sq. km,⁵ which is much lower than the national average of 20 km per 1000 sq. km of area. The average length of railway lines per ten lakh population in MP is 75.8 km. There has been a historical lag in the railway line set-up in the state and there are large parts of the state that do not have the benefit of any rail line (see Map).

While the state fares poorly in comparison to some of its peers like Bihar, UP, Maharashtra, Rajasthan, and Gujarat, there are also interregional disparities among the various regions of the state.⁶ For instance, the central region is the most poorly connected by rail as there are only 27.6 km of railway lines serving every ten lakh population in the region. Compare this with the state average of 75.8 km or with the south-western, north, and south-central regions, each of which have nearly 100 km of railway lines serving ten lakh population. The second most poorly connected region by railways is the Vindhya region that has 56.5 km of railway lines serving every 10 lakh of its population. The Malwa region (at 73.0 km of railway lines per ten lakh population) fares better than the Vindhya

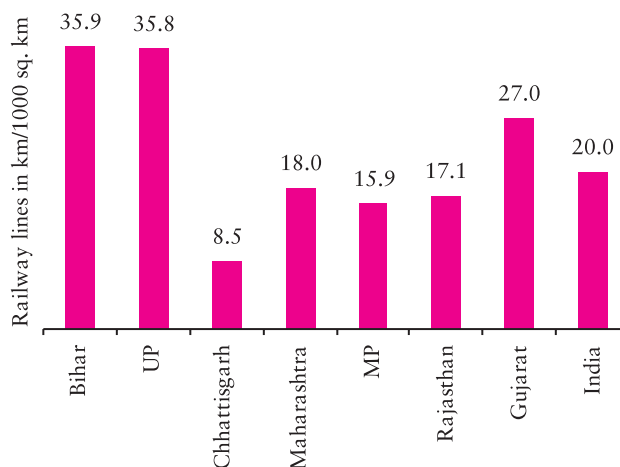


Figure 2.8: Railway Connectivity in MP in comparison with Neighbouring States

region, but is only marginally worse than the state average. Out of the 48 districts in MP, three districts do not have any railway lines connecting them. These are Barwani, Dhar, and Dindori (see Appendix A2.3 for district-wise availability of railway lines in the state of MP).

In the emerging plans of new rail lines and gauge conversions, MP does not seem to be getting its due share and attention. With the advantages of the state in agro produce, mineral ores, fisheries, forest based produce, and its potential as a national central warehouse due to its strategic location, increased rail routes are critical. The inadequate availability of rail infrastructure gets compounded when one considers the fact that the state produces nearly 81000 Million Tonnes (MTs) of mined materials every year and nearly 15 per cent of its NSDP (at current prices) is derived from mining activities.

The plans for a dedicated freight corridor proposed recently also do not address the concerns of MP. The state would receive its meagre share in the railway GQ only when the railways set out to begin work on the Delhi–Chennai corridor which is not being taken up with any degree of urgency by the Ministry of Railways. The state needs to join forces with Tamil Nadu to mobilize government support for this corridor.

⁵ <http://www.indiabusiness.nic.in/indian-states/madhya-pradesh/economic.htm>

⁶ Office of the Divisional Railway Manager, Bhopal.



Railway Map

Being a land-locked state, MP has limited potential for development through port infrastructure. Railways play a major role here through the Inland Container Depots (ICDs) also called dry port. These ICDs are operated by Container Corporation of India (CCI) Ltd. The state had two dry ports in Pithampur (near Indore) and Malanpur (near Gwalior) while the third one in Mandideep (near Bhopal) commenced operations in February 2006. Talks are on for a fourth dry port at Ratlam on the Delhi-Mumbai track. The cargo handled by the two ICDs, Pithampur and Malanpur, in last three years is shown in Table 2.5.

Table 2.5: Cargo Handled by the ICDs

Name of ICD	2003–04	2004–05	2005–06
ICD PITHAMPUR			
Export	9525	10540	12515
Import	9113	10297	13053
Total	18638	20837	25568
ICD MALANPUR			
Export	2850	3870	4172
Import	3270	4267	3539
Total	6120	8137	7711

Note: Data in Twenty feet Equivalent Units (TEUs).
Source: Container Corporation of India Ltd.

While not much data are available on rail traffic, passenger as well as goods, it can be said with some certainty, on the basis of rail line density, number of stations (normal and junctions), and movement of freight wagons, that MP is still under-serviced and under-equipped in terms of rail infrastructure.

2.5 AIR CONNECTIVITY IN MADHYA PRADESH

Air connectivity and air traffic provide connectivity of another kind to the state—fast, comfortable, and quality travel which is, however, expensive and out of reach for most people. It has its relevance and need, as it is an essential service for the growth of industry and business, but does it have implications for human development? Towards providing connectivity to basic sources and services of minimum needs, education, health, water, basic livelihood options, air connectivity is not a medium. But it does provide other opportunities and opens up access for people, finances, and knowledge.

Air travel is a gateway to an area, and the type of travellers it brings are, normally, business people with large financial values and ability to invest and tourists, who spend large per capita in the areas they visit and the local livelihoods they patronise. Air connections provide easy and manageable access to people looking for investment destinations, or destinations to put up high end institutions, or to interact with state governments and other agencies. Good air connectivity directly increases the load and traffic of such persons. It also improves the image of an area and thereby boosts a type of confidence into the strengths and merits of an area. This may at times sound tenuous, but the impact of investments in industry, services, trading and financial services, and educational and health institutions at the higher end, and the role that people with higher incomes play in building purchasing power in markets certainly boosts local economies. One of the main activities that air transport boosts directly, especially the high paying part is tourism. Tourism is the most employment-friendly industry, with every activity in tourism requiring people, and generates employment and earnings for many, from those providing expensive services such as boarding and lodging to small services such as transport, guides, curio sellers and so on.

MP is endowed with many places of historical and cultural importance and has vast natural heritage. There is the industrial town of Indore, one of India's leading manufacturing centres, the capital at Bhopal, and the tourist attraction at Khajuraho that ranks amongst the world's best known tourist destinations. Yet the state of air infrastructure and air services is very poor. There are two aspects to air transport infrastructure. The first is airports itself, their capacity to take aircrafts of different types at different frequencies, night parking capacity etc. The second is basic air services, number of flights into and out of various airports of the state, the cities connected, to the size of aircrafts, and so on.

The main airports in MP are Indore, Bhopal, and Khajuraho, there are also some flights into and out of Gwalior and Jabalpur. All these have only domestic terminals, and cannot take larger aircrafts (larger than Boeing 737s). Khajuraho caters only to tourists, and Indore, Bhopal, Gwalior, and Jabalpur

are the airports that bring in people with business, both public and private. The stations that were earlier connected by *Vayudoot* (small aircraft airline) were Bhopal, Khajuraho, Satna, Rewa, Guna, Indore, and Jabalpur. All flight connections are still only to Delhi and Mumbai—all other stations are connected to cities of MP via these two cities.

The data on traffic from the airports are displayed in Table 2.6. MP handles an abysmal share of national air flights and passenger traffic, just about 1.6 per cent of flights and just about 1 per cent of passengers. This is way below the total area in MP, or its share of population in the total population in India.

In air transport, with private airlines and public air carrier also looking at commercially profitable destinations, the state government must look at promoting MP as a tourist destination first. This will encourage more air traffic and then bring in other benefits. The Government of India is taking up airport modernization (including upgradation and

expansion of airports) in a big way. The airports of Bhopal, Khajuraho, and Indore must be picked up in Phase II of this expansion plan, and facilities must be developed to take larger aircrafts, especially in Khajuraho where direct international chartered tourist flights can be encouraged, in the manner that has been successfully done in Goa. Further, with Mumbai, Hyderabad, and Delhi airports heavily congested, airlines are looking for airports for parking at night, airports not very far from these cities, and Bhopal and Gwalior are ideally located. Proactive work must be undertaken to grasp this opportunity.

2.6 CONCLUSIONS

The emphasis on re-building roads and ensuring universal rural connectivity—if work goes according to the plans of state and the *Bharat Nirman*—is bound to lead to a major qualitative upgradation in the state's road network. However, the question that needs to be asked is, whether the agencies involved have the

Table 2.6: Data on Air Traffic

	2003–04								
	Average number of flights handled per day			Average number of Passengers handled per day			Average cargo handled per day (in tonnes)		
	All	Intl	Domestic	All	Intl	Domestic	All	Intl	Domestic
Bhopal	9	0	9	300	0	300	1	0	1
Indore	12	0	12	622	0	622	6	0	6
Khajuraho	3	0	3	43	0	43	0	0	0
Gwalior	1	0	1	2	0	2	0	0	0
Jabalpur	0	0	0	1	0	1	0	0	0
MP	25	0	25	968	0	968	7	0	7
India	1919	359	1560	137922	45679	92243	3071	1918	1153
MP's share (per cent)	1.30	0.00	1.60	0.70	0.00	1.05	0.23	0.00	0.61
	2002–03								
Bhopal	8	0	8	289	0	289	1	0	1
Indore	12	0	12	599	0	599	4	0	4
Khajuraho	2	0	2	85	0	85	0	0	0
Gwalior	1	0	1	2	0	2	0	0	0
Jabalpur	1	0	1	4	0	4	0	0	0
MP	24	0	24	979	0	979	5	0	5
India	1551	314	1237	121284	40605	80679	2818	1802	1016
MP's share (per cent)	1.55	0.00	1.94	0.81	0.00	1.21	0.18	0.00	0.49

Note: Intl—International.

Source: Department of Civil Aviation, Government of India.

requisite capacity to undertake this huge task—state and district highways roads, rural roads, as well as upgrading and maintaining these roads.

With the strategy of involving the private sector in roads and their maintenance for a period of time, and funds under *Bharat Nirman*, there seems to be some strategic and financial platform available for a push in roads, though what is now needed is a higher scaling of these efforts. At the current speed, it may even take a decade to achieve the targets and then the issue of maintenance would still remain. Further, the selection criteria for roads, especially rural roads must now look towards indicators of backwardness especially in health and education to select priority habitations and districts.

The issue of rail network is basically under the Central Government but it is a responsibility of the state to push for more rail lines as a priority and to include MP within the ambit of the proposed freight corridor.

The State Government also needs to play a much more active promotional role to encourage air traffic into the state, and this begins with encouraging infrastructure, and making in-bound tourism a much more dynamic and growing sector than it is today.

The state government is doing everything within its means to develop the airports at Bhopal and Indore into international airports without which it would be well nigh impossible for the cities to develop into IT hubs—a desire that has been expressed by the government time and again. Its commitment on this issue has been demonstrated through its efforts at strengthening its industrial infrastructure and by building an IT park in Indore. Besides, the government has been able to hand over the land required for the expansion of the airports to the appropriate agencies, free of all encumbrances so that the airports may be developed quickly. It is expected that once the airports at Indore and Bhopal are expanded and developed into international airports, the state will have moved a step closer to realizing its dream of becoming a hub for handling air cargo—both domestic and international.

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Appendix A2.1: Case Study on State Highways

This study was undertaken after informed sources, based in Bhopal, indicated that the construction of State Highway no. 27 connecting Indore to Edelabad has greatly impacted the banana trade for which Burhanpur is widely known. The team set out with the objective to assess how the road had generally affected the public. Personal in-depth interviewing was chosen as the methodology for understanding the impact of this road on human development. By the time the team reached Burhanpur, it had interviewed seven participants on the way. To understand the impact of SH-27, the team interviewed a leading Banana trader and a leading trucker based in Burhanpur.

First, the road has greatly impacted the quality of bananas reaching their destination. Earlier, when the road was in a pitiable condition, the quality of bananas deteriorated by the time they arrived at their destination. It may be noted that less than 5 per cent of Burhanpur bananas are sold in Indore with the remaining 95 per cent being sold in Rajasthan, Punjab, Haryana and other states.

Second, the road has greatly reduced transportation costs. Table A2.1.1 provides a before and after comparative scenario based on certain criteria.

Table A2.1.1: Comparative Scenarios before and after Road Construction

Evaluation Criteria	Before Road Construction	After Road Construction
Number of trips per month	4	4
Mileage	3–3.5 km per litre	4–4.5 km per litre
Savings on maintenance	None	Rs 4000–5000 per month
Running hours (Indore to Burhanpur)	12 hours	5–6 hours
Load bearing capacity	14–15 MTs (officially 9 MTs)	14–15 MTs (officially 9 MTs)
Tumbling risk	Very High	Insignificant
Destination	Haryana, Punjab, Rajasthan	Haryana, Punjab, Rajasthan
Diversion to reach Indore	via Choral (280 kms)	None (< 180 kms)
South bound traffic through Burhanpur	Negligible	Most

A reduction in the transportation cost attracted a host of truckers to get involved in the transportation of bananas from Burhanpur. Increased availability of transport drove down the prices charged by the truckers. This helped the traders to improve their margins and made them lift larger quantities from the farmers bringing their produce to the *mandi*. The increased demand from traders at the *mandi* drove up the farmer's price. The market mechanism ensured that the cost reduction owing to better road condition was shared between the farmers, traders, and transporters.

Third, it was amply clear that the road by itself did not impact the trading volumes as that depended upon a host of unconnected factors. But it had made the life of commuters much easier. The truckers, traders, general commuters, and the farmers are all happy with this road. The only sections that lost out were the auto repair and spare parts businesses and wayside *dhabas* that served poor quality food and offered substandard services to their customers. While the loss to the former was obvious, the loss to the latter needs some explaining. The poor quality *dhabas* (that netted a lot many customers earlier as commuters were forced to halt there for meals for want of a better option) lost out to other *dhabas* that offered better quality meals and services as the commuters are now willing to cover that extra distance that they could ill-afford earlier owing to poor road conditions. The good road conditions have provided more alternatives for the commuters to continue their journey and stop only at *dhabas* that offer good quality food and services.

Appendix A2.2: A Case Study on Village Roads

Village Baragda is part of the Baragda *gram panchayat* of Kesla block of Hoshangabad district. A village road measuring 3.52 km was constructed under the PMGSY at an estimated cost of Rs 57 lakh in July 2003. The construction of the road took approximately 12 months. This road connects the village to the Jaipur–Nagpur National Highway (NH-69). Even in January 2006, when this case study was undertaken, the condition of the road was good. Village Baragda comprises nearly 200 households, and the *Gawlis* are the dominant community both socially and numerically. The habitation of *Korku* tribals comprises 20–25 houses and someone approaching the village would have to cross the *Korku* habitations before reaching the hamlets occupied by the *Gawlis*. The village road has a *rapta* that was a part of the package under which the contractor constructed the road. The *Gawlis* have to cross the *rapta* to access the world outside and the *Korkus* have to cross the *rapta* in order to access the *Gawli* habitation.

Both, the primary and the secondary schools in the village, are located in the hamlet where the *Gawlis* reside. Before the road and with it the *rapta* were constructed, the *Gawli* hamlet was cut off from the rest of the world during the monsoon season as the rivulet overflowed and made it impossible for the *rapta* to be crossed. Those who had to commute, used boats to cross the rivulet. The children of the *Korkus* who were unable to access their schools that were located in the *Gawli* hamlet during the monsoons felt one of the debilitating impacts of this. The construction of roads has enabled the *Korku* children to access their schools all the year round.

The advantages of being connected by roads are being savoured by the *Gawlis* as well who are now able to access the outside world throughout the year, without having to take a circuitous route to nearby Sukhtawa (a small town) to meet their daily needs. Earlier, when the road was bad, it had fallen into disuse and another route was being used by the *Gawlis* to access the outside world.

The traders owning *kirana* shops in the village (there are three such shops) have never had it so good. When the roads were bad, it used to be a huge effort to frequent the nearby towns to procure the commodities being sold by them. They also faced difficulty in transporting the grains that they received from the villagers, who prefer to barter their grains to purchase various wares and commodities from the shops. After the road was built, the competition among their suppliers made sure that the commodities were delivered at their doorsteps without any extra cost. Similarly, transporting the grains collected through barter to be sold in the nearby town ceased to be a major effort unlike it earlier used to be. Though the roads did not contribute much in improving their margins or turnover, but the sheer ease with which they can go about their business now has immensely contributed in improving their quality of life.

Sand mining is one of the major sources of livelihoods of the non-agriculture labourers residing in the village. Earlier, when the road was bad, the mining contractors never accessed the banks of river Masania for sand mining through Baragda. There was no need for them to ply their trucks and trolleys on this road as they could access other mining sites with greater ease. But, once the road was built, the mining contractors found it an attractive proposition to mine the sands from river Masania and transport it through the village. The same non-agricultural labourers, who had to travel to distant mining sites, now, had an option to procure work within their village instead of wasting their time and energy in travelling to distant places. This did not improve the daily wages that they earned. Nor did it increase the number of days for which they could procure mining work in a year. But the immense ease with which they can access the mining site being separated from their loved ones as the time for commuting to their work place and back was too high earlier, has immensely improved their quality of life.

Source: Fieldwork by Sanket MPHDR Team.

Appendix A2.3

Table A2.3.1: Length of Railway Lines in MP

District	Length of Railway Lines (in km)						Total
	Division						
	Bhopal	Nagpur	Ratlam	Jhansi	Bhusawal	Jabalpur	
Balaghat		146.83					146.83
Barwani							0.00
Betul		311.06					311.06
Bhind				51.82			51.81
Bhopal	35.00		22.33				57.33
Chhatarpur				15.84			15.84
Chhindwara		275.47					275.47
Damoh						86.10	86.10
Datia				40.10			40.10
Dewas			58.63				58.63
Dhar							0.00
Dindori							0.00
East Nimar	59.77		41.18		79.23		180.18
Guna	218.88						218.88
Gwalior	37.18			91.51			128.69
Harda	58.28						58.28
Hoshangabad	74.19	69.38				93.67	237.24
Indore			125.02				125.02
Jabalpur		48.16				188.02	236.18
Jhabua			64.89				64.89
Katni						55.80	55.80
Mandla		67.75					67.75
Mandsaur			46.22				46.22
Morena				242.74			242.74
Narsimhapur						111.92	111.92
Neemuch			70.25				70.25
Panna						10.90	10.90
Raisen	59.31						59.31
Rajgarh	80.24						80.24
Ratlam			126.85				126.85
Rewa				20.62		24.00	44.62
Sagar	40.72			29.15		110.04	179.91
Satna						170.70	170.70
Sehore	23.56		41.85				65.41
Seoni		141.67					141.67
Shahdol						71.35	71.35
Shajapur	51.73		97.89				149.62
Shivpuri	122.00						122.00
Sidhi						128.92	128.92
Tikamgarh				30.90			30.90
Ujjain			186.07				186.07
Umaria							0.00
Vidisha	72.42						72.42
West Nimar			50.05				50.05
MP	933.28	1060.32	931.23	522.67	79.23	1051.42	4578.15

Note: Data for Ashoknagar included in Guna, Burhanpur included in East Nimar, Anuppur and Umaria included in Shahdol and Sheopur included in Morena.

Source: DRM Office, Bhopal.

CHAPTER 3

Energy

3.1 INTRODUCTION

Power, that is, electrical energy has a very strong bearing on human development. Availability of appropriate quantity and quality of energy at reasonable prices can contribute to increased productivity, growth in existing economic activities and consequently provide greater economic opportunities to people. The benefit of increased economic opportunities over a period of time results in increased incomes, improved standards of living and increased demand for products and services.

The ability of people to derive benefit from availability of power depends as much on the quality, quantity, and delivery format of power as on the prevailing socio-economic and cultural factors. Sustained and regular supply of power, at people's doorsteps at the times when they need it, and in usable quality will make more and more people and activities shift to power, and use power productively and effectively. There are innumerable instances where villages used to street lights, although in limited quantity, will not adjust to situations without street lights, although their voices may not be heard in such circumstances.

In the recent past, power has had the greatest impact on human development but now the concern is to create an even greater sustainable impact in the future. Provision of power for human development is governed and influenced by policy frameworks, political culture, institutional governance, and state regulations.

Availability of power of appropriate quality and quantity can reduce energy costs for people and can, therefore, be a commercially viable proposition even for poor in the long run. Power can contribute to significant increase in agricultural productivity and

development of industries. Benefits from these developments accrue disproportionately more to the poor as the rich can afford to get power from alternate sources like generators. Improvement in the quality of education, diversification in sources of drinking water from hand dug wells and hand pumps to tubewells and public taps, and improvement in health care services (due to heat, lighting, and refrigeration) result in greater benefits to women, children, and the elderly, especially in rural areas because of their gained access. Improved lighting in homes extends productive working hours both for men and women and enables children to study with ease even after sunset. Through television, there is a flow of information (news, market prices, and broader dissemination of public health, education, information about new technology, policies and entertainment) to the poor, especially those living in remote areas. Power has environmental impact as well, as it reduces pressure on woodlands.

A study undertaken in Africa, has shown a significant and positive relationship between electrification and economic and social development,¹ the two things together that would sum up as the most important elements of human development. The manner and ways in which one is affected by the other has been illustrated in Figure 3.1. In a separate study² involving an empirical evaluation of the impact of infrastructure development on economic growth and income distribution using a large panel data set, encompassing over 100 countries and spanning the years 1960–2000, it was found that ‘estimates... obtained from a large cross-country panel data set, we find positive and significant output contributions of three types of infrastructure assets—telecommunications, transport, and power. The estimated marginal productivity of

¹ African Development Bank and OECD Development Centre African Economic Outlook (2003–04), p. 4

² The Effects of Infrastructure Development on Growth and Income Distribution, Central Bank of Chile, Working Papers, September 2004, César Calderón Luis Servé n.

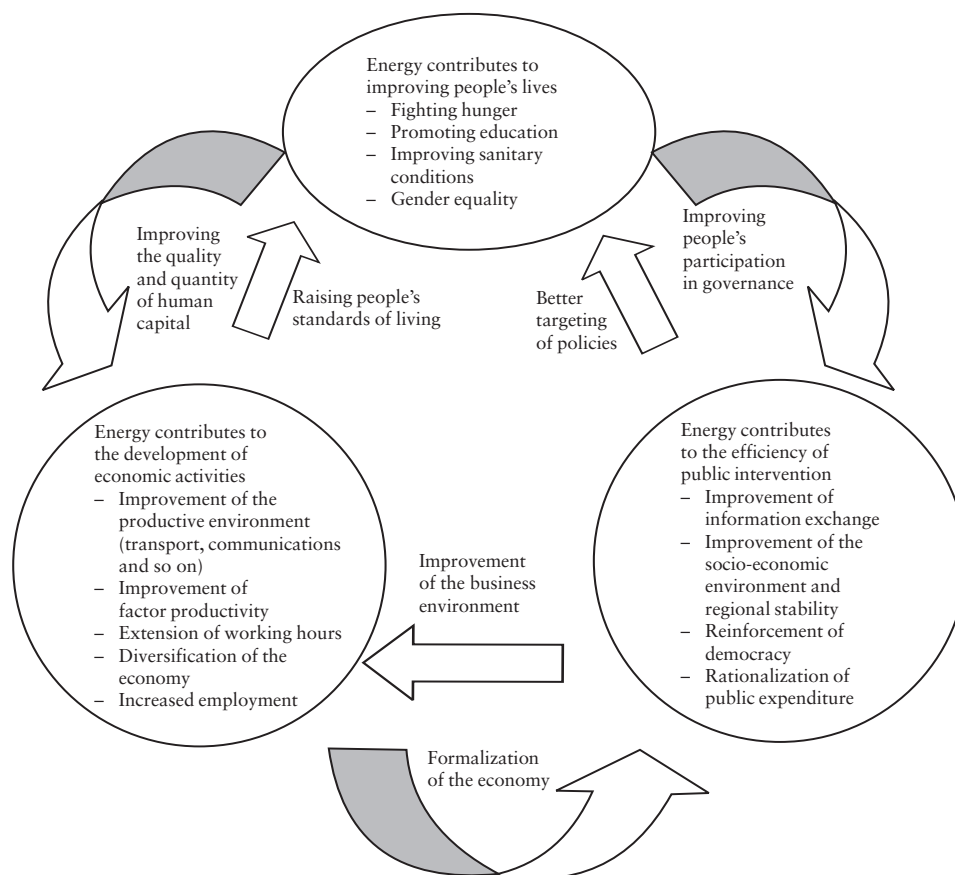


Figure 3.1: Contribution of Energy to Human Development

Source: African Development Bank and OECD Development Centre African Economic Outlook (2003–04).

Box 3.1: Role of Electricity and Rural Poor

Energy to power production

The livelihoods of many small producers relying on energy are under threat because of inefficient production methods and diminishing natural fuel resources. For enterprises relying on heat, such as bakeries or brickyards, up to half of the production costs are on fuel. Options at the industrial level include more fuel-efficient kilns, turning waste into energy (such as sawdust, agro-waste, or charcoal dust), and fuel diversification. Greater fuel efficiency will reduce costs, hence increasing long-term profitability, as well as improving the environmental impact of the enterprise. Many enterprises in rural areas require energy to drive sawmills, pump water or grind grains.

Energy to modernize public services

More emphasis is required on energy for public services like health centres, schools, and water supply in remote areas. Whether it is refrigeration for vaccines, lighting for maternity suites, pumping drinking water, or lighting for evening study, there is no doubt that the impact of power in terms of quality of life of poor people in remote areas is very significant. In key areas such as these, local control can increase security of health provision. Public services are central to achieving the millennium development goals of health and education, and modern energy will be an essential input to modernizing and expanding service provision.

Source: Powering Poverty Reduction—ITDG, Position Paper for Renewables 2004.

these assets significantly exceeds that of non-infrastructure capital’.

Human development specifically argues for building human capabilities, improving entitlements of citizens, and expanding the choices available to human beings and in all these, power in today’s technology-dominated context becomes essential. Clearly, the role of power in the various services that

help build basic human capabilities, and for leading a certain quality of life both within homes and outside, is critical. Further, power has helped economic enterprises to achieve scales that have spurred economic growth and rates that would be unmanageable without power. Some more specific examples from the development experience of MP clearly explain this (see Box 3.2).

Box 3.2: Power and its Relationship with Human Development—Some Examples

According to the first National Family Health Survey (NFHS I), households with access to electric power are more likely to have children (between 12–23 months of age) that have received full immunization, than those households that do not have access to electric power. Further, the data collected during the survey were analysed to establish that households with access to electric power are less likely to face mortality of children aged 12–48 months than households without access to electric power (NFHS II). Further, the relationship between access to electric power and health parameters discussed may only be associational and not causal. An analysis of the NFHS data shows that exposure of women of reproductive age to media like radio, television and cinema has a strong positive impact on current contraceptive use and intended future use of contraception. The report argues that such media exposure would spread only if the households had access to electric power (NFHS II). Another analytical report based on NFHS data has established that pregnant women residing in households with access to media that operate on electricity like television and radio are more likely to receive antenatal care than households without access to mass media. The report has reached the conclusion that ‘...high quality health and family planning services, combined with electrification of households and improved accessibility to the electronic mass media, can increase contraceptive use and lower fertility substantially, even in the absence of major progress in many other aspects of economic and social development’ (NFHS II). The findings discussed here indicate that health parameters are likely to be better for people residing in households with access to electric power than for those without such access.

Role of electric power in bringing about improvements in education and livelihoods in rural areas is best illustrated by a recent initiative, taken by the Ministry of Non-conventional Energy Sources, known as the Village Energy Security Plan. In the process of piloting this plan for providing non-conventional energy to remote villages that would not be conventionally electrified in foreseeable future, a biomass based power generation unit comprising two plants of 10 MW capacity was made operational in Kasai village in Betul district. The electric power generated has transformed the lives of the villagers, with power availability resulting in positive impacts on education and livelihoods. Before the initiative bore fruit, the villagers used to operate the flour mill, pumps for irrigation and threshers on diesel mixed with kerosene. While the nearest outlet for diesel was 45 km away, kerosene supply from the Public Distribution System (PDS) was erratic to say the least. But now the villagers are running the flour mill, threshers, and pumps on the electric power supplied by the newly installed biomass based power plant.

While the villagers are paying a sum of Rs 70 per month and are taking turns to ensure regular supply of biomass (in this case, locally available small pieces of wood), their children now have the choice to study at night. Further, villagers are avidly watching programmes of their interest on a TV that is run on the electricity. This is expected to not only entertain them but also bring them within the ambit of health awareness campaigns run on electronic mass media. This may have a positive impact on the health indicators of the village in the long run as has been discussed earlier. The villagers are planning to soon start running an electric pump for supplying drinking water to the households and also for running irrigation pumps. This would help them cut costs by avoiding the use of diesel and kerosene. The village is also expected to witness positive impacts on their livelihoods as the electric power generated in the village is soon expected to be used for running a milk chilling plant (which may lead to securing reasonable price for the milk produced in the village, thereby expanding the livelihood choices available to some of the villagers) and processing of non-timber forest produce to add value to the produce collected from the forest in order to augment household incomes. It is evident that access to electric power has helped to expand the choices available to the community. The power supply has already resulted in creating conditions that are conducive to promoting education, health, and livelihoods of the community. The role of electric power in human development can hardly be overemphasized.

Increased access and improvement in quality of public services have a greater impact on the poor people than on the non-poor as the later have means to obtain these services through alternate sources. Studies conducted in the states of Andhra Pradesh and Haryana concluded that the income of small farmers could rise by 100 per cent and even income of large farmers could rise by around 40 per cent if the existing quality of power is raised to an acceptable level. The key to power making an impact on poverty reduction is enabling the poor to increase their utilization and consumption of power especially for productive purposes. However, lack of a reliable supply tends to discourage households from making necessary investments.

The nature of poverty is different in urban areas, many goods that are free or relatively cheaper in rural areas, such as water, fuels and building materials, have to be paid for in cities. The impact of power on human development varies in rural and urban areas. Different policy interventions and strategies are required for optimizing the impact.

Provision of free power to poor people cannot be justified financially, as far as the financial health of the power provider is concerned. But there are substantial social and developmental gains, and the social benefits far outweigh the financial costs in such provisioning. Bundling the delivery of power with other services has shown to magnify its effect on income. Data from a household survey in India suggest that, while both, education and power, can lead to higher non-farm income, delivering these services together amplifies the effect by as much as 2.3 times the annual household income (Barnes, Fitzgerald, and

Peskin). Therefore, these investments should be planned and implemented together to realize the full and intended impact.

3.2 CURRENT STATE AND TRENDS IN THE POWER SECTOR IN MP

The state of MP has been focusing on its human development priorities for over a decade now, and as a response to the increasing demand of its citizens to simultaneously focus on basic infrastructure, there has been a renewed focus on power amongst other infrastructure. The state government is committed to build human capital along with providing the entitlements that the citizens of the state require.

Power infrastructure is almost entirely managed and serviced by the state government though the control has shifted from government to regulator. In a relatively unsatisfactory scenario where power consumption is low, people still use other forms of energy much more, and supply is unsure, the state still needs to play a proactive role in developing appropriate policies and strategies to make power accessible to a greater number of people, improve quality and reliability of supply, and have well-directed subsidies in place. The perspective of the state government in the overall policy context of social and economic development and towards reduction of poverty and direct impact on human development will play a crucial role in the way the power sector progresses.

3.2.1 Access to Power

According to the 2001 census and the Madhya Pradesh State Electricity Board (MPSEB), the status of household electrification is displayed in Table 3.1.

Table 3.1: Number of Households Electrified in MP

Source-wise Total Number of HHs and Electrified HHs	Total	Rural	Urban
Occupied Households in Lakhs (Census 2001)	109.20	81.25	27.95
Electrified Households in Lakhs (Census 2001)	76.42	50.63	25.79
Percentage of Households Electrified (Census 2001)	70.00	62.30	92.30
Occupied Households as on 31st March 2004 in Lakh (Projected on the basis of Census 1991 and Census 2001)	109.24	81.28	27.96
Electrified Households as on 31st March 2004 in Lakh (MPSEB)	46.35	22.76	23.59
Percentage of Households Electrified as on 31st March 2004 (MPSEB)	42.40	28.00	84.40

Note: HH—household.
Source: Census of India, 2001 and MPSEB.

Table 3.2: Households with Access to Electricity and with Domestic Connections

Year	1991			2001		
	Total	Rural	Urban	Total	Rural	Urban
Households with Access to Electricity (%)	43.3	34.5	72.5	70.0	62.3	92.3

Year	1995–96			2003–04		
	Total	Rural	Urban	Total	Rural	Urban
Households with Domestic Connections (%)	35.6	23.8	70.3	42.5	29.0	81.7

Source: Energy Compendium and Census of India, 1991 and 2001.

The basic issue of household access to electricity has seen some impressive progress in the state. While in 1991, 43.3 per cent households were estimated (Census 1991) to be electrified, this figure has gone up substantially to 70 per cent for all households and 62.3 per cent for rural households (Census 2001). However, there are two disturbing factors—one is that if we see the number of households with domestic connections, as registered in the MPSEB, it is just 43 per cent overall, and 29 per cent in rural Madhya Pradesh—signifying that either many households do not have a valid connection, or that actually only 29 per cent rural households have proper connections that delivers power as supplied. The high loss levels till 2005 indicate that the probability of the former is higher.

The second disturbing factor is the low per capita energy consumption. If we compare it with some of the other ‘more developed’ states such as Maharashtra and Gujarat, the difference becomes very clear. The inter-district variations within MP, place some regions in a very poor power scenario. While the average per capita domestic consumption is the highest in Bhopal, Indore, Gwalior, Jabalpur, and Ujjain, it is the lowest (below 500 kWh per year per person) in Mandla, Seoni, Jhabua, Damoh, and Dindori which are sparsely populated areas. However, this low per capita consumption does not present the right picture because the losses on account of illegal connections are actually consumption and hence actual data for per capita consumption may be higher than indicated.

There is also substantial inter-district variation in basic access to electricity as estimated by the 2001 Census. The districts with over 90 per cent house-

hold access to power in 2001 were Bhopal, Indore, Neemuch, Shajapur and Ujjain. Overall, 18 districts had more than 80 per cent households with access to power which, given the past record of the state, is a very substantial gain. On the other hand, the districts which still had below 50 per cent access were Bhind, Chhatarpur, Dindori, Jhabua, Mandla, Panna, Shahdol, Sidhi, Tikamgarh, and Umaria.

If one were to consider the use of electric pump sets used for agriculture purposes, one finds huge inter-regional disparities within the state. The Malwa region, in terms of number of electric pumps per lakh rural population, clearly stands out in comparison to other regions of the state. While the figure is 5480 for the Malwa region, the other regions lag behind, with the second best south-western region having 3992 pump sets per lakh population—a good 27 per cent below Malwa region. While both Malwa and south-western regions fare better than the state average for MP (2984), the other regions fare poorly with the central region having 2447, south-central region having 2245, north region having 2011, and Vindhya region having 1337 electric pump sets per lakh population. Within a region, flat rate tariff for agriculture favours the big farmers who grow cash crops compared to tribals and poor farmers who grow foodgrains. Districts where electricity is used substantially for agriculture (primarily pump sets, and some use in agriculture machinery) are Jabalpur, Datia, Shivpuri, Dhar, Barwani, and Indore, and they have become strong voices in support of increased and better supply of power to agriculture.

In terms of per capita electricity consumption (see Figure 3.2), MP, at 284 kWh fares worse than the

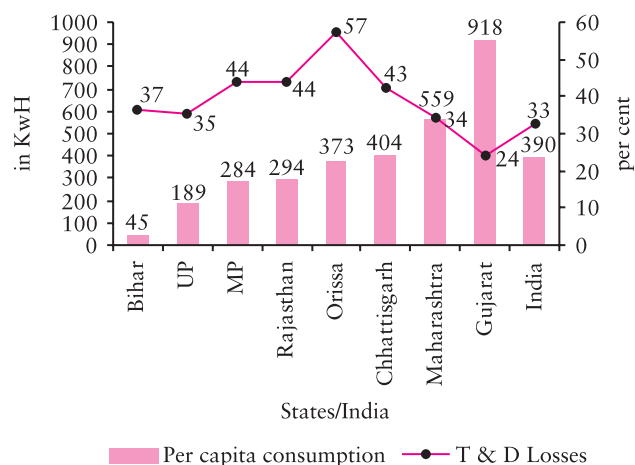


Figure 3.2: Per Capita Electricity Consumption and T&D Losses Access States

Source: MPSEB (2003–04).

national average of 390 KwH. However, it is doing better than states like Bihar and UP where the per capita consumption is at 45 KwH and 189 KwH, respectively. Per consumer domestic consumption of energy is the highest in Malwa region (800 KwH). The north and the central regions take close second and third positions with 780 KwH and 776 KwH, respectively. The Vindhya region turns out to be the least consuming of all regions with the per consumer domestic consumption at 589 KwH. The south-central and south-western along with the Vindhya region fare worse than the state average of 713 KwH per consumer domestic consumption.

While central and north regions fare better than the state average of 1179 KwH (per consumer non-domestic consumption), the remaining regions of Malwa, south-central, south-western, and Vindhya fare worse than the state average.

In terms of consumption per agriculture unit, the state average of 4866 KwH hides a substantial measure of regional disparities. While in the north region, the consumption per agriculture unit stands at 6444 KwH, the Vindhya Region (at 3428 KwH) consumes only half of it per agriculture unit. While north, south-western, and Malwa regions consume energy per agriculture unit at a rate higher than the state average; the central, south-central, and Vindhya regions fare worse than the state average. It is worth mentioning that loss levels are also higher

in these areas which has a direct impact on per capita consumption.

3.2.2 Supply Position

The Transmission and Distribution (T&D) losses for MP in 2006 at 42 per cent are much higher than the national average (33 per cent). It may be noted that high sub-transmission and distribution losses reduce the viability of distribution companies, thereby weakening their ability to source more power and invest in infrastructure and in new production. In general, the supply position in the state has improved over the past few years but it is still unsatisfactory, particularly in tehsil headquarters, smaller towns, and rural belts. Supply restrictions are imposed during every *rabi* season due to demand-supply mismatch, resulting because of an additional load of about 2000 MW of agricultural pumps that have come onto the system. The supply hours to various parts of the state are given in Table 3.3.

Table 3.3: Number of Supply Hours

Details	FY 03	FY 04	FY 05	FY 06
Divisional HQ	22.21	22.19	23.34	23.39
District HQ	20.21	21.04	22.00	22.27
Tehsil HQ	18.10	19.48	19.32	20.23
(a) Rural three phase	6.20	10.39	7.49	11.02
(b) Rural single phase	7.18	5.08	7.23	4.52
Total Rural	13.38	15.47	15.13	15.55

Source: MPSEB.

The power and energy availability in the state has increased over the years and so has the demand. Peak power and energy shortages in FY'04 and FY'05 declined due to commissioning of generating units of the Indira Sagar Hydro Project and Sardar Sarovar Project—joint venture projects of the MP Government.

The generating capacity of the state at present is 4588 MW out of which 2147 MW is thermal power while 2441 MW is hydel power. Clearly, the contributors of Indira Sagar (1000 MW) and Sardar Sarovar (598 MW) have helped the state in creating capacities that can ease out the pressures of increasing demand. In recent years, several private players have shown interest in the creation of generation capacities and the state has shown positive response in

Table 3.4: Energy Availability and Shortages in MP

(in MU)						
Year	Energy Demand	Availability	Increase in Availability	Percentage Increase (per cent)	Shortage (MU)	Shortage (per cent)
FY 02	30627	26437			-4190	-13.68
FY 03	31393	27094	657	2.49	-4299	-13.69
FY 04	32693	28559	1465	5.41	-4134	-12.64
FY 05	35171	30624	2065	7.23	-4547	-12.93
FY 06	37077	32231	1607	5.25	-4846	-13.07

Note: Estimated energy demand is the area under the estimated unrestricted power demand curve drawn with time of the day on the X-axis.

Source: SLDC.

promoting such partnerships. This has resulted in signing of Memoranda of Understanding (MoU) with at least three companies. The peak demand and peak availability projected for the next five years is shown in Table 3.5.

Table 3.5: Projected Peak Demand and Peak Availability

Year	Estimated Peak Demand (MW)	Peak Availability (MW)	Shortage (MW)
2006-07	7114	5783	1331
2007-08	7492	6248	1244
2008-09	8091	7570	521
2009-10	8738	8038	700
2010-11	9437	9446	Surplus
2011-12	10192	10452	Surplus

Note: Estimated peak demand is extrapolated peak demand at a growth rate of 8 per cent per annum.

Source: MPSEB Estimates.

3.2.3 Status of Rural Electrification

The statistics on village electrification do not help the planners in evidence-based planning. The percentage of electrified villages in MP today is nearly 97 per cent. The definition has been revised but in a way that the percentage may change but it still doesn't convey the right picture to the planners. While the old definition classifies a village as electrified if electricity is being used within its revenue area for any purpose whatsoever, the new definition entails that for a village to be classified as electrified, it would have to meet the following conditions:

- The basic infrastructure such as distribution transformer and/or distribution lines is made available in the inhabited locality within the revenue boundary of the village including at least one hamlet/*dalit basti*.
- Any of the public places like school, *panchayat* office, health centre, dispensary, community centre etc. avail power supply on demand.
- The number of households electrified should be minimum 10 per cent for a village which is un-electrified, before the village is declared electrified.

Of the villages electrified as per the old definition, 1068 or nearly 2 per cent do not have even one distribution transformer. But as they may have distribution lines, the first condition in the new definition is satisfied and there is no hindrance in classifying the village as electrified. Besides, there are no data to substantiate if a village has at least one *dalit basti* hamlet electrified. Reliable data are also not available to check if a village now classified as electrified has at least one of the public places electrified. The third condition speaks of the condition that should be met by an 'un-electrified' village for it to be classified as electrified. Clearly, this condition would not help in revising the number of villages electrified as per the new definition as it is meant to be applied only to un-electrified villages as per old definition. Besides, there is a huge difference in household electrification data provided by the Census and the MPSEB.

The electrified household figures provided by the Census are much higher than those provided by the MPSEB. While the former provides data on all

households that use electric power as a source of energy, the latter only provides the number of the metered connections. Clearly, the difference in figures provided by Census and MPSEB contribute to the high T&D losses that rule at 44 per cent in MP. Therefore, the data are of little use for the planners and analysts. Village electrification data should be collected in a way that they aid the planning that is required to strengthen the power infrastructure in rural areas in accordance with the objectives set for Rajiv Gandhi Gramin Vidyutikaran Yojana (RGGVY) under *Bharat Nirman*. The definition should also use criteria that include both quality and duration of power supplied for classifying the village as electrified. The quality parameter should include the number of phases in which the supply is made available to the villages. The status of rural electrification in MP is given in Table 3.1 and the position relative to other states of the country (as per the old definition for ‘electrified’ villages) is given in Appendix A3.1.

The state has 90 per cent of its villages electrified as per the old definition for ‘electrified villages’. As explained earlier, these numbers do not aid to evidence-based policy making by the government as the old definition does not take into account the quality, duration, and household-level access to electricity into consideration before labelling a village as electrified. With the way new definition too is being used, there is reason to believe that it will also not help the cause of planners and policy makers. But even the earlier definition can help in understanding the

regional disparities that exist in rural electrification within the state. Both Malwa and south-central regions have 95.3 per cent and 92.7 per cent of their villages electrified respectively and fare better than the state average. On the other hand, central region with 88.7 per cent, north region with 88.1 per cent, south-western region with 87 per cent, and Vindhya region with 86.8 per cent of electrified villages fare worse than the state average for electrified villages. It is observed that the worst region in terms of proportion of villages electrified is Vindhya region where the figure is 9 per cent lower than the best placed region of Malwa.

The basic problem of access is being taken up on a priority basis by both the central and state governments. The recent initiative of the Government of India under the ‘*Bharat Nirman*’ initiative would provide acceleration to basic access bridging. Through *Bharat Nirman*, the government aims to reach electricity to all villages and offer electricity connection to 2.3 crore households over a period of four years in accordance with its business plan for rural infrastructure (see Box 3.3). With a view to strengthening the rural power infrastructure, RGGVY aims to: (i) establish Rural Electricity Distribution Backbone (REDB) with at least a 33/11 KV substation; (ii) Village Electrification Infrastructure (VEI) with at least a distribution transformer in a village or hamlet; and (iii) stand-alone grids with generation where grid supply is not feasible. Till mid-May 2006, MP had received sanction for electrification of 115 un-electrified villages spread over four districts. Further sanction has also been received for

Box 3.3: Rural Electrification Scheme of Ministry of Power: RGGVY

The Ministry of Power has introduced the RGGVY scheme in April 2005, which aims at providing electricity in all villages and habitations in four years and provide access to electricity to all rural households. This programme has been brought under the ambit of *Bharat Nirman*.

Under RGGVY, electricity distribution infrastructure is envisaged to establish REDB, VEI, and stand-alone grids.

This infrastructure would cater to the requirements of agriculture and other activities in rural areas including irrigation pumpsets, small and medium industries, khadi and village industries, cold chains, health care, and education and using IT at the village level. This would facilitate overall rural development, employment generation, and poverty alleviation.

Subsidy towards capital expenditure to the tune of 90 per cent will be provided, through the Rural Electrification Corporation Limited (REC), which is a nodal agency for implementation of the scheme. Electrification of un-electrified BPL households will be financed with 100 per cent capital subsidy at the rate of Rs 1500 per connection in all rural habitations.

The management of rural distribution is mandated through franchisees. The services of Central Public Sector Undertakings (CPSUs) are available to the states for assistance in the execution of rural electrification projects.

providing electricity to over six lakh rural households spread over more than 10000 electrified villages. Nearly 54 per cent of these households are Below Poverty Line (BPL). It is clear that the programme has immense potential to affect human development outcomes positively in rural MP.

3.2.4 Challenges in Rural Electrification

The task of energizing more households, actually electrifying villages, in a manner where they are not merely connected but a good part of their population uses electricity properly, and supplying power to rural areas to satisfy their energy and agriculture needs is at the least, a daunting one. Given the states finances, the poverty profile of the state, especially its marginalized communities of SCs and STs, those residing in the remote hilly, undulating, and forested terrains, and inhabitations remotely located from roads, the task will be difficult.

Some of the challenges to rural electrification in MP are discussed here.

- *High investment cost.* Small and dispersed loads (owing to lower population density in MP, scattered habitations and undulating terrain) in rural areas tend to increase network expansion costs as compared to those in urban areas. For rural electrification, system designs and technical standards appropriate to urban areas with high levels of demand have been used, thus, increasing the cost of electrification. It is often argued by power sector experts that economic criteria for technology selection have not been employed. For example, off-grid schemes may be the least cost supply option if the location is remote from the existing grid or requires extensive repair, or where there is a good renewable resource. Renewable energy sources are not included under any form of priority in the state.
- *High supply cost.* Widely dispersed load also results in higher technical energy loss. The fixed cost of operation is high and has to be spread on low volumes of energy consumption. Hence, there is an inherent tendency to cut off rural supply to balance out many supply deficiency and fiscal deficit problems. The very calculation of rural needs is made on the basis of agriculture season and little is included by way of domestic needs or non-farm needs. That many rural areas of MP are now moving into large scale non-farm business (Dewas, Sehore, Narsinghpur, Raisen etc.) is not much of a consideration.
- *Low uncertain demand.* Rural areas are characterized by low levels of household demand concentrated at evening (peak) times. This means that fixed (investment) costs are high relative to energy sales and that the average unit cost of supply is higher than that for urban networks.
- *Operational control.* For MPSEB because of its centralized operations, supervision is costly and problematic in rural areas. Greater distances make supervision difficult and expensive, resulting in lower quality maintenance, higher levels of corruption, and higher rates of absenteeism.
- *Weak institutions and sector governance.* At present, several national and state agencies have overlapping mandates for rural electrification oversight and funding. Co-ordination between the Energy Department, which is responsible for policy issues and co-ordination with key ministries—Power, Rural Development, and Non-conventional Energy Sources—that finance rural investment programmes is at times difficult to achieve. Opportunities to optimize resource use and capitalize linkages between rural electrification, rural development, and poverty alleviation are lost.
- *Un-metered supply.* Most of the rural connections are un-metered, with flat-rate tariffs. Since most users pay a fixed monthly amount, they have no incentive to use power efficiently. Low tariffs and un-metered supply have contributed greatly to the poor financial condition of the MPSEB. Un-metered supply has also resulted in wastage of water and over-pumping of groundwater resources. This is a peculiar problem besieging rural power supply. In a way, the system of un-metered supply spread in the state because of political compulsions and the inability of the state electricity authorities to offer better and more sustainable energy supply options for rural areas. Now that this system is widespread and its problems haunt the power sector, villagers are once again becoming victims of a system that is unable to handle the problem. This is a pan-Indian phenomenon

and managing the shift from un-metered to a metered system has its own challenges. Though the companies have taken steps to install meters and the Regulatory Commission has fixed a target for 100 per cent meterization by the end December 2007, it remains a big challenge.

- *Inherent technical problems.* Network in the rural area has been continually extended, with little regard for design and planning principles. For example, the requirement for additional sub-stations and appropriate injection of higher voltage inputs has not been incorporated into the grid as expansion occurred. It is very common to find 11 KV feeders running for more than 25 km. Use of three-phase systems is widespread, and urban design standards have been applied without adaptation to rural conditions. These deficiencies are compounded by the absence of policies to promote the development of balanced loads, poor construction and maintenance practices, and inadequate enforcement of technical standards. The outcome is frequent outages and unstable voltage. Rural safety standards are low. Bare conductors and unguarded terminals pose a serious electrocution hazard to the public and employees. Line clearances in rural areas are generally inadequate. In addition theft is widespread, enabled by poor system design. Ready access to low hanging conductors and insecure meters make tampering easy. Moreover, consistently poor quality service provides an incentive to circumvent meters and take illegal connections.
- *Quality and reliability of power.* The quality of power that is available is generally poor, with low voltage and frequent outages. Supply rationing is necessary because demand—driven by low tariffs and theft and amplified by high technical losses—exceeds supply. Fluctuations in voltage and frequency and large phase imbalances cause a high rate of burnouts of both consumer pump motors and distribution transformers. To mitigate the costs of unreliable supply, farmers routinely install higher capacity pump sets and use capacitors or phase converters to avoid the rationing of three phase supply. This leads to higher energy consumption, increased transformer failure, and unbalanced loading, creating

a vicious cycle of declining quality of supply. Poor, deteriorating quality of supply affects not only farmers but other consumers as well, especially industrial and commercial users. Analysis of Haryana and Karnataka suggests that the cost of poor quality, unreliable power, as estimated by production loss approach equals 1–2.2 per cent of value added in manufacturing. Likewise in agriculture, the cost, measured by loss in crop production represents as much as 3.1–13.3 per cent of agricultural GDP (TERI 2001). Unfortunately, poor and small consumer households, small and marginal farmers, and small industries are the groups most severely affected by poor quality and unreliable power as they can least afford coping mechanisms (for example, investments in diesel generators).

- *High Losses.* One of the reasons for higher losses in rural areas is the unwillingness of villagers to take formal household connections. The new definition for rural electrification requires the supply line to be extended in the populated area, but that will increase the losses as more and more people will tend to tap it illegally. Weak monitoring systems make it almost impossible for the Distribution Companies (DISCOMs) to check this. Thus, they face a dilemma of whether to extend the line and declare a village electrified and increase their losses or not extend it and compromise on the access.

It is interesting to note that a large number of technical issues associated with improving rural electrification have arisen because the specific nature of rural habitations and poor rural households has never allowed a power distribution system and technology options that could be implemented to give good quality power. Rural power distribution has been nothing but a copy of the urban system, with obvious disadvantages creeping, making rural electrification financially an undesirable service. The point is not to blame the power agencies, but to point out that specific solutions for rural areas and the consciousness that their needs and requirements must take as much of a priority as urban areas and industries, were perhaps never adequately considered. A system was devised, and implemented that inherently was unsustainable.

That the power sector in MP would not be quite remunerative as it has low population density, large areas to cover to search out the small habitations in which people live, is largely agriculture or forest based in its livelihood pattern, and has households that are mostly poor, with low surpluses available was always known. But, it may not be wrong to say that in spite of these limitations, and knowledge about them, the power sector was unable to come up with implementable solutions. In this, the small and marginal farmer, the remotely located hamlets, the rural schools, the rural SHCs, the rural non-farm entrepreneur—all have remained without the tremendous benefits to life and business that power could have brought, rendering them worse-off relative to others in cities and towns who had proper access to power.

3.3 RESTRUCTURING EFFORTS BY THE STATE

In order to overcome operating inefficiencies, increase accountability, and make the sector financially viable the State Government restructured the MPSEB initially into five companies under the Madhya Pradesh Vidyut Sudhar Adhiniyam, 2000. The five companies formed were responsible for generation, transmission and distribution in eastern, central, and western parts of MP and were registered in November 2001. They entered into an operation and management agreement with the MPSEB to operate as agents on its behalf with effect from July 2002. Subsequently, other administrative and legal requirements were also met by the state to ensure proper division of such responsibilities within these five companies and the parent MPSEB. However, a sixth company, MP Power Trading Company was created in 2006 to look after the trading of surplus power, if any.

The Commission has appointed an Ombudsman in line with the provisions of the Electricity Act, 2003. The Ombudsman started functioning in February 2005 and has been hearing appeals against the orders passed by the Electricity Consumers' Grievance Redressal Forum.

These reforms, led by restructuring of the mammoth MPSEB into separate units looking after generation, transmission, distribution, and trading, are based on a nationwide reforms effort that appears to be derived from basic function-wise division of power companies. The assumption behind this

restructuring is that these separate activities require separate set of skills and managing separate organizational and social goals—with a separate set or priorities that each activity would entail, directed by state policies, and their fiscal realities. It would ensure that each of the four critical components of power infrastructure is given full attention and each is governed by its own priorities based on criteria of efficiency and governments policy guidelines.

This system appears to be working better than the previous system of one large agency. This is evident from the fact that reform process has not been affected by the change in government and is appreciated by all concerned.

3.3.1 Regulatory Development

Part of the reforms process has also been the setting up of an independent power sector regulator—the State Electricity Regulatory Commission—which has now been functioning in the state for nearly six years. The role of the commission has been to ensure that the problems and challenges before the power industry in the state are resolved in an efficient manner and the policies adopted by the state are respected. One of the critical tasks of the commission is the management of power tariffs. The commission, through its various tariff orders, has attempted to rebalance the tariffs.

One of the major changes in MP today is that the DISCOMs are no longer giving new connections without meters and the regulatory commission is overseeing that all existing un-metered consumers get metered. The commission along with the DISCOMs has drawn up a programme to place meters at distribution transformers for energy audit so that a focused approach can be adopted for reducing distribution losses. This is coupled with other actions that should provide a good environment for investors looking at MP (see Box 3.4).

3.4 POLICY AND REGULATORY ISSUES IN POWER

The power sector, due to its very high financial implications, complexity of technical issues, and its impact on state government's finances and the economic growth of the state, has a well-defined policy and regulation framework. This framework tends to balance the welfare objectives of the state,

Box 3.4: Promoting Consumers and Investors Interest in MP

In order to incentivize the existing generating company, transmission licensee, and three distribution licensees, an MYT framework for determination of tariff has been proposed with a 3 year control period. It is expected that the MYT framework would provide investors the necessary confidence to invest in the power industry in the state. To protect the interest of the consumers, performance standards and supply code for licensees have been framed with provisions of penalty if these operating conditions are not complied with. The commission has implemented a scheme for providing rebate in fixed charges to the consumers if the promised quality of supply is not provided by the DISCOMs. Consumer grievance redressal forum and ombudsman have been instituted for the redressal of consumer grievances if these are not attended to by the DISCOMs in the stipulated time period. The commission also hears consumers' complaints regularly if licensees have not resolved them satisfactorily. The commission has registered with itself number of Non-Governmental Organizations (NGOs) representing consumers of the state for dissemination of public interest information. It has published a draft regulation on the manner and payment of subsidies, wherein the intent of Section 65 of the Electricity Act, 2003 of advance payment of subsidy has been reinforced.

the welfare and development impact of accessible, and affordable power for all, specially the farmers, the poor, the slum dwellers, as well as the need for financial viability and sustainability of power managing institutions so that the state can produce or source adequate power, and keep investing in its infrastructure.

The Electricity Act, 2003, which governs the development of the power sector, has a number of provisions for facilitating rapid expansion and improvement in quality and reliability of supply for consumers. It provides for:

1. National policy on stand-alone systems for rural areas and non-conventional energy systems.
2. National policy on electrification and local distribution in rural areas.
3. Obligation of the government to supply power to all areas including villages and hamlets.
4. Exemption from the need to obtain licence for supply by *panchayat* institutions, users' associations, co-operative societies, NGOs, and franchisees.
5. Multiple licensees with the incumbent service provider not having the exclusive right.
6. Open access in distribution and transmission for facilitating competition in generation and retail supply.
7. Duty to supply on request by the owner or occupier of any premises by incumbent service provider.
8. Standards of performance to be specified for the distribution licensee and non-achievement of

these standards may result in imposition of penalty. These standards may be different for different licensees.

9. Tariffs based on efficient cost and principles of competition. The tariffs may, however, be differentiated according to geographical location.
10. Provisions for consumer forum and ombudsman for resolving consumer disputes.

The National Electricity Policy notified by the Central Government in compliance with Section 3 of the Electricity Act, 2003 reinforces the intent of the Electricity Act, 2003 to facilitate human development. The policy aims at achieving the following objectives:

1. Providing access to all households in the next five years.
2. Availability of power-demand to be fully met by 2012. Energy shortages to be overcome and adequate spinning reserve to be available.
3. Supply of reliable and quality power of specified standards in an efficient manner and at reasonable rates.
4. Per capita availability of power to be increased to over 1000 units by 2012.
5. Minimum lifeline consumption of 1 unit/household/day as a merit good by year 2012.
6. Protection of consumers' interests.

While the Electricity Act defines the rules under which the power sector would be governed, the policy framework has taken on a very ambitious role for the government providing access to all households within five years, say by the year 2008, and the ambitious targets of assured supply with minimum average

consumption. These targets while looking very difficult to be achieved in the given time frames, have spurred both national and state effort. As far as the state government is concerned, there have been institutional reforms and much required investment into new units, power infrastructure, and strengthening of the distribution system (including metering, billing) and also ensuring better local supply. The Government of India is also pitching in with major national level initiatives that include substantial expansion of generation capacity, more effective grid management and grid discipline across India, and funding state government for reforms, strengthening of systems, and under *Bharat Nirman* for rural electrification.

3.5 ROAD AHEAD

The universal service obligation and the requirement to supply 24 hours of quality and reliable supply require the sector to be sustained in the long run. Reforms have to be carried forward to make the sector financially viable and competitive and to increase efficiency, and attract investment, so that it can play its assigned role in human capital formation in MP. However, the approaches for reforms in urban and rural areas would have to be different as there are primary differences between the urban and rural supply.

3.5.1 Governance and Institutional Reforms

Improvement oversight and co-ordination of rural electrification programmes. The responsibility for evaluating, implementing, and monitoring rural electrification programmes at both central and state government levels should be clearly established. The co-ordination regard for this purpose should be institutionalized. In this respect, following actions need to be taken:

- establishing appropriate state electrification targets in consultation with districts;
- co-ordinating rural development programmes to maximize development impact;
- developing transparent criteria for project selection based on economic and financial criteria;
- introducing third party audits and review of project implementation; and
- refining procurement processes for rural electrification investments to prevent corruption.

3.5.2 Technological Options for Expanding Access in Rural Areas

Investments have been made in rural electrification programmes, creating vast expanse of network but due to substandard construction practices and poor maintenance, these are in a depleted condition. The existing access is low. The preferred option should, therefore, be to rehabilitate the existing network to improve reliability and quality of supply and expand access by regularizing illegal connections and providing new ones. Currently, low voltage is the preferred mode of supply but this must be upgraded. Existing Low Tensions (LT) lines can be upgraded for supply at high voltage with little investment. The extent of investment needed for rehabilitating the network should not be underestimated. It is, therefore, important that the existing grid infrastructure be accurately valued when appraising supply options because off-grid supply from renewable sources for small dispersed loads may actually be a cheaper option.

Alternatives to grid supply must be explored. For this, a shift from traditional, centralized planning approaches to initiatives that support markets in which alternative technologies (including renewable and non-renewable) can flourish and compete, must take place. The MP Government is planning a Green Energy Fund to promote non-conventional energy use. This intervention has a large potential in remote rural areas. An evaluation of the economic cost of supply in India suggests that micro-hydro and village level biomass projects, where available, are likely to be most economical. Grid extension is an economic solution only where the distance from the existing grid is short (less than 5 km) and where the required investment to rehabilitate assets is not excessive.

What must also be considered is to bring all areas in the state at par with each other, especially, rural areas. Thus, the power-poor rural areas must be the priority areas for investment. This does go against financial logic where investments into regions which would give the best returns should be made first. But we have seen that the areas poorest in power infrastructure are also the worst-off in terms of health and education parameters. Therefore, investments in power infrastructure would certainly make an impact on basic human development aspects and

contribute substantially to the development of backward regions and poor communities.

3.5.3 Supply Options for Increasing Access to Services in Rural Areas

The Electricity Act, 2003 recognizes various means by which access to power, both in the urban and the rural areas, can be encouraged. The theme that runs through these options is decentralization. The people who are to be served are associated with these models. The suggested options, if implemented with the right incentives, can—with aggressive efficiency improvements—make these areas (especially the rural ones) financially viable. For example, Section 4 provides for a National Policy on stand-alone systems for rural areas and non-conventional energy systems, Section 5 provides for a National Policy on electrification and local distribution in rural areas, and Section 6 places the obligation to supply power to rural areas on the State Government, clearly recognizing the need for a separate focus on rural supply.

It is unlikely that any single mode of service delivery would be able to meet the challenge. On the contrary, multiple organizational arrangements and technologies should be encouraged to compete to provide service and make the most efficient use of the limited subsidy. One option that is being talked about is the separation of domestic and agricultural supply network in rural areas. This can have a long-term impact on quality of power in rural areas and can affect lifestyles significantly.

3.5.3.1 Decision Options—Evaluation Criteria

In working towards universal rural electrification, the options to be chosen in MP must be decided on the basis of certain viability criteria. Currently, rural areas are financially not very viable, but have very high social and socio-economic benefit values. The rural service provider has to cope with consumers with lesser paying capacity, adverse consumer mix higher supply cost due to lower density of loads and a spread-out network. Decisions that lead to increased retail prices to take care of more expensive supply systems cannot succeed, given the low paying capacity and also justifiably a lack of willingness to pay without commensurate increase in the quality of supply. In such a case where tariffs cannot be raised quickly to recoup cost of supply,

rural services remain financially unviable. The option available then is for the state government to provide subsidy either to the bulk supplier or service provider. For transparency and better targeting of the subsidy, it is recommended that the beneficiary of the subsidy, be the service provider. Care must also be taken that misuse of subsidy does not take place with large commercial and industrial users located in rural areas using rural power at rural rates.

3.5.3.2 Proposed Models for Electrification through Grid Supply

The model available for the state is the franchisee model. A franchisee is an entity empowered by the state to either develop/operate a generation and distribution system or distribute electricity within an identified contiguous area for a prescribed duration and collect revenues directly from rural consumers. The four models under franchisee prescribed by Government of India are revenue collection franchisee, energy purchase, sell and collection franchisee, energy purchase and sell collection and operation and asset management franchisee, and electricity co-operative as franchisee.

3.5.3.3 Ownership Options

The service provider could be a government/public company or a private investor. The service provider may operate the network under many available ownership and ownership sharing options.

Many options are available to the state government for the type of ownership and arrangements they have with the service providers like concessions, management contract, operation and asset management, or revenue cycle management. What must take precedence is selecting an option where long-term investments are attractive to the service provider, and where a larger number of potential investors can be attracted. Of all the possible alternatives, revenue cycle management is likely to provide the greatest number of potential investors, as individual contracts will be relatively small. In addition, the fact that no asset management experience is required may open the field to companies with no historic background in power, but which have other established data collection and billing systems. While it is true that this would not tackle the problems of network efficiency,

it does allow focus on a specific issue and could lead to some quick wins.

3.5.3.4 Options for Off-grid Supply

This may give an economical option for areas that are far off from the grid or are inaccessible to grid supply. Such off-grid systems could either use renewable sources of power such as bio-mass, wind, solar, mini-micro or conventional sources such as diesel. Co-operatives of consumers or individual investor as a service provider may be better suited business model for such supply option. The service provider should be free to develop network construction practices, fix prices, reliability and quality standards and should also not be required to seek licence from the regulatory commission. There should be no bar on the number of service providers in the area, the judgement should be left on the potential investor.

3.5.4 Market Development

Reforms should facilitate the entry of new service providers for increased competition and market development. New market entrants should be encouraged through targeted subsidies, supportive regulation, technical assistance, and measures to lower transaction costs. The encouragement could be in the form of financial incentives, regulation, training and technical support, lowering of transaction costs, and autonomy in technology decisions.

3.5.5 Reality of Rural Electrification

Most rural electrification schemes are financially unattractive and the state government will continue to be the main and perhaps the only investor in rural electrification. The options for the government could be to either fund the power purchases or the cost of infrastructure. The latter would be a better option, as it would reduce the cost of access for poor people and would facilitate the expansion of the coverage of services to un-electrified areas as well. Funding only power purchase cost would subsidize the cost of supply to existing users and would encourage inefficient consumption.

3.6 CONCLUSIONS

It is imperative that the power infrastructure must expand, move towards universal coverage and

become accessible and affordable to all households. Its impact is manifold, and the lack of adequate and assured supply of power to villages and to households is holding back a large part of our population from a better quality of life that comes with availability of power.

Business as usual is no longer an option. It cannot deliver the rapid, sustainable increase in rural and urban power access required to meet the state's development needs and poverty reduction targets. Realistic targets have to be established with appropriate delivery arrangements and right incentives. Efforts have to be made to undertake institutional, regulatory, subsidy, and tariff reforms to encourage new market entrants and technological solutions. Until action is taken by both state and national governments, the rural sector will continue to pose an obstacle to state growth, and will be prevented from playing its critical role in catalysing rural development and reducing poverty. While the *Bharat Nirman* programme and the associated programmes of the state government may in a time bound frame get electricity to all villages, the effort to go into all households will be a daunting task—this is not just a technological challenge, it is also a finance challenge. And once we have more and more households, schools, service centres, manufacturing and service enterprises running with electrical power, we will face an even greater challenge: to provide uninterrupted and quality power supply, to the extent that not even been worked out yet.

Barriers to access should be given greater attention in investment and management planning, particularly those that prevent the poor from accessing the benefits of such services. This is important to alleviate poverty in more systematic way. In particular, the cost of power connections for the poor rather than the cost of delivering power may be subsidized. With improved quality of service and greater transparency in billing, both poor and non-poor consumers would be more willing to pay the full cost of power.

Investments should be made in the complementary infrastructure that promotes productive uses of power and other income generating and poverty reduction initiatives and linking electrification with development and improvement of facilities in other sectors, such as schools, health clinics, and water

supply pumping. Without such investments the benefits of power interventions are likely to be limited.

Pricing and incentives are the most critical elements creating an enabling environment for private investment. A clear and rational policy framework is needed that provides proper signals to all stakeholders. Regulations should be designed to attract more private sector investments, allow reasonable rates of return to investors, and improve customer satisfaction. The performance of service providers and regulators should be evaluated by an independent agency with public participation to improve transparency and diminish the likelihood of capture by interest groups.

It is also essential to actively monitor the physical progress achieved in rural electrification programmes. The establishment of benefit monitoring and evaluation programmes is also required to ensure that the development impacts of rural electrification are

achieved. This will help ensure that operational problems are identified and rectified at an early stage, and that delivery of intended development benefits (particularly in terms of poverty reduction, health improvements, gender equity, income generation, and forest preservation) is monitored.

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Appendix A3.1: Status of Village Electrification in India across States

(as per old definition)

	Inhabited Villages (1991 Census)	Villages Electrified (per cent)	Household Access (per cent)	Villages not Electrified (No.)
Andhra Pradesh	26586	100	60	21
Arunachal Pradesh	3649	64	45	1332
Assam	24685	77	17	5678
Bihar	67513	71	5	19579
Goa	360	100	92	0
Gujarat	18028	100	72	88
Haryana	6759	100	79	0
Himachal Pradesh	16997	99	94	102
Jammu and Kashmir	6477	97	75	181
Karnataka	27066	99	72	298
Kerala	1384	100	66	0
Madhya Pradesh	51806	97	62	1502
Maharashtra	40412	100	65	63
Manipur	2182	92	53	181
Meghalaya	5484	47	30	2907
Mizoram	698	99	44	7
Nagaland	1216	100	57	4
Orissa	46989	75	19	11747
Punjab	12428	100	89	0
Rajasthan	37889	96	44	1478
Sikkim	447	91	75	42
Tamil Nadu	15822	100	71	0
Tripura	855	95	32	40
Uttar Pradesh	97122	80	20	20
West Bengal	37910	78	20	8264
Chhattisgarh	19720	92	46	1518
Uttaranchal	15681	81	50	3042
Union Territories	1093	100	83	3
India	490233	88	44	58097

Sources: Central Electricity Authority and Census 2001.

CHAPTER 4

Communication Infrastructure

4.1. INTRODUCTION

The role of Information and Communication Technology (ICT) in human development has become a reality with the rapid strides taken by the nation in this field and in space science. In this chapter, we discuss the linkages between human development and ICT. The communications infrastructure provides an expansion of choices available to individuals and to society to enable them to lead fulfilling and improved lives. ICT partners with existing services and existing forms of technology to make them reach more and more people faster at a cheaper rate and provides a more expansive and wider platform, if there is equitable access to the communication infrastructure.

ICTs have become a vital organ of the 'knowledge society' in which people live. Developing communication infrastructure has become crucial to access information (and knowledge) and resources for enhancing the quality of life. In the last two decades, communication technology has seen absolutely revolutionary changes—the changes in telephony, its network, the technology driving it, its ability to reach every nook and corner in India, the coming of computers and the internet and their amazing ability to penetrate every kind of service and need of human beings.

These changes have, in turn, changed the role of communication in our lives, especially the pace of communications, low costs, and increasing ease of access. There is also increasing integration between information (in its wider sense) and communication, and increasing geographical integration where communication is nearly instant, and is in text, audio, and video. While new ways of communication are changing the way people communicate and way they go about their business or their jobs, the issues of access and usage are creating their own class structure. India is witnessing fast development of communication infrastructure and services and a changing

profile of the forms of communication that people use. This chapter looks at the opportunities from communication and discusses how the state has been able to utilize these. It also delves into the economic and cultural issues involved with communication use.

Before we embark on a look at the state of communications and its infrastructure in MP, it is important to identify the various links between human development and the communication infrastructure. There is a very clear relationship between the facility to be able to communicate with other people for personal or business reasons, and basic quality of life. The service offered by telephones to contact your own people instantly, who live away, has a very high value to human life. Being able to contact people quickly brings value to businesses as it becomes easier to access markets or other information and to even conduct business over the telephone. The facility to communicate with people through text (letters), send or receive quick information through telegrams, and even be able to send funds and other forms of gifts and material through the Post and Telegraph (P&T) infrastructure has social, cultural, and economic benefits that do not need to be stated. Such communication, apart from its social and cultural values, also enables transmission of information for help, conveying emergency messages, and building a security system where in spite of separation over distances, people can assist each other.

There were issues related to earlier forms of communication, but that is changing—the telephone network has now entered urban households and nearly every village, although rural households are still far away from full telephone connectivity. In conducting business and economic activities, telephones (landline and cellular or mobile telephony) have changed the rules of working and have integrated markets, and even individual enterprises across locations connected

through telephones. In MP, with a primarily agrarian society and a large forested belt, the network is still weak and its reach is even weaker in the rural areas. The coming together of computers and telephones in the medium of the internet has opened up a whole new world of communications.

Communication infrastructure also plays a critical role in enhancing social and economic equity along with growth. It is argued that the level and quality of technology (including IT) determines growth and progress in societies, and includes elements that ensure equitable and sustainable growth.

India has become a front-runner in the usage of IT for development purposes during the last one and a half decades. However, the use of IT has not been uniform across different states in the country. As a result, the benefits of ICT have also not progressed at the same pace in different states, and within states in different districts. While in terms of states, MP lags behind Andhra Pradesh and Karnataka, within MP, the district of Indore is much ahead of Balaghat and Sidhi. Digital divide between various regions, income, and caste groups, gender, and even at the

individual level, can be attributed to the way the current infrastructure has been laid, the cost of investing in infrastructure, and also its availability and the cost of accessing it. Access to communication facilities has enhanced human capabilities by increasing choices for economic and social decision making. However, on the other hand, communication facilities (or the lack of these) have also created a social divide in the society between urban and rural areas, between men and women, and between the rich and the poor—based on who has access to what kind of communication facilities—and between people speaking different languages.

ICT has another form of impact on people's lives today. It offers a potential of employment in better quality jobs, where IT skills are becoming increasingly necessary. In MP where there are few emerging opportunities for the youth and the graduates, IT knowledge and skills will enable many to apply for such jobs. ICT has also been useful in expanding the employment potential of activities and in getting higher incomes for people who can access its advantages (see Box 4.2 on e-chaupals).

Box 4.1: Role of Technology in Growth

Recent empirical evidence suggests that factors such as endogenous technical progress, human capital accumulation, increasing returns to Research and Development (R&D), and government policies might have stronger explanatory power in determining the difference in per capita income across countries (Barro and Sala-I-Martin, 1995).

A crucial source of economic growth that is highlighted by this theory is skills and knowledge of labour. Skills and knowledge enhance the productivity of factors of production through activities such as education and on-the-job training. It has been argued by Barro (1989), Lucas (1988), and Romer (1990) that investment in human capital raises the efficiency of labour which, in turn results in output growth. After studying the economy of Republic of Korea, Young (1995), and Nelson and Pack (1999) have argued that coupled with factor accumulations in capital and labour force, an increase in human capital through improved educational levels led to the fast economic growth experienced by Korea. High level of education has enabled the labour force to absorb rapid changes in technology. The important point of the endogenous growth theory is that knowledge drives growth. Because 'ideas' or knowledge can be infinitely shared and reused, one can accumulate them without limits. 'Ideas' are not subject to diminishing returns like land, physical labour, or physical capital. Instead the increasing returns to knowledge propel economic growth.

It is essential for a country today to have sufficient IT-skilled manpower not only for the growth of the IT sector but also that of sectors where IT is used. IT-related jobs require engineering, science, and computer managers; electrical and electronics engineers; electrical powerline installers and repairers; electrical and electronics technicians; broadcast technicians; computer equipment operators; electronic semi-conductor processors; communication equipment operators; and telephone and cable TV installers and repairers. IT is driving upgradation of skills. In this context, imparting IT education and training through formal (schools, colleges, universities, private institutes) and informal sources (learning by doing on job site, learning from friends and colleagues, learning from the internet, learning through NGO initiatives etc.) become vital. Countries and regions which are performing dismally in terms of education, will be unable to catch up with the digital revolution if they do not take steps in this direction.

Box 4.2: e-chaupals

Modern information and communication infrastructure has a profound impact on agriculture growth and development. This has been amply demonstrated by the e-chaupals of ITC, an agribusiness conglomerate. MP has been a front runner in leveraging ICT for agriculture growth and streamlining of the agriculture supply-chain under this initiative.

The Indian FMCG major ITC began its e-chaupal network in early 2000 through its International Business Division, and within four years, it had established 5050 e-chaupal kiosks, of which 1750 e-chaupals are in MP. Through these e-chaupals, the company reaches out to 1 million farmers in the south-western and central parts of MP, especially in the Malwa belt. The transactions through e-chaupals in 2003 were to the tune of US\$ 100 million, and over the next decade, ITC aims to extend the coverage of e-chaupals to 100000 villages in northern India (including MP)—covering 10 million farmers and generating transactions of over US\$ 2.5 billion (GoI 2004, p. 33).

e-chaupals are information centres with a Personal Computer (PC) and internet connectivity secured through VSATs. A local, village-based farmer known as *sanchalak* manages the information centre. The project aims at making each of these centres serve 5–7 villages lying within a radius of 5 km. The average number of farmers with access to a single e-chaupal is approximately 1000. The e-chaupals provide online information on the prevailing *mandi* rates for various produce to help farmers take informed decisions on the timing of sale and choose the *mandi* or ITC procurement centre where the farmer would like to sell his produce (mostly oilseeds such as soybean). The ITC e-chaupals also provide information on weather. This has helped cut down the losses due to rains by half. Further, they provide information on the best practices in agriculture, thereby helping to improve production as well as productivity. Besides, they offer customized quality solutions, based on the examination of samples collected at ITC procurement centres. They also help the farmer decide on the inputs to be used for farming.

The e-chaupal has helped the farmer by lowering his transaction costs through cutting down on costs otherwise incurred on making overnight stays and multiple trips to the *mandis*. The transaction costs incurred due to inaccurate weighing at the *mandis* and wastage in the sampling of the produce have also been eliminated. Since the ITC procurement centres are professionally managed, the farmers are treated with respect and dignity as though they are the customers.

In studies undertaken on e-chaupals, it was estimated that in the traditional agriculture *mandi* system, a farmer incurs Rs 370 per MT as transaction cost in selling his or her grains. On the other hand, in the e-chaupal system, a farmer incurs only Rs 120 per MT as transaction cost in selling his or her products (mostly soybean) to the firm. At the same time, in the traditional *mandi* system, a processor incurs Rs 335 per MT as transaction costs, while such costs are only to the tune of Rs 215 per MT in the e-chaupal system. Thus, we find that through e-chaupals the firm has brought down the total transaction cost in the supply-chain from Rs 705 per MT to Rs 335 per MT. (See Table A4.3)

An evaluation of the e-chaupal initiative based on ‘Sen’s capability approach’ done in the E-Readiness Report 2004, indicates that indirect measures like improved productivity, reduction in transaction costs, and total time consumed have helped the farmers. Besides, the initiative has helped increase growth by making available timely and localized weather reports and by informing the farmers of the best farming practices. By restoring the dignity and self-respect of the farmers and by training them in basic business skills, the initiative has directly impacted human development.

Source: Sivakumar (2005).

The impact of information and communication infrastructure on the well-being of the people depends upon a gamut of factors. In the context of human development, the impact of such infrastructure depends a great deal on the nature and purpose of deployment of the infrastructure facilities, concentration or spatial spread, institutional arrangements

to support the infrastructure and the administrative set up to facilitate equitable access to such facilities by people from all sections of the society. Though in terms of well-being, the advantages that could follow in the field of health and education have not as yet come about in the field of popular, basic and primary levels, there are some successful experiments

Box 4.3: Role of ICT in Human Development—Some Examples

The 123rd Report of the department-related Parliamentary Standing Committee on Science and Technology, Environment and Forests commended the department for bringing high quality medical care to the patients transcending the barriers of geography, distance, time, and costs. The report asserted its belief that (telemedicine) could be a boon for countries such as India where a large part of the population lives in remote areas without access to even basic health care. It expressed the hope that poor quality of internet/telephone services would not come in the way of effective functioning of the telemedicine services. The report also hoped that the telemedicine kiosks would soon proliferate along the length and breadth of sub-urban and rural India. Appreciating the department's efforts in making medical care accessible in remote villages, the report hoped that telemedicine initiatives would soon be implemented in the poor states such as MP, Uttar Pradesh, Rajasthan, Orissa, and Bihar. The telemedicine technology demonstration projects were then running at 17 Medical College Hospitals and 10 super speciality hospitals across various states in India—providing specialist consultations to hospitals located in remote areas. The telemedicine system comprises customized medical software integrated with diagnostic equipments like ECG and X-Ray machines at both ends—the patient and the specialist hospitals that are connected through video conferencing facility.

An ISRO managed satellite education programme that was started in 1996 at Jhabua has had a significant impact on the lives of the villagers. Group of villagers viewed development programmes daily through the direct receive system installed at the community centres. 'An innovative and imaginative software approach using the sophisticated modern tools and yet rooted in the cultural ethos of the tribal people (was) the hallmark of TV programmes produced for Jhabua. The programmes (were) entertaining, enjoyable and educative. They (were) made with the active participation of the local population.'¹ One of the impacts of the programme has been a reduction in the incidence of alcoholism among the villagers. But these initiatives are still to be replicated successfully on a large scale.

The potential of ICT in making health services accessible to those residing in the rural and remote areas cannot be denied. There is evidence based on data from the NFHS I and II that suggests that there is an associational relationship between some of the health parameters like improved child immunization and low IMRs and television viewing, as the households viewing television were exposed to a host of health-related media campaigns.

and some advanced uses of ICT that are already proving to be helpful at least at the higher end of health and education.

4.2. INFRASTRUCTURE FOR COMMUNICATIONS—MP AND INDIA

P&T, telephones, and the combination of computers and telephones (ICT) form the three forms of major communication facilities in MP. While P&T would be the most popular form of communicating, telephones are spreading and ICT is creating its own systems and also a divide that may have extremely serious implications in coming years. But what is the current state of this infrastructure, especially in MP in comparison with neighbouring states and the All India position?

4.2.1 Telephones

In basic telephones, MP was the first state to have private sector investments in telephony.² The number of telephone connections in MP has been on the rise. From just around 541000 telephone connections in the year 1994–95, there were around 1263000 telephone connections in the year 2000–01 (CMIE 2003). Total cellular connections in MP by December 2006 were 4352126 (COAI) and the fixed line connections were 2200272 as on 31st March 2006 (TRAI). In 2005, MP had a tele-density of 4.83, as compared to the average national tele-density of 8.59 (DoT 2005). There is a glaring rural–urban disparity in tele-density in MP, with tele-density for urban MP at 16.09, and for rural areas at only 0.65 in 2004. A mere 9.7 per cent of all telephones were in rural

¹ Dr K. Kasturirangan, speaking on 25th June 1999 in his speech titled 'Challenges and the Opportunities of the New Millennium: Communication for Development'.

² Source: Office of Secretary General, Association of Unified Service Providers of India (AUSPI), New Delhi.

areas. Such low availability and use of telephones in rural areas points to the need to first and foremost expand this network in villages, before any other steps or developments can be made in the field of communications.

By the end of 2004, 38849 out of the total 51806 villages in the state were covered by direct access to telecom facilities, primarily by public service providers, with private telephone services in villages being negligible. Just three years before that, data from village directory records of the 2001 Census show that about 19 per cent of the villages were connected with a telephone facility. However, wide disparity exists among different districts in terms of the percentage of villages connected by telephone facilities. While there are districts such as Dindori, Sidhi, Rewa, and Tikamgarh where less than 4 per cent of villages are connected by telephones, there are districts such as Gwalior, Bhopal, Dewas, and Datia that have more than 41 per cent villages with telephone connections. The district of Datia has the highest percentage of villages with telephone connections (63 per cent).

phones (cellular mobile phones plus WLL mobile phones) increased to 4352126 by December 2006 (COAI). Increasing cellular phone user population is an indication of the growing aspirations and changing lifestyles of the working population of the state, especially in the urban areas. However, the share of MP in the overall cellular subscribers is rather low (around 3 per cent only as against 5.9 per cent share in the total population of India in 2001), and there exists a great potential in increasing this figure through investments in cellular infrastructure, especially in rural and far-flung areas. The main service providers in mobile telephones in MP are Idea Cellular, Reliance Telecom, BSNL, and Bharti Cellular. It would be pertinent to note that as things stood at the end of December 2005, mobile telephony in undivided MP had overtaken fixed line telephony in terms of number of subscribers. While fixed line connections comprised only 43 per cent of the total telephone connections, the remaining 57 per cent were mobile connections. Out of these 57 per cent mobile connections, shares of GSM and CDMA technology based connections are 35 and 22 per cent, respectively.

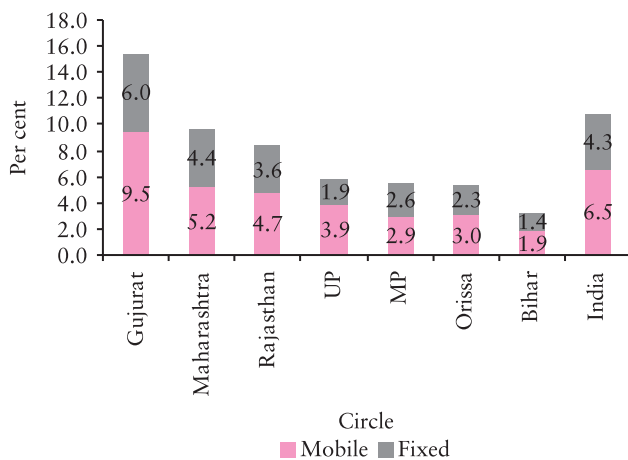


Figure 4.1: Tele-density in MP, December 2005

There has been a massive increase in the number of cellular phone users in MP over the last few years. From a mere cellular phone user population of 12000 in 1997–98 (CMIE 2003), the number of mobile

4.2.2 Posts and Telegraphs

As on 1st April 2006, there are 8345 post offices in MP. Out of these 7473, that is, around 89.55 per cent are located in rural areas while 872 that is, 10.45 per cent post offices are in the urban areas. On an average, each district has post office services available in about 14.46 per cent villages. In other words, on an average one out of every seven villages in MP has a post office. Out of total villages, 34485 (66.57 per cent) villages have the facility of letter box. Average population served per post office is 7232 and average area served per post office is 36.94 sq. km. Thus, post office density per lakh population stands at 13.83 in MP.³

The data pertaining to post offices from a survey undertaken by NSSO in 2002 show that 15.6 per cent villages in MP had a post office within the village, 10 per cent within 2 km and 56.3 per cent had a post office between 2–5 km.

³ Office of Post Master General, Madhya Pradesh, Bhopal.

4.2.3 Computer & Internet⁴

Figure 4.2 shows that actual PC penetration in undivided MP at 3.9 is much below the national average of 9.5. While states such as Maharashtra and Gujarat have either achieved their potential or have exceeded it, states like MP and West Bengal are still some distance away from achieving that status. While MP has achieved nearly 63 per cent of its potential, West Bengal at nearly 65 per cent fares only marginally better. There is a strong case for the government of MP to work towards increasing the potential of the PC penetration in the state as also for realizing the existing potential.

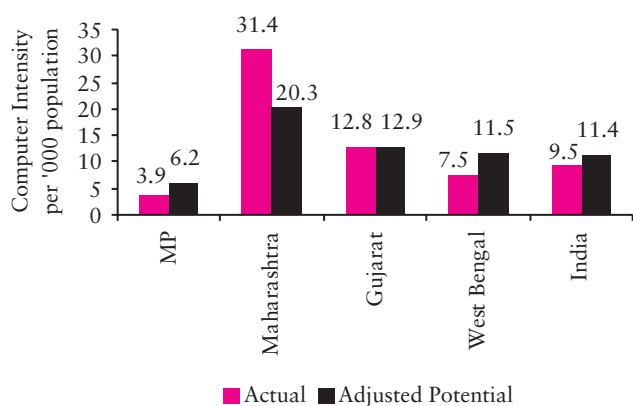


Figure 4.2: PC Penetration, 2003–04

In terms of internet usage, there were 89501 internet users in the state of MP in 2003, as compared to 65301 internet users in 2002, registering an impressive 37 per cent growth. However, despite this high rate of growth in internet users, MP accounts for just 2.55 per cent of all internet users in the country. Though data are not available, it will not be incorrect to say that over 95 per cent of these must be only in cities, with small towns and rural areas accounting for little internet usage.

4.2.4 IT Spending⁵

It was found that in 2003–04, while undivided MP had a share of 5.87 per cent in the national population, it accounted for only 1.33 per cent of the

⁴ Source of Data: NASSCOM.

⁵ Source of Data: NASSCOM.

total national spending on IT. Contrast this with Maharashtra which has a population share of 9.42 per cent in the national population and accounts for 26.15 per cent of the national IT spend. The state of Gujarat is better placed than undivided MP as its IT spending is 3.57 per cent of the national IT spending even as it constitutes 4.93 per cent of the national population. West Bengal too fares better than undivided MP. With a population share of 7.79 per cent it has a share of 4.72 per cent of the national spending on IT. It is evident that MP has a long way to go before it catches up with the leading states with respect to investment in IT sector. The situation

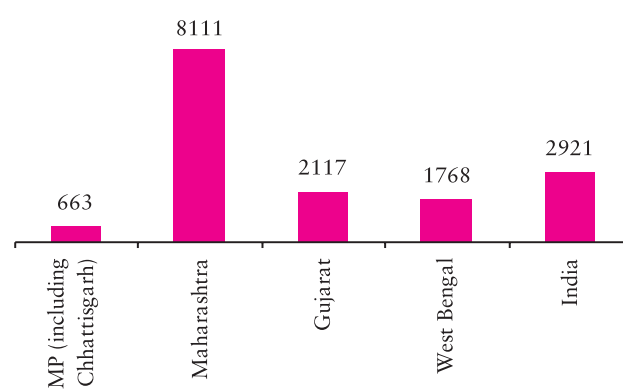


Figure 4.3: Per Capita IT Spending, 2003 (in rupees)

is further corroborated if one takes a look at the per capita spending in IT sector in the different states of India. The per capita IT spending in MP stands at 22.7 per cent of the national per capita spending on IT. When viewed in comparison with leading states such as Maharashtra, the per capita IT spending in undivided MP stands at merely 8.2 per cent. Figure 4.3 shows the per capita spending on IT in undivided MP, some other major states, as well as the national average.

4.2.5 The Digital Divide

The dominant ICT discourses show that while there are significant gains to be made from ICT, areas that get left out and do not adapt to ICT quickly can run into trouble (Ekdahl and Trojer 2002). The impact

of the digital divide⁶—unless governments and societies take care—can further exacerbate the already existing economic and development divisions amongst people, and benefits of ICTs would be unevenly distributed, with the disadvantaged concentrated in the ‘black holes of human misery’ (Loader 1998). However, we must not identify ICT as a miracle medicine for poverty eradication (Ekdahl and Trojer 2002). Vandana Shiva (1998)⁷ said, ‘New technologies travel on old social relations’. This meant that unless the old forms of discrimination on the basis of caste, creed, race, and gender end, ICT is not going to produce prosperity for all. This has implications for MP also, where substantial parts of the state are home to disadvantaged sections of the population and are infrastructure-poor areas.

The common indicators of the digital divide are the communication infrastructure, access to internet, computer availability, availability of alternative sources of ICT that is, TV, mobile phone etc. Let us take a look at the major determinants of digital progress or digital divide, and the state of different areas of MP.

(1) *Household or Individual Incomes and Poverty:* It is perhaps the most important determinant of the presence of PCs and the extent of internet access in homes. Income distribution is particularly important in determining the diffusion of new technology, with higher income groups acquiring ICTs early and leading uptake. The richer also tend to live in infrastructure rich areas and hence their own purchasing power combined with availability of good ICT services puts them in a very advantageous position relative to others. The cities of Indore, Bhopal, Gwalior, Jabalpur, and the smaller townships like Sehore, Dewas, Hoshangabad, and districts in the Malwa belt and around Bhopal are in a better position. The poorer belts fall in southern and south-eastern MP, north in Bundelkhand, and eastern MP.

(2) *Level and Quality of Education:* In general, higher the level of education, the more likely that the

individuals have access to, and use, ICTs. A study in the Organization for Economic Co-operation and Development (OECD 2006) in their report Education at Glance countries reveals that at the same income level, those with higher educational attainment will have higher rates of access.⁸ In terms of educational level, basic functional literacy is the least required to have even the most rudimentary interface with ICT, and to be able to utilize its potential even matriculation is not adequate, and we must look at higher educational achievement. The districts that have a higher percentage of graduates and above are Bhopal, Indore, Gwalior, Jabalpur, followed by Rewa and Hoshangabad.⁹



Computer education in government schools

(3) *Language:* Language is one of the most distinguishing features in access to, and use of ICT. In spite of some weak attempts to bring in Indian languages for interactive platforms in computers, on the internet, and in various programmes, their presence is really quite insignificant, normally restricted to occasional texts. If a person does not know English, then even a rudimentary use of computers and ICT is not possible. MP has been lagging behind most other states in this respect. Even within the state, with the exception of the larger cities and some urban centres, English is hardly known.

⁶ The term ‘digital divide’ refers to the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard both to their opportunities to access ICTs and to their use of the internet for a wide variety of activities.—Understanding the Digital Divide, Organization for Economic Co-operation and Development, 2001.

⁷ Shiva, Vandana (1998), Lecture on ‘Focus on Biotechnology’, Lulea University of Technology, Sweden, 5th March.

⁸ Shiva, Vandana (1998), Lecture on ‘Focus on Biotechnology’, Lulea University of Technology, Sweden, 5th March.

⁹ Census of India, 2001.

(4) *Rural–Urban Divide/Location*: This divide is as relevant for the ICT sector, perhaps even more, as it is for most emerging modern economy sectors. Incomes are much lower in rural areas, infrastructure for telephones and related requirements such as regular electricity, internet service providers, and issue of language keep the rural areas lagging behind their urban counterparts, and this experience has relevance worldwide (2001 Census). In MP, other than the areas surrounding the four *rajbhogi* cities, areas around the industrially developed zones and in small towns with economic vibrancy, all other rural areas lag in terms of infrastructure and systems and demand for ICT. An International Labour Organization (ILO) study on the Indian software industry shows that there is an absence of rural brains in the IT industry, and the urban mass has the advantage of knowing English (Rothboeck et al. 2001).

(5) *Ethnicity*: The SCs and STs are at the lower end of access to ICT. Their economic, linguistic, and geographic characteristics count for this. An ILO study reveals that in the Indian software industry (Rothboeck et al. 2001), professionals belonging to the forward castes form the highest proportion of workers.

(6) *Infrastructure and Cost of Accessibility*: Infrastructure is the foundation for the development of ICT. The necessary infrastructure includes connections to electricity, and regularity of power supply, connectivity to telephones, and availability of internet services. Most information and communication technologies depend on electrical power and telephone lines.

4.3. COMMUNICATION AND MEDIA PROFILE—RURAL MADHYA PRADESH

An interesting picture of the profile of media use is provided by a field study undertaken in MP.¹⁰ The survey brought to light some unique findings which have implications for human development. The survey was conducted in Harda and Hoshangabad districts of MP, but the findings can be generalized for the entire state.

About 70 per cent of all households have at least one member living away from home. Thus, there exists a huge latent demand in rural MP for communication infrastructure. The rural people in the state already spend quite a significant amount of money in availing communication services. As per the survey, monthly expenditure on all communication activities for such households is Rs 278 (or Rs 3336 per annum).

Approximately 20 per cent people use telephones as the preferred means of communication. Around 30 per cent people mostly rely on P&T services for communication. However, on account of lack of local facilities (especially, telecommunications), incoming communications constitute only a third of all communications with the family.

The CIDA report shows that the average number of communications per month on an average between villages and family members is 32. Out of this, 21 are average number of communications with household members living away, while 11 communications, on an average, are from household members living away to the village members of the family.

Media Profile in rural MP identifies media use and not necessarily media ownership. As per the CIDA survey, television is the most commonly used media device in the villages with nearly 50 per cent overall usage. Radio comes second to television with 32 per cent families in rural MP using it. Newspapers and periodicals are not very common among rural households, even among the literate ones, and their usage is restricted to the relatively higher income families.

Though entertainment is the most common use of these technologies, there has been an increasing trend in MP to also use them for education and health related information purposes. News broadcasts, weather information, government announcements, agriculture extension services, and distance education services are the other major uses for which television and radio are used in rural MP. The NSS data on access to modern farming technologies provides an insight

¹⁰ Situation Assessment Pertaining to the Design of a Sustainable Model and the Pilot Project by Canadian International Development Agency (CIDA), 2003 conducted for the design of a sustainable model for telecom and the expansion of telecommunication services and ICT in rural areas in the state of MP. The survey was carried out in the villages of the Khirkiya and Babai tehsils of Harda and Hoshangabad districts, respectively.

into the role and impact of communication technology and infrastructure on farming practices in MP.

4.4. COMMUNICATION INFRASTRUCTURE AND INFORMATION FOR FARMING¹¹

One of the fundamental effects of improved communication infrastructure and better connectivity is the increased access to modern technology, to more accurate and timely information, and thus, a greater adoption of technology by a greater mass of people. This has an implication for human development, the implicit assumption being that better technology leads to higher productivity and output, and thus higher incomes. We look at the 59th Round of NSS to assess the link between communication infrastructure and use of modern technology in farming in MP. MP, being an agriculture state, should witness human development through growth and development of the agriculture sector.

As per the NSS (2003) data for All India, television is the main source of information on modern farming technology for 10 per cent households, radio for 13 per cent households, newspaper for 7 per cent households, and extension workers for 5.7 per cent households. Clearly, one can see that radio and television have become more important than extension workers as sources of information on modern farming practices. In other words, communication sources like television and radio supplement the efforts of extension workers for dissemination information on modern farming practices.

In MP, television is the main source of information on modern farming technology for 6.6 per cent households, radio for 8.4 per cent households, newspaper for 3.4 per cent households, and extension workers for 9 per cent households. Thus, compared to the all-India average for households accessing television and radio for information on modern farming techniques, MP has a lower percentage of households in the same category.

Of all the households in MP accessing farming-related information from the television, 61.5 per cent households access information on improved seed varieties, 24.5 per cent on fertilizer application, and 9.5 per cent on plant protection. In case of radio,

54.4 per cent of such households seek information on improved seed varieties, 27.9 per cent on fertilizer application, and 11.5 per cent on plant protection. Thus, modern means of communication (especially, mass communication) have opened new vistas for farming households to access information on modern agricultural practices.

Of all the households in MP accessing animal husbandry related information from television, 44.8 per cent of households seek information on breeding activities, 30 per cent on feeding practices, and 25 per cent on modern health care practices. In case of radio, 92.7 per cent of such households seek information on health care practices in animal husbandry. None of the households receive any such information through extension workers, *Krishi Vigyan Kendras*, and government demonstrations. Clearly, modern communication infrastructure has made available greater sources of information to agricultural households to make more informed choices and decisions.

In case of fisheries, most of the households in MP depend solely on the extension workers for information on modern fishing techniques. This is on account of two reasons. First, programmes on modern fishing practices do not find ample time and coverage on the television and radio, and second, most households depending on fishing for their livelihoods in MP do not have access to modern means of communication and information such as radio and television. Only 19.2 per cent of fishing-dependent households access any information on modern fishing practices from radio.

Apart from the number of households accessing information from means of one or more modern communication, it is also important to look at the quality of the information received, and whether the information was put to any use or not in agriculture and animal husbandry.

Of all the households in MP accessing farming-related information through television, 66.2 per cent households reported the quality of information received as 'good'. In case of households accessing information from radio, 62.5 per cent households reported the information quality to be 'good'. On the

¹¹ From the NSS Report No. 499, *Access to Modern Technology for Farming*, 2003, Government of India.

contrary, only 42.1 per cent of households accessing information from extension workers reported the information received as 'good'. It is, therefore, evident that modern sources of information and communication have become the means for receiving good quality information on modern farming practices by households. With access to better quality information, people can make more informed choices and take appropriate decisions. Increase in choices for improved decision making is one of the hallmarks of human development.

Compared to the all-India figures on the quality of information, MP fares well. Of all the households in India accessing information on modern farming technology from the television, 59 per cent report such information as 'good'. In case of radio, 55.5 per cent of households report the information received as good. However, in MP, households reporting information received from television & radio as 'good' are 66 and 62 per cent, respectively. Thus, while there may be a lower coverage of households by television and radio compared to all-India figures, the quality of information received by households in MP is better as the proportion of households reporting such information as 'good' is higher in MP as compared to the All-India figures.

4.5 ICT INITIATIVE FOR HUMAN DEVELOPMENT IN MADHYA PRADESH

There has been a lot of discussion on the promise of ICT in helping developing countries to achieve the Millennium Development Goals for human development. In case of MP, there have been some pioneering attempts by the government, the industry, and civil society organizations in deploying ICT to accelerate the state's trajectory towards achieving those goals. A few of the major ICT initiatives geared towards increasing human development are discussed here.

4.5.1 ICT Initiatives in Education in MP

Project Headstart was launched in MP to provide computer-enabled skills to all students in primary and middle schools in the state. For this purpose, 7000 *jan shiksha kendras* (cluster resource centres) have been established in middle-school premises in 48 districts of the state. More than 50 Interactive Multi

Media Rich Lessons (IMMRLs) have so far been developed.

Project *Shiksha* is another project for accelerating computer literacy by providing comprehensive software training to teachers and students in government schools in India. Microsoft Corporation, in collaboration with different state governments including the MP government, shall provide opportunity to 80000 school teachers and 3.5 million students to strengthen their computer-related skills. Through a PPP, efforts are being made to make computer-literacy more inclusive, accessible to a larger proportion of the population, especially the SCs and STs in both rural and urban areas.

Apart from the above experiments in the formal schooling system, ICT is also being used to strengthen the informal education system in the state. Programmes like *Gyan Darshan*, prepared by Indira Gandhi National Open University (IGNOU), have more than 70000 minutes per year of TV time devoted to distance learning for various subjects and levels. Many universities in MP have forged tie-ups with IGNOU both for developing content for distance learning education and using the programmes to supplement traditional course curricula. IGNOU is also in the process of developing a network of FM radio channels with a total capacity of 3500 hours devoted exclusively for education. These programmes can be accessed by schools and colleges in remote areas of MP to supplement and strengthen the existing education system.

4.5.2 ICT and e-governance

- *e-Krishi Vipanan (EKVI)*: EKVI project is the e-Agriculture Marketing Project of the MP Government, executed by Madhya Pradesh Agricultural Marketing Board and Madhya Pradesh Agency for Promotion of Information Technology (MAP_IT), on BOO basis with a consortium of vendors. The objective of the project is to professionalize the agriculture trading business of the state by installing cost effective digital infrastructure using the latest advancements in ICT. For the purpose, the VSAT based communication network is being established in 400 locations all over the state. At present, the project has been rolled out in all the

64 class A and class B mandis (that constitute around 70 per cent of the total agricultural produce market of the state), seven regional offices and head offices. This would enable the farmers to take informed decisions on sale of their produce as the current and future rates are displayed.

- *Treasury computerization:* Integrated Treasuries Computerization is an e-governance initiative by the MP Government. The project aims to cover all aspects of payment and revenue receipts through treasuries in Consolidated Fund of the state. For this purpose, 53 treasuries and 159 sub-treasuries have been computerized, and linked through Wide Area Network to the State Finance Department and Directorate of Treasuries and Accounts. With this system, finance and other administrative departments are equipped with updated information on their revenue and expenditure on daily basis.
- *MPTAXNET:* Under this project, computerization of Department of Commercial Taxes was undertaken in the year 2000. The project has been implemented in all 118 logical offices comprising 78 circles in 13 divisions spread over 55 locations in 43 towns of the state with the headquarters at Indore.
- *Computerization of land records:* Records of all landholdings in the state have been computerized and are distributed through the *Tehsil* office.
- *Computerization of driving licences and registration certificates:* The project is implemented across the state on BOOT model. Now all the driving licences and registration certificates are available on smart cards.

4.6 COMMUNICATION INFRASTRUCTURE—THE FUTURE

What is required along with communication infrastructure is imparting skills to the citizens to use the technologies, that is, operate them and also benefit from them. Communications technology has become a defining and determining asset between those who can take the opportunities being offered today and those who will not be able to.

The public and private sectors are both major players as far as communication technologies are concerned. Hence, the responsibility to ensure that all sections of society in MP, situated in all locations are provided access to this technology and its options lies with both the sectors. There is a considerable bias amongst private players towards the urban, and the more affluent regions and this bias must be handled by the government stepping in to ensure that all infrastructure and service providers also have equity obligations.

The responsibility of the state is to ensure that citizens are enabled to use these services and are able to access and afford them—both physically and financially. There is a grave danger in the way that ICT can create further divisions between those with access to and ability to benefit from communications infrastructure and those without it. With a world that is increasingly getting electronic and where all predominant and growing forms of activity are going to be IT-related, both the centre and state governments have to constantly act as guardians of the interests of the poor and ensure equity in this arena.

Box 4.4: e-Readiness Report 2004

The e-Readiness Report 2004 classifies the Indian states on the basis of e-readiness index as ‘least achievers’, ‘below average achievers’, ‘average achievers’, ‘expectants’, ‘aspiring leaders’ and ‘leaders’. The index takes into account the following factors:

- Environment offered by the concerned state governments that is, market, political/regulatory environment, and basic infrastructure support.
- Readiness of the community key stakeholders to use ICT that is, individual readiness, business readiness and government readiness.
- Usage of ICT among these stakeholders to their degree of readiness to use and benefit from ICT.

The report has classified Madhya Pradesh as ‘expectant’ along with the states of West Bengal and Pondicherry. While the states of Kerala, Gujarat, Goa, Delhi, Punjab and Haryana have been classified as ‘aspiring leaders’, the states of Karnataka, Tamil Nadu, Andhra Pradesh, Maharashtra, and Chandigarh have been classified as ‘leaders’.

It is also the responsibility of the state government especially, to bring citizen and information services onto the IT platform and in a manner and form that is accessible, comprehensible, and practically usable by all. IT-enabled services and e-governance have, thus, far remained restricted to a few services and accessible by a minor fraction of the actual demand. To put it in a language related to IT, we have not yet cracked the code in terms of mass scale IT-enabled interventions that shall truly bring the benefits of IT into peoples' homes, giving benefits in education, and accessing distant markets, institutions, and expertise in health etc.

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Appendix A4

Table A4.1: District-wise Village-level Availability of Postal Services in MP

District Name	Number of Inhabited Villages	Post & Telegraph Facility	% Post & Telegraph Facility	Post Office	% Post Office	Post Office Density
Sheopur	527	179	33.97	79	14.99	13.00
Morena	782	331	42.33	205	26.21	17.00
Bhind	889	355	39.93	281	31.61	21.00
Gwalior	612	436	71.24	129	21.08	10.00
Datia	551	408	74.05	133	24.14	32.00
Shivpuri	1353	608	44.94	225	16.63	18.00
Guna	2078	461	22.18	190	9.14	15.00
Tikamgarh	865	195	22.54	178	20.58	20.00
Chhatarpur	1080	252	23.33	221	20.46	18.00
Panna	955	194	20.31	162	16.96	20.00
Sagar	1901	420	22.09	231	12.15	11.00
Damoh	1175	288	24.51	169	14.38	16.00
Satna	1817	481	26.47	273	15.02	18.00
Rewa	2415	399	16.52	343	14.20	17.00
Umaria	589	144	24.45	74	12.56	14.00
Shahdol	1380	325	23.55	220	15.94	16.00
Sidhi	1754	286	16.31	226	12.88	13.00
Neemuch	674	449	66.62	109	16.17	12.00
Mandsaur	906	538	59.38	194	21.41	21.00
Ratlam	1053	581	55.18	152	14.43	19.00
Ujjain	1096	650	59.31	180	16.42	12.00
Shajapur	1068	496	46.44	174	16.29	18.00
Dewas	1061	680	64.09	157	14.80	23.00
Jhabua	1317	368	27.94	150	11.39	14.00
Dhar	1473	528	35.85	219	14.87	19.00
Indore	625	447	71.52	119	19.04	6.00
West Nimar	1181	529	44.79	198	16.77	15.00
Barwani	711	172	24.19	105	14.77	16.00
East Nimar	1054	582	55.22	248	23.53	13.00
Rajgarh	1677	427	25.46	149	8.88	15.00
Vidisha	1533	427	27.85	148	9.65	16.00
Bhopal	512	358	69.92	65	12.70	9.00
Sehore	1019	581	57.02	148	14.52	19.00
Raisen	1425	511	35.86	209	14.67	24.00
Betul	1343	499	37.16	232	17.27	19.00
Harda	513	199	38.79	71	13.84	11.00
Hoshangabad	929	558	60.06	168	18.08	16.00
Katni	896	373	41.63	167	18.64	10.00
Jabalpur	1386	530	38.24	191	13.78	11.00
Narsimhapur	1052	516	49.05	200	19.01	25.00
Dindori	902	101	11.20	93	10.31	9.00
Mandla	1213	206	16.98	165	13.60	16.00
Chhindwara	1906	790	41.45	267	14.01	14.00
Seoni	1584	434	27.40	212	13.38	21.00
Balaghat	1285	377	29.34	230	17.90	15.00

Source: Village Directory, Census 2000-01, Analysis: IDF.

Table A4.2: District-wise Village-level Availability of Telecom and Communication Services

District Name	Telegraph Office	Telecom Facility	% Telecom Facility	Communication Facility	% Communication Facility	Bus Facility	% Bus Facility	Rail Facility	% Rail Facility
Sheopur	4	113	21.44	198	37.57	195	37.00	14	2.66
Morena	0	154	19.69	144	18.41	142	18.16	17	2.17
Bhind	0	123	13.84	126	14.17	123	13.84	4	0.45
Gwalior	0	261	42.65	202	33.01	196	32.03	15	2.45
Datia	1	345	62.61	128	23.23	128	23.23	6	1.09
Shivpuri	2	424	31.34	238	17.59	237	17.52	3	0.22
Guna	0	300	14.44	266	12.80	262	12.61	15	0.72
Tikamgarh	0	29	3.35	219	25.32	219	25.32	1	0.12
Chhatarpur	0	63	5.83	274	25.37	274	25.37	1	0.09
Panna	0	54	5.65	159	16.65	159	16.65	2	0.21
Sagar	0	208	10.94	366	19.25	360	18.94	15	0.79
Damoh	0	155	13.19	232	19.74	229	19.49	7	0.60
Satna	1	248	13.65	322	17.72	316	17.39	13	0.72
Rewa	5	71	2.94	267	11.06	266	11.01	3	0.12
Umaria	1	92	15.62	89	15.11	88	14.94	8	1.36
Shahdol	1	156	11.30	297	21.52	292	21.16	13	0.94
Sidhi	2	67	3.82	315	17.96	304	17.33	16	0.91
Neemuch	1	222	32.94	260	38.58	260	38.58	5	0.74
Mandsaur	1	357	39.40	301	33.22	300	33.11	10	1.10
Ratlam	0	337	32.00	368	34.95	356	33.81	10	0.95
Ujjain	0	365	33.30	257	23.45	252	22.99	20	1.82
Shajapur	2	262	24.53	199	18.63	197	18.45	6	0.56
Dewas	0	441	41.56	189	17.81	187	17.62	3	0.28
Jhabua	1	247	18.75	317	24.07	314	23.84	8	0.61
Dhar	1	163	11.07	438	29.74	438	29.74	0	0.00
Indore	0	161	25.76	210	33.60	208	33.28	10	1.60
West Nimar	0	250	21.17	437	37.00	437	37.00	4	0.34
Barwani	4	75	10.55	156	21.94	156	21.94	1	0.14
East Nimar	3	323	30.65	332	31.50	329	31.21	28	2.66
Rajgarh	4	301	17.95	176	10.49	174	10.38	2	0.12
Vidisha	7	217	14.16	231	15.07	230	15.00	4	0.26
Bhopal	1	212	41.41	88	17.19	85	16.60	4	0.78
Sehore	5	335	32.88	162	15.90	160	15.70	2	0.20
Raisen	6	262	18.39	175	12.28	173	12.14	12	0.84
Betul	4	260	19.36	223	16.60	222	16.53	12	0.89
Harda	0	81	15.79	83	16.18	83	16.18	6	1.17
Hoshangabad	5	369	39.72	179	19.27	169	18.19	21	2.26
Katni	5	228	25.45	321	35.83	317	35.38	22	2.46
Jabalpur	1	339	24.46	256	18.47	255	18.40	20	1.44
Narsimhapur	4	230	21.86	153	14.54	152	14.45	7	0.67
Dindori	0	18	2.00	174	19.29	174	19.29	0	0.00
Mandla	0	62	5.11	150	12.37	147	12.12	9	0.74
Chhindwara	3	434	22.77	313	16.42	312	16.37	21	1.10
Seoni	0	281	17.74	295	18.62	295	18.62	11	0.69
Balaghat	0	172	13.39	318	24.75	313	24.36	16	1.25

Source: Village Directory, Census 2000-01, Analysis: IDF.

Table A4.3: Cost Comparisons—e-chaupals and Traditional Agriculture *Mandis*

Transaction costs in a <i>mandi</i> system		Transaction costs in e-chaupal chain	
What farmer incurs- (in Rs per MT)		What farmer incurs- (in Rs per MT)	
(a) Trolley freight to <i>mandi</i>	= 120	(a) Trolley freight	= 120
(b) Labour	= 50	(b) Labour	= 0
(c) Local agent	= 150	(c) Local agent	= 0
(d) Handling loss	= 50	(d) Handling loss	= 0
Total	= 370	Total	= 120
What processor incurs- (in Rs per MT)		What processor incurs- (in Rs per MT)	
(a) Commission to agent	= 100	(a) Commission to <i>sanchalak</i>	= 50
(b) Cost of gunny bags	= 75	(b) Cost of gunny bags	= 75
(c) Freight to factory	= 120	(c) Freight to factory	= 0
(d) Handling at <i>mandi</i>	= 40	(d) Storage and handling	= 40
Total	= 335	(e) Cash disbursement costs	= 50
		Total	= 215
Cost incurred in total supply chain 370 + 335 = Rs 705 per MT		Cost incurred in total supply chain 120 + 215 = Rs 335 per MT	

Source: Sivakumar (2005).

CHAPTER 5

Migration and Urbanization

5.1 INTRODUCTION

Structural reforms and the associated development strategy launched formally in India in the early nineties are expected to step up infrastructural investment in the country and help the less developed states like MP to get linked with the national and global economies. It is argued that there will be massive investment, from both within and outside the country, resulting in rapid economic growth and improvement in infrastructure and basic services. The reform is expected to attract investors in urban centres that have relatively higher levels of income and consequently higher affordability for the services. This, in turn, is likely to give impetus to population growth in towns and cities in these states. Since much of the industrial growth and consequent increase in employment are likely to be either within or around the existing urban centres, it is argued that the later would attract massive rural–urban migration and experience rapid demographic growth. The impetus would also come from the creation of new urban centres, as a consequence of this infrastructural and industrial development. All this would lead to higher incomes and growth in sustainable employment, alleviation of poverty, improvement of quality of life, and promotion of overall human development.

However, in the current economic scenario, this may not necessarily happen in relatively backward states like MP, where there has been and probably would be high urban growth but partially because of pull factors operating through urban centres attracting investment. A part of the demographic growth in the cities and towns could be due to the destabilization of the agrarian economy and the forest based economy in the region. The protagonists as also the critics of economic reforms seem to converge

on the proposition that urban growth in the post liberalization phase would be very high in less developed states although they seriously disagree on the factors causing the rural–urban migration.

It can be argued that the rate of infrastructural investment and improvement in provisioning of urban amenities may not be high in a less developed state like MP due to resource constraints. Further, in the last ten to fifteen years, the central government transfers to states under a more liberalized dispensation were lower than those in the previous years and the weakened state of state government finances had also reduced the capacity of the states to intervene to improve infrastructural services in backward regions, particularly, in small and medium towns. Although, in the last couple of years, this has changed with a substantial rise in the funds transferred from central government to state government,¹ and an improvement in the states' own fiscal situation after years of problems faced after implementation of the fifth Pay Commission. The ability of these states to attract private investment in less developed areas by offering incentive would also be lower than in many of the developed states.

It has been seen that in the current economic scenario leading to relaxations of locational constraints, private entrepreneurs may not be enthusiastic in moving into the less developed states like MP, and more so in its backward regions. As private investors become increasingly free to choose locations guided by commercial reasons, a few established industrial and commercial centres, besides the state capital, may emerge as favourite destinations. Indeed, these centres are likely to corner most of the benefits of the emerging capital market and operations of financial intermediaries and mobilization of resources

¹ The recent adoption of the recommendations of the Twelfth Finance Commission by the Government of India on the funds to be transferred to state governments has contributed significantly to this change.

through issue of bonds and other financial instruments. As a consequence, cities and towns in less developed regions would face a serious resource crunch. Understandably, this would create serious problems of inequality in the provisioning of infrastructure and basic services across regions.

This chapter looks at urbanization as an infrastructure development. Urbanization is the growth in population residing in urban areas, due to both growth in population of current residents and net migration into urban areas. It also encompasses a transformation of the erstwhile rural areas into 'urban' areas through changes in population density and the employment profile from a primarily agrarian and agro-based employment to non-agriculture based employment. In terms of all the basic human development parameters, urban areas stand out as significantly different from rural belts, both in the provisioning of services essential for human development, and in the basic capabilities that citizens can, and do, acquire while living and growing in an urban area as compared to that in a rural area.

The urban dwellers get to access schools more easily and in greater quantity with an element of choice, between public and private schooling as well as within public and private schools. They get easier access to primary and advanced health care, at close distance, and with much better service quality than in rural areas. There is also the choice of public and private health service providers. The issue of livelihood is also much better here. There are multiple options for skilled and unskilled, including the migrant casual labourers, and the cities and towns also provide areas for shelter, organized in their own informal but extremely strong networks. Basic minimum services are also available—basic drinking water (although its quality is now under severe strain), and a PDS which is better when compared to the rural PDS. Further, there is one element in cities, even and in fact especially for its poor—the strength the urban citizen draws from close dwelling—turning into a powerful and influential democratic force. Whether it is the literate and rich city citizens who influence policy and programmes through their sheer influence on news media, and their proximity to the political executive and the bureaucrats and their ability to make adequate noise that is heard; or the slum

dwellers whose sheer number and ability to turn into a peoples force and demonstrate, if and when required, that makes them politically powerful and influential. This power of the city dwellers, has constantly kept the government on its toes and forced it to provide basic services in towns and cities that rural areas don't even expect, forget getting them.

The city takes care of its citizens in a manner no other form of conglomeration is able to. The sheer dynamism, vibrancy, and size of economic activity, the multiple options and services needed and used, the multiple service providers and the range of prices at which they are offered enable most, even the poorest to somehow survive. The absorptive capacity of cities seems to be growing and as they add people, they also seem to add services for them. There are also the human development dark holes in cities—the slums—where levels of sanitation, and condition of habitation are extremely poor; the sheer dynamism of urban poor dwellings and their rules of social organization and engagement, especially, of the unemployed youth, with aspirations higher than basic labour, which give rise to crimes, use of drugs and other substance abuse; and the increasing 'lumpenization'—a process that has political and social implications that can turn into organized crime and into greater social disorder.

It is these characteristics and reality of urbanization, that make us look at urbanization as an element of infrastructure that provides citizens within its fold a better quality of servicing for their entitlements. But it also has warning bells, which say that basic human development in cities has to be of a minimum order that can help continuously turn Bhopal, Gwalior, Indore, and Jabalpur into places of opportunity and growth for the state and its people. Even the smaller towns such as Sehore, Narsimhapur, Rewa, Betul, and Tikamgarh can also offer similar quality to their citizens.

Here we begins by looking at the trends and pattern of population growth in rural and urban areas and migration in the state at the macro level and across size class of urban centres in the context of the macroeconomic strategy of globalization in the country. Section 5.3 overviews the major trends in the economy in terms of growth in income, poverty, malnutrition etc. in relation to the processes of

urbanization. Next Section discusses pertaining to urbanization, provisioning of infrastructural services, and aspects of economic and human development for rural and urban areas at the district level for eighties and nineties and the early years of the present decade. An attempt has also been made to assess how the changing pattern of urbanization and provisioning of infrastructure and basic amenities are affecting the process of achieving balanced human development in the state, based on an analysis of their interdependencies. Section 5.5 highlights the state's response to these problems and recent initiatives that have been the focus of the government. Last Section sets out a perspective for future development.

5.2 EMERGING DEMOGRAPHIC TRENDS AND PATTERN OF URBANIZATION

MP has a large and growing urban population, with nearly 27 per cent of the state's population, approximately 16 million people, living in towns of over 100000 people (Class I towns). A significant proportion of this population lives in the six major cities of Bhopal (1433875), Indore (1597441), Jabalpur (951469), Gwalior (826919), Ujjain (429933), and Ratlam (221267). The high growth rate is expected to continue, with the urban population rising by a further 50 per cent to over 25 million people living in the towns having more than 1 lakh population by 2021.



City roads after renovation bring comfort to commuters

The state experienced modest population growth during the pre-independence period in the last century. The growth has, however, picked up since independence, the rate being much above the national average. In case of demographic growth in urban areas, the rate has always been above the national average during the past five Census decades, and is a subject of policy debate. It would indeed be important to probe into the dynamics of urban growth in the context of macro and micro level changes in the state economy.

The most significant demographic phenomenon in the state was a slump in the urban growth rate during the nineties. The decline was much more than that noted at the national level so much so that the national and state growth rates have become equal *viz.*, 2.7 per cent per annum. Furthermore, the final population count for 2001 brings down the provisional figures of urban population by about one (0.85) per cent,² giving the revised urban growth rate as 2.6 per cent, which is below the national average.³ It may be pointed out that for all municipal corporations in the state except for Indore, Jabalpur, and Rewa, the decennial growth rates of population have declined during 1991–2001 compared to the previous decade. Even in the projected population estimation by the Census of India, urban population growth is at a modest 2.2 per cent per annum.

The urban structure in MP is not top heavy, as urban population in towns with less than 20000 population was as high as 24 per cent compared to the figure of 13 per cent for the country in 1981. The figure has gone down to 16 per cent which is still much above the national figure of 8 per cent in 2001. The growth rates of population in lower order towns in the state during the first four decades since independence were similar to, or higher than, those in class I cities. The growth rates for class II towns during the seventies and that of class III towns in the eighties are higher than those in class I cities. This led to the urban structure not becoming top heavy. Importantly, the trends and pattern noted at the national level are different wherein the smaller towns

² The overestimation in the provisional figures of urban population in MP was noted to be only 0.06 per cent in 1991. At the national level, there was underestimation in provisional figures of urban population by 0.2 per cent only.

³ The study by GHK International shows that the data on Land and Housing disprove the popular notion of rapid urbanization creating many new and temporary settlements, and also the notion that poor settlements are created by a tide of rural migration.

Table 5.1: Urbanization Rate in MP

Census Year	Total Number of UAs/Towns	Total Population	Total Urban Population	Urban Population (per cent)	Decennial Growth		Annual Exponential Growth Rate
					Absolute	Per cent	
1901	97	12679214	1329445	10.49	–	–	–
1911	98	14249382	1172290	8.23	–157155	–11.82	1.17
1921	99	13906774	1277021	9.18	104731	8.93	–0.24
1931	118	15326879	1565868	10.22	288847	22.62	0.97
1941	138	17175722	2058412	11.98	492544	31.46	1.14
1951	167	18614931	2768908	14.87	710496	34.52	0.80
1961	171	23217910	3864520	16.64	1095612	39.57	2.21
1971	190	30016625	5576875	18.58	1712355	44.31	2.57
1981	253	38168507	8528287	22.34	2951412	52.92	2.40
1991	350	48566242	12274144	25.27	3745857	43.92	2.41
2001	368	60385118	16102590	26.67	3828446	31.19	2.18
Estimated Urban Population							
			17567000	26.9			
			17969000	27.1			
			18370000	27.2			

Note: UA—Urban Agglomeration.

Source: Census of India (2001).

have experienced a lower growth rate making the urban structure heavy at the top.

The nineties, once again emerge as a decade making a departure from the past. The state has seen significant deceleration in the growth of the small towns resulting in their population share coming down significantly in 2001, as mentioned above. Also, the number of new towns is only 39 as compared to the figure of 102 in 1991.⁴ Understandably, the percentage of population in new towns to the total urban population in the state has declined from 7.4 per cent in 1991 to 2.3 in 2001. Further, the number of declassified towns was 9 in 2001 compared to only 1 in 1991.

It is often argued that the states trapped in the vicious circle of poverty report high urban demographic growth. All characteristics of poverty that lead to high fertility and demographic growth, such as low levels of literacy, poor medical facilities, and poor social and economic infrastructure, are arguably present in MP. A part of the explanation for the state reporting urban population growth above

the national average can possibly be found within this poverty syndrome. Importantly, however, the migration factor has also played an important role in pushing up the demographic growth.

Demographers analysing the pattern of migration in terms of push and pull hypotheses have come to the conclusion that relatively backward states ought to be sending out the migrants while the developed states should be receiving them. This indeed is the case in India as the less developed states like Rajasthan, Uttar Pradesh, Himachal Pradesh, and Bihar are out-migrating in character while Maharashtra, Punjab, Haryana, Gujarat, and West Bengal are the in-migrating states. MP emerges with unique characteristics, reporting per capita income and economic growth much below the national average and yet receiving many more migrants than those being sent out (till 1991). This is partly because of the investment in heavy industries in the post-independence period undertaken with the objective of creating long-term growth potential in the country. As the skill requirement for employment

⁴ The number of new towns identified in the 1981 Census in the reconstituted state of MP (even after excluding those that got declassified in 1991) was as large as 84.

in the upcoming industries such as steel, heavy electrical, and heavy engineering was high and educational development in the state lagged behind significantly, not many among the locals could benefit from the expanding job opportunities. In fact, educational levels and general awareness about the job market in the country were so low that not many could go out of the state or even to the centres within the state where the opportunities were opening up. As a result, the state witnessed net in-migration of labour, even for taking up low-skilled or unskilled jobs.

The percentage of male immigrants from outside the state was very high in MP in 1961, basically because of a large number of workers coming to urban centres, as a consequence of public investment in basic industries. This declined subsequently as incremental private sector investment fell and hence, the percentage of in-migrants became equal to the national average in 1991. The percentage of out-migrants was low—about half the national average in 1991. This led to a peculiar situation of a backward state like MP, reporting net in-migration of six per 1000 population in 1991 which is very high. The figure works out to be exactly the same by the NSS for the year 1999–2000.

This trend has changed now as the Population Census of 2001 informs us that MP has become a net out-migrating state in terms of decadal migrants, the net figure being only 21000. This is about 1 per cent of the figures reported by Bihar or Uttar Pradesh and about 10 per cent of those of Orissa or Rajasthan. The number is one-fifth of that of Chhattisgarh although its population is less than 40 per cent of that in MP.

The trend of growth in four major cities can be seen in Figure 5.1. Bhopal, Indore, Gwalior, and Jabalpur are developing as major urban centres as well as growth centres for their respective regions. Indore is emerging as the commercial capital of state and is progressing at a very fast pace with investments in infrastructure and industrial sectors.

The low sex ratio is a significant characteristic of urban India. Large cities in India have sex ratios less than 900 because in-migrating population, specially the labour, has less number of women compared to men. However, in case of MP, again the trend

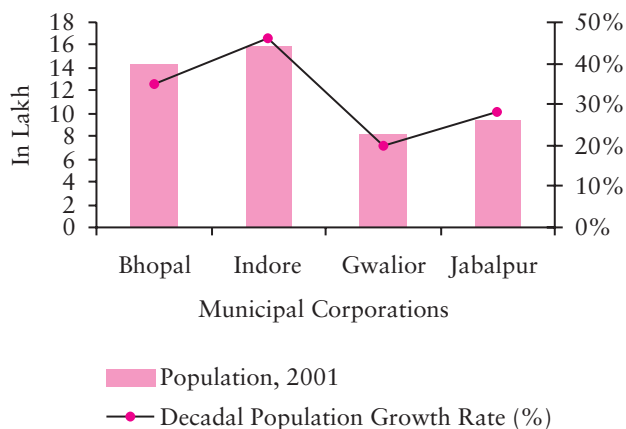


Figure 5.1: Major Municipal Corporations of MP

is slightly different as large cities like Indore (902), Bhopal (898) and Jabalpur (898), have higher than the average sex ratio of all Urban Agglomerations (UAs) or large cities of country. This is because economic dynamism has not improved in many of these cities over the years that can attract volumes of migrant population having low female–male ratio. The cities have, thus, become residential in character attracting not many migrants or mostly family based migration.

5.3 STATUS OF URBAN DEVELOPMENT

A growing urban population in MP, increasing rates of urban poverty, and the economic leadership of urban centres is fast making our cities and towns the most crucial areas of focus in the coming decades. Not only is urban MP housing a quarter of the population, the cities and towns are also the gateways to the state and its principal economic engines. Urban areas have to be a focus area not only to ensure good living conditions for the middle class but also to ensure that cities and towns have fewer slums and remain basically clean with adequate water supply and roads. In terms of their economic impact, it is currently being estimated that the contribution of urban areas to India's Gross Domestic Product (GDP) was about 60 to 65 per cent in 2005. However, our cities and towns, by and large, have not received their due share of attention and public investment.

If the current rate of growth of urban population continues, MP would have approximately 2 crore urban dwellers by 2011 and 2.4 crore by 2021

(conservative estimates).⁵ The share of urban population would also have reached the near 30 per cent mark and then onto the nearly 40 per cent mark by the end of the fourth decade of this century.

This would also mean that we should have around 550 towns and cities by that time. These numbers exhibit the pressures that are going to emerge for urban civic and basic amenities. This shall also suddenly bring into focus the challenges of sanitation, drinking water, garbage disposal, law and order, and the most critical of all, housing for the poor on the one hand and maintaining and preserving the current green belts, green cover, and open public and required spaces for common facilities and uses in urban locations on the other.

5.3.1 Basic Amenities and Housing Conditions

Way back in 1991, according to the Census, basic amenities available to urban citizens in MP were rather abysmal. Only 44.7 per cent of urban households had access to all the three facilities of electricity, potable water supply, and sanitation while 8.1 per cent had none of the three facilities. Chhatarpur, Panna, Rewa, and Satna were the most backward districts with less than 30 per cent of the urban households having access to any of these facilities. The percentage of urban households with all the three amenities of safe drinking water, electricity, and sanitation went up to 62.2 per cent by 2001. Though this increase is significant it is still a very long way from universal access to basic urban amenities. About 12 per cent households in 2001 did not have access to safe drinking water. However, the survey undertaken by NSS in 2002 reveals that 20 per cent households did not get sufficient water in urban MP, and this is, particularly, true for people dwelling in slums and squatter settlements where this figure goes up to 38 per cent (NSSO 2002). The data from NSS 54th round (Sarvekshana 2000) in 1998 show that about 16 per cent urban households in MP reported getting insufficient drinking water. This shows that in a period of 4–5 years, quantity of water supply and its availability for households had in fact deteriorated. Regarding the quality of water, while there is little direct evidence of household access and quality of

water, only 36.5 per cent households filtered drinking water before drinking it. Very few precautions are taken by households to treat the water in some manner before consumption. With fairly poor drainage systems, wells and hand pumps providing most of the drinking water, and no use of latrines, water quality cannot be assumed to be satisfactory directly from its source.

The basic amenity, for which the state's performance can be commended, is electrification. The state reports the percentage of households having electricity connection as 70 per cent, and 92 per cent for urban MP, well above the national average of 55 per cent in 2001. Per capita power consumption, however, falls short of the national per capita figure of 355 Kwh.

From Census 2001, it is also assessed that about 76 per cent households did not have access to sanitation/latrines. The percentage of households without latrine facility is also corroborated by NSS 58th round survey on housing conditions in India, 2002, where it was found that 71 per cent urban households had no bathroom, and 77 per cent had no latrine facility.

The state government has since initiated several schemes for the supply of water and sanitation in 100 towns of MP during the Eighth Plan, many of which are continuing into the Ninth Plan period as well. Drinking water, however, continues to be a critical area for the state as demonstrated in recurring droughts in some part of the state over the last four years. The state government, in its submission to the Vidhan Sabha, stated that water supply crisis was apprehended in 279 urban areas in 37 drought-affected districts of the state. The problem was also envisaged in the remaining 55 towns of the state where the existing water schemes had become obsolete. In addition to water, sewerage, drainage, and solid waste disposal facilities are the most critical problems in urban settlements of MP as they are grievously affecting the environment, apart from emerging as urban eyesores.

The overall quality of sanitation also seems to be worsening. The NSS survey in 2000 found that around 46 per cent urban households reported that they find that flies have actually increased over the

⁵ Population projections for India and states, 2001–06, Census of India, Office of the Registrar General of India, New Delhi.

Table 5.2: Households Reporting Increase or Decrease in Problem of Flies, Mosquitoes, and Foul Odour over Last Five Years, 1999

	Flies		Mosquitoes		Foul Odour	
	Increase	Decrease	Increase	Decrease	Increase	Decrease
Rural MP	43.8	7.3	57.9	3.5	22.1	8.3
Urban MP	46.2	2.2	76.5	0.4	40.8	2.3
Population	26835144	3586882	37958065	1614299	16356295	4045809
Percentage	44.44	5.94	62.86	2.67	27.09	6.70

Source: Sarvekshana 2000, p. 81.

last five years, whereas 77 per cent urban households find more mosquitoes and 41 per cent find an increase in foul odour.

5.3.1.1 Slums

The latest information on slum is available from the 2001 Census. In 2001, there were nearly 24 lakh persons residing in slums in MP. This is almost 15 per cent of the total urban population of the state, and 4 per cent of that of the entire state. The maximum slum population is found in the cities of Indore, Bhopal, Jabalpur, and Gwalior. There is clear evidence from the in-migrating pattern that the population residing in slums is increasing.

This population will increase, if the current rate of urbanization remains the same or increases, and very little is happening by way of provision of low cost housing or solutions to look after the migrating population which has no recourse except slums at the given income levels.

5.3.1.2 Urban Housing

In terms of shelter, in the undivided state of MP, the proportion of *pucca* houses in urban areas was lagging behind the national average. Only Morena (85.13 per cent *pucca* houses), Gwalior (84.11 per cent), Shivpuri (80.01 per cent), Hoshangabad (77.50 per cent), Sagar (76.69 per cent), and Bhind (73.93 per cent) were the districts above the national average (72.75 per cent). The Working Group on Housing for the Ninth Plan, Government of India

had estimated a shortage of the order of 0.32 million in urban areas and 0.38 million in rural areas of MP for 2001. The Census 2001 also estimated that of the total houses used for residence, 36.5 per cent in urban areas in MP were either just livable or in a dilapidated condition.

5.3.2 Trends in Income, Poverty, and Gender in Urban MP

According to the last major national estimation of poverty in 1999–2000, it has been assessed that 38.5 per cent of urban residents in MP were BPL. This amounted to nearly 81 lakh persons, and was the highest amongst all states except Orissa.⁶ The national poverty ratio was 24.1 per cent at the same time. The low economic growth in the state, particularly in agriculture, forestry, and non-farm rural activities, is responsible for high poverty, both in urban and rural areas of the state, way above the national average.

Urban poverty was below rural poverty during the seventies, as was the pattern at national level. It is in the early eighties that urban poverty overtook rural poverty in the state and this continues to be the case at present. This is because rural poverty declined significantly during 1977–83 and 1983–87. Urban poverty, on the other hand, came down only marginally. It may be hypothesized that urban growth in the eighties and nineties was induced by poverty as this was very high in less developed regions. Urban centres seem to have absorbed a segment of rural poor through the window of migration or

⁶ In view of the controversy with regard to bias in reporting, due to mixing of reference periods, poverty figures—as estimated by Deaton and Dreze—were also considered; they further confirm the propositions regarding the trends and pattern of poverty as discussed here.

emergence of new towns, relieving the pressure of poverty in rural areas.

This opportunity, however, seems to be drying up in the nineties, reflected in much slower reduction in rural poverty. Correspondingly, cities and towns in the state are experiencing a much lower rate of immigration and urban growth. The capacity of the towns and cities to provide livelihood and basic infrastructure has been severely constrained due to low economic growth in the state.⁷ As a result, poverty levels in urban areas have been very high in the nineties,⁸ significantly higher than those in rural areas.

Understandably, employment growth in MP during the eighties was low—2.2 per cent per annum, much below the national figure of 2.7 per cent. During the nineties, the growth rate for the state fell to 1.2 per cent which was similar to the national figure. Importantly, inequality among casual workers in both rural as well as urban areas turns out to be low here compared to the national average which has to some extent ameliorated the conditions of the poor.

It is no surprise that, in terms of calorie consumption, MP presents an alarming picture. It is the only state reporting as high as 90 per cent calorie deficient population in 1999–2000 by NSS, if 2400 KCL is taken as the requirement. As per the data from NFHS III, malnourished children in urban areas of MP were 52.8 per cent, much higher than the national average of 36.4 per cent. The pace of reduction in child malnutrition during 1992–98 in the state has been much slower than that at the national level.⁹ After the previous survey of NFHS in 1998, the rate of malnutrition has actually increased in MP, which is a major concern for the state.

5.3.3 Development of Urban Infrastructure

The major factor responsible for low economic growth and high regional disparity in the state is deficiency in infrastructure. Transport and communication facilities in the state are not as well developed as in most other states. The road network is much below the national average. In case of railway lines also, the state's position *vis-à-vis* most states, especially keeping in mind that it is centrally located and hence must naturally benefit from rail lines that connect India, is poor.

In urban MP, the Census estimated that 18.5 per cent urban residents had a telephone compared to 23 per cent nationally. Despite a five-fold increase in the figure during 1995–2004, the gap with the national figure has gone up significantly due to faster rate of expansion in most other states.

The urban IMR was as high as 56 per 1000 in 2004, against the national average of 40.¹⁰ Undoubtedly, the state has to accord far greater attention to improving the health delivery system if it has to ensure a minimum quality of life to its population and improve its ranking among the states in terms of human development.

One area, where the achievement of MP seems to be satisfactory, is in the field of primary education and amelioration of illiteracy. The state has allocated significant resources to the education sector. This has resulted in high growth in the number of educational institutions and school-going children, and also literacy rate. It has almost caught up with the national literacy figure of 80.3 per cent in 2001, despite being 2.41 percentage points behind the national figure of 73.08 per cent in 1991.

⁷ With the decline in agriculture, many of the agro industrial and agro marketing towns have suffered a downslide. A class I city, like Ratlam, can perhaps be discussed as an illustrative case. Wholesale trading, storage etc. of agricultural commodities and agro processing were the dominant economic activities in the city. Recent developments have, however, led to closure of an estimated 80 per cent of the units. This has affected the municipal revenues and expenditure, which, in turn, is responsible for the city facing serious deficiency in all basic services with the sole exception of drainage.

⁸ A study conducted by GHK International suggests that the use of the poverty line of Rs 365 per capita per month by the state government for poverty calculations results in underestimation of poverty. The study reveals that the incidence of households below poverty line in the 6 cities of the state *viz.*, Jabalpur, Bhopal, Indore, Gwalior, Ratlam, and Ujjain works out to be as low as 15.7 per cent. In case the poverty line of Rs 481.65 (as suggested by the Planning Commission) is considered, the poverty figure would work out to be more than 25 per cent.

⁹ As per the calculations of Dev (2005), the Millennium Development Goal of reducing poverty to half the level (as proposed by United Nations or UN) is likely to be achieved, as per the present trends, by 2015 in urban areas. The goal of halving malnutrition seems to be more remote for urban areas, as it would be achieved only by 2028.

¹⁰ SRS estimates 2006.

5.4 SOCIO-ECONOMIC CORRELATES OF URBANIZATION: A DISTRICT LEVEL ANALYSIS

This section analyses the degree and direction of relationship between urbanization and other developmental indicators at the district level in an attempt to build a micro level perspective with respect to human development. The objective is to overview the pattern of interdependencies among indicators in a spatially disaggregated manner and identify the explanatory factors. The analysis has been carried out within a comparative static framework, building up data sets for three points of time: early eighties, early nineties, and early years of the present decade. In view of the fact that the trends and pattern of urbanization during 1991–2001 have been somewhat different from those observed in earlier decades, analysis of the interdependencies for the later years has been attempted separately from that in earlier years.

5.4.1 Pattern of Interdependencies During the Eighties

The first point to be noted is that the percentage of urban population in 1981 as well as in 1991 has a positive relationship with the coverage of households through basic amenities like education, drinking water, electricity, toilets etc. This implies that the level of urbanization tends to increase the availability of the later to urban households. Understandably, a larger municipality would have the capability for greater expenditure in provisioning infrastructure and civic services. An important point, however, is that the disparities in the percentage of households availing the facilities across districts, measured through Coefficient of Variation (CV) are not very high (Table A5.2). These are significantly below those in rural areas and have remained so over the decades. This suggests that a high percentage of urban population in a district or the existence of large UAs does not lead to very high coverage of urban households under basic amenities so much so to push up inter-district inequality. This is a reflection of greater equity in the provisioning of financial resources to urban local bodies by the state government and other institutions and uniform criteria applied in urban governance, particularly, in the context of delivery of civic services.

Importantly, the rural areas in the highly urbanized district benefit due to their proximity to urban

centres and report much better access to amenities compared to the rural areas in less urbanized districts. Urbanization, thus, does not result in high urban inequality across districts but accentuates rural inequality. One of the ways to bring down this rural disparity would be to promote urbanization in the less-developed and less-urbanized districts.

The percentages of workers in non-household manufacturing, trade, and commerce, other services etc., that have been taken as proxy indicators for economic development at the district level are strongly correlated with the level of urbanization in 1981 and 1991. One would infer that more urbanized districts or larger urban centres in the state have a relatively stronger economic base. Even agricultural productivity and technological transformation—captured through use of fertilizers—are positively related to urbanization, suggesting a trickle-down effect in rural areas of the district. The relatively higher land productivity in the urbanized districts, however, seems to be due to labour saving technology as the former does not lead to higher absorption of labourers. Interestingly, despite the important role of mining in the state economy, it has had little impact on the level of urbanization at the district level (Appendix A5.2 and Tables A5.3 and A5.4).

The role of urban centres in promoting human development in the region does not emerge as highly positive and strong through the pattern of correlations. High percentage of urban population does not imply high literacy in the rural areas of the district. It does not even bring about higher literacy among the urban population. There is a negative and significant correlation of urbanization with the percentage of ST population and no correlation of the former with the percentage of the SC population. This suggests that urban centres have not benefited the marginalized sections of population or protected them from social discrimination by bringing them into urban areas. It is often argued that caste and ethnicity based discrimination is high in remote rural areas but the data for the eighties and nineties reveal that it does not fall with urbanization. Notwithstanding all this, urbanization can be seen as a positive factor for human development due to its strong positive correlation with all the basic amenities in rural as well as urban areas, as noted.

The other positive impact of urbanization in the social sphere seems to be in terms of dampening of population growth. Although, urbanization does not exhibit a negative and significant relationship with population growth in rural areas, as is stipulated in the development literature, the percentage of children tends to go down with an increase in the share of urban population (Appendix A5.2 and Tables A5.3, A5.4, and A5.5). The child population ratio works out to be low in the urbanized districts, understandably due to adoption of family planning practices, greater awareness, modernization etc. And yet, population growth rates in rural areas in these districts are not very low as the later are receiving migrants from neighbouring areas.

The pattern of correlation turns out to be completely different when we move from the percentage of urban population to the growth rate of urban population. Importantly, these two indicators show no correlation at the district level in MP, despite exhibiting a positive and significant relationship at the state level, particularly, during the nineties. It is evident that urban growth has not taken place in the urbanized districts of the state and that the former is guided by factors other than those that historically determined the levels of urbanization. Understandably, the positive correlations with a number of development indicators that are noted in case of percentage of urban population are absent when one considers the growth in urban population (Appendix A5.2 and Tables A5.3, A5.4, and A5.5).

To a large extent, demographic growth in urban centres has remained confined to the backward regions of the state. Importantly, it relates negatively with the indicators of access to all basic amenities, in both rural and urban areas. The correlations of urban growth work out as negative and significant with the literacy rates in rural and urban areas, while with incidence of SC or ST population, these are insignificant. This was noted in the case of percentage of urban population as well (Appendix A5.2 and Tables A5.3, A5.4, and A5.5).

5.4.2 Pattern of Interdependencies in the Nineties

The process of urbanization in the state of MP during the nineties is characterized by extreme spatial inequality. The percentage of urban population at

district level ranges from over 80 per cent in Bhopal to less than 5 per cent in Dindori in 2001. Even higher is the variation in urban growth, the highest decadal growth recorded by Sidhi at about 200 per cent and the lowest in Mandsaur at 15 per cent only during 1991–2001.

The percentage of urban population in 2001 at the district level shows positive and significant correlation with rural population growth, which is a positive phenomenon. All the districts with over 30 per cent of their population living in urban areas (in 2001) such as Gwalior, Indore, Bhopal, Jabalpur, Ujjain, Ratlam and Hoshangabad have reported their rural population to be growing at a rate equal to the national average or higher. One can argue that the rural areas in urbanized districts have been able to benefit from the trickle-down effects and thereby stall out-migration. These seem to have even attracted migrants from neighbouring areas and consequently reported relatively high population growth and high sex ratio.

The magnitude of this migration, however, is unlikely to be high. Researchers have noted that the male–female ratio tends to be high in in-migrating regions since migration is a male selective phenomenon. Indeed, the ratio happens to be relatively high in many of these districts, as already noted. This, however, may not be attributed totally to the migration factor since the percentage of migrants in total population is not very high. These districts have problems of gender based discrimination; and the availability of sex testing facilities in urban centres is helping in the termination of female foetuses, resulting in a low female–male ratio among children as well as in the total population.

A peculiar phenomenon in the context of the demographic scenario is the growth of urban population during the nineties which bears no correlation with the base level of urbanization. The four districts that have experienced urban growth of over 50 per cent during the nineties, *viz.*, Sidhi, Dhar, Raisen, and Balaghat, neither have strong urban economic base nor manifest any development dynamism. The same can be said about most other districts that have reported growth between 30 and 50 per cent. Among these are the districts of Sheopur, Shivpuri, Guna, and Rajgarh that are bordering the backward state of

Rajasthan. Bhind, Datia, Tikamgarh, Chhatarpur, Satna, and Rewa belonging to the same growth category border Uttar Pradesh. There are two other districts *viz.*, Balaghat and Shahdol, bordering Chhattisgarh where the pace of urbanization is between 30 per cent and 50 per cent. Surprisingly, however, there are not many districts adjacent to the developed states of Gujarat or Maharashtra that exhibit high or medium growth rates. All these confirm that the pace and pattern of urbanization in recent years cannot be explained in terms of the pattern of economic or industrial development.

The riddle of urban growth during the nineties becomes complex when one notices that it has no relation with the indicators of infrastructure development (except road mileage) or incidence of employment in industry or other relatively more productive tertiary activities, at the district level. The positive correlation of the former with percentage of, and growth in, child population suggests that demographic pressure has played an important role in urban growth, possibly more than economic pull attracting immigrants. The growth exhibiting negative correlation with urban literacy is a pointer to weak social infrastructural support in urban areas (Table 5.5). This could also be due to population mobility being caused by push factors, which is responsible for bringing underprivileged people with little or no education into urban settlements. Furthermore, the fact that urban growth has taken place in districts that have low levels of basic amenities like drinking water, electricity, toilets etc. confirm the proposition of weak infrastructural support to urban growth and possibly its non-sustainability in the long run.

The percentage of urban households having access to basic amenities in 2001 shows low disparity (CV), as noted in 1981 and 1991 (Table A5.2). This implies that the urbanized districts (with one or more large cities) have not brought forth differentiation within the urban segment in the state which is in sharp contrast to what is noted in other states. The inequality across districts in terms of access to social infrastructure or civic amenities in urban areas, thus, turns out to be very low. The inequality in the amenities in the rural areas across the districts, however, is very high. Indeed, according to the CV in the

distribution of drinking water, electricity, toilets, and literacy rates, rural inequality is far higher than urban inequality in 2001, as was also observed in earlier years. One can argue that there is not much variation in terms of access to amenities across urban centres or districts. The high inequality in the rural segment is because the benefits that the villages have been able to get depend on their proximity to urban centres or the level of urbanization in the district. The only way that one can reduce rural inequality is through promoting urbanization in a balanced manner in the state.

5.5 THE STATE'S RESPONSE TO URBANIZATION

The budgetary allocation to the urban local bodies has seen an increasing trend in the last few years with the 2006–07 allocation being 1350 crores. Besides, the state government has been focusing on urban sector reforms, urban infrastructure, livelihood projects in urban areas, and the urban poor.

5.5.1 Urban Infrastructure

The last few years have seen the state focusing on urban infrastructure through various projects. Urban Water Supply and Environmental Improvement Project in MP (UWSEIMP) is aimed at promoting sustainable growth and poverty reduction in the project cities of Bhopal, Gwalior, Indore and Jabalpur. Another programme named Water for Asian Cities (WAC) is being implemented in the four cities of Bhopal, Indore, Gwalior, and Jabalpur with a view to promoting sanitation in poor households and their participation in the community-managed water supply system. The latest thrust to the urban infrastructure development has, however, come from the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) that was launched by the Government of India on 3rd December 2005. Madhya Pradesh has been a front-runner in submitting the projects to the Centre and first state in the country to enter into a tripartite Memorandum of Association (MoA) on urban sector reform with the Government of India and Bhopal Municipal Corporation.

The need of infrastructure in the smaller towns is being taken care of through the Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) that aims to improve infrastructure

facilities, help create durable public assets and quality oriented services in cities and towns, enhance PPP in infrastructure development and promote planned integrated development of towns and cities. The programme aims to utilize a major share of funds available on urban water supply augmentation schemes in order to address the fact that only 55 per cent of the urban local bodies are able to provide daily water supplies.

Apart from the widening of roads/streets under various schemes, the Bus Rapid Transit System (BRTS) in Indore has also been a response of the government to problems of congestion of traffic in urban areas. The project has been taken up through the PPP route. The initial response has been encouraging and attempts along similar lines have been initiated in Bhopal as well.

5.5.2 Poverty Alleviation and Employment Generation

There has been an honest attempt at earmarking of the budget to provide basic services to the urban poor.

Generally, 10–15 per cent of the budgets of the Urban Local Bodies (ULBs) are allocated for the urban poor. Major activities covered under the budget allocation for urban poor are water supply, sanitation, paving of lanes, construction of drains, roads, street lighting, and slum rehabilitation. The share of the budget for the urban poor will be increased in the next few years.

The government is focusing on providing/facilitating creation of livelihoods through the Swarn Jayanti Shahri Rozgar Yojana (SJSRY) in the urban areas. The programme is funded on a 75:25 basis between the centre and the states. The programme is targeted at the urban poor and has two components, namely, Urban Self Employment Programme (USEP) and Urban Wage Employment Programme (UWEP). Every year, more than 7000 beneficiaries are given credit through USEP. In addition, more than 11,000 beneficiaries are given training under the USEP-Training component. Another livelihood related initiative of significant import is the Urban Street Vendors Policy

Box 5.1: Urban Infrastructure Development Programmes

Jawaharlal Nehru National Urban Renewal Mission (JNNURM): Launched by the Government of India in 2005, this mission aims to cover four cities—Bhopal, Indore, Jabalpur, and Ujjain in the state. It aims at integrated development of infrastructure services in the cities covered under it, securing effective linkages between asset creation and asset management so that the infrastructure-related services created in the cities are not only maintained efficiently but also become self-sustaining over time, ensuring adequate investment of funds to fulfil deficiencies in the urban infrastructure related services, planned development of identified cities including peri-urban areas, out-growths, urban corridors, so that urbanization takes place in a dispersed manner, scaling up delivery of civic amenities and provision of utilities with an emphasis on universal access to urban poor and taking up the urban renewal programme, that is, redevelopment of inner (old) cities area to reduce congestion.

Urban Water Supply and Environmental Improvement Project in MP (UWSEIMP): The project has been started with financial assistance from the Asian Development Bank (ADB) with a view to promoting sustainable growth and reducing poverty in the project cities of Bhopal, Gwalior, Indore, and Jabalpur. The project focuses on improvement of urban water supply and environment by implementing physical work related to water supply, sewerage, and sanitation, storm water drainage, and solid waste management. Further, it runs a public participation and awareness programme wherein it provides funds for Municipal Action Planning for Poverty Reduction (MAPP) and implements a Gender Action Plan. Under UWSEIMP project, a total financial outlay of Rs 1366 crore in water supply, sewerage and sanitation, solid waste management, community development and implementation assistance sectors has been allocated for the four cities.

Water for Asian Cities (WAC): This programme has been initiated with financial assistance from UN-Habitat in the four major cities of Bhopal, Indore, Jabalpur, and Gwalior. Under this programme, the Poverty Pocket Situational Analysis has been completed in the four cities and 5000 urban poor households have been identified for intervention through NGOs. Further, steps have been taken by the project to implement community-managed water supply schemes in Gwalior, Jabalpur, and Indore. The project has also initiated water demand management strategies and implementation plans in the four cities.

and Programme. The programme is aimed at providing and promoting a supportive environment for earning livelihoods to the street vendors, as well as easing congestion and maintaining hygiene in public spaces and streets. The programme envisages the creation of 'hawking zones' in the urban development/zoning plans, giving legal status to the vendors, promoting self-compliance among the vendors, promoting organizations of street vendors to affect their empowerment, rehabilitating child vendors, facilitating social security (pension, insurance etc.) and access to credit through the promotion of SHGs/co-operatives/federations/Micro Finance Institutions (MFIs) etc. and capacity building to improve entrepreneurial skills.

5.5.3 Urban Housing

The Integrated Housing and Slum Development Programme (IHSDP) has been started by the state with the basic objective of striving for holistic slum development with a healthy and enabling urban environment through providing adequate shelter and basic infrastructure facilities to the slum dwellers in the identified urban areas. Under this scheme, 62 cities have prepared their projects. The state is also targeting the urban poor residing in Bhopal, Indore, Jabalpur, and Gwalior through the 'Madhya Pradesh Urban Services for the Poor (MPUSP)' Programme. This programme is to be implemented over a period of 5 years beginning 2006 and would be extended to 10 more towns in due course of time. It is aimed at promoting a pro-poor approach towards urban



Concrete gives new life to internal roads

governance. Efforts are also on to provide housing through resources under JNNURM.

5.5.4 Municipal Reforms

The urban sector reforms are aimed at strengthening and reforming the ULBs. The State Municipal Act has been suitably amended by incorporating the provisions of 74th Constitutional Amendment Act and including the functions of ULBs in 12th schedule. The Urban Land (Ceiling and Regulation) Act, 1996 was repealed in 2000. The state is also planning to amend the MP Accommodation Control Act to suit the changing scenario in urban housing. The MP Bhumi Vikas Niyam, which regulates building permission and development of sites, has been simplified to a great extent and the process of examining its provisions, with a view to further streamline the approval process, are underway. A system for self-assessment of property tax was introduced as early as 1996.

5.6 THE ROAD AHEAD

5.6.1 Urban Housing for Poor

Provision of reasonable housing for the urban poor is one of the most challenging tasks that the incumbent and future state governments will have to face. With the present trend of urban population growth, the demand for housing will continue to increase at a higher rate. The construction sector in recent times has been one of the primary contributors to the economic growth in the country. This has put an extraordinary pressure on the limited land resource. Due to increasing demand and pressures from construction industry, as in many other states, MP has also witnessed a sharp increase in the real estate prices. The quantum of increase has made it extremely difficult for the urban poor to secure housing in the vicinity of their work place. A recent relocation of slums in the state has seen an increase in the distance that a relocated slum dweller has to commute to reach his work place. It is expected that with increasing corporatization of real estate business, the challenge of urban housing for the poor will reach unmanageable proportions. The present schemes of urban housing for the poor seem quite inappropriate to handle the problem. The state government will have to take a hard look at the policies followed in this regard, so

that the challenge may be met with resolve in the coming years.

5.6.2 Unplanned Expansion

Unplanned expansion of towns and cities has been the bane of urban development in our country. The existing laws, rules, and regulations are either not adequate to ensure planned expansion or, if they exist, are not implemented in their true letter and spirit. The ULBs are supposed to provide civic amenities to the citizens. However, unplanned expansion puts severe constraints on ULBs' limited resources and abilities. The Town and Country Planning (TCP) tries to regulate the expansion in selected cities. However, many a times, TCP is viewed not as complementary body but as an adversary by the ULBs resulting in poor co-ordination between the two. The need of the hour is to build capacities in TCP as well as ULBs by training the existing workforce and inducting well-trained professionals to deliver the goods. The planning department's co-ordination with the elected ULBs leaves much to be desired. The government will have to find ways of improving capacities all around and strengthening the co-ordination between the ULBs and the Town Planning Department in the state.

The problem is more acute in the case of smaller towns and cities. Today's small towns and cities are expected to grow into larger towns and cities over the next few years. The limited capacity of TCP is presently utilized in the planning of larger cities and smaller cities and towns are left out. The state's response to the problems of civic amenities in smaller cities and towns is UIDSSMT which appears to be highly inadequate in terms of resources as well as capacities of the ULBs to execute the projects. Moreover, at present, the funds under this programme are being used for strengthening water supply systems only. While there is no gainsaying the fact that strengthening of water supply systems should be accorded the highest priority, it must be understood that the government will have to mobilize more funds for planned development and expansion of small cities and towns.

5.6.3 Urban Drinking Water Supply

The state has been poorly endowed in terms of perennial rivers, Narmada being the sole such river.

Mindless exploitation of groundwater for irrigation purposes, especially in the western part of the state, has put severe pressure on the groundwater table as well. The result has been a severe drinking water crisis in many towns and cities. Whatever be the government response to meeting the challenge of urban drinking water supply, many of the towns and cities in the state go without daily drinking water supply and those who do get the supply on a daily basis, get it only for a limited duration during the day. While citizen forums talk about round the clock water supply in developed countries, the fact remains that many towns and cities in the western part of the state do not get daily water supply even for limited hours. Thus, round the clock water supply appears to be a distant dream for the whole state. Water supply systems need to be improved and expanded to reduce the degrees of Unaccounted For Water (UFW) to 20 per cent by the year 2010 and by 15 per cent by the year 2021, and to attain supply coverage of 90 per cent of the urban population through individual house connections, under full time pressurized and treated water distribution systems.

The water supply components should consist of optimization of existing systems in reducing losses, improvement of distribution network systems, expansion of existing distribution systems into as yet unserved areas/zones, augmentation of intake source, requisite treatment and transmission, inclusive of the line storage and pumping requirements. All this requires a huge support from the government in terms of resources. Apart from the resources available at its end, the state also needs to exploit the potential of generating private resources. The first urban and industrial drinking water supply system under the PPP has been set up in Dewas. Though this scheme is not truly meant for domestic purposes (the project aims to provide water to industries), this is surely a good beginning and the state needs to ensure doing more of this in the near future. Many a times, the quality of municipal water supply is wanting and sometimes, it even poses serious health risks to the population. The state government will have to substantially strengthen its response to the rather poor condition of its urban drinking water supply systems if this challenge is to be met squarely.

5.6.4 Sanitation

Contrary to basic environmental and health requirements, municipal corporations do not have adequate sewage treatment provisions, as they continue to prioritize the exclusive development of water supply components, with only marginal provisions given to wastewater requirements. Development of adequate wastewater disposal systems, as an integral part of the urban development process is, therefore, required. Municipal corporations currently do not attend to the immediate need of providing treatment of wastewater generation, which are becoming particularly acute once increased reticulated water supply schemes are implemented. The ultimate objective should be for full sewerage collection connectivity within the urban core areas and complete eradication of open defecation practices. Wastewater systems should include new or improved sewage collection systems, inclusive of individual house sewer connections. New sewage treatment plants and hydraulically located intermediate pumping stations are required to be constructed as part of the overall city wastewater development master planning. Appropriate on-site sanitation facilities should also be constructed in less affluent areas inclusive of pour flush latrines and community sanitation facilities.

Solid waste management systems are to be developed under integrated master planning processes for the municipal corporations, which are to be designed to extend the coverage and increase the efficiency of collection and disposal services of the corporations. Particular targets should be established for improved coverage in the core urban and peri-urban areas. Solid waste management systems should also be developed according to the provisions of Municipal Solid Wastes (Management and Handling) Rules, 2000, with appropriately designed containers for collection, vehicles for transportation, and the development of sanitary landfill sites for safe disposal. Optimization of the disposal system, together with minimized transportation costs, can be achieved by the construction and utilization of strategically located solid waste transfer stations.

5.6.5 Traffic Congestion and On-road Air Pollution

The last few years have seen a quantum jump in the number of four wheelers and two wheelers on the

roads. It is apparent that the anticipation for future traffic while constructing roads has proved wrong. As a result of this, the traffic congestion levels during peak and non-peak hours have mounted in the big cities such as Indore, Bhopal, Gwalior, and Jabalpur. In some of the state's cities and towns, jams during peak hours will soon become routine. Proper planning and construction of not only roads, but also of parking spaces will help ease traffic troubles. The BRTS started in Indore and Bhopal does seem to provide some solution but much more is required if the present trend of traffic growth continues. Further, with an increase in traffic congestion, the on-road air pollution encountered by the commuters has increased the risk to their health. Switching to cleaner and cheaper fuels like Compressed Natural Gas (CNG), as has been done in some of the metro cities, would not only reduce the risk to the health of the commuters but also improve the incomes of the auto and taxi owners. Besides, it will also help to keep the cost of commuting down for the city dwellers.

5.6.6 Municipal Reforms

The growing urbanization and the problems associated with it make many laws and processes either irrelevant or obstructive in growth. For example, the MP Accommodation Control Act was the need of hour in the past to protect the rights of renters. However, it now impedes the development of the housing sector and puts premium on houses available for rent. This needs to be revisited in the changing scenario. The stamp duty on registration of land transfers is very high at present. The high cost induces people to various avoidance strategies resulting in ownership disputes, risk premium, and other complications. The state needs to pay attention to this cost so that extra-legal transactions do not hamper the development of the real estates market.

The municipal bodies have limited capacities and exposure to handle the problems of high urban growth. The revenue generation is also almost stagnant due to lack of capacity in the staff and lack of willingness on the part of elected bodies. The ULBs are highly hesitant in either imposing new taxes or increasing the existing taxes. This puts them in a permanent kind of financial crisis situation and forces them to look towards the government for extra

revenue. The need of the hour is to strengthen these bodies and inculcate some sort of fiscal discipline in them. This is certainly not an easy process but the alternatives are limited and sooner or later, the ULBs have to realize this in order to improve their financial conditions and provide the basic amenities in a qualitative manner.

5.7 CONCLUSION

The state has seen rapid growth in urbanization comparable to overall national urban growth and at times even higher than the national growth. This rapid growth puts severe pressure on the ability of the local bodies to provide basic amenities that affect the quality of life. Thus, urbanization poses major challenges to the state in terms of human development. So far, the state's response has been an increased investment in the areas such as roads, drinking water, sanitation, electrification etc. The new interventions under JNNURM, UWSEIMP, Backward

Area Grant Fund, and increased resource transfer to ULBs, in a way try to minimize the drudgery of people living in urban areas. However, the state/ULBs need to do much more and at a much increased scale to improve the quality of life in urban MP. The areas that require major interventions are city planning, housing, drinking water, drainage, sanitation, strengthening of ULBs, their capacity building, and institutional reforms.

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Appendix A5.1

Table A5.1: District-wise Number of Slum Pockets and Population

S.No.	Districts	District-wise No. of Slum Pockets (2004)	
		Total No. of Slum Pockets	Slum Population
1	Morena	32	66201
2	Sheopur	35	11714
3	Bhind	96	42358
4	Gwalior	254	229998
5	Shivpuri	61	32481
6	Guna	74	56367
7	Datia	37	19343
8	Bhopal	282	318831
9	Sehore	103	31625
10	Betul	136	27582
11	Rajgarh	119	22470
12	Vidisha	81	52139
13	Raisen	89	20998
14	Hoshangabad	135	61172
15	Harda	49	14546
16	Indore	445	331220
17	Dhar	54	23819
18	Khargone	69	35828
19	Barwani	69	21033
20	Khandwa	186	104077
21	Jhabua	41	13363
22	Ujjain	277	155582
23	Ratlam	162	75540
24	Dewas	116	49309
25	Mandsaur	88	28727
26	Neemuch	85	27138
27	Shajapur	112	29295
28	Sagar	313	111684
29	Panna	87	12753
30	Tikamgarh	45	16252
31	Damoh	67	38391
32	Chhatarpur	107	29135
33	Jabalpur	399	252519
34	Katni	148	16627
35	Mandla	69	20364
36	Dindori	22	0
37	Narsimhapur	45	21168
38	Balaghat	67	32698
39	Chhindwara	180	56010
40	Seoni	66	21487
41	Rewa	452	38694
42	Shahdol	165	42791
43	Umaria	47	6081
44	Sidhi	56	44470
45	Satna	202	56015
	Total	5824	2719895

Source: Department of Urban Development 2004

Table A5.2: Average Values and CVs of Select Indicators for the Years 1981, 1991, and 2001

Acronym of Indicators	1981		1991		2001	
	Mean	CV	Mean	CV	Mean	CV
RP_GR	21.326	21.027	22.231	21.330	22.640	25.879
UP_GR	64.933	59.665	59.243	89.790	33.120	80.389
RP_SR	928.790	5.570	914.342	5.360	926.670	5.393
UP_SR	877.447	4.152	886.474	3.920	903.200	3.282
TP_UP	20.599	77.428	23.035	70.770	23.867	64.516
R_LIT	20.873	23.968	35.568	21.090	58.238	15.057
U_LIT	51.927	10.688	68.690	9.260	78.825	5.608
RH_ELECT	7.932	56.859	38.878	32.590	63.935	29.119
UH_ELECT	54.907	16.442	72.002	10.195	90.162	6.621
UH_TOILT	50.762	22.429	52.323	19.195	62.184	16.206
AR_DENST	136.700	45.478	175.317	49.243		
TP_MW	36.397	12.955	36.074	11.825		
TP_MGW	4.492	44.801	5.211	47.154		
MW_MNH	4.031	106.115	2.800	131.375		
MW_MNN	4.386	107.649	4.366	89.431		
MW_OS	6.796	62.183	8.355	59.209		
MW_CTT	7.707	60.588	8.583	67.799		
MW_MIN	0.660	195.618	0.700	174.970		
AGRI_PRO	566.237	21.945	4.625	31.241		
HEC_FER	11.118	68.042	36.601	61.406		
WK_LND	467.079	20.124	511.053	24.784		
RH_DW			11.738	46.990	10.659	82.547
UH_DW			63.772	21.750	64.489	22.181
TP_CH			20.014	6.781		
TP_SC			15.997	34.860		
TP_ST			18.966	101.465		
RC_SR					938.022	3.861
UC_SR					910.289	3.364
RC_GR					10.504	89.284
UC_GR					8.277	273.404
RP_CH					18.656	8.800
UP_CH					14.645	10.070
RH_TOILT			3.981	58.176	9.678	52.506
RH_BNK					21.235	28.679
UH_BAK					46.555	14.144
AR_RD					24.162	38.261
AGRF_PRO					1220.267	33.468

Note: For description of acronyms please refer to Appendix A5.2.

Table A5.3: Correlations among Select Indicators for the Early Eighties

Acronyms of Indicators	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
RP_GR	1										
UP_GR	-0.288	1									
RP_SR	-0.032	-0.129	1								
UP_SR	0.067	-0.437(**)	.334(*)	1							
TP_UP	0.025	-0.203	-0.25	0.084	1						
R_LIT	-0.106	-0.161	-0.036	0.094	0.22	1					
U_LIT	0.06	-0.593(**)	.398(*)	0.258	.332(*)	.456(**)	1				
RH_ELECT	.500(**)	-.393(*)	-0.033	.340(*)	.409(*)	0.315	0.255	1			
UH_ELECT	.392(*)	-.564(**)	-0.067	.325(*)	.636(**)	0.058	.436(**)	.669(**)	1		
UH_TOILT	0.154	-0.418(**)	-0.087	.390(*)	.558(**)	0.044	.774(**)	.405(*)	.774(**)	1	
AR_DENST	-0.135	0.041	-0.191	-0.04	.846(**)	0.247	.396(*)	.352(*)	.396(*)	.409(*)	1
TP_MW	-0.005	-0.122	.866(**)	.382(*)	-.441(**)	-0.133	0.283	-0.113	-0.21	-0.223	-0.449(**)
TP_MGW	0.007	-0.002	.469(**)	0.311	-.492(**)	-.506(**)	-0.074	-0.274	-0.201	-0.08	-.442(**)
MW_MNH	-0.044	-0.143	-0.019	0.009	0.071	0.302	0.265	-0.186	-0.173	-0.1	-0.014
MW_MNN	0.126	-0.224	-0.184	0.066	.958(**)	0.264	.370(*)	.426(**)	.610(**)	.555(**)	.830(**)
MW_OS	-0.057	-0.143	-.389(*)	-0.023	.938(**)	0.185	0.282	0.279	.555(**)	.553(**)	.826(**)
MW_CTT	0.06	-0.214	-0.235	-0.007	.957(**)	0.28	.403(*)	.412(*)	.603(**)	.523(**)	.813(**)
MW_MIN	-0.178	0.114	.323(*)	-0.101	-0.069	-0.033	-0.121	-0.072	-0.068	-.352(*)	-0.183
AGRI_PRO	-0.177	0.128	-.425(**)	0	0.134	.495(**)	-0.107	0.044	-0.028	0.032	0.215
HEC_FER	0.28	0.113	-0.271	0.162	.352(*)	0.238	-0.097	.591(**)	.412(*)	.444(**)	.432(**)
WK_LND	-0.224	.355(*)	-0.033	-.340(*)	-.348(*)	0.042	-0.292	-.415(**)	-.593(**)	-.550(**)	-0.165

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Acronyms of Indicators	TP_MW (12)	TP_MGW (13)	MW_MNH (14)	MW_MNN (15)	MW_OS (16)	MW_CTT (17)	MW_MIN (18)	AGRI_PRO (19)	HEC_FER (20)	WK_LND (21)
RP_GR	-0.005	0.007	-0.044	0.126	-0.057	0.06	-0.178	-0.177	0.28	-0.224
UP_GR	-0.122	-0.002	-0.143	-0.224	-0.143	-0.214	0.114	0.128	0.113	.355(*)
RP_SR	.866(**)	.469(**)	-0.019	-0.184	-.389(*)	-0.235	.323(*)	-.425(**)	-0.271	-0.033
UP_SR	.382(*)	0.311	0.009	0.066	-0.023	-0.007	-0.101	0	0.162	-.340(*)
TP_UP	-.441(**)	-.492(**)	0.071	.958(**)	.938(**)	.957(**)	-0.069	0.134	.352(*)	-.348(*)
R_LIT	-0.133	-.506(**)	0.302	0.264	0.185	0.28	-0.033	.495(**)	0.238	0.042
U_LIT	0.283	-0.074	0.265	.370(*)	0.282	.403(*)	-0.121	-0.107	-0.097	-0.292
RH_ELECT	-0.113	-0.274	-0.186	.426(**)	0.279	.412(*)	-0.072	0.044	.591(**)	-4.15(**)
UH_ELECT	-0.21	-0.201	-0.173	.610(**)	.555(**)	.603(**)	-0.068	-0.028	.412(*)	-.593(**)
UH_TOILT	-0.223	-0.08	-0.1	.555(**)	.553(**)	.523(**)	-.352(*)	0.032	.444(**)	-.550(**)
AR_DENST	-.449(**)	-.442(**)	-0.014	.830(**)	.826(**)	.813(**)	-0.183	0.215	.432(**)	-0.165
TP_MW	1	.562(**)	-0.085	-.386(*)	-.537(**)	-.464(**)	0.248	-0.319	-.355(*)	0.106
TP_MGW	.562(**)	1	0.027	-.478(**)	-.532(**)	-.536(**)	-0.01	-0.252	-0.238	0.064
MW_MNH	-0.085	0.027	1	0.056	0.053	0.079	-0.079	-0.022	-0.242	-0.121
MW_MNN	-.386(*)	-.478(**)	0.056	1	.877(**)	.924(**)	-0.133	0.134	.350(*)	-0.318
MW_OS	-.537(**)	-.532(**)	0.053	.877(**)	1	.910(**)	-0.185	0.219	0.269	-.325(*)
MW_CTT	-.464(**)	-.536(**)	0.079	.924(**)	.910(**)	1	-0.075	0.113	.326(*)	-.352(*)
MW_MIN	0.248	-0.01	-0.079	-0.133	-0.185	-0.075	1	-0.055	-0.258	0.207
AGRI_PRO	-0.319	-0.252	-0.022	0.134	0.219	0.113	-0.055	1	.399(*)	.450(**)
HEC_FER	-.355(*)	-0.238	-0.242	.350(*)	0.269	.326(*)	-0.258	.399(*)	1	-0.021
WK_LND	0.106	0.064	-0.121	-0.318	-.325(*)	-.352(*)	0.207	.450(**)	-0.021	1

Note: For description of acronyms please refer to Appendix A5.2.

Table A5.4: Correlations among Select Indicators for the Early Nineties

Acronyms of Indicators	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	RP_GR	UP_GR	RP_SR	UP_SR	TP_UP	R_LIT	U_LIT	RH_ELECT	UH_DW	RH_ELECT	UH_ELECT	RH_TOILT	UH_TOILT	AGRI_PRO
RP_GR	1	0.286	0.232	-0.123	-0.216	-0.640(**)	-0.098	-0.255	0.042	-0.135	0.118	-0.215	0.02	-0.387(*)
UP_GR	0.286	1	-0.088	-0.685(**)	-0.247	-0.306	-0.286	-0.274	-0.305	-0.269	-0.197	-0.153	-0.192	-0.172
RP_SR	0.232	-0.088	1	.595(**)	-0.241	-0.03	.448(**)	0.225	0.097	0.015	0.244	0.109	0.008	-0.362(*)
UP_SR	-0.123	-0.685(**)	.595(**)	1	0.051	0.091	.438(**)	0.265	.347(*)	0.25	0.313	0.162	0.26	-0.047
TP_UP	-0.216	-0.247	-0.241	0.051	1	0.193	0.244	0.234	.468(**)	.404(*)	.523(**)	0.304	.513(**)	.331(*)
R_LIT	-0.640(**)	-0.306	-0.03	0.091	0.193	1	.515(**)	.535(**)	0.022	0.104	-0.015	0.285	-0.032	0.298
U_LIT	-0.098	-0.286	.448(**)	.438(**)	0.244	.515(**)	1	.583(**)	.436(**)	0.26	.596(**)	.405(*)	.447(**)	0.018
RH_DW	-0.255	-0.274	0.225	0.265	0.234	.535(**)	.583(**)	1	.463(**)	.440(**)	.353(*)	.660(**)	0.303	0.214
UH_DW	0.042	-0.305	0.097	.347(*)	.468(**)	0.022	.436(**)	.463(**)	1	.693(**)	.702(**)	.514(**)	.771(**)	0.276
RH_ELECT	-0.135	-0.269	0.015	0.25	.404(*)	0.104	0.26	.440(**)	.693(**)	1	.664(**)	.663(**)	.600(**)	.575(**)
UH_ELECT	0.118	-0.197	0.244	0.313	.523(**)	-0.015	.596(**)	.353(*)	.702(**)	.664(**)	1	.506(**)	.829(**)	0.236
RH_TOILT	-0.215	-0.153	0.109	0.162	0.304	0.285	.405(*)	.660(**)	.514(**)	.663(**)	.506(**)	1	.537(**)	.413(**)
UH_TOILT	0.02	-0.192	0.008	0.26	.513(**)	-0.032	.447(**)	0.303	.771(**)	.600(**)	.829(**)	.537(**)	1	0.272
AGRI_PRO	-0.387(*)	-0.172	-0.362(*)	-0.047	.331(*)	0.298	0.018	0.214	0.276	.575(**)	0.236	.413(**)	0.272	1
HEC_FER	-0.25	-0.235	-0.109	0.085	.470(**)	0.284	0.053	.385(*)	.398(*)	.511(**)	0.261	.544(**)	0.315	.618(**)
WK_LND	0.295	0.221	-0.03	-0.336(*)	-0.299	-0.047	-0.265	-0.215	-0.510(**)	-0.492(**)	-0.480(**)	-0.556(**)	-0.580(**)	-0.137
AR_DENST	-0.062	-0.171	-0.186	-0.009	.850(**)	0.201	0.134	0.094	.357(*)	0.272	.340(*)	0.249	.414(**)	0.294
TP_CH	.602(**)	.461(**)	-0.116	-0.468(**)	-0.636(**)	-0.555(**)	-0.469(**)	-0.451(**)	-0.379(*)	-0.338(*)	-0.374(*)	-0.379(*)	-0.391(*)	-0.384(*)
TP_SC	-0.510(**)	0.006	-0.724(**)	-0.324(*)	0.162	0.182	-0.407(*)	-0.217	-0.151	0.028	-0.28	-0.086	-0.021	.431(**)
TP_ST	.658(**)	0.002	.633(**)	0.285	-0.361(*)	-0.415(**)	0.258	0.05	0.096	-0.025	0.203	0.011	-0.014	-0.438(**)
TP_MW	0.18	-0.128	.817(**)	.659(**)	-0.440(**)	-0.115	.336(*)	0.109	0.068	-0.037	0.117	-0.005	-0.077	-0.366(*)
TP_MGW	.568(**)	0.139	.395(*)	0.222	-0.554(**)	-0.654(**)	-0.203	-0.348(*)	-0.242	-0.297	-0.171	-0.347(*)	-0.147	-0.351(*)
MW_MIN	0.14	0.209	0.277	-0.19	-0.076	-0.118	-0.024	-0.038	-0.203	-0.149	-0.066	-0.155	-0.339(*)	-0.172
MW_MNH	-0.137	-0.087	-0.07	-0.035	-0.027	0.291	0.204	-0.013	-0.289	-0.179	-0.102	-0.131	-0.216	-0.226
MW_MNN	-0.303	-0.209	-0.08	0.119	.898(**)	0.279	.340(*)	.339(*)	.412(*)	.412(*)	.564(**)	.443(**)	.538(**)	0.251
MW_OS	-0.173	-0.148	-0.401(*)	-0.139	.922(**)	0.231	0.214	0.147	.387(*)	.358(*)	.465(**)	0.275	.510(**)	.373(*)
MW_CTT	-0.182	-0.204	-0.225	0.06	.958(**)	0.213	0.293	0.256	.488(**)	.419(**)	.562(**)	.392(*)	.582(**)	0.313

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Acronyms of Indicators	HEC_FER (15)	WK_LND (16)	AR_DENST (17)	TP_CH (18)	TP_SC (19)	TP_ST (20)	TP_MW (21)	TP_MGW (22)	TP_MIN (23)	MW_MNH (24)	MW_MNN (25)	MW_OS (26)	MW_CTT (27)
RP_GR	-0.25	0.295	-0.062	.602(**)	-.510(**)	.658(**)	0.18	.568(**)	0.14	-0.137	-0.303	-0.173	-0.182
UP_GR	-0.235	0.221	-0.171	.461(**)	0.006	0.002	-0.128	0.139	0.209	-0.087	-0.209	-0.148	-0.204
RP_SR	-0.109	-0.03	-0.186	-0.116	-.724(**)	.633(**)	.817(**)	.395(*)	0.277	-0.07	-0.08	-.401(*)	-0.225
UP_SR	0.085	-.336(*)	-0.009	-.468(**)	-.324(*)	0.285	.659(**)	0.222	-0.19	-0.035	0.119	-0.139	0.06
TP_UP	.470(**)	-0.299	.850(**)	-.636(**)	0.162	-.361(*)	-.440(**)	-.554(**)	-0.076	-0.027	.898(**)	.922(**)	.958(**)
R_LIT	0.284	-0.047	0.201	-.555(**)	0.182	-.415(**)	-0.115	-.654(**)	-0.118	0.291	0.279	0.231	0.213
U_LIT	0.053	-0.265	0.134	-.469(**)	-.407(*)	0.258	.336(*)	-0.203	-0.024	0.204	.340(*)	0.214	0.293
RH_DW	.385(*)	-0.215	0.094	-.451(**)	-0.217	0.05	0.109	-.348(*)	-0.038	-0.013	.339(*)	0.147	0.256
UH_DW	.398(*)	-.510(**)	.357(*)	-.379(*)	-0.151	0.096	0.068	-0.242	-0.203	-0.289	.412(*)	.387(*)	.488(**)
RH_ELECT	.511(**)	-.492(**)	0.272	-.338(*)	0.028	-0.025	-0.037	-0.297	-0.149	-0.179	.412(*)	.358(*)	.419(**)
UH_ELECT	0.261	-.480(**)	.340(*)	-.374(*)	-0.28	0.203	0.117	-0.171	-0.066	-0.102	.564(**)	.465(**)	.562(**)
RH_TOILT	.544(**)	-.556(**)	0.249	-.379(*)	-0.086	0.011	-0.005	-.347(*)	-0.155	-0.131	.443(**)	0.275	.392(*)
UH_TOILT	0.315	-.580(**)	.414(**)	-.391(*)	-0.021	-0.014	-0.077	-0.147	-.339(*)	-0.216	.538(**)	.510(**)	.582(**)
AGRI_PRO	.618(**)	-0.137	0.294	-.384(*)	.431(**)	-.438(**)	-.366(*)	-.351(*)	-0.172	-0.226	0.251	.373(*)	0.313
HEC_FER	1	-0.181	.464(**)	-.398(*)	0.172	-0.294	-0.205	-.422(**)	-.363(*)	-0.158	.508(**)	.375(*)	.466(**)
WK_LND	-0.181	1	-0.159	.378(*)	-0.223	0.249	-0.037	0.229	0.296	-0.041	-.338(*)	-0.244	-.400(*)
AR_DENST	.464(**)	-0.159	1	-.529(**)	0.098	-0.311	-.436(**)	-.460(**)	-0.2	-0.09	.786(**)	.855(**)	.872(**)
TP_CH	-.398(*)	.378(*)	-.529(**)	1	-0.12	.389(*)	-0.052	.493(**)	0.121	0.04	-.651(**)	-.532(**)	-.626(**)
TP_SC	0.172	-0.223	0.098	-0.12	1	-.879(**)	-.629(**)	-0.313	-0.3	0.239	0.1	0.21	0.145
TP_ST	-0.294	0.249	-0.311	.389(*)	-.879(**)	1	.632(**)	.518(**)	0.268	-0.175	-0.311	-.405(*)	-.370(*)
TP_MW	-0.205	-0.037	-.436(**)	-0.052	-.629(**)	.632(**)	1	.456(**)	0.105	-0.071	-0.311	-.587(**)	-.421(**)
TP_MGW	-.422(**)	0.229	-.460(**)	.493(**)	-0.313	.518(**)	.456(**)	1	0.08	-0.051	-.551(**)	-.585(**)	-.538(**)
MW_MIN	-.363(*)	0.296	-0.2	0.121	-0.3	0.268	0.105	0.08	1	-0.07	-0.178	-0.111	-0.161
MW_MNH	-0.158	-0.041	-0.09	0.04	0.239	-0.175	-0.071	-0.051	-0.07	1	0.07	-0.048	-0.012
MW_MNN	.508(**)	-.338(*)	.786(**)	-.651(**)	0.1	-0.311	-0.311	-.551(**)	-0.178	0.07	1	.796(**)	.896(**)
MW_OS	.375(*)	-0.244	.855(**)	-.532(**)	0.21	-.405(*)	-.587(**)	-.585(**)	-0.111	-0.048	.796(**)	1	.929(**)
MW_CTT	.466(**)	-.400(*)	.872(**)	-.626(**)	0.145	-.370(*)	-.421(**)	-.538(**)	-0.161	-0.012	.896(**)	.929(**)	1

Note: For description of acronyms please refer to Appendix A5.2.

Table A5.5: Correlations Among Select Indicators For the Early Years of Present Decade

Acronyms of Indicators	RP_GR (1)	UP_GR (2)	RP_SR (3)	UP_SR (4)	RC_SR (5)	UC_SR (6)	RC_GR (7)	UC_GR (8)
RP_GR	1	-0.025	-.390(**)	-.309(*)	-0.052	-0.128	.841(**)	0.121
UP_GR	-0.025	1	0.004	-.370(*)	-0.009	-0.074	0.079	.945(**)
RP_SR	-.390(**)	0.004	1	.793(**)	.714(**)	.635(**)	-0.218	-0.031
UP_SR	-.309(*)	-.370(*)	.793(**)	1	.570(**)	.702(**)	-0.179	-.357(*)
RC_SR	-0.052	-0.009	.714(**)	.570(**)	1	.680(**)	0.058	-0.031
UC_SR	-0.128	-0.074	.635(**)	.702(**)	.680(**)	1	-0.008	-0.067
RC_GR	.841(**)	0.079	-0.218	-0.179	0.058	-0.008	1	.294(*)
UC_GR	0.121	.945(**)	-0.031	-.357(*)	-0.031	-0.067	.294(*)	1
RP_CH	.522(**)	0.253	-0.148	-0.256	0.117	0.063	.697(**)	.418(**)
UP_CH	.387(**)	.366(*)	-.449(**)	-.525(**)	-0.25	-0.203	.555(**)	.540(**)
TP_UP	.431(**)	-0.068	-0.292	-0.168	-0.261	-0.143	0.169	-0.08
NT_GR	-0.252	-0.06	0.282	0.196	0.125	0.165	-0.081	-0.042
R_LIT	-0.287	-0.175	-0.203	-0.043	-.319(*)	-0.225	-.361(*)	-0.263
U_LIT	-.335(*)	-.318(*)	.326(*)	.416(**)	0.2	0.122	-.410(**)	-.426(**)
RH_DW	0.084	-0.196	0.233	.360(*)	0.242	0.141	0.099	-0.126
UH_DW	0.18	-.309(*)	0.241	.396(**)	0.217	0.067	0.111	-0.261
RH_ELECT	.335(*)	-0.227	0.064	0.292	0.085	0.147	0.259	-0.135
UH_ELECT	.373(*)	-.341(*)	0.077	0.273	0.17	0.116	0.263	-0.246
RH_TOILT	0.207	-0.125	-0.173	-0.06	-0.172	-0.171	0.03	-0.105
UH_TOILT	.343(*)	-0.173	-0.131	-0.014	-0.095	-0.212	0.248	-0.134
RH_BNK	.311(*)	-0.063	0.026	0.091	-0.019	0.096	.342(*)	0
UH_BAK	-0.068	0.293	.312(*)	0.012	0.269	0.146	-0.073	0.091
AR_RD	0.037	.321(*)	0.231	-0.055	-0.049	0.053	0.04	.315(*)
AGR_PRO	0.245	-0.164	-.484(**)	-0.254	-.617(**)	-.415(**)	0.061	-0.108

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Acronyms of Indicators	RP_CH (9)	UP_CH (10)	TP_UP (11)	NT_GR (12)	R_LIT (13)	U_LIT (14)	RH_DW (15)	UH_DW (16)
RP_GR	.522(**)	.387(**)	.431(**)	-0.252	-0.287	-.335(*)	0.084	0.18
UP_GR	0.253	.366(*)	-0.068	-0.06	-0.175	-.318(*)	-0.196	-.309(*)
RP_SR	-0.148	-.449(**)	-0.292	0.282	-0.203	.326(*)	0.233	0.241
UP_SR	-0.256	-.525(**)	-0.168	0.196	-0.043	.416(**)	.360(*)	.396(**)
RC_SR	0.117	-0.25	-0.261	0.125	-.319(*)	0.2	0.242	0.217
UC_SR	0.063	-0.203	-0.143	0.165	-0.225	0.122	0.141	0.067
RC_GR	.697(**)	.555(**)	0.169	-0.081	-.361(*)	-.410(**)	0.099	0.111
UC_GR	.418(**)	.540(**)	-0.08	-0.042	-0.263	-.426(**)	-0.126	-0.261
RP_CH	1	.700(**)	-0.169	0.104	-.693(**)	-.533(**)	-0.162	-0.073
UP_CH	.700(**)	1	-0.286	-0.039	-.353(*)	-.844(**)	-0.273	-.410(**)
TP_UP	-0.169	-0.286	1	-0.21	0.071	0.183	0.079	.302(*)
NT_GR	0.104	-0.039	-0.21	1	-0.043	-0.017	0.01	-0.087
R_LIT	-.693(**)	-.353(*)	0.071	-0.043	1	.468(**)	0.173	0.029
U_LIT	-.533(**)	-.844(**)	0.183	-0.017	.468(**)	1	0.247	.410(**)
RH_DW	-0.162	-0.273	0.079	0.01	0.173	0.247	1	.629(**)
UH_DW	-0.073	-.410(**)	.302(*)	-0.087	0.029	.410(**)	.629(**)	1
RH_ELECT	-0.22	-0.253	.425(**)	-0.225	0.257	0.29	.589(**)	.582(**)
UH_ELECT	-0.086	-.296(*)	.427(**)	-.320(*)	0.028	.398(**)	.485(**)	.680(**)
RH_TOILT	-0.29	-.343(*)	.509(**)	-0.137	.397(**)	.410(**)	0.272	.388(**)
UH_TOILT	-0.093	-.360(*)	.623(**)	-0.218	0.144	.501(**)	0.211	.582(**)
RH_BNK	-0.039	-0.07	0.284	-0.168	0.153	0.14	0.293	.337(*)
UH_BAK	-0.016	-0.291	0.147	0.025	-0.152	0.161	-0.256	0.011
AR_RD	0.18	0.043	0.126	0.031	-0.227	-0.07	-0.143	-0.12
AGRF_PRO	-0.139	0.045	0.246	-.362(*)	0.213	-0.001	0.182	0.23

Note: For description of acronyms please refer to Appendix A5.2.

Appendix A5.2: Description of Acronyms

Acronyms	Description
AGRF_PRO	Productivity in Kg per Hectare
AGRI_PRO	Value of Output of 35 Crops per Hectare
AR_DENST	Density of Population
AR_RD	Road Length per 100 sq.km
HEC_FER	Fertilizer per Thousand Hectare
MW_CTT	Percentage of Workers in Other Services to Main Workers
MW_MIN	Percentage of Workers in Mining and Quarrying to Main Workers
MW_MNH	Percentage of Workers in Household Manufacturing to Main Workers
MW_MNN	Percentage of Workers in Non-Household Manufacturing to Main Workers
MW_OS	Percentage of Workers in Construction, Trade, Commerce, Transport etc. to Main Workers
R_LIT	Rural Literacy Rate
RC_GR	Rural Population Growth in 0–6 Age Group
RC_SR	Rural Sex Ratio of Child Population in the Age Group 0–6
RH_BNK	Percentage of Rural Households availing Banking Services
RH_DW	Percentage of Rural Households availing Drinking Water from Taps
RH_DWT	Percentage of Rural Households availing Drinking Water from Taps
RH_ELECT	Percentage of Rural Households having Electricity
RH_TLT	Percentage of Rural Households having Toilet Facility
RH_TOILT	Percentage of Rural Households having Toilet Facility
RP_CH	Percentage of Rural Population in 0–6 Age Group
RP_GR	Growth in Rural Population
RP_SR	Rural Sex Ratio
TP_CH	Percentage of Children to Total Population
TP_MGW	Percentage of Marginal Workers to Population
TP_MW	Percentage of Main Workers to Population
TP_SC	Percentage of SC to Total Population
TP_ST	Percentage of ST to Total Population
TP_UP	Percentage of Urban Population
TW_CTT	Percentage of Workers in Other Services to Main Workers
TW_GR	Increase in Number of Towns
TW_MIN	Percentage of Workers in Mining and Quarrying to Main Workers
TW_MNH	Percentage of Workers in Households Manufacturing to Main Workers
TW_MNN	Percentage of Workers in Non-Households Manufacturing to Main Workers
TW_OS	Percentage of Workers in Construction, Trade, Commerce, Transport etc. to Main Workers
U_LIT	Urban Literacy Rate
UC_GR	Rural Population Growth in 0–6 Age Group
UC_SR	Urban Sex Ratio of Child Population in the Age Group 0–6
UH_BAK	Percentage of Urban Households availing Banking Services
UH_BNK	Percentage of Urban Households availing Banking Services
UH_DW	Percentage of Urban Households availing Drinking Water from Taps
UH_DWT	Percentage of Urban Households availing Drinking Water from Taps
UH_ELECT	Percentage of Urban Households having Electricity
UH_TLT	Percentage of Urban Households having Toilet Facility
UH_TOILT	Percentage of Urban Households having Toilet Facility
UP_CH	Percentage of Urban Population in 0-6 Age Group
UP_GR	Growth in Urban Population
UP_SR	Female-Male Ratio in Urban Areas
WK_LND	Land per Agriculture Worker

CHAPTER 6

Financial Infrastructure

6.1 INTRODUCTION

Finance and financial institutions are a critical component of infrastructure that impacts human development. The role of finance in the lives of people—especially the poor and those with poor individual and social asset base—is often defining, whether it is access to consumption credit, credit for business or work, access to micro credit for meeting basic, day-to-day expenses, or the financial security required in the times of death, disease, or disaster.

Finance is one of the inputs that can provide the poor and the needy with the required ‘push’ to overcome food insecurity, social backwardness, livelihood vulnerabilities, seasonality, and debilitating shocks, and to cross over to the other side of the poverty line. Irrespective of the location of a household (rural or urban) or its economic status, it requires finance in varying amounts to meet diverse production and consumption needs that can be categorized

into life cycle, emergency, and investment needs (Sa-Dhan 2003).

Poor households are seldom able to pool sufficient resources on their own to address their basic livelihood requirements. Consequently, they compromise on meeting the basic needs of their members, leading to poor health and productivity of women, other earning members, and youth in the household; lack of education and production skills, thus, limiting their opportunities for employment; inadequate housing; and persistent food insecurity fuelled by a perpetual state of indebtedness at the hands of local moneylenders. Such conditions lead to a poor quality of life of the poor in both rural and urban areas, and this is where major financial services (savings, credit, and insurance) can come to their rescue. Emerging field experiences also reveal the impact that timely and targeted provision of credit and finance can have on people’s lives (see Box 6.2).

Box 6.1: The Role of Credit

Credit—the principal financial service—plays four roles in human lives:

- Enables a person or group to undertake activities, commercial and personal, that they hitherto would be unable to due to lack of financial resources, adequate working capital, adequate cash stock etc. This has a far-reaching impact on their livelihoods and the ability to take and tackle risks and emergencies. It saves people from the disasters of negative turns in small livelihoods, and even helps enterprises to expand, thereby impacting other livelihoods, generates jobs, and brings greater prosperity.
- Builds equity by giving access to finances—a resource that is scarce, especially, amongst the poor and in the poorer regions. Finance or credit is not an open access resource, and the laws and relations governing its access can either make it very difficult for all but the financially empowered to access it. It needs to be made equity sensitive—accessible to all and sensitive to their economic and life realities.
- The infusion of capital into any enterprise, small, household-based or large, takes it to higher levels of technical and financial scales, thereby providing ways of breaking out of its own and the local economic equilibrium. In that sense it has a liberating aspect to it.
- The role of finance as insurance. Although, there is a lack of provision of insurance, especially in rural zones, credit in times of disaster, death, disease, and consumption needs nearly plays the role of insurance. Although credit, in such times, does not help cover someone for the loss he has incurred as insurance does, it does help people in getting over the immediate problem.

Box 6.2: Using Credit to Improve Lives— Some Field Experiences

Example 1

In Jawali village of Hoshangabad District, an all women SHG (Aarti SHG) manages the first cowshed of MP which is run exclusively by women. What started off in 2003 as an effort to serve cows in response to the state government's announcement to promote dairy farming at the micro-level through *gaushalas*, took the form of a viable and profitable enterprise with the potential to make wide ranging impacts on the status, lives, and livelihoods of women members of the SHG. On the basis of their pooled savings, Aarti SHG has taken loans from the bank to purchase 22 cows and 10 buffaloes. Around 20 litres of milk is sold daily by the group at the counter of the MP State Milk Federation in Sohagpur Work Division. But, at present, all the income of the group gets exhausted in loan repayment, and the savings are not sufficient to meet the infrastructure requirements of the growing enterprise. The group is looking towards the government to finance the establishment of a chilling plant nearby. It requires additional funds to diversify into producing bio-pesticides from cow's urine; and the group members feel the need to become trained in the marketing of milk products.

Source: Somkuwar 2005.

Example 2

As part of its *Shakti* project, the FMCG Giant Hindustan Lever Ltd. (HLL) is making pioneering effort to create livelihoods for rural women, organized in the form of SHGs, in 12 states of the country, including MP. *Shakti* has over 13000 women entrepreneurs in its fold who sell HLL products through small shops in the village. Each entrepreneur, thus, earns a sustainable income of Rs 700 to 1000 per month, which is double the average household income. The project is not only spurring the growth of and penetration of the FMCG Company's products—soaps, shampoos, detergents etc.—in rural India; it is also changing lives and boosting incomes. This SHG-based intervention is creating opportunities for rural women to live with dignity by improving their living conditions and overall standard of life. More than 10000 villages in the states of Chhattisgarh, Karnataka, and MP have been covered under *Shakti*.

Sources: 1. Kamath 2003.
2. www.bllshakti.com.

Example 3

SHG-based credit interventions do not stop at improving disposable incomes of the members. A study carried out in 2004 for testing the Consultative Group to Assist Poor (CGAP) Poverty Assessment Tool with the SHGs promoted by the NGO PRADAN (Professional Assistance for Development Action) revealed the following:

- Households of SHG members were less likely than non-members' to experience food shortage, and those that did, experienced it for a shorter period than non-members.
- They also had better access to clean drinking water.
- SHG members had less reliance on moneylenders, and better capacity to save, accumulate assets, and diversify livelihoods.
- Far greater numbers of SHG members' than non-members' children attended school, and there was greater gender equity in school attendance for SHG members.
- SHG members also compared favourably to non-members on a variety of health issues: for example, they were more likely to know about family planning methods, childhood immunization, and causes of diarrhoea.
- Membership also increased their likelihood of attending community-level meetings of various kinds.
- The comparison between PRADAN SHG members with and without livelihood promotion was also extremely striking. Those who were part of the livelihood promotion project, whether they were also part of an SHG or not, demonstrated stronger effects in relation to gender indicators than non-members or other SHG members.

Source: PRADAN 2004.

Human development has been defined as the expansion of choices available to communities and the individuals so that they may lead lives that they value. This relates to not just achievements in education, health, and quality of life, but includes external factors such as improvements in physical and virtual connectivity and basic political freedoms, equality etc. We look into the relationship that exists between human development and financial infrastructure, which has been narrowly defined for the purpose of this chapter as infrastructure that delivers credit to the poor—primarily, the rural poor in MP.

The challenges for credit are not just the fulfilment of cash/money deficit in the lives of people, but also ensuring that both the consumption and production credit needs of people, especially the rural poor, are met adequately by credit delivery institutions. The challenge is equally to offer opportunities for the poor to service their credit needs, with credit that is timely, adequate, affordable, and comes with fair commercial and business contract. It is necessary to ensure that the financially needy and insecure are able to extract themselves from a vicious cycle of deficit and indebtedness and are able to lift their livelihood cycles onto more sustainable levels.

Serious attempts have been made by the government in the past to reach banking services, primarily credit, in rural areas. The first attempt comprised the creation of institutions such as co-operative credit societies. This was followed by the momentous decisions of nationalization of SCBs and the creation of Regional Rural Banks (RRBs). While these institutional changes unfolded, the state simultaneously tried to proliferate rural credit through the Lead Bank Scheme, directed lending for the priority sectors, banking sector's linkage with government sponsored programmes for poverty eradication, differential rate of interest schemes, service area approach, SHG–bank linkage programme, and the introduction of Kisan Credit Card Scheme (KCCS).

There is no gainsaying the fact that these efforts of the government have gone a long way in widening and deepening the rural credit markets, and the

outreach of institutional lending has expanded over time. However, despite these efforts, a large section of the rural population is still unable to access institutional credit. Besides, the national level credit access figures hide geographical disparities. As per the Census of India, 2001, while nearly a third of households had access to banking facilities in rural India, the figure for rural MP lagged behind with only one in every five households having such an access. As per the NSSO 2003 results, out of the 93.90 lakh rural households in MP, 63.21 lakh (67.31 per cent) were cultivator households. Of the cultivator households, 50.8 per cent were indebted to either the formal or informal sectors or both, leaving 49.2 per cent households without any indebtedness, implying that half of the cultivators had not taken any credit. While the number of small and marginal farmers constituted 41 per cent of all cultivators in rural MP, the number of small and marginal farmers who have not accessed or benefited from any type of credit was 75 per cent of all such households. This clearly demonstrates that the access problem is indirectly related with to the size of landholding, the poorer you are the less credit you receive.

A very large number of cultivator households have not accessed credit, and within them there is a clear bias against the poor and small landholders. In terms of social categories, as we can see from Table 6.1, only 38 per cent of ST cultivators took any credit, while Other Backward Classes (OBCs) cultivators seem to access credit much better at 55 per cent.¹

The terms of services offered by the traders/moneylenders can change significantly (in favour of the poor borrowers) only if the former are faced with strong competition due to the expansion of operations of formal credit delivery institutions. It would be pertinent to note that since the NSSO survey that concluded in June 2003, number of KCCs issued in MP has gone upto 35.78 lakh in March 2006. The formal credit institutions have issued these cards mostly to their already existing clients.² However, there is reason to believe that some households who were earlier either not able to access any credit or

¹ We must keep in mind that indebtedness as assessed in surveys does not necessarily relate with demand for credit and providing such demand.

² Personal communication from the Central Bank, which is the Lead Bank for the state of MP.

Table 6.1: Indebted Households by Social Category

Category	Cultivator Households	Share of all Households (per cent)	Indebted Households	Indebted Households as Share of Households (per cent)	Share of all Indebted Households (per cent)
All Cultivators	6320600	100.0	3211000	50.8	100.0
SC	971100	15.4	597300	61.5	18.6
ST	1331700	21.1	511600	38.4	15.9
OBC	2789600	44.1	1536400	55.1	47.8
Others	1228200	19.4	565700	46.1	17.7

Source: NSSO (2003).

who could access credit only through informal sources have benefited after being brought under the ambit of formal credit institutions through KCC. One would not be able to quantify the number of new households included in the category of having access to formal credit owing to KCC because of inadequacy of data on the subject. Further, there is no gainsaying the fact that those who have received the KCC may have experienced greater ease in availing credit through formal sources.

The role of credit institutions is not limited only to credit, but expands to a whole lot of other services, as observed by the H.R. Khan Committee Report constituted by the RBI to examine issues relating to rural credit and micro finance (RBI 2005). It says, 'The poor would need credit in an increasing quantum depending on their stages of development. Keeping in view the necessity of secured savings for future use, need for reasonable returns, as a source of long-term security of the households and means for inclusion in the mainstream of financial sector, easier and wider availability of savings products has become imperative. With increasing rural-urban migration within and outside India, the need for remittance services to and from remote rural villages is also felt acutely. Protection against vulnerabilities of rural poor to disease, death, old age, disasters and natural calamities through micro insurance and pension schemes is also considered essential as a social security measure. Thus, there is need for comprehensive financial services encompassing savings, credit, remittance, insurance and pension products which the formal financial system has not been able to provide effectively in the rural areas'.

Nearly, half the rural households do not have access to credit. Of those with access to credit, about one-third took credit from traders/moneylenders and other informal providers, and two-thirds used formal credit institutions. This is somewhat better than the national picture where nearly 43 per cent of all debt, by cultivators and non-cultivators, was from the informal money-lending circuit.

6.2 THE CREDIT SITUATION IN MP

6.2.1 Situation in the State

The state of MP has one of the lowest per capita incomes in the country (Table 6.2). This, in turn, means low levels of surplus, lesser funds to invest, low capacity in the economy to grow on its own, and inadequate capacity of poor households to break out of their economic equilibrium by leveraging external funds and/or investments to change their situation.

Table 6.2: Per Capita Income of MP and India at Current and Constant Prices

Per Capita Income	<i>(in Rs)</i>	
	Madhya Pradesh 2004–05(QE)	India 2004–05 (QE)
At Current Prices	14069	23222
At Constant (1993–94) Prices	8238	12416

Note: QE—Quick Estimates.

Sources: Directorate of Economics and Statistics (2005); Economic Survey of MP 2005–06, Government of MP; Economic Survey 2005–06, Government of India.

Besides low per capita income, it was estimated that in 1999–2000 around 37.2 per cent of rural families in MP lived below the income poverty line, while 38.5 per cent urban families were poor, much higher than national poverty estimates of 26.8 per cent and 24.1 per cent for rural and urban areas, respectively. This dismal poverty-ridden status poses another challenging demand to the financial and credit sector—that of the provision of sensitive, timely, affordable, and adequate credit for the poor; to enable them to gradually expand their risks, take advantage of economic opportunities to come out of their situation, or to simply use credit in the times of crisis.

Two other maladies afflict livelihoods in MP. While on the one hand, there is low level of unemployment (measured in terms of people not getting any work); there is high level of underemployment or lack of gainful employment on the other hand. Since the poor cannot afford to remain unemployed, the stark joblessness prevailing in the state is not evident. In reality, most landless labourers remain without work for anything between three to five months a year. Studies have also shown that casual labourers remain without work for a third of all days.

Agriculture, while employing 72 per cent people, contributes only 31 per cent of the SDP, indicating a poor output and productivity situation. This means that a majority of people in MP who are engaged in agriculture have low productivity and the government needs to expand the agricultural infrastructure to improve their productivity. Though MP's share in the total production of cereals, food grains, and pulses in the country is 6.3 per cent, 7.5 per cent, and 22.6 per cent, respectively, the absolute yields of cereals and food grains are much lower than the country average. This can be attributed to lower irrigation (while MP's gross irrigated area to gross sown area was 29 per cent in 2003–04, this was much higher at 38 per cent for all India in 2001); lower usage of fertilizers (in 2004–05, the per hectare use of Nitrogen Phosphorus, Potassium (NPK) fertilizer was 56.6 kg in MP compared to 96.6 kg for all India) (GoI 2006). This translates into lower agricultural incomes and increased risk of food insecurity. The role of credit

in enhancing food security at the household level, thus, becomes crucial.

Land distribution in the state is highly skewed, with 69.7 per cent land holders falling in the category of small and marginal farmers, holding only 27.3 per cent of total land,³ although the level of skewness is lower than the all-India figures, where 80 per cent of all landholdings are small and marginal in size and comprise just 36 per cent of the area.⁴ A large number of people are, thus, working with landholdings that would be hardly sustainable in the long run and will not ensure them desired quality of life. To compound the small landholdings of those engaged in agriculture further, the state also does not have a good irrigation base. There are two specific trends in agriculture in the state; one of which is increase in the number of small and marginal landholders, both in terms of area and the number of landholdings.

The second disturbing trend is the increasing casualization of labour, as the figures in Table 6.3 reveal. While in 1993–94, 32 per cent men and 38 per cent women workers worked as casual labourers; labourers, these numbers have increased by 5–6 per cent within 6–7 years. Casual labourers comprise the most vulnerable sections of the workforce and are an indication of increasingly insecure livelihoods. Declining size of average landholdings in the state owing to intergenerational land fragmentation as well as poverty-induced land transfers are some of the reasons behind this casualization of labour, which is evident from the declining proportion of self-employment in the state. Substantial and directed credit is, thus, required to promote entrepreneurship in the state.

Table 6.3: Casual Labourers in Madhya Pradesh (Percentage of Total Workforce in Each Category)

Year	Male	Female
1993–94	32	38
1999–2000	37	44

Source: NSS 50th and 55th rounds.

³ *Basic Agriculture Statistics 2003–04*, Commissioner of Land Records, Gwalior.

⁴ *Agriculture Statistics at a Glance 2004*, IFFCO, New Delhi.

6.2.2 Rural Credit

The rural economy of MP is characterized by low productivity, high levels of poverty, an agriculture that is not very dynamic, and unsustainable livelihoods, especially, of small and marginal farmers, landless labourers, and small artisans. There is little surplus generated and in fact most households would face a deficit situation in terms of cash, for both productive and consumption purposes. Cash requirements within households are primarily for production, as data would indicate, but also for consumption and other household needs. In an economic scenario like MP, where many households face a gap between their incomes and the expenditure need, credit becomes important even for issues of survival and fulfilling basic needs.

What is the level of overall indebtedness of households, or what is the number of households which have taken some form of credit or the other? It was found in mid-2002, about 26 per cent rural and 17.7 per cent urban households were under some form of indebtedness (indebtedness must not be confused with debt trap). So, over three-quarters of rural and over 80 per cent urban households have not accessed credit.

Estimates of level of indebtedness amongst households shows that 16 per cent of all rural labour households were indebted in 1999–2000, and about the same share of agriculture labour households⁵ were indebted. The level of indebtedness was higher in the case of SC households (20 per cent) and lesser for ST households (13–14 per cent).

In terms of shares of institutional and non-institutional sources of credit, while in 2002, it was estimated that 59 per cent rural households had

accessed institutional credit, this trend has been on a decline in last decade or so. As we see from Figure 6.1, while the share of institutional credit between the 1980s and 1990s was ranged between 60 to 70 per cent, it has dropped substantially since then. The role of institutional credit service providers, on the other hand, has increased in urban areas, displaying an increased bias towards urban lending and increasing role of non-formal credit players in rural areas. The big jump between 1971 and 1981 would, of course, have been due to nationalization of banks, spread in banking in rural areas, and the impact of schemes and priority sector push into rural lending.

In terms of who accesses these loans, in rural MP, NSS data reveal that cultivators formed the majority, making up 66 per cent of all rural creditors, commensurate with their share in the total working population. Amongst the non-cultivators, in rural MP, agriculture labourers took 19.6 per cent of all loans, others 12.5 per cent, while artisans just 1.8 per cent.

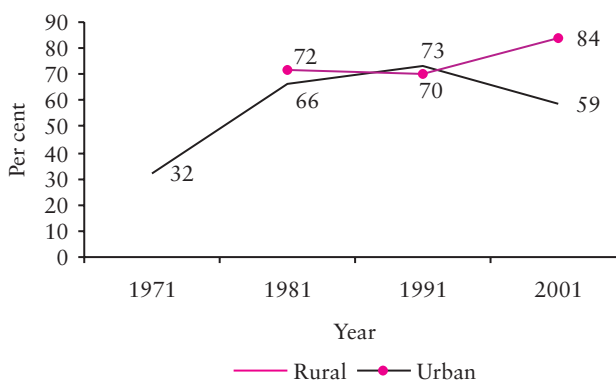


Figure 6.1: Share of Institutional Credit

Table 6.4: Incidence of Indebtedness in Madhya Pradesh and India, 2002

	Rural			Urban		
	Institutional	Non-institutional	All	Institutional	Non-institutional	All
Madhya Pradesh	15.2	15.0	26.1	10.9	7.5	17.7
India	13.4	15.5	26.5	9.3	9.4	17.8

Source: Report no. 501, *Household Indebtedness in India*, NSSO.

⁵ *Rural Labour Enquiry (1999–2000)*, Ministry of Labour, Govt of India, <http://labourburea.nic.in>

The average loan taken by a family was Rs 12246, while that taken by other non-cultivating households was Rs 2763.

It appears from the NSS survey in 2002 that of the 59 per cent accessing institutional lending, 34 per cent took it from co-operative societies or banks, and another 24 from Commercial Banks (CBs) including RRBs.⁶ Amongst the non-institutional sources, professional moneylenders gave loans to 21.1 per cent amongst all households taking credit, 9.8 per cent loans were taken from agriculture moneylenders.

What are these loans used for? Figure 6.2⁷ shows the purpose for which every Rs 1000 of outstanding credit is deployed in MP, India, and some of the neighbouring states by farmer households. Here, production credit includes capital and current expenditure in farm business and expenditure on non-farm business. On the other hand, consumption credit includes 'consumption expenditure', expenses incurred on marriages and ceremonies, education, medical treatment, and 'other expenditure'. It may be seen that the production credit uptake in farmer households in MP is better than the all-India average but worse than that in the states of Gujarat and Maharashtra.

One of the major concerns in MP is that the proportion of its indebted marginal farmer households, that is, farmer households with a landholding size of less than one hectare, to the total indebted households is merely 33 per cent as compared to the

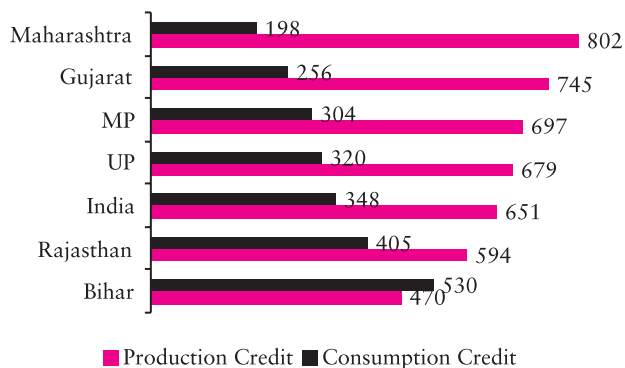


Figure 6.2: Per Rs 1000 Distribution of Outstanding Loan by Purpose of Loan of Farmer Households

⁶ Figures may not add up due to rounding off of numbers.

⁷ Derived from the data sourced from Report No. 498, 'Indebtedness of Farmer Households, 2003' based on the 59th round of the NSSO.

all-India average of 61 per cent. This implies that the access to credit from both, formal and informal, sources is poor among the marginal farmer households in MP when compared to the national average. Further, the average amount of outstanding loan per marginal farmer household in MP at Rs 5253, though better than states such as West Bengal (Rs 3710), Bihar (Rs 3742), and Orissa (Rs 4019), does not fare well in comparison to the all-India average (Rs 7096) or to states such as Uttar Pradesh (Rs 5318), Gujarat (Rs 6152), Maharashtra (Rs 8045), and Rajasthan (Rs 10927).

As per the NSSO's 59th round conducted in 2003, the institutional credit delivery in MP is marginally weaker than the national average as for every Rs 1000 of outstanding loan in MP, Rs 569 is sourced through institutions like the government, banks, or co-operatives as against Rs 577 in India. The most dominant source of non-formal credit in MP are the agricultural/professional money lenders as for every Rs 1000 of outstanding loan, Rs 226 comes from them. The corresponding all-India figure is marginally higher at Rs 257. While traders account for Rs 90 of every Rs 1000 of outstanding loans in MP, the figure is much lower for all India at Rs 52. Relatives and friends play an important role in meeting credit needs as for every Rs 1000 of outstanding loan, Rs 101 is sourced from them in MP as against Rs 85 in the whole of India. Among the non-formal sources, doctors, lawyers and other professionals account for Rs 5 and Rs 9 for every Rs 1000 of outstanding loan for MP and India, respectively.

6.3 FINANCIAL SERVICES IN MP

The major financial products available for meeting livelihood and overall development needs include credit, savings, insurance, and remittances. These services are provided by a network of government promoted financial institutions (that includes banks and co-operatives) that is, the formal sector, private institutions and individual financial service providers (including the moneylenders). This section focuses on the formal financial infrastructure in the state.

6.3.1 Formal Financial Infrastructure in the State: An Overview

The formal banking structure comprises SCBs, the RRBs which cover specified areas, and the district co-operative banks. Through these banks, the formal credit policies, credit priorities, and the responsibility of energizing the state's economy are channeled by the national and state governments. While the SCBs now have a certain amount of autonomy in their functioning and application of funds, the RRBs and co-operative banks are also fairly independent in this except for the directions of the elected boards in the case of co-operatives.

There are 124 banks operating in MP with 4721 bank branches, of which 2495 (52.84 per cent) are located in rural areas. Each branch on an average services a population of 12930 persons. There are 38 CBs in the public and private sectors, 10 RRBs, 38 District Central Co-operative Banks (DCCBs), and 38 District Co-operative Agricultural and Rural Development Banks (DCARDBs) operating in the state, as on 30th September 2006.

The CBs (with 2456 branches) and RRBs (with 1031 branches) account for 51 per cent and 22 per cent of the total branch network in the state, respectively. The DCCBs have 856 branches with 4526 Primary Agricultural Credit Societies (PACs) affiliated to them, and the DCARDBs operate through 378 branches.

The two essential roles of these banks are deposits and lending. We briefly examine this aspect of these banks before taking a look at the ground reality of their credit functions. Over the last five years, there seems to have been an impressive growth in deposits. Commercial bank deposits have grown at nearly 14 per cent per annum in this period, while RRBs and co-operative deposits have grown at even faster rate. There also appears to be a similar growth in loans and advances, with commercial bank credit growing at 19 per cent and RRB credit at 24 per cent every year. The CBs have contributed the maximum towards this increase, contributing two-third of the increase in this period. The banks that represent the small depositors and creditors, small rural farmers

**Table 6.5: Growth of Deposits and Loans and Advances in Banks
in MP, 2000–06**

Particulars	<i>Deposits (in Rs Crore)</i>						Rate of Growth (per cent)
	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06	
CBs	26520.11	29375.39	35408.29	38771.09	48911.64	50141.91	13.59
RRBs	2591.30	2936.62	3344.50	3923.24	4081.78	4969.99	13.91
DCCBs	2679.86	3037.35	3337.14	3658.65	5642.15	6312.65	18.69
DCARDBs	83.73	100.64	101.12	106.68	156.01	176.80	16.12
Total	31875.00	35450.00	42191.05	46459.66	58791.58	61601.35	14.08
<i>(Loans and Advances Outstanding)</i>							
Particulars	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06	Rate of Growth (per cent)
CBs	13457.20	13952.16	16785.47	18704.35	27579.52	31961.35	18.89
RRBs	831.43	1014.54	1323.44	1601.25	1984.27	2437.59	24.00
DCCBs	2488.10	2878.93	3256.15	3441.69	4089.61	8344.02	27.38
DCARDBs	599.98	772.98	987.59	1154.61	1424.48	1571.31	21.23
Total	17376.71	18618.61	22352.65	24901.9	35077.88	44314.27	20.59

Source: CBs—State Level Banking Committee Data and for Co-operatives Bank Returns.

and manufacturers-RRBs and co-operative banks have also performed quite well, in fact relatively better than the CBs.

The impressive increase in deposits points to an economy with positive movements that enable savings. The small savings have also shown similar trends. There have been significant jumps in small savings in the early years of this decade, but it has come down since 2003–04 (Table 6.6). The rate of growth in small savings over the last five years has been 13.38 per cent. District-wise disaggregated data show impressive savings in some districts. However, many of the districts have not been able to achieve even two-third of their targets (Table 6.7). During 2005–06, only 10 districts could achieve 75 per cent of their small savings targets. The reason may also be poor target-setting considering the fact that small savings have increased almost at the similar rates compared to bank savings.

Table 6.6: Progress of Small Savings Mobilization in MP, 2000–01 to 2005–06

(in Rs Crore)

Year	Target	Gross Small Savings	Net Small Savings
2000–01	1066.5	2209.86	1038.89
2001–02	1205.0	2677.71	1373.57
2002–03	3120.0	3799.67	1953.38
2003–04	3001.0	4576.74	2256.74
2004–05	3100.9	3555.71	1956.84
2005–06	3220.0	4335.71	1945.52

Source: Directorate of Small Savings and State Lotteries, Government of MP.

As on 31st March 2005, per capita deposit stood at Rs 9265 while the same at the national level was Rs 16085. On the same date, per capita loan

Table 6.7: District-wise Net Target and Achievement of Small Savings in Madhya Pradesh, 2005–06

(in Rs Crore)

District	Net Target	Net Achievement	Per cent	District	Net Target	Net Achievement	Per cent
Balaghat	30	16.49	54.97	Mandsaur	30	25.74	85.80
Barwani	20	0.00	0.00	Morena	50	47.23	94.46
Betul	40	31.65	79.13	Narsimhapur	30	19.59	65.30
Bhind	45	29.20	64.89	Neemuch	25	-0.48	NA
Bhopal	500	388.72	77.74	Panna	10	5.29	52.90
Chhatarpur	30	11.05	36.83	Raisen	30	-14.87	NA
Chhindwara	90	44.39	49.32	Rajgarh	20	9.87	49.35
Damoh	25	15.83	63.32	Ratlam	50	39.91	79.82
Datia	20	13.91	69.55	Rewa	60	47.96	79.93
Dewas	50	24.69	49.38	Sagar	85	37.45	44.06
Dhar	20	13.21	66.05	Satna	75	35.58	47.44
Dindori	10	0.00	0.00	Sehore	30	14.49	48.30
East Nimar	60	52.93	88.22	Seoni	20	6.45	32.25
Guna	30	20.62	68.73	Shahdol	45	50.81	112.91
Gwalior	250	149.30	59.72	Shajapur	25	8.89	35.56
Harda	15	12.13	80.87	Sheopur	10	3.17	31.70
Hoshangabad	50	30.40	60.80	Shivpuri	25	15.79	63.16
Indore	500	294.06	58.81	Sidhi	75	32.98	43.97
Jabalpur	300	185.38	61.79	Tikamgarh	25	12.80	51.20
Jhabua	20	8.76	43.80	Ujjain	175	102.42	58.53
Katni	65	46.02	70.80	Umaria	25	0.00	0.00
Khargone	30	23.02	76.73	Vidisha	30	21.62	72.07
Mandla	20	11.08	55.40	Total	3220	1945.52	60.42

Source: Directorate of Small Savings and State Lotteries, Government of MP.

disbursed in the state was a just Rs 5383, as against a corresponding national average of Rs 10623. The scale of both, deposit and credit, disbursed in MP, is lower than the Indian average, leaving a huge potential for increase in both. Therefore, the role that institutional credit could play as a critical input and partner in people's progress is not being fulfilled sufficiently. With just 50 per cent of the farmers and others accessing credit, and the low per capita credit, it appears that the credit delivery system needs a substantial jump, both in its coverage and the size of its lending.

The share of CBs in total outstanding stood at around 78.16 per cent. The combined CDR⁸ of three agencies (CBs, RRBs, and DCCBs) was generally low in MP (50 per cent in March 2003, 51.5 per cent in March 2004),⁹ but off late there has been an increase in this and by March 2006, the CDR for the state as a whole stood at 64 per cent.¹⁰ In absolute terms, both deposit and credit situation in the State was bettered by 76 and 116 per cent between 2001 to 2005, respectively.

It needs to be mentioned here that poor CDRs (below 70 per cent) indicate inefficient deployment/investment of savings/deposits that have the potential to boost growth and development in the state by enhancing credit flow to various sectors. Within MP, June 2005 CDRs of districts such as Raisen (172.24 per cent), Indore (102.70 per cent), Shajapur (102.05 per cent), Sehore (92.64 per cent), Rajgarh (87.56 per cent), and Guna (84.70 per cent) were high, but the CDRs in districts like Sidhi (11.50 per cent), Umariya (24.36 per cent), Shahdol (31.18 per cent), Rewa (31.34 per cent) and Anuppur (31.52 per cent) show vast regional variations within the state itself.

The disparity is even more evident when we consider the gross deposits of top ten districts in MP. They account for 58.22 per cent of the total deposits in the state (RBI 2005).¹¹ The gross credit of the ten leading districts, on the other hand, accounts for 63.69 per cent of the credit disbursed in the State (Table 6.8). The picture of regional disparities in bank performance is completed if we consider that the ten last ranking districts in terms of deposits,

Table 6.8: Top 10 and Bottom 10 Districts in terms of Gross Deposits and Credit

Ranks	Top 10 Districts		Ranks	Bottom 10 Districts	
	In terms of Deposits	In terms of Credit		In terms of Deposits	In terms of Credit
1	Bhopal	Indore	39	Raisen	Seoni
2	Indore	Bhopal	40	Shahdol	Tikamgarh
3	Jabalpur	Jabalpur	41	Mandla	Jhabua
4	Gwalior	Gwalior	42	Burhanpur	Mandla
5	Sidhi	Ujjain	43	Harda	Umariya
6	Ujjain	Dhar	44	Panna	Anuppur
7	Rewa	Dewas	45	Datia	Panna
8	Satna	Sagar	46	Ashoknagar	Sheopur
9	Sagar	Ratlam	47	Sheopur	Shahdol
10	Chhindwara	Hoshangabad	48	Dindori	Dindori

Source: RBI (2005).

⁸ CDR is calculated as total credit given in a defined area divided by total deposits gathered from that defined area. A low CDR shows that funds are flowing out of that region to provide credit for other areas.

⁹ Economic Survey, 2005–06, Directorate of Economics and Statistics, Government of MP, Bhopal.

¹⁰ Economic Survey, 2005–06, Directorate of Economics and Statistics, Government of MP, Bhopal.

¹¹ RBI (2005). Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks, Reserve Bank of India, June 2005.

account for a mere 6.7 per cent of deposits and those lagging in terms of credit disbursements account for only 4.34 per cent credit disbursed in the whole of MP.

Further, RBI data of June 2005 show that only four of the top 100 centres in the country (in terms of size of aggregate deposits and gross bank credit) are located in MP (Table 6.9), pointing to the fact that the credit status in MP lags far behind the national scene.

with far lesser transaction costs than it would otherwise be the case. Second is that by the very nature of group work, group ownership, and manner in which micro finance is serviced by micro finance groups or SHGs, there is a reduction in asymmetric information, making lending more democratic, accessible, and easy.

In order to make banking with the poor a bankable proposition for both the parties, micro finance activities were initiated in the state in the late 1990s.

Table 6.9: MP Centres that Figure in the Top 100 Centres in India

(according to the size of aggregate deposits and gross bank credit)

Data on Deposit Rankings				Data on Credit Rankings			
Deposit Rankings	Centre	Annual Growth	Amount (in Rs Crore)	Credit Rankings	Centre	Annual Growth	Amount (in Rs Crore)
17	Bhopal	-10.2	8095	14	Indore	29.2	6688
22	Indore	8.5	7143	22	Bhopal	35.1	3564
51	Jabalpur	-0.5	3059	69	Jabalpur	-1.5	1141
58	Gwalior	10.1	2615	79	Gwalior	26.5	991

Source: RBI (2005).

More than 35 of the state's districts are in need of a concerted and severe push in credit and saving services. These also account for some of the backward districts, and unless there is a directed institutional push towards greater credit disbursement in these districts, the poor in these districts shall not be able to avail of critical credit services.

6.3.1.1 Micro Finance

Micro finance—small credit delivered to people through a whole new set of delivery agencies and tools, and a new set of systems and standards—has become the principal strategy for providing credit to the poor, the small farmers, the small artisans and rural manufacturers and service units. There are two distinct advantages that micro finance as a tool possesses in banking terms. One is that it reduces transaction costs for delivering small credit. In case of large financial/banking agencies, delivering small credit has high transaction costs, but micro finance cuts that out. Banks or financial agencies deliver credit in large sums to groups which in turn make them into micro finance whilst lending amongst themselves,



Employment through micro-credit—Positive role of SHG

The micro finance activity in MP, at present, covers more than four lakh SHGs formed by different organizations such as government departments, NGOs, banks and NABARD. Of these, the total number of SHGs financed by banks (as on March 2005) stood at only 45105 (excluding the groups promoted under the principal poverty alleviation scheme called

the Swarnajayanti Gram Swarozgar Yojana, SGSY groups), with a cumulative bank loan of Rs 110 crore. This enables an estimated 9.02 lakh poor households in the state gain access to micro finance from the formal banking system. 47 NGOs have been sanctioned grant assistance of Rs 90 lakhs for credit linkage of 6290 SHGs in 20 districts. The institutional credit for the SHG linkage programme for 2006–07 is estimated at Rs 56.44 crore.

All the 19 RRBs operating in the state have participated in the SHG–bank linkage programme. As on 31st March 2005, RRBs had credit linked 17678 SHGs and provided them bank loans to the tune of Rs 34.89 crore (NABARD 2006–07). Apart from government departments, around 120 NGOs are involved in SHG promotion in 28 districts of the state (see Box 6.3).

The number of SHGs credit-linked in the state has increased from 74 SHGs with bank loans of Rs 14.34 lakh in 1997–98 to 45105 SHGs involving

Table 6.10: Agency-wise number of SHGs formed in the State, 2005–06

Agency	No. of SHGs formed
Zila Panchayat	233113
Rajiv Gandhi Watershed Mission	11130
Mahila Bal Vikas	77463
Padhana Badhana Andolan	63488
NGOs/Bank	19374
Total	404568

Source: NABARD (2006–07).

bank loan of Rs 10968.74 lakh in 2004–05. These SHGs were credit-linked by 18 CBs, 19 RRBs, and 21 DCCBs spread over 48 districts in MP (for details, see Table 6.11).

Although, all the 48 districts of MP have been covered under the SHG–bank linkage programme, there is wide disparity across different regions. It is observed from Table 6.12 that the Malwa region with

Table 6.11: Number of SHGs Credit-linked through Bank Loans

Agency	No. of Participating Banks	No. of Participating Branches	No. of SHGs Credit-linked	Bank Loan
CBs	18	1633	24048	6658.02
RRBs	19	1025	17678	3488.97
DCCBs	21	706	3379	821.75
Total	58	3364	45105	10968.74

Source: NABARD (2006–07).

Table 6.12: Spread of SHG–Bank Linkage Programme in MP

Region	Districts Covered	No. of SHGs credit linked	Percentage Share in Total
Malwa	13 Districts: Shajapur, Ujjain, Indore, Dewas, Khandwa, Burhanpur, Khargone, Barwani, Dhar, Jhabua, Ratlam, Neemuch and Mandsaur	26822	59.47
Central	8 Districts: Bhopal, Sehore, Raisen, Vidisha, Rajgarh, Hoshangabad, Harda and Betul	4412	9.56
Northern	8 Districts: Bhind, Morena, Gwalior, Shivpuri, Sheopur, Ashoknagar, Datia and Guna	4546	10.08
Eastern	11 Districts: Sagar, Tikamgarh, Chhatarpur, Damoh, Panna, Satna, Rewa, Sidhi, Shahdol, Umaria and Anuppur	4945	10.96
Mahakaushal	8 Districts: Balaghat, Mandla, Dindori, Jabalpur, Katni, Narsimhapur, Seoni, Chhindwara	4480	9.93
Total	48 Districts	45105	100.00

Source: NABARD (2006–07).

Box 6.3: SHG-based Enterprise Promoted by Pradan in Kesla, Hoshangabad

One of the major NGOs running SHG programmes in MP is PRADAN which is a national voluntary agency working in 26 districts across seven states in the country. PRADAN's mission is to help the rural poor in India, by focusing on the promotion and strengthening of their livelihoods. The NGO recognizes credit as a key input for livelihood promotion, and considers micro finance delivery through an SHG model as a necessary and complementary strategy to livelihood promotion. In India (as in March 2004), PRADAN was promoting 5358 SHGs that were addressing the needs of 76742 female clients (53.5 per cent tribals, 14.5 per cent *dalits*, and 29.5 per cent OBC beneficiaries). PRADAN seeks to promote SHGs as the first step towards local livelihoods planning, for undertaking sectoral interventions, and subsequently, to leverage credit on a large scale.

In MP, one of the most successful and widely cited SHG-based livelihood interventions of PRADAN has been the poultry enterprise, which consists of rearing broilers for consumption in towns and cities. The NGO has helped establish a producer organization, so that market and other fluctuations can be absorbed and the entrepreneurs also gain from scale economies. The programme currently covers 244 producers, organized into Kesla Poultry Co-operative (KPC) in Hoshangabad district. The KPC works according to modern principles of supply chain management model, and a strategy based on forward and backward vertical integration. Each producer is selected carefully and is given hands-on training before s/he is assisted to set up a unit.

The KPC seeks to provide its owner-members with a minimum additional income of Rs 7500 per annum from broiler farming. It aims to capture 35 per cent market share of the Bhopal broiler cluster; to become the largest vertically integrated production house in MP; and to demonstrate the financial viability and technical feasibility of decentralized, small-scale poultry. The Co-operative provides members all the inputs at prices and quality standards available to large farmers. It provides reliable marketing services. Through a system of decentralized input distribution, door step marketing service, and localized veterinary care, a complete production package is available to members; this ensures participation of women in the activity rather than being appropriated by men. The system of de-linking production risks from enterprise risks by fixing the input-output prices helps the Co-operative remain competitive in the market and insulates member-producers from volatile markets. A blend of local cadre drawn from the member families and professional management ensures that there is unwavering commitment to the Co-operative's mission and efficiency.

The Co-operative today rears more than 3 lakh birds a year with an annual turnover of Rs 187 lakh. It has retail and wholesale outlets in 4 markets and is poised to expand its market chain. It generated incomes to the producer members to the tune of Rs 11 lakh. Additionally, the Co-operative provides close to Rs 7 lakh to workers selected from amongst the producers for providing veterinary services, central production, and marketing services, and to workers at warehouse-retail points.

Income from poultry has reduced family deficits and replaced wage earning in the existing livelihood portfolio of the family. Producers earn an average of Rs 8000 per annum, which translates into more than 270 person days per family at prevailing wage rates of Rs 30 per day. Women have access to this employment opportunity by working at home for 2–3 hours a day. The co-operative reaped a net profit of Rs 2.3 lakh as on 31st March 2002.

Over the years, PRADAN has established linkages, financial systems, self-management, and mutual support routines and an intensive training programme to launch new people into the enterprise. PRADAN has also taken steps to initiate replication of the Kesla model in Sidhi under the MP Government's District Poverty Initiatives Project (DPIP). It is envisaged to provide opportunities to generate incomes through broiler rearing to 350 poor families in the identified villages. Locally, the project would continue to expand to about 50 new producers per year, the principal constraint being control over the market. Besides poultry, PRADAN is also working in the areas of irrigation, and silk, oyster mushroom, and milk production for rural livelihoods promotion in MP.

Sources: <http://www.indianngos.com/issue/microcredit/projects/pradan4.htm> (3rd February 2006).

PRADAN (2004).

PRADAN's website: www.pradan.net.

59.47 per cent credit linkage of SHGs has performed far better than other regions like northern (10.08 per cent), eastern (10.96 per cent), central (9.56 per cent), and Mahakaushal (9.33 per cent) regions.

Both the central and state governments have been implementing a number of development schemes in MP. Some of these schemes have a credit component, and aim at poverty alleviation by providing affordable credit to poor households. It is envisioned that when deployed in viable enterprises (individual as well as group-based), this financial support will reap incomes that will enable the beneficiaries to access a basket of goods and services (including the nutritional minimum) to fulfil their basic subsistence needs. A summary of different schemes, including those specially targeted at women and weaker sections of the society, has been presented in Box 6.4.



Women empowerment through micro-credit

6.3.2 Spatial Variations in the Status of Financial Services

With great geographical and, related economic and social diversity, there are spatial variations in MP, that must be looked into to get a better idea of the analysis of the demand and supply of financial services.

Understanding the Demand Side

The varying resource endowments of 11 distinct Agro-Climatic Zones (ACZs) into which the state is divided translate into diverse productive capacities, production and occupational patterns and, thus, development requirements. Consequently, the financial service requirements of communities residing in these

areas also differ. The region-wise characteristics and their credit requirements are presented in Box 6.5.

Analysing the Supply Side

The regions of Malwa Plateau, Kymore Plateau and Satpura Hills, Vindhya, and Giridh account for 65 per cent of the net sown area, 69 per cent of total population, and 73 per cent of total crop loans disbursed in the state. These four ACZs along with Nimar region accounted for 75.14 per cent of the total loans disbursed during 2004–05 in the non-farm sector. Thus, only 24.86 per cent of the non-farm sector credit flow went to rest of the 6 ACZs comprising 15 districts.

6.3.3 Sector-wise Variations in the Status of Financial Services

Demand for Financial Services

Close to three-quarters of MP's population resides in its rural areas, and 71.5 per cent of the state's main workforce is dependent on agriculture and allied (forest, land-based, and livestock) activities. The share of workers in the non-farm sector is only 25 per cent, and in the rural non-farm sector is just 11 per cent.

Primary Sector: Of the total workers in the state, 43 per cent are cultivators and around 29 per cent are agricultural labourers (2001 Census). There are 36 per cent (Agriculture Census 2000–01) large, medium, and semi-medium farmers (2 ha and above) in MP who hold roughly 74 per cent of the total cultivated area of the state. These medium and large farmers numbering around 25.7 lakh would be the main seekers of credit in agriculture, whether for their



Cash crops—a boost to income through agriculture

Box 6.4: Developmental Schemes with Credit Component Run by Banks in MP

Swarnajayanti Gram Swarozgar Yojana (SGSY)

This is a credit-linked subsidy scheme that places emphasis on group approach for self-help, leading to the establishment of micro-enterprises in rural areas. It provides support to families falling BPL (called swarozgaris) in all aspects of self-employment, such as organization of SHGs, their capacity building, provision of income-generating assets through a mix of bank credit and government subsidy, and support for marketing rural products. The adult swarozgaris are also covered under a Group Life Insurance Scheme (GLIS).

Pradhan Mantri Rozgar Yojana (PMRY)

Under this subsidy-linked scheme, credit is provided for self-employment up to a limit of Rs 1 lakh for small trade and up to Rs 2 lakh for engaging in self-employment in industry or services sectors. The margin money specified under PMRY is 20 per cent (including subsidy).

Swarna Jayanti Shahri Rozgar Yojana (SJSRY)

This credit-linked subsidy scheme is specially targeted at the underemployed and unemployed BPL urban youth who are educated up to ninth standard. Under this, the entrepreneur has to contribute 5 per cent of the proposed project cost as margin money.

Margin Money Scheme of Khadi Village and Industries Commission (KVIC)

This scheme is applicable for financing viable rural enterprises in villages having population less than 20000. Individuals as well as institutions/co-operative societies/trusts are eligible to receive an amount of up to Rs 1 lakh and Rs 2 lakh, respectively for investing in sanctioned projects. There is a requirement of beneficiary contribution in this scheme as well, though beneficiaries belonging to weaker sections of the society are eligible to receive credit at concessional terms.

Loans for Rural Housing

Under this scheme, rural BPL households are eligible to receive credit of up to Rs 40000 from the bank for constructing houses; the subsidy component of this scheme has been capped at Rs 10000.

Pratishtha Scheme

Under this scheme, subsidy-linked loan up to Rs 50000 is provided to those engaged in carrying the night soil to shift to alternative occupations of their choice.

Madhya Pradesh Tribal Finance and Development Corporation

This scheme is specially aimed at the upliftment of the tribal population of the state. Implemented through NABARD, this scheme also involves disbursement of subsidy-linked credit to the members of STs.

'District Poverty Initiative Program & Rural Livelihood Promotion

Under these two schemes, members of SHGs or common interest groups are provided credit linkages when their credit needs are beyond the limits specified under the schemes.'

Special Schemes for Women and SC/STs

With a view to increasing women's access to institutional credit, NABARD has formulated various schemes exclusively for them; for example, Assistance to Rural Women in Rural Non-farm Development (ARWIND), and Assistance for Marketing of Non-farm Products of Rural Women (MAHIMA). NABARD has also extended grant assistance to 100 banks in the country (including 5 in MP: 4 RRBs and 1 DCCB) to establish women development cells, based on the concept of relationship marketing with the aim of streamlining the flow of institutional credit to women in a gender sensitive manner.

Special lines of credit on liberal terms have also been established through DCCBs and RRBs operating in tribal dominated areas with a view to step up credit to tribal population. Short-term credit limits are also sanctioned for co-operatives for financing the collection and marketing of various types of minor forest products by STs. A number of subsidy-linked credit schemes are being run for income and employment generation of SC/ST population under the purview of Madhya Pradesh Adivasi Vitta Evam Vikas Nigam (for STs) and Zila Antyavasayi Sahakari Vikas Samities (for SCs).

Box 6.5: ACZs in MP, their Characteristics, and Credit Requirements

Chhattisgarh Plains. Only Balaghat district falls in this region. It houses close to 30 per cent tribal population. Poor transport infrastructure in the area restricts mobility of population to various industrial hubs in search of alternative employment avenues. Funds for watershed management, investment credit for off-farm income generation, and loans for physical assets (including vehicles to improve mobility) are a priority here.

Northern Hills of Chhattisgarh include the districts of Dindori, Mandla, Shahdol, southern half of Sidhi, and Umaria. Heavily forested, this region houses substantial tribal population which is dependent on forests for survival. Cropping intensity is generally low, and agriculture is rain-fed. Seasonal migration to Jabalpur and Raipur (as wage labour) is common. Engagement of the workforce in secondary and tertiary, and in non-farm sectors is below the state average. Development of alternative income generation opportunities (forest-based and other off-farm) and establishment of watershed management and irrigation infrastructure constitute key development priorities in the area.

Kymore Plateau and Satpura Hills include Jabalpur, Katni, Panna, Rewa, and Sidhi districts. Two major commercial hubs—Jabalpur and Katni—are located here, which are well-connected by rail networks. Promotion of urban livelihoods, and employment opportunities in the secondary and tertiary sectors, with a special focus on forest-based livelihoods are key areas for support in this zone.

Central Narmada Valley—the largest river valley in the state—covers Hoshangabad, Narsimhapur, and the southern half of Sehore and Raisen districts. It has substantial groundwater resources, and is well-irrigated by Narmada and Tawa rivers. Though agriculture is the main occupation in the region, Non-Timber Forest Produce (NTFP) rich forests of Pachmarhi (Hoshangabad) also support the livelihoods of rural communities. Alternative income generation options like fisheries, poultry, development of culturable wastelands, and improvements in transport and communication infrastructure are key areas for investment and improvement here.

Vindhya Plateau includes the districts of Damoh, Sagar, northern halves of Sehore and Raisen, southern part of Guna, and Vidisha. Agri-based small and medium scale industries and *tendu* leaf-based enterprises contribute to the employment opportunities in this region, which otherwise has Bhopal as its only major city. Agriculture-related credit, for both, farm inputs and marketing of agri-produce, is in high demand here.

Gird Region borders Rajasthan and Uttar Pradesh and includes the districts of Bhind, Gwalior, Morena, most of Guna, northern half of Shivpuri, and Sheopur. It is a low rainfall region, with 38 per cent of its area under irrigated agriculture. Forests, though present, are mainly of the open scrub type. The predominantly tribal population of Sheopurkalan is largely dependent on NTFPs derived from the forests for their survival and subsistence. Investments are required for wastelands reclamation, pasture development, and forest development activities. Tribals in the area face hunger during the agricultural lean season every year, and resort to advance sale of NTFPs to borrow from moneylenders. Repayment is ensured by destructive and premature harvesting of NTFPs from the forests of the area. Consumption credit is, thus, essential for ensuring local food security and protecting the natural resource endowments of the area.

Bundelkhand Region comprises Chhatarpur, Datia, part of Shivpuri, and Tikamgarh districts which are all SC-dominated. Poor roads and rail network, and the absence of any major commercial centre limit the employment potential of the region. Watershed management, desilting of canals and harnessing the area's irrigation potential, agri-technology development and dissemination, reclamation of culturable wastelands, promotion and scaling up of cottage industries (for example, in Tikamgarh), and basic infrastructure development to invite private investments can go a long way in developing this zone.

Satpura Plateau includes Betul and Chhindwara districts which are tribal dominated. Good rainfall, fine teak forests, abundance of minerals like coal, dolomite, and magnesium, and shallow black gravel suitable for horticultural crops enhance the investment-based development potential of this otherwise moderately industrialized zone.

Malwa Plateau is the largest ACZ. It includes 9 districts—Dewas, Indore, Mandsaur, Neemuch, part of Dhar, Rajgarh, Ratlam, Shajapur, and Ujjain. Development of culturable wastelands, cultivation of horticultural crops, growth of agro-processing industries, and promotion of livestock-based enterprises are potential options for improving the livelihoods of communities in this, otherwise, naturally well-endowed region.

Nimar Plateau includes the districts of Barwani, Harda, Khandwa, Khargone, and part of Dhar. Both farm and off-farm production credit is expected to be widely sought here.

Jhabua Hills include parts of Jhabua and Dhar districts. Poor transport and communication infrastructure complete the picture of poverty of this ACZ. The credit needs of this zone are similar to those of the Gird region.

current established operations or for innovations, changes in cropping or for supporting investments in agriculture.

The demand for credit in agriculture has substantial seasonal variation, especially, between the two principal cropping seasons—*kharif* and *rabi*. Around 65 to 70 per cent of agricultural credit (GoMP 2001) is taken during the *kharif* season to purchase agricultural inputs. During the *rabi* season, production credit is sought mainly by medium and large farmers, who have irrigation facilities or can take and repay loans for establishing irrigation infrastructure.

In terms of irrigated area, around 32 per cent area is irrigated, hence the demand for credit to invest in irrigation infrastructure is expected to be high in rural areas of the state. This is particularly so in the eastern parts of MP (including Dindori, Mandla, Panna, Rewa, Seoni, Shahdol, Sidhi, and Umaria districts) where irrigation intensity is low and there is an urgent need to invest in small irrigation, individual farm-based irrigation facilities, and watershed management activities. In regions of low *kharif* productivity that already show high irrigation intensity—such as the three Nimar districts—use of better farm inputs and farming technologies can be identified as priority areas for investment.

The state has a large sector allied to agriculture, including substantial untapped potential in dairying, fishing, and poultry, all of which require small to medium scale investment. These activities are particularly relevant for promotion in those parts of the state where rain-fed agriculture and/or poor transport infrastructure restrict movement of communities, preventing them from accessing opportunities in commercial hubs. Involvement of women in rural areas in physically less demanding enterprises of these kinds (as compared to say, road construction labour) can increase food security, improve child care and nutrition, and improve gender balance at the household level.

Secondary and Tertiary Sector: At present, the proportion of workforce employed in non-primary sectors of the state's economy is only about 25

per cent. A similar proportion of workers are engaged in non-farm occupations. According to estimates, 16 districts of MP have non-agricultural employment of less than 20 per cent. There is a pressing need to diversify the livelihood portfolio and spread and increase worker participation in other dynamic sectors such as manufacturing, repairs and related services, and community, social, and personal services. Credit plays a significant role in promoting small and micro enterprises in non-farm activities that produce, process, or perform intermediary services.

We get some insight into the purpose of borrowing in rural areas of MP from the national survey on indebtedness.¹² The main purpose of borrowing for cultivator households has been seen to be 'current expenditure in farm business' amounting to nearly half of all cultivator household borrowings. 'Capital expenditure' on farming is not very high, just about 15 per cent of borrowing households. The other categories for which cultivator households borrow money are household expenditure, related to consumption needs. Even in the case of non-cultivating households, most of the borrowings were for household expenditure or on-farm activities. The level of use of borrowed funds for investing into own business, or on non-farm activities is abysmally small. Not only is there scope for advancing much more credit than is being dispersed now (both through formal and other sources), but the quality of credit disbursed also needs to be gently turned towards sustainable economic investments.

Delivery of Sector-based Financial Services

In the last six years that we are considering, there has been progressive increase in the credit disbursed by banks to agriculture and rural sector in Madhya Pradesh.

- Credit disbursed to agriculture grew from Rs 2058.98 crore in 2001–02 to 6954.42 crore in 2005–06,¹³ and agriculture accounted for about 73.69 per cent of the total credit deployed under the Service Area Credit Plan (SAP) of NABARD. The share of non-farm sector and other priority sectors were 5.57 per cent and 20.75 per cent,

¹² Household Borrowings and Repayments in India 2002–03, NSS Report no. 502, NSSO.

¹³ Madhya Pradesh State Focus Papers for the Year 2007–08 by NABARD.

respectively. The bank credit towards meeting crop loans requirements, accounted for 53.88 per cent of the total credit provided for agriculture.

- The total ground level credit flow to the priority sector has also been increasing (Table 6.13). The growth in crop loans of 54.4 per cent during the year 2002–03, of 57.0 per cent during 2004–05 and 39.3 per cent in 2005–06 was mostly due to the implementation of the KCCS (see Box 6.6).
- Non-Farm Sector (NFS) growth rates have been irregular. This is a cause of concern for the State, as NFS loans have the potential to promote value addition of agriculture produce, create avenues

for alternative employment for marginal farmers and the landless, and enable them to move out of the poverty trap.

- Negative growth in lending in other priority sector in 2005–06 over the previous year too is a cause of concern and needs to be addressed by the government.

Capital formation in agriculture through the medium and long-term credit has been increasing between 2000–01 and 2005–06. It needs to be kept in mind that the growth in agriculture term loans is directly related to creation of capital assets resulting in enhanced production in agriculture, and thus, such loans favourably impact incremental income of the farmers (see Box 6.6). Under agriculture term

Table 6.13: Percentage Growth in Ground Level Credit Flow to Priority Sector (from 2000 to 2006)

Types of Loans/Sector	% Growth in Credit Flow					
	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
Crop Loans	2.60	11.20	54.39	20.37	57.05	39.27
Medium/Long Term Agriculture Loans	13.21	23.76	7.91	11.71	36.93	40.16
Total Loans for Agriculture	6.25	15.81	36.15	17.67	51.11	39.51
Non Farm Sector	-21.69	44.45	2.22	36.17	3.38	28.07
Other Priority Sectors	25.90	19.68	39.65	16.30	41.98	-1.25
Total Loans for Priority Sector	7.92	18.94	34.07	18.54	44.89	27.92

Source: Madhya Pradesh State Focus Papers for the Years 2001–02; 2002–03; 2003–04; 2004–05; 2005–06; 2006–07 and 2007–08 by NABARD.

Table 6.14: Agency-wise Ground Level Disbursement of Crop Loans and Agriculture Term Loans

Crop Loans	% Growth in Credit Flow (over the previous year)					
	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06
CBs	19.49	23.68	27.44	31.59	38.35	37.60
DCCBs	73.54	66.50	62.55	54.27	45.91	19.69
DCARDBs/DLDBs	0.00	0.00	0.00	0.00	0.00	0.00
RRBs	6.97	9.82	10.01	14.14	15.75	68.80
Others	0.00	0.00	0.00	0.00	0.00	0.00
Total Disbursement (in Rs Lakh)	112516.69	125368.45	193160.50	232498.46	365135.27	508530.45
Agriculture Term Loans	13.21	24.54	7.24	11.71	36.93	40.16
Total Disbursement- Agriculture Term Loans (in Rs Lakh)	65274.23	81291.13	87176.51	97388.07	133357.00	186911.85

Source: Madhya Pradesh State Focus Papers for the Years 2001–02; 2002–03; 2003–04; 2004–05; 2005–06; 2006–07 and 2007–08 by NABARD.

Box 6.6: Kisan Credit Card Scheme (KCCS)

The Scheme (KCCS) was formulated by NABARD in consultation with major banks for implementation from the year 1998–99. It is an innovative mechanism that aims to provide to the farmers, adequate and timely financial support in a flexible and cost effective manner, for meeting their agriculture-related needs.

The main features of the scheme are as follows:

- As on 31st March 2006, KCCS implementation had been taken up by all CBs, Central Co-operative Banks (CCBs), and RRBs in the country.
- Every borrower in rural areas having landholding in his name is eligible for issue of KCC.
- KCCs are mainly issued to facilitate hassle free availability of crop loan to farmers. Banks can also issue term loans up to the period of five years for agriculture purpose through KCCs.
- Most of the banks have issued credit cards to their existing members and/or those having a good track record for the past 2–3 years. Some banks have also fixed minimum eligibility at an acre of irrigated land, which discriminates against rain-fed agriculturists.
- The card holders under KCCS are issued a card and/cum passbook.
- Credit limits under KCCs are fixed by banks for *kharif* and *rabi* season separately based on landholdings, crop being grown and scale of finance (as decided in district level technical committee).
- CBs have generally fixed a maximum credit limit under KCCS. Some banks have brought out more than one type of card under this scheme.
- Credit limits under KCC for crop loans are expected to cover all expenses for raising the crop (labour, seeds, fertilizer, pesticide etc.) plus a small portion of consumption credit.
- In the case of CBs, RRBs, and CCBs, there is provision of credit for meeting the working capital requirements for agriculture and allied sectors. Importantly, consumption credit is also included under this head.
- The period of repayment is usually within 12 months (fixed by banks).
- All banks have introduced the provision of insurance of the card holder in the scheme.
- Banks have instructed their branches to cover crop insurance of card holders under the Rashtriya Krishi Bima Yojana.

The progress of KCCs in MP is shown in the table below:

Bank	No. of Kisan Credit Cards		Credit Limit Sanctioned (in crore Rupees)	
	2005–06	Since Inception	2004–05	2005–06
CBs	203578	643516	1055.65	1685.34
DCCBs	221007	2662534	5402.50	7051.00
RRBs	79401	271784	363.53	440.22
Total	503986	3577834	6821.68	9176.56

Source: Lead Bank, Central Bank, Bhopal, MP, 2006.

A study entitled ‘Support from the Banking System: A Case Study of Kisan Credit Card’, conducted by the Bankers Institute of Rural Development (BIRD), Lucknow, for the Planning Commission of India in 2000–01, to review the performance of KCCS in selected Indian states revealed the following:

- The scheme performed well in states where the state government took interest in the scheme and actively followed up its progress with the banks.
- In MP, all 27 CBs, 43 DCCBs, and 20 RRBs were implementing the scheme. However, less than 50 per cent of the target was achieved as on 31st December 2000 (as against >50 per cent in the case of Andhra Pradesh).
- The number of cards issued by 31st March 2000, in MP was less than 1 lakh (as against more than 10 lakhs in the case of Andhra Pradesh, Maharashtra, Rajasthan, and Uttar Pradesh). An amount of Rs 16112.47 lakh had been sanctioned/disbursed to the card holders in the state by that date.

Box contd.

- Less than 25 per cent farmers in the state were covered under KCCS, and the number of cards as a percentage of total landholdings stood at a poor 7.1 per cent (as against 61.2 per cent in Andhra Pradesh).
- Seasonal sub-limits imposed by the banks under the total limit of credit under KCCS complicate the process of withdrawal.
- Overall, the KCCS is rated highly and is considered useful by farmers as well as bankers. It is also being utilized appropriately by the card users.

Box 6.7: Selected Schemes for Disbursing Agricultural Credit

Apart from the KCCS, some other lines of credit have been sanctioned to meet the agricultural credit demands of Indian farmers. Some of these are briefly described here.

Short-term agricultural credit

This credit is usually provided for a cropping season for a period of 12 months and is also known as Crop Loan. Loans can be given for the purchase of inputs for crop production. To be eligible for such crop loans, the borrowers should be owner-cultivators, tenants, lessee or allottee-farmers with record occupancy rights or farmers with ancestral/perpetual rights of cultivation. Oral tenants can be eligible for loan only if landowners agree to become co-borrowers. Loans are need-based, and depend upon the scale of finance. To meet crop production requirements on an ongoing basis, crop loan in general is given as cash credit facility. Short-term loans are also provided for growing crops during a particular season, for example, *Kharif* or *Rabi*. The due dates for loan repayment are fixed so as to synchronize loan recovery with harvesting and marketing of crops. Short-term agricultural credit is also provided to help farmers store produce in their own premises, or to access the services of private or government warehouses and cold storage to prevent distress sale.

Medium-term agricultural credit and term loans for agriculture

Such credit is provided to farmers for the purchase of farm inputs required for production purposes on an ongoing basis, or for the purchase of assets (like farm machinery, bullocks, etc.) connected to agricultural activities. Medium-term loans are usually repayable over a period of three to five years. Such loans might also be combined with consumption credit to offer a customized composite credit package to farmers.

Credit solutions for land development projects are also provided in the form of medium-term direct finance to cultivators for better productivity. Loans of this type cover activities such as land clearance, levelling and shaping, contour/graded bunding, and terracing etc. Credit for creating irrigation facilities from underground/surface water resources, and all the structures and equipments connected with it are covered under minor irrigation credit schemes offered by banks to farmers, over the medium term.

Term loans are provided to farmers for the purchase of farm equipment and machinery, including tractors and accessories, trailers, power tillers, combine harvesters etc. for use by self or for custom hiring. Loans for the long-term are also provided to small, marginal and landless farmers for the purchase of agricultural land. Long-term investment credit is sometimes linked to consumption credit (up to Rs 50000 or 25 per cent of the total limit), and offered to farmers in the form of package loans. Repayment period for term loan in agriculture exceeds five years.

Banks also provide loans to meet the requirements of those engaged in allied agricultural and non-farm activities; these credit products include loans for establishing enterprises, related to:

- Horticulture and plantation crops (loan provided for this purpose is a kind of term loan as life span of horticultural and plantation crops is greater and also the yield obtained from them is spread over a larger time span)
- Poultry
- Dairy
- Mushroom cultivation and spawn production
- Sheep/goat breeding/rearing
- Piggery
- Apiculture
- Kitchen gardening.

loans, the main activity for which such credit has gone has been farm mechanization and Minor irrigation.

Cooperatives account for about a third of the short-term agricultural credit provided by the formal financial sector in MP, making them critical to rural outreach. As on 31st March 2005, the short-term rural credit co-operative structure had a membership of 56 lakh members (NABARD 2006–07) covering about 90 per cent of rural households in MP through a three-tier structure. A two-tier structure for long-term credit covers 3.2 million members. On an overall basis, during 2004–05, PACS lent to around 68 per cent of their members, showing a good borrower—member ratio compared to other states. However, credit through 4526 PACS of Rs 2398.49 crore constituted only 7.38 per cent of the total credit outstanding in the state for the year 2004–05.

In recent years, there has been a decline in the membership in PACS, falling from 61.85 lakh in 2002–03 to 56.23 lakh in 2004–05, although there has been a marginal rise in borrowing members from 38.13 lakh to 38.24 lakh during the same duration. This decline in membership may be attributed to the emergence of alternative, non-banking financing institutions offering client friendly services, and also

to renewed crop loan disbursements by CBs and RRBs during this period.

The SCs and STs constitute 15.2 per cent and 20.3 per cent of the state's population, respectively (Census of India 2001), and their socio-economic condition remains very backward. Understanding this segment's financial requirements and credit utilization pattern is important. The financial support forwarded to SCs and STs by formal sector institutions is shown in Table 6.15.

Under various subsidy-linked credit schemes, financial assistance has been targeted towards women and other weaker sections of the society in MP (Table 6.16). However, the overall supply of loans disbursed by banks to weaker sections in the state was just 13.4 per cent of the total advances in 2003–04.

6.4 DELIVERY OF FINANCIAL SERVICES IN MP AND THEIR IMPACT

Three main priorities for the financial service providers in the state if they wish to have a sustainable and favourable impact on the lives and livelihoods of communities are as follows:

1. plugging the resource gap for production credit;
2. meeting the requirements for consumption credit; and

Table 6.15: Financial Support to SC/ST Beneficiaries in MP, June 2005

Agency	Number of SC Beneficiaries	Loan Amount Outstanding (lakh rupees)	Number of ST Beneficiaries	Loan Amount Outstanding (lakh rupees)
CBs	188823	73149.22	100036	32596.16
RRBs	72772	12541.27	68882	13443.98
MPSCARDB	74635	12453.95	–	–

Source: NABARD (2006–07).

Table 6.16: Financial Support to Women by Banks in MP, June 2005

Agency	Deposits		Advances	
	No. of Accounts	Amount (Rs lakh)	No. of Accounts	Amount (Rs lakh)
CBs	850759	21084.99	227466	158714.86
RRBs	384835	43273.25	58230	13244.64

Source: NABARD (2006–07).

3. making qualitative improvements in financial service delivery.

6.4.1 Plugging the Resource Gap

The planning and programming of public sector financial institutions in credit flowing to agriculture and rural areas is co-ordinated through what are called Potential Link Plans (PLP).

If the credit gap figures over a four year period—from 2002–03 to 2005–06—are compared in both absolute terms and as a percentage of total estimated credit need, a persistent gap in the credit flow to agriculture and other priority sectors is evident along with a widening credit gap in the rural NFS, and an emerging demand of credit from the SHGs which surpasses the current levels of credit supply (Table 6.18). This hints at the need to

dedicate additional resources and to strengthen the financial sector for delivering credit as per existing demands.

If the existing credit gap is analysed spatially and sectorally simultaneously, the following picture emerges (Table 6.19), which provides sufficient cues for directed credit delivery in the future. The resource gap mentioned here is not due to the constraint of funds. But it is due to a lack of absorption capacity, that is, the inability to utilize the available funds. Hence, it becomes imperative to improve the absorption capacity.

6.4.2 Meeting Consumption Credit Requirements of the Poor

Surveys by the NSS on the purpose of loan uptake by farming households for all social groups in the state

Table 6.17: Broad sector-wise PLP Projections for 2005–06
(in Rs Crore)

Sector	PLP Projections	Likely Credit Flow	Resource Gap
Crop Loan	4561.94	4106.85	455.09
Allied Activities	2121.65	1521.44	600.21
Total Agriculture	6683.59	5628.29	1055.30
RNFS	975.56	576.23	399.32
OPS	2351.23	1993.69	357.54
SHGs	51.53	49.64	1.89
Total Priority Sector	10061.91	8247.85	1814.05

Source: NABARD (2005–06) State Focus Paper, MP.

Table 6.18: Broad Sector-wise Gaps in Credit Flow in Absolute Terms and as a Percentage of PLP Projections (2002–06)

(in Rs Crore)

Sector	Resource Gaps in the Financial Years							
	2002–03		2003–04		2004–05		2005–06	
	Absolute Value	Per cent	Absolute Value	Per cent	Absolute Value	Per cent	Absolute Value	Per cent
Crop Loan	275.88	15.93	280.81	14.26	217.92	8.59	455.09	9.98
Allied Activities	322.77	28.09	327.01	24.82	391.50	25.09	600.21	28.29
Total Agriculture	598.65	20.78	607.82	18.49	609.42	14.87	1055.30	15.79
RNFS	240.11	37.34	206.52	30.72	270.14	35.25	399.32	40.93
OPS	207.08	18.39	191.56	15.01	259.35	14.12	357.54	15.21
SHGs	0.00	0.00	0.00	0.00	0.00	0.00	1.89	3.67
Total Priority Sector	1045.84	22.49	1005.90	19.21	1138.91	17.00	1812.16	18.10

Source: Madhya Pradesh State Focus Papers for the Years 2000–01; 2001–02; 2002–03; 2003–04; 2004–05; 2005–06; and 2006–07; by NABARD.

revealed that about 20 per cent of loans disbursed in 2003 were used for meeting consumption expenditure, social consumption, and medical treatment. This

figure was as high as about 80 per cent in the case of farmers engaged in agriculture allied activities (Table 6.20).

Table 6.19: District-wise/Sector-wise Credit Resource Gap Projections, 2005–06

Activities	5 Districts with the Highest Resource Gap	5 Districts with the Second Highest Resource Gap	5 Districts with the Third Highest Resource Gap
Crop Loan	Ujjain, Dhar, Sagar, Satna, Damoh	Indore, Dewas, Raisen, Ratlam, Neemuch	Katni, Jabalpur, Rajgarh, Khargone, Sheopur
Non-farm Sector	Gwalior, Khargone, Bhopal, Datia, Ratlam	Katni, Dhar, Chhatarpur, Jabalpur, Bhind	Dewas, Indore, Raisen, Balaghat, Mandsaur
Farm Machinery	Dewas, Rajgarh, Vidisha, Sidhi, Mandla	Khandwa, Shajapur, Mandsaur, Chhindwara	Ujjain, Hoshangabad, Datia, Narsimhapur, Morena
Minor Irrigation	Narsimhapur, Barwani, Chhindwara	Rajgarh, Balaghat, Anuppur	Rewa, Damoh, Sidhi, Seoni, Umari
Other Priority Sectors	Indore, Jabalpur, Katni, Raisen, Shivpuri	Ujjain, Datia, Rewa, Narsimhapur, Bhopal	Ratlam, Chhatarpur, Harda, Barwani, Shajapur
Dairy		Gwalior, Khargone, Betul, Mandla, Jhabua	
Plantation and Horticulture		Dindori	Dhar, Satna, Mandla
Storage		Burhanpur	Khandwa, Tikamgarh, Sagar
Sheep, Goat and Piggery			Gwalior

Source: NABARD (2005–06) State Focus Paper, MP.

Table 6.20: Per 1000 Distribution of Outstanding Loans by Purpose of Loan for Different Sources of Income of Farmer Households (All Social Groups) in MP (January–December 2003)

Source of Income	Purpose of Loan									No. per 1000 of Indebted HHs.
	Capital Expenditure in Farm Business	Current Expenditure in Farm Business	Non-Farm Business	Consumption Expenditure	Marriages and Ceremonies	Educational	Medical Treatment	Other Expenditure	All	
Cultivation	506	239	8	74	123	0	33	18	1000	553
Farming other than Cultivation	725	105	11	62	81	0	0	15	1000	518
Other Agricultural Activities	70	46	24	739	48	0	3	70	1000	620
Others	335	122	44	112	260	3	60	65	1000	418
All	470	213	14	96	144	1	36	27	1000	508
Estimated No. of Farmer HHs. ('00)	9666	13166	1183	8159	5340	112	1630	1408	32110	–

Source: NSSO (2003).

A micro level study of livelihoods in MP in 2002 BASIX-MPLEAP (2002) revealed that the micro finance needs of communities in the state fall between Rs 100 to Rs 25000; this includes both production and consumption needs. The economically better-off segments require larger amounts of credit—in the range of Rs 50000 to Rs 200000, mainly for production purposes. The study also revealed that as far as the expenditure pattern of households in rural areas is concerned, three-fourth of the expenditure is consumption related.

Segmentally speaking too, the findings have been no different. As per various rounds of NSS surveys, 78.7 per cent of the loan amount taken by ST cultivators in 2003 was used for capital and current expenditure in the farm business, at least 16 per cent loan was taken for consumption, medical treatment, marriages and ceremonies, and other purposes. Consumptive purposes accounted for over 55 per cent of the amount borrowed by ST farmers engaged in farming other than cultivation, thus, signifying the importance of making consumption credit accessible to this section of the state's population (Table 6.21). Similar observations were made when the loan utili-

zation patterns of SC and OBC farmers in the state were studied.

Similarly, when loan utilization by farmers categorized on the basis of size of their landholdings was studied, the importance of consumption and medical credit for small and marginal farmers stood out (Table 6.22). As the class of land size increased, loans taken for capital and current expenditure in farm business also went up. Loan requirements of small and marginal farmer households for meeting medical expenditure were found to be particularly high, suggesting that lower incomes from smaller parcels of land result in poor nutrition and increased susceptibility to diseases.

Several other studies have revealed that in rain-deficient districts of the state, agricultural incomes are often not sufficient even for meeting consumption requirements of households. Even when production credit is disbursed, the beneficiaries utilize a part or whole of that loan for meeting their basic needs, eventually becoming defaulters. Distress migration of cash-strapped and loan burdened tribals in Betul and Sheopur is well documented.¹⁴ Thus, consumption loans are required as a priority for a majority of

Table 6.21: Per 1000 Distribution of Outstanding Loans by Purpose of Loan for Different Sources of Income of Farmer Households (ST) in MP

(January–December 2003)

Source of Income	Purpose of Loan									No. per 1000 of Indebted HHs.
	Capital Expenditure in Farm Business	Current Expenditure in Farm Business	Non-Farm Business	Consumption Expenditure	Marriages and Ceremonies	Educational	Medical Treatment	Other Expenditure	All	
Cultivation	421	366	9	53	86	0	38	27	1000	408
Farming Other than Cultivation	16	217	194	558	0	0	0	15	1000	692
Other Agricultural Activities	349	158	0	0	163	0	0	330	1000	201
Others	538	137	0	52	115	0	29	128	1000	358
All	445	304	9	59	93	0	35	55	1000	384
Estimated No. of Farmer HHs. ('00)	1358	2502	60	959	494	0	140	343	5116	–

Source: NSSO (2003).

¹⁴ For examples, see Llewelyn (2005) and Bhattacharya and Hayat (2003).

Table 6.22: Per 1000 Distribution of Outstanding Loans by Purpose of Loan for Each Size Class of Land Possessed by Farmer Households in MP
(January–December 2003)

Size Class of Land Possessed	Purpose of Loan									No. per 1000 of Indebted HHs.
	Capital Expenditure in Farm Business	Current Expenditure in Farm Business	Non-Farm Business	Consumption Expenditure	Marriages and Ceremonies	Educational	Medical Treatment	Other Expenditure	All	
<0.01	28	0	78	138	17	0	439	299	1000	493
0.01–0.040	196	145	74	252	225	2	81	25	1000	330
0.40–1.00	378	117	34	140	217	3	68	43	1000	441
1.01–2.00	470	182	11	172	119	0	25	20	1000	522
2.01–4.00	399	243	9	59	242	0	31	16	1000	582
4.01–10.00	572	272	8	37	44	1	15	49	1000	655
10.00+	650	235	0	37	26	0	50	0	1000	766
All Sizes	470	213	14	96	144	1	36	27	1000	508
Estimated No. of Farmer HHs. ('00)	9666	13166	1183	8159	5340	112	1630	1408	32110	–

Source: NSSO (2003).

the state's population to meet their household expenses (food, clothing, house repair), social events (such as marriage, death, festivals) and need in case of emergencies (major illnesses, drought, and floods).

6.4.3 Making Qualitative Improvements in Financial Service Delivery

It is clear that the poor in MP need credit, and there exists a sprawling network of banks and NGOs to meet their financial needs. However, the poorest of the poor in the state still depend on informal financial service providers for meeting their requirements of consumption credit. These informal service providers include:

- Large farmers within the village who favour those borrowers who are ready to work on their lands even as indentured labour, since the poor do not want to migrate leaving their families behind.
- Traders who provide credit in cash as well as kind, but charge exorbitant and compounding rates of interest so that the debtor is perpetually and often inter-generationally in debt.
- NTFP traders who also charge very high rates of interest (up to 8 per cent per month) and force the tribals to resort to advance sale of NTFPs in the off-season, and pay back by (over-) harvesting

NTFPs to settle the loan often before the ecologically appropriate NTFP harvest season.

These observations are substantiated by national level research on indebtedness as presented in Table 6.23. According to a report, the attractiveness, and/or the accessibility of bank loans is generally more for medium and large farmers. Small and marginal farmers prefer professional moneylenders, traders, and relatives as their main sources of loan.

Micro-level studies have revealed several factors that make these informal money lenders click. They provide credit to whoever needs it, whenever he/she needs it, in varying amounts, and on flexible terms. Given a choice, the poorest of the poor prefer labour within the village to out-migration, despite the wage terms being exploitative. Moneylenders readily give loans to the landless (while formal institutions hesitate). Often, there is a continuity in the kind of patron–client relationships traditionally created at the village level between moneylenders and the borrowers.

The lengthy paperwork involved in getting loans disbursed from the bank often keeps the semi-literate and illiterate people away from formal financial institutions. The transaction costs of these loans are considered high, since the poor are afraid of

Table 6.23: Per 1000 Distribution of Outstanding Loans by Source of Loan for Each Size Class of Land Possessed by Farmer Households in MP*(January–December 2003, in Rs)*

Size Class of Land Possessed	Source of Loan									No. of Farmer HHs. having Outstanding Loan	
	Govt.	Co-op. Society	Bank	Agri./Professional Money-lender	Trader	Relatives & Friends	Doctor, Lwyer and other Profesionals	Others	All	Estimated (' 00)	Sample
<0.01	0	0	104	580	24	293	0	0	1000	115	12
0.01–0.040	6	138	210	388	146	80	1	31	1000	2555	98
0.40–1.00	33	76	325	279	120	134	6	28	1000	7900	327
1.01–2.00	10	135	382	211	142	104	6	9	1000	8714	267
2.01–4.00	4	152	312	349	76	97	6	4	1000	7412	219
4.01–10.00	3	212	516	108	51	105	5	2	1000	4175	257
10.00+	88	333	418	64	39	59	0	0	1000	1240	54
All Sizes	19	169	381	226	90	101	5	8	1000	32110	1234
Estimated No. of Farmer HHs. ('00)	1157	12011	7347	7043	7448	5334	571	667	32110	x	x

Source: NSSO (2003).

travelling repeatedly to banks and foregoing several days of labour opportunities while the loans are being processed. Bankers in some districts have been accused of demanding that three generations of the prospective borrower's should be default-free if he/she or the SHG, he/she belongs to, is to become eligible for bank loans. It is well-known that the remote and backward communities in different districts of the State can often converse only in their traditional dialects and barely understand Hindi, leave alone making sense of the multitude of forms and formats prepared by the banks. Though there are provisions for collateral-free loans for 'mature' SHGs, banks hesitate to disburse credit to SHGs they know little about. Very less relationship banking goes on in the rural areas of the state, and taking banking and financial services to the doorsteps of the needy is still a dream.

There have been commendable efforts by NABARD to design financial products and to chalk out their delivery to targeted segments as part of different subsidy-linked credit schemes. But information on these schemes (for example, the insurance component of SGSY) and their potential benefits is often not available at the ground level. Since the poor are

unable to differentiate between bank loans and government schemes, recovery suffers and more names get added to the list of defaulters.

6.4.4 RRB Amalgamation and Recapitalization: Changing Institutional Focus

In the last few years, the reform process has become increasingly broad-based—encompassing institutions such as RRBs, urban co-operative banks, rural co-operatives, financial institutions, and non-bank financial companies.

In the view of importance of RRBs as purveyors of rural credit, the Union Budget, 2004–05, emphasized that the sponsor banks would be 'squarely accountable' for the performance of RRBs under their control. In line with the suggested roadmap for restructuring of RRBs, sponsor banks are being encouraged to amalgamate the RRBs sponsored by them state-wise. In order to reposition RRBs as an effective instrument of credit delivery in the Indian Financial System, the RBI, is in the process of reviewing their performance, exploring restructuring through amalgamation/consolidation, changing the sponsor banks, reviewing minimum capital requirement, and

suggesting suitable measures for their regulation, supervision, and consultations.

The Government of India notified on 12 September 2005, under Section 23A of the RRB Act, 1976, the state level amalgamation of 28 RRBs into 9 new RRBs in six states, *viz.*, Bihar, Gujarat, Karnataka, Maharashtra, Punjab, and Uttar Pradesh. The Government of India, had sanctioned assistance of Rs 224.46 crore for the purpose of recapitalization of 17 RRBs out of 18 in the MP. The state government has already given its share of Rs 17.24 crore for the purpose of recapitalization of RRBs, which is further getting utilized in various credit disbursement programmes.

6.5 CONCLUDING REMARKS

Sustainable improvements in the lives and livelihoods of the poor in MP will require production and consumption credit as well as other financial services to be made available to the poor individuals and households who are often in no position to deploy their own meagre resources towards that end.

The spatial and sectoral diversity of credit needs in the state as well as the nature and needs of clients need to be kept in mind while devising financial targets and designing delivery mechanisms for financial services. There have been substantial improvements in the infrastructure for financial service delivery, but it needs to be accessible and sensitive to the ground-level needs.

Timely injection of credit and other financial services can go a long way to increase sustainability and gainfulness of employment, thus enabling the poor in the state to meet their basic needs, leading to improvement in health and nutrition, increased availability of safe drinking water and quality housing, and an overall improvement in their quality of life.

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CHAPTER 7

Human Development—Status 2007

In 1995, when the first Madhya Pradesh Human Development Report was written, the concern of the state towards human development reflected the poor human development condition of the people of this state. While, in absolute terms, all indicators of human development were low, even within India, MP lagged behind in ensuring that its people were literate, that its children went to school and attained basic literacy and eight years of education, that infants and children did not die in infancy or before they reached the age of five years, that children and women got basic nutrition and did not grow malnourished, and that everyone had a decent standard of living. From the middle of the 1990's, the state government started investing both financially and programmatically in education and basic health, in improving the instruments that deliver development, in deepening democracy, and in encouraging non-farm employment.



The experience in the last 10 to 15 years shows an accelerated and focused effort towards human development sectors and in many areas, this has had a positive impact. The pace of progress witnessed in

literacy, enrolment, and provision of schooling to all children has been a success, the efforts to bring decentralized community based health services to people, the schemes that have enabled people to access credit through MFIs and to manage their own resources in forestry and water through watershed committees and irrigation management committees, etc. are credible examples. Yet, the infant mortality levels, malnourishment, basic poverty, and lack of infrastructure to complement these developments have been far from satisfactory. In terms of the state's own spending and the role of private investments, the last few years have again seen some positive moves, in spite of the crunch on public finances.

Here, as the fourth MP Human Development Report looks at its basic theme of infrastructure, in this chapter we take a look at the changes and trends in some of the very basic human development sectors, to try and see where the state is progressing. The effort to make any prediction for human development and the impact of various investments by state and by people is difficult, especially, with the myriad variables affecting human development, but the broader trends can perhaps be identified and flagged.

7.1 EDUCATION

7.1.1 Status Today

The progress in literacy has been very satisfactory in the last decade. From 1991 to 2001, the basic or crude literacy rate in the MP went up from 45 per cent to 64 per cent, with female literacy increasing from 29 per cent to 50 per cent. The general enrolment numbers show that at the primary level, almost all children are now enrolled across the state, and this is as much true for girls as for boys. There has also been a reduction in the male–female gap in literacy, improvement in the Gross Enrolment Ratio (GER), and other education parameters. The increase in literacy



Free bicycles to high school girls

between 1991 and 2001 has been much faster than the previous decades. While these achievements would set the state up for a leap in education, there are still many gaps and challenges before the state.

The crude literacy level in 2001 was 64 per cent, leaving over a third of the population and nearly half of all women still unable to either read or write. The age-wise literacy rate in Table 7.1 shows the distance the state still has to travel. The level of literacy in ages 7–14 is approaching 80 per cent, and that is a direct result of interventions in this sphere in the last five to eight years. However, as we go up the ages a very large number of people still remain illiterate. Looking at people in their most economically productive ages shows that nearly 30 per cent of people aged 20–25, 35 per cent of people aged 25–29, and 40 per cent of people aged 30–34 years were illiterate in 2001.

Those in the ages 7–14, and may be even up to 19 years, can be made literate with focused efforts, but with declining emphasis on adult education and very few programmes to mop up the illiterate today, a significant section of the population shall remain illiterate in the coming years. Since, a large number of women in reproductive ages are still illiterate (about 50 per cent), and it appears this shall remain so, it poses a challenge as critical human development initiatives (both societal and governmental) for the child are focused through the mother, and she is also the principal teacher of a child in his/her formative years.

Mere literacy displayed by the figures of literate population, does not show the education deficit if we are looking for at least eight years of schooling. If we look at figures of enrolment, the state has managed to get nearly all children enrolled in primary classes. The GER for primary level is above 100 per cent, meaning that most of the eligible children are enrolled in some school or the other, and what is a matter of satisfaction for MP is that even amongst children of SC and ST communities, enrolment rates are 100 per cent. The GER in middle school drops to 87 per cent. The GER in classes 6 to 8 for ST students is even lower at 73 per cent. Another indicator of how many children are actually progressing up the years in various classes is the retention rate at the primary level—simply a percentage of the number of children enrolled in class V to the total enrolled

Table 7.1: Literacy Rate Across Age Groups, 2001

(Per cent)

	All			Rural			Urban		
	Persons	Male	Female	Persons	Male	Female	Persons	Male	Female
All ages	64.1	76.8	50.3	58.1	72.1	43.0	79.7	87.8	70.6
07–14	78.6	83.1	73.6	75.4	80.9	69.3	88.1	89.6	86.5
15–19	78.4	86.0	68.9	73.4	83.4	60.9	89.9	92.1	87.1
20–24	70.5	83.8	56.1	64.2	80.3	47.2	85.6	91.5	78.6
25–29	64.7	79.7	49.4	58.3	75.7	40.5	80.9	89.5	71.9
30–34	59.4	75.3	43.3	52.6	70.6	34.5	77.0	87.1	66.4
35–39	57.1	72.2	40.4	49.8	66.8	30.8	74.5	85.2	63.0
40–44	55.3	70.9	36.9	47.2	64.5	27.2	74.6	85.3	61.0
45–49	52.5	70.3	32.8	44.0	63.5	22.8	73.2	86.0	58.1
50 & above	36.8	55.6	17.9	29.1	47.9	10.6	59.6	78.0	40.3

Source: Census of India (2001).

in class I. While retention rate does not display the actual fate of class I children when they shall reach eligibility for class V, it does show the general trend. The retention rate of 69 per cent for all children in 2005–06, (71 per cent boys and 67.7 per cent girls)¹ clearly exhibits the phenomenon that as children move from primary classes onto senior classes, they seem to be opting out. With such a large number of children appearing to be leaving the school system as they advance into higher classes, the education goal of a minimum of eight years of schooling looks difficult to achieve. It would not be an exaggeration to say that between 60 to 65 per cent children only complete eight years of schooling in MP.

After access & retention, the next issue comes to mind is the quality of education. The earlier data available on this regard is not very encouraging. NCERT carried out a learning achievement test throughout the country in the year 2004–05. The tests were carried out in classes III, V, VII, & VIII. MP has not been included for class VII but results are available for rest of the three classes. In class III, the State's performance had been the worst among all states. The mean scores in this class were 36.94 per cent in Maths & 45.21 per cent in languages compared to all India figures of 58.25 & 63.12, respectively. In class V, mean scores in EVS, maths & language were 54.09, 49.03, & 58.25, respectively. Again these scores were worse than all India average except the last category where it has been marginally better. In class VIII, the situation was no better. The mean scores in language, Maths, Science, & Social Sciences were 50.63, 36.14, 41.71 & 43.50, respectively. Again except for Science, the mean scores had been worse than all India average. What is more disturbing is the fact that the sampled districts in this survey were all non-tribal districts whereas the State has a sizable tribal population where reach of government services is relatively worse.

However, if one were to go by Annual Status of Education Report (ASER) 2006, the quality of education in MP has improved significantly within one year from 2005 to 2006, after the implementation of 'Learning to Read Programme' that was conducted

in classes III–V in 45 districts of MP from October 2005 to January 2006. Simultaneously, the teachers of all the schools in classes VI to VIII undertook similar effort. Subsequently, 'Pratham' organized a volunteer based campaign from April to June 2006 that was aimed at classes II and I. While in 2005, the proportion of children studying in classes I and II, who could read letters, words or more was 57.31 per cent; it increased to 89.17 per cent in 2006. Similarly, while in 2005, the proportion of children studying in classes I and II, who could recognize numbers or more, was 48.59 per cent, it increased to 84.32 per cent in 2006. While in 2005, the proportion of children studying in classes III to V, who could read level I text or more, was 57.74 per cent it increased to 78.91 per cent in 2006. Similarly, while in 2005, the proportion of children studying in classes III to V, who could do subtraction or more, was 56.09 per cent, it increased to 81.56 per cent. ASER 2006 discovered that while in India 25 per cent of children of mothers with no schooling, could not read letters, in MP only 9.4 per cent children of unschooled mothers could not read letters. Similarly, ASER 2006 discovered that while in India 37.3 per cent of children of mothers with no schooling, could not recognize numbers or more, in MP this was only 13.8 per cent.

In terms of basic infrastructure, we first take a look at the provisioning of schools. The total primary and middle schools in MP, run by different government departments and the private sector amount to just over a lakh in 2005–06, with 1.55 crore children enrolled. The large size and sparsely populated areas in the state pose a great challenge towards universal provision of education. If we take a look at the comparative numbers between the number of students per school at the national level and in MP, the figures for 2003–04 show that the average students per primary and middle school in MP were 132 and 102, whereas the national figures were 180 and 185. This average in MP is even lower in tribal dominated districts such as Jhabua, Betul, Mandla, Dindori etc. The state is confronted with the challenge of a large number of relatively small schools.

¹ Retention rate calculated from enrolment statistics from Rajya Shiksha Kendra, Department of School Education, Government of Madhya Pradesh.

Table 7.2: Schools in Madhya Pradesh, 2005–06

Type of School	Schools	Enrolled Students	Teachers	Pupil Teacher Ratio
Primary Schools	95517	8256080	171020	48
Middle Schools	24293	2683333	72988	37
High Schools	4325	1423520	35028	41
Higher Secondary Schools	4179	771479	58211	13

Note: Data for primary and middle schools pertain only to government schools.

Source: Rajya Shiksha Kendra and Department of School Education, Government of MP, Bhopal.

The state has 52086 inhabited villages and 111780 habitations, and it has a primary school within a distance of 1 km for every village and habitation. Similarly, middle schools also cover every village and nearly every habitation as the state has tried to provide a middle school within 3 km of every habitation. Number-wise, the reach of educational institutions is adequate today, and this does reflect in the evidence of near-full enrolment, both from statistics of the School Education Department and public surveys undertaken by the government.

The primary level pupil to teacher ratio, according to the enrolment statistics in 2005–06 is 48:1, which is higher than the recommended ratio of 40:1. With large inter-district variations, this is worse in some districts. Eight districts have a ratio higher than 80 students for each teacher. This problem is being tackled by the state government through various initiatives and hopefully this gap will get filled in. The state, in 2005, streamlined the teachers' recruitment process already delegated to panchayats to make it objective and transparent.

The enrolment angle has been well covered as various efforts by state government, like the campaigns to identify out-of-school children,² the focus on enrolling all children, and a large programme to provide a functional school wherever there were willing students,³ have achieved this for MP.

We now take a look at two features—the out-of-school children and the quality of infrastructure and essential services available in government schools in the state. According to the data of the state government, in the year 2005–06, nearly 3.34 per cent of children in the ages 5 to 11 years, and nearly 1.38

per cent children in ages 11–14 years were out of school. In the case of children from the ST community, the percentage of out-of-school children is higher at nearly five per cent for ages 5 to 11, and ten per cent for ages 11 to 14 years. To bring these children into school is, of course, the immediate challenge for education sector.

That figures of enrolment also represent regularity of attendance is something cannot be said with surety. However, field experience bears out that in the last three to four years, attendance in schools has improved and the reasons for this are accessible schools within the habitation, an effective mid-day meal scheme, timely distribution of incentives such as text books and school uniforms to girls, increased number of local teachers, and active community participation through reasonably effective Parent Teacher Associations (PTAs) in primary schools. An idea of the impact on enrolment during the last few years can be taken from the comparison of the number of children now enrolled or out of school, with the number of children enumerated in Census 2001 as being 'in an educational institution'. Census 2001 counted 21.7 per cent children in ages 7–11 years and 33.6 per cent children in ages 11 to 14 as not being enrolled in any educational institution, which would mean out of school children. This numbers drops sharply to below five per cent in the 2005–06 surveys of the state government, clearly indicating a high level of achievement by the government in ensuring that children start going into school.

To strengthen primary education further, the Government of MP has been taking a number of steps (see Box 7.1).

² Lok Sampark Abhiyan.

³ Education Guarantee Scheme.

Table 7.3: Children Out of School by Age Group, 2006–07

Age Group	Never Enrolled Children			Dropout Children			Out of School Children		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
5 to 11 years	65224	64533	129757	26353	25002	51355	91577	89535	181112
11 to 14 years	22681	24757	47438	34636	33793	68429	57317	58550	115867
5 to 14 years	87905	89290	177195	60989	58795	119784	148894	148085	296979

Source: Rajiv Gandhi Shiksha Mission, Government of MP.

Table 7.4: Children in Educational Institutions, 2001

Ages	Population			In Educational Institutions			Percentage Children in Educational Institutions		
	All	Male	Female	All	Male	Female	All	Male	Female
07–11	7986688	4158628	3828060	6256345	3416936	2839409	78.3	82.2	74.2
11–15	5786931	3115910	2671021	3898055	2324494	1573561	67.4	74.6	58.9

Source: B Series Tables, Census of India, 2001.

Box 7.1: Decentralization initiatives in education by the State Government

The state has been putting a lots of effort on empowerment and capacity building of communities to enthuse their participation in the field of elementary education. The decentralization move that had been started by the previous government has been pursued further by the present government. The school management had been decentralized to the district and sub-district level. The PTAs formed previously to supervise and manage the individual schools have further been given new powers like distribution of free uniforms to girls and running of the mid-day meal schemes. They also play a significant role in developing village education plans, deciding school timings and local holidays, teacher recruitment, construction of school buildings, procurement of school equipments, etc. A *Shala Shiksha Kosh* (School Education Fund) has been formed for each school to encourage the PTA to raise resources locally so that child-specific interventions can be planned and implemented. It can also initiate the process to impose fines on parents, guardians, or any such persons guilty of preventing a child from going to school. The PTA also presents an annual academic report before the *Gram Sabha* stating the improvement in the status of education of the habitation/ward in terms of achievement made against the main educational indicators.

Decentralizing academic support to schools, structures for academic support at cluster and blocks were formed. This was possible through the institutional reforms undertaken in the state, whereby structures right from state to village level have been made by integrating the administrative and academic units and local bodies. To strengthen the PTAs and enhance their capacities, training is imparted to the members of the PTA at the cluster level. This training focuses on the roles, responsibilities, and duties of PTA as envisaged in the Jan Shiksha Adhinyam (JSA) for improving the educational status of habitations, bringing the out-of-school children to school and ensuring regular attendance. Communication strategies like conventions of PTA, training films and audio-video programmes, poster campaigns and participation in enrolment drives also support such training.

Much has already been written about the MP JSA, 2002 in the previous MP Human Development Report. Attempts have been made by the state to ensure the rights of children and responsibilities of the state mentioned in JSA. The steps taken for the empowerment of Panchayat Raj Institutions (PRIs) and PTAs have been aimed at achieving the goals in JSA.

Table 7.5: Infrastructure in Schools, 2005–06

Schools	Number of Schools	Schools with Own Building	Schools without Own Building		Schools with Drinking Water Facility	Schools without Drinking Water Facility		Schools with Toilet Facility	Schools without Toilet Facility	
			No.	Per cent		No.	Per cent		No.	Per cent
Primary	95517	79138	2197	2.3	61304	20031	21.0	42349	38986	40.8
Middle	24293	12760	11533	47.5	14650	9643	39.7	9911	14382	59.2
All	119810	91898	13730	11.5	75954	29674	24.8	52260	53368	44.5

Source: Rajya Shiksha Kendra, Department of School Education, Government of MP, Bhopal.

Coming to the school infrastructure, Table 7.5 gives a fair idea of the infrastructure gaps in schools—nearly 2.3 per cent primary schools and 48 per cent middle school don't have their own building, nearly 21 per cent of primary and 40 per cent of middle schools do not have drinking water facility and 45 per cent do not have toilet facilities. The clear gap in basic amenities in schools needs to be plugged first. The state has gone for financing of school buildings in a major way by taking loan from NABARD and converged with Total Sanitation Campaign, *Rastriya Sam Vikas Yojana* and other rural development programmes to bridge the infrastructure gaps.

Quality is a major concern for the state. As the NCERT figures suggest, the state has to go a long way in this respect. One of the major concerns is the huge number of untrained teachers. The share of recruited teachers in primary and upper primary levels who are professionally trained was 50.3 per cent 55.3 per cent, respectively, and 21 per cent in both categories had gone through the 60-day training organized by the educational authorities. That leaves a high 30 per cent teachers without any proper training. This comes to more than a lakh of teachers in numbers and it requires tremendous efforts to train them to provide quality education. The state government's efforts in the form of Operation Quality launched in 2006 aim at bridging this gap by providing two-year Diplomas in Education to more than 90,000 untrained teachers.

7.1.2 Trends in Education

The trends in education should be compared to the Tenth Plan targets in education.



Free uniform to girls—improving school atmosphere

- *All children in school by 2003*: While it is estimated that there is near full enrolment in primary classes, the same cannot be said for middle school as retention rates show almost half the children not enrolled in middle school, or class VI. Along with universal enrolment, the state must also ensure adequate attendance.
- *All children to complete five years of schooling by 2007*: This will amount to no drop-out between classes I to V. Currently, if we take the retention rate between class V and class I, it shows that over 30 per cent children joining class I do not even enrol for class V, leave alone the quality of their attendance and participation in school.
- *Reduction in gender gap in literacy by at least 50 per cent by 2007*: The gap between male and female literacy that existed in 2001 should be reduced by 50 per cent. In 2001, male literacy was 64 per cent and female was 50 per cent—a

gap of 14 per cent. It needs to be reduced to less than 7 per cent difference.

- *Increase in literacy rate to 75 per cent by 2007:* The current literacy rate of 64 per cent in 2001 will need to be raised by more than 10 per cent within seven years.

While enrolment figures point to near full enrolment, with 2 to 4 per cent children out of school, the higher classes, especially, above class IV, seem to be having significant drop-outs. The drop-out rates estimated by the state-run Rajiv Gandhi Shiksha Mission show that for the ages 6–11 years (primary level) the drop-out rate was 21.4 per cent, and the same rate for the age group 11–14 years was 21.5 per cent. The average attendance rate at the primary stage in 2005–06 was just 73 per cent, and the completion rate at primary level was 57 per cent and upper primary level was 53 per cent.

To achieve major gains just in literacy, the challenge is to put all children into schools and get them to complete, if not eight, at least five years of education, and then to ensure that at least 80 per cent of them enrol into middle schools. But the problem will lie in the large number of adults (above 18 years of age) who are illiterate—nearly 50 per cent of the population, and with increasing life expectancy, this will continue to keep overall literacy rates low.

Let us take a look at the results based on classes V and VIII board results, where the pass percentage in class V was 78.4 per cent and in class VIII was 61.1 per cent in 2004–05. The learner achievement of Grade A was only 21 and 13 per cent respectively, in classes V and VIII.

Looking at this background, can we achieve the Tenth Plan Targets in the coming two to three years—say by 2010? If the current push in education continues, the literacy rate could certainly achieve the required rate of 75 per cent with a reduced gender gap, but ensuring five years of schooling for all children, and maintaining a quality in educational teaching seem distant targets right now, unless urgent measures are taken to upgrade and upscale infrastructure, to bring in more trained teachers, to enthruse more and more children to remain in school longer, and to ensure better learning and pass percentages with at least 30 per cent in Grade A level of achievement.

The State has placed a lot of emphasis on girls' education in recent years. The efforts started by the *Mahila Padhna Badhna* Movement by the previous government for increasing female literacy have been further strengthened by placing emphasis on girls education through incentives for girls, for example, free school uniforms, free bicycles to girls going to class IX and the *Gaon ki Beti* scheme for higher education.

7.2 LONGEVITY AND HEALTH

7.2.1 State of Health



Anganwadi—reaching to the children

The health situation in MP is very poor. The latest estimate for longevity, measured as life expectancy at birth was 59 years for males and 58 years for females (corresponding to the period 2001–06), and this was the lowest amongst all major states in India, a good four and eight years lower than the national averages, respectively. Further, while naturally female life expectancy should be more than male life expectancy it is the opposite case in the state, pointing towards discriminatory practices against both the girl child and women, leading to higher mortality than nature would otherwise determine.

The other critical indicators of health are IMR and Maternal Mortality Rate (MMR). Children die before they reach the age of one year due to a combination of factors including poor nutrition for their mothers while pregnant, inadequate immunization of mothers from tetanus and lack of haemoglobin in their bodies, poor sanitary and health care conditions at birth, poor care during delivery, overall unhygienic

Table 7.6: Education—Targets, Progress, Positives, Impediments and Requirements

Target	Current Progress	Positive Forces	Impeding Forces	Requirements
Literacy rate of 75 per cent	Could be achieved by 2010	Education friendly environment, Sarva Shiksha Abhiyan (SSA), emphasis on educational infrastructure	Lack of adequate capital expenditure, lack of teachers, lack of adequately trained and motivated teachers	Better teacher–pupil ratio, rapid bridging of infrastructure gaps
Reduction in gender gap with reference to literacy	Could be achieved by 2010	There has been considerable focus on female education and enrolment figures also show increased female enrolment and attendance. A more positive social environment for girl education is also helping. There has been 50 per cent horizontal reservation for women in teacher recruitment	There is still a tendency of high girls' drop-out, even before they are able to pass class V. Parents tend to pull out girls from the school	More awareness, sustained effort in schools to retain girls and make them literate and educated, and make schools more girl friendly with facilities such as separate toilets, and appropriate pedagogy
Full enrolment	Could be achieved by 2010	Active PTAs, well-oiled state machinery, PRI participation	Highly dispersed population, very small habitations	Awareness, good school infrastructure
Zero drop-out from class I to class V	Not possible by 2010	The current drop-out rates are gradually improving with investment in school infrastructure, pedagogy, better books, and a more child friendly school environment. Funds from state and central governments under SSA are spent in mission mode for tackling education issues	Professionally untrained teachers, remote habitations (especially tribal ones)	Disaggregated drop-out data for girls and tribal children, timely delivery of incentives like books, uniforms, and scholarships, better pupil–teacher ratio. Improved and effective classroom processes
Pass percentages exceeding 80 per cent	Not possible	As basic enrolment and attendance improves, more and more children, especially, second generation learners, would be able to pass their tests	Not possible to achieve at current levels of teaching, student interest, pedagogy and condition of schools	Improve the learner evaluation system, effective classroom processes, teacher motivation, effective monitoring
Grade A level achievement at 30 per cent minimum	Could be achieved by 2010	Legal framework of JSA for sharing results with the legislative	Teacher shortages, teaching–learning process not very effective, teachers not motivated to improve results	Improve the learner evaluation system, capacity development of teachers for effective classroom processes, increase teacher accountability, effective monitoring, and support to teachers
Enrolment in middle school at 80 per cent	Could be achieved by 2010	Active PTAs, well-oiled state machinery, PRI participation	Highly dispersed population, very small habitations	Awareness, subject-wise teachers, improvement in completion rates of students at primary level
Over 90 per cent attendance	Not possible	Mid-day meals, better school buildings	Teacher shortage, teacher absenteeism, time on task to be ensured, teaching–learning process to be made interesting and effective.	Better school buildings, better PTR, greater teacher accountability, improved teaching–learning processes, improvement in learner achievement

Table 7.7: Life Expectancy at Birth, 1993–97 and 2001–06

States	Life Expectancy at Birth (1993–97)			Life Expectancy at Birth (2001–06)	
	Male	Female	Total	Male	Female
Andhra Pradesh	61.2	63.5	62.4	62.79	65.00
Assam	56.6	57.1	56.7	58.96	60.87
Bihar	60.4	58.4	59.6	65.66	64.79
Gujarat	60.9	62.9	61.9	63.12	64.10
Haryana	63.7	64.6	64.1	64.64	69.30
Karnataka	61.6	64.9	63.3	62.43	66.44
Kerala	70.4	75.9	73.3	71.67	75.00
Madhya Pradesh	55.6	55.2	55.5	59.19	58.01
Maharashtra	64.1	66.6	65.5	66.75	69.76
Orissa	57.1	57.0	57.2	60.05	59.71
Punjab	66.7	68.8	67.7	69.78	72.00
Rajasthan	59.1	60.1	60.0	62.17	62.80
Tamilnadu	63.2	65.1	64.1	67.00	69.75
Uttar Pradesh	58.1	56.9	57.6	63.54	64.09
West Bengal	62.2	63.6	62.8	66.08	69.34
All India	60.4	61.8	61.1	63.87	66.91

Note: The data include parent states along with the subsequently divided states (for example, Chhattisgarh in MP).

Source: Registrar General of India, New Delhi.

environment from which respiratory and water borne diseases could be contacted etc.—there are indicators of poverty, poor level of awareness, unclean environment, and a poor health delivery system and post natal care. So if the IMR is high, it indicates the general level of poverty, and an ill-performing health delivery system. The IMR of MP in 2004 was estimated at 79 (84 for rural and 56 for urban), as against the national IMR of 58, the highest amongst all states. Between 2000 and 2004, while the national IMR reduced from 68 to 58, the IMR in MP dropped from 87 to just 79. The decline rate in MP appears to be gradual in recent years, as Figure 7.1 shows.

The MMR is another area of high concern for the state. While the two issues that is, IMR and MMR are interrelated, their solutions also supplement each other. The MMR for the state as per NFHS II was 498 per lakh births. The latest data of MMR released by Registrar General India pertains to the year 2003 that show MMR of MP as 379 per live births, a significant improvement from 498 but much worse than national average of 301.

The male–female gap in IMR is even more alarming. While the girl child would normally survive

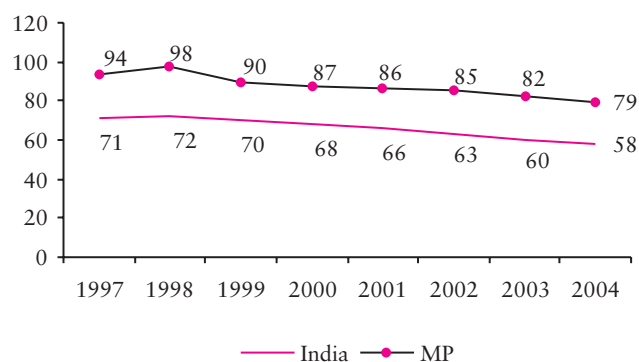


Figure 7.1: IMR for India and MP

better than the boy child, being biologically healthier, the IMR in MP, as is the case with rest of India, shows a much higher girl child IMR of 86 compared to 77 for boys. Trends also show that this gap appears to be increasing in recent years, revealing a dangerous tendency towards increasing discrimination against the girl child. While the sex ratios do show discrimination in society against women, the current trends in male and female IMR as depicted in Figure 7.2 show a continuous and even increasing gap between the two.

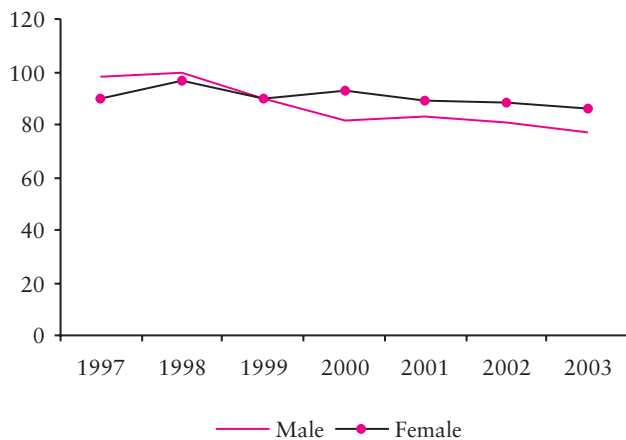


Figure 7.2: Male and Female IMR in MP

The public health infrastructure in MP has 47 district hospitals, 56 civil hospitals, 265 CHCs, 1152 PHCs, and 8835 SHCs. These numbers do not satisfy the population norms for such centres, and the gap in centres itself is pretty large as seen in Table 7.8. The data show that the gap is substantial in terms of health facilities.

With a shortage of 26 per cent in PHCs, the very basis of primary health, there seems to be a serious problem concerning the delivery of primary health services. The fact that doctors are generally unwilling

planning to extend it to all tribal blocks under the National Rural Health Mission.

While there are significant vacancies for almost all cadres, the doctors' absenteeism or their keenness towards private practice reduces their effective available time at the institutions. These together make for a below par functional primary health public system.

7.2.2 Factors Affecting Basic Health

Apart from the very basic provision of health care services, from primary to tertiary and referral levels, there are some very fundamental factors that affect health. These factors impact the child's health from the moment of birth, and form the foundations of the child's health as he/she grows up. Some of these factors must be looked at to get a better idea of the health status.

Nutrition. The NFHS II conducted in 1998–99 found that more than half the children in the state were underweight by both the criteria of weight for age and height for age. In response, the state government had taken up a massive programme under the scheme called *Bal Sanjeevani* for decreasing malnourishment and conducting periodic surveys through weighing children to keep a check on this issue. The state further aimed to reduce severe malnourishment

Table 7.8: Health Facilities in Madhya Pradesh

Institution	Numbers in Existence (as of 2005)	Required for 2005	Gap in Numbers	Percentage Gap
SHCs	8835	10524	1689	16
PHCs	1152	1691	439	26
CHCs and Civil Hospitals	321	428	107	25
District Hospitals	47	48	1	2

Source: Unpublished data from the Directorate of Health Services, Government of MP.

to serve in the rural areas compounds this problem further. The state has adopted an innovative approach of mobile health dispensaries through public–private participation. Under this scheme (called Deendayal mobile dispensary), an NGO partner provides vehicle, manpower, medicines and equipments and gets payment from the state government, on the basis of a system that not only encourages better performance but also penalizes under-performance. The system has been started as a pilot in 11 tribal blocks and state is

Table 7.9: Staff Position in Medical Centres and Hospitals

(as on 1st January 2006)

Post	Sanctioned	Filled	Vacant
Specialists	759	504	255
Medical Officers	4972	4614	358
MPW (Female)	10202	9525	677
Staff Nurse	3120	2710	410
Lab Technician	1104	996	108

below 1 per cent level through another scheme called *Bal Shakti*. Government surveys have shown that the percentage of severely malnourished children in the state has gone down from 5.49 (in 2001) to 0.91 per cent and the percentage of child population suffering from total malnutrition has declined from 57.57 per cent in 2001 to 49.21 per cent in May 2006 (GoMP, Women and Child Department, *Bal Sanjeevani* data). There has been an improvement of nearly 8 per cent in the overall malnutrition in the state. There is also widespread undernourishment in pregnant mothers who also suffer from anaemia. Data from the NFHS II survey showed that in 1998–99 over half of the women in the state (54.3 per cent) had anaemia.

Trained Attendant at Birth. The state governments own information shows that till 2004, just about a quarter of all deliveries were institutional deliveries, considered safe deliveries. A large number of deliveries taking place at home are attended by trained birth attendants or the local Auxiliary Nurse Midwife (ANM). However, the state government is now striving to increase the deliveries at institutions to make them safer and risk-free. Several schemes have been initiated to motivate pregnant women of weaker sections to come to government or private hospitals for delivery purpose. The names of these schemes are *Prasav Hetu Pariwahan Evam Upchaar Yojana*,



Baby care unit in district hospital

Janani Suraksha Yojana, and *Vijaya Raje Janani Kalyan Bima Yojana* (see Box 7.2). The results have been quite encouraging as institutional delivery has gone up in 2005 from 27 per cent to 35 per cent. The fact that most of these women belong to weaker sections shows that governmental efforts seem to be heading in the right direction.

Immunization. Immunization enables infants to survive most of the deadly diseases that lead to infant mortality, and then keeps them safe from them for the rest of their lives. There are no clear reliable data on the level of fully immunized children, though

Box 7.2: Motivational Schemes for Pregnant Women from the Weaker Sections

Prasav hetu Parivahan evam Upchaar Yojana. This scheme was launched by the state government in 2004 with an aim to cover the transport and treatment expenses of a pregnant woman for delivery in a government hospital. The beneficiaries are all women belonging to SC/ST and all women belonging to BPL families. The scheme provides for a flat payment of Rs 300 to the pregnant woman towards transport and Rs 200 to the motivator who brings her to hospital. The delivery expenses in the hospital are taken care of by that institution through government support. This scheme was a precursor to Government of India's *Janani Suraksha Yojana*.

Janani Suraksha Yojana. This scheme was launched by the Government of India in all the states in 2005. Under this scheme, pregnant women are given cash incentives to cover all their expenses during delivery in a hospital. The beneficiary has to be a woman belonging to a BPL family. However, the benefit is extended up to first two children only provided the woman has married after 18 years of age. Some conditions have been imposed for the benefit of third child as well. The quantum of benefit is different for rural and urban women. While the pregnant woman and her motivator are given Rs 1300 and Rs 600, respectively in case of rural areas, the corresponding figures for urban areas are Rs 600 and Rs 200. The benefits can be given in limited private hospitals also.

Vijaya Raje Janani Kalyan Bima Yojana. This scheme was launched by the state government with the help of United India Insurance Company in 2006. Under this scheme, all pregnant women belonging to BPL families are provided financial support up to a sum of Rs 1000 for delivery in any hospital, be it public or private.

Source: Public Health and Family Welfare Department.

NFHS III (2005–06) estimated that 40 per cent of children of 12–23 months have received all recommended vaccines. The state government does collect such data monthly but they are not very reliable.

Subsequent block-wise survey by the MP Government also appears to point to the fact that even in 2003 this level was very low. This survey has not been able to give a statewide picture, hence we take a look at the range of achievements between blocks. A look at the block-wise survey, shows that (see Table 7.10), even the best performing block in terms of achievements in immunization in BCG, OPV, and DPT could show only two-third rate of success, whereas the situation in the worst performing block was alarmingly poor. In terms of the average achievement⁴ in all the blocks, they show that in all cases, the level of children immunized is abysmal, and almost two-third children are in danger of being affected by easily preventable infections, which are today the biggest infant and child killers.

Sanitation. Census 2001 estimated that about 24 per cent of all households in MP had access to toilets, and this figure was just about 8.9 per cent in rural MP. This figure is corroborated by an extensive survey carried out by the Ministry of Rural Development, Government of India, which estimated that in 2005, only 9.7 per cent rural households in MP had a toilet. The MP figure is abysmally low even compared to the national average of 23.7 per cent. In urban areas too the access of latrines in households was just 68 per cent according to the 2001

Census, thus leaving nearly a third of urban households to continuously dirty the habitat and pollute water channels, groundwater, and the air. The impact of the Total Sanitation Campaign in the State has not been very significant in terms of household toilets.

Access to Safe Drinking Water. With nearly a third of all diseases being water-borne, we have already discussed the status of basic sanitation. With respect to access to safe drinking water, the 2001 Census found that 68 per cent of all, and 62 per cent of rural households had access to safe drinking water, leaving the others to source water from different sources that would not necessarily be clean, and thus 22 per cent of the state's population was always directly at risk of water-borne diseases.

High out-of-pocket expenditure. Research has shown that direct Out-of-Pocket (OoP) expenditure on hospitalization can push almost one-fourth of such patients below the poverty line (Peters et al. 2002). Considering the fact that OoP expenditure on health care in India is to the tune of 80 per cent (Duggal 2004), it has some serious impacts on human development in the state. The reasons for such high OoP are inadequate government infrastructure, lack of suitable health insurance options, inadequate control on quacks etc. The state has tried to cope with the situation in a limited way. There have been increased medical supplies to take care of the outdoor patients through increased allocation as well as better procurement processes. A new scheme was started in

Table 7.10: Assessment of Immunization Achievement in Blocks of MP

Criteria	Children (0–5) gives BCG Vaccine (per cent)	Children (0–5) gives OPV 3rd dose (per cent)	Children (0–5) gives DPT 3rd dose (per cent)	Children (0–5) gives Measles Vaccine (per cent)	Children (0–5) gives Vitamin A (per cent)
Highest achievement in Blocks	66.71	65.95	65.59	87.47	63.50
Lowest achievement in Blocks	0.51	5.49	1.42	5.27	2.43
Average achievement in Blocks	40.23	36.43	31.92	35.13	29.59

Source: Block-wise survey data from Centre for Population Studies, Academy of Administration through Family Welfare Evaluation Survey, 2003, MP.

⁴ Average for all blocks is not the average for the state, since this is a simple average and not a weighted average depending on population of children in immunizable ages in each of the blocks. Since figures for the state are not available, we are taking these averages as a surrogate for statewide figures.

2004 under the name of ‘*Deendayal Antyodaya Upchaar Yojana*’ to cover the expenses on hospitalization for the disadvantaged sections. Under the scheme, a family is provided free treatment on hospitalization in a government hospital up to a limit of Rs 20000 in a calendar year. The beneficiaries of this scheme were BPL families belonging to SC/ST. However, the scheme was extended to all BPL families in 2006. To cover the expenses in critical illnesses where the expenditure is higher than Rs 25000, a fund was created in the late 1990s called the State Illness Fund. The fund supported patients belonging to BPL families for 13 identified critical illnesses including cancer, valve replacement etc. up to a sum of Rs 1.50 lakh. However, the reach of the scheme was limited because of rigid guidelines. Considering the inability of the poor to avail benefits from this fund, guidelines were relaxed in 2005 and now sanctions are issued from the district level up to a sum of Rs 75000. The impact of this change is yet to be studied.

7.3 TRENDS IN HEALTH

7.4 INCOMES AND POVERTY

The economic condition of people can be assessed from per capita incomes and the level of income poverty. Per capita incomes do not show skewed income distribution amongst people, and, therefore, hide the extent of actual deprivation. This is somewhat estimated by numbers of income poor. However, per capita incomes show the general health of the state’s economy, and, thereby, the general ability of people to access resources and lead a certain quality of life. It also is the most critical factor affecting the dynamism, spread, character, strength, and trend of the state’s economy. There is great need for equity, especially equity of access to entitlements and opportunities, but for equity and equity of access to resources, more resources and more opportunities are required and these can come only from growth. Thus, growth is required to attain equity at desirable levels of quality of life.

Figure 7.3 shows a comparison of the per capita incomes in MP and India at constant prices (1993–94). The gap between national per capita income and that of MP is ever increasing. From 1993 to 1999–2000,

Table 7.11: Health—Targets, Progress, Positives, Impediments and Requirements

Target	Current Progress	Positive Forces	Impeding Forces	Requirements
IMR of 45 per 1000 live births by 2007 and 28 per 1000 by 2012.	Very slow. This target is not possible in this time frame	There is recognition in government towards reduction in IMR, with efforts on immunization, sanitation, and decreasing malnutrition, and increasing attended births	Poor service delivery in immunization, especially ensuring full immunization, poor sanitary conditions, discrimination against the girl child, very high level of untrained birth attendants. The discrimination against the girl child is causing very high girl child mortality	Ensure full immunization, better post natal care for both child and mother, and reduce discrimination against the girl child. Increase the access to better health care
Reduction in the maternal mortality ratio to 220 per lakh live birth by 2011	In Madhya Pradesh the maternal mortality rate was 379 deaths per lakh live births (all India was 301) according to SRS in 2003. To reduce this to 200 does not seem feasible at current rate of change in factors affecting maternal mortality	Since 1998, and in the recent decade there has been some progress in reduction of maternal mal-nourishment and large improvement in type of attendance during birth. There is better administration of TT, consumption of folic acid tablets and more awareness of issues of maternal health	Poor pre, peri, and post natal services. Many deliveries take place under poor supervision and low standards of hygiene. Low primary health care available at doorstep for care of mother and infants	Increase institutional delivery, better trained personnel available in case of emergency

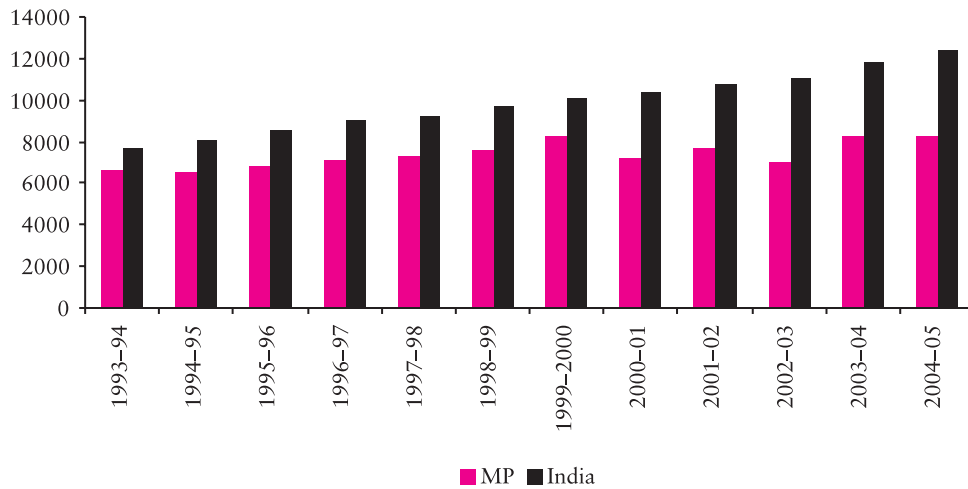


Figure 7.3: Per Capita Income in MP and India

Note: Per capita incomes in Rupees at 1993-94 prices

at constant prices, the per capita income of MP was on an average about 81 per cent of national average, from 2000-01 to 2004-05 this fell to an average of 68 per cent. In this period of last four years, the per capita income at constant prices in MP grew at a modest 3.32 per cent per annum, while for all India it grew at 4.76 per cent per annum. The more developed states of course grew even faster.

Not only is the income in MP much lower than the national average, this gap is increasing, both with rest of India and especially with the more developed states. This springs up greater challenges. Growth is an essential pre-requisite for the reduction of poverty. It also enables the state to generate increasing

revenues, which are essential for investments in anti-poverty measures, in infrastructure, and in social sectors. Low per capita incomes have a negative impact on the purchasing power of people and hence their ability to access the necessary resources and goods for maintaining a certain required and desired quality of life. Further, a buoyant economy that makes markets more buoyant, also positively affects the poor.

The growth in the different sectors of the state has been very uneven. The primary sector growth which employs about 70 per cent of the states population has had very wide fluctuations across the last ten years (see Figure 7.4). The principal reason for

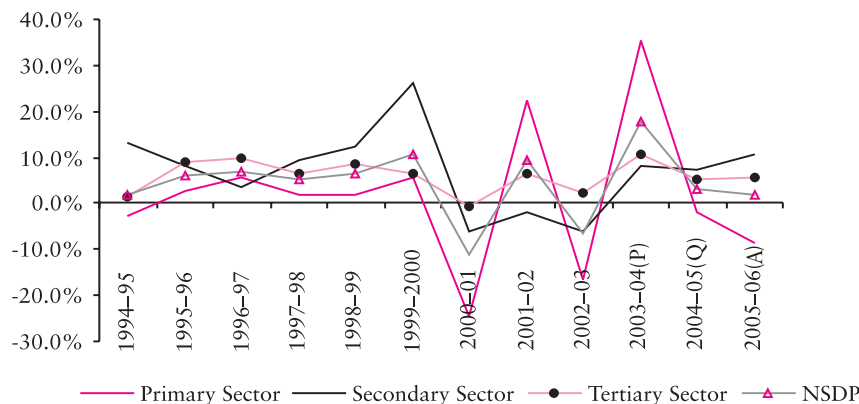


Figure 7.4: Sector-wise Annual Growth Rates in MP (at constant 1993-94 prices)

such wide variation is over-dependence of agriculture on the monsoons. While tertiary sector growth has been more even and constantly positive, it tends to move with the growth rates of the secondary sector. Such wide fluctuations in the primary sector, including agriculture, animal husbandry, and forestry tend to leave a huge section of the population in a scenario of uncertainty year after year. Sudden drops in sectoral performance tend to hit the poor the worst.

The level of income poverty was estimated to be 37.4 per cent when the last surveys were undertaken by the Planning Commission in 1999–2000. This is a good 11 percentage points higher than the national poverty head count ratio. Between 1973–74 to 1999–2000, while the reduction at national level was about 52 per cent, this reduction was only 39.4 per cent in MP. The efforts to counter poverty have increased significantly in the last few years with additional investment in poverty alleviation schemes. *Rashtriya Sam Vikas Yojana* launched in 2003–04 in 10 of the most backward districts in the state saw an investment of more than Rs 300 crore in three years. However, the year 2006 has been a watershed in terms of investments in poverty alleviation schemes as two schemes—Backward Region Grant Fund and National Rural Employment Guarantee (NREG) Scheme intend to tackle poverty on a significantly higher scale. Under the Backward Region Grant Fund, the state plans to invest Rs 1800 crore over a period

of 5 years in 24 districts that cover almost half the state. Similarly under NREG, 18 districts have been selected in the first phase and plans are underway to invest almost Rs 1200 crore in these districts in the very first year. While a question can always be raised on the capacity of the government agencies to utilize the phenomenally high resources, the fact remains that poverty is getting increased attention from the state. This sector is surely going to get much more attention in the coming years, and there should be a significant reduction in rural poverty.

A high poverty rate, especially high rural poverty rate, with a low economic growth rate, and even slower agriculture sector growth rate does not augur well for MP in the near future. The prospect of increased growth exceeding six to seven per cent at constant prices and climbing up to eight per cent over a sustained period of time is critical for the state. However, this seems to be a daunting task in the present scenario. Stagnation in agriculture, slow rate of investments in industry, and a growing but not accelerating service industry are the major challenges for the state at present.

If we take the long-term SDP figures, agriculture growth in MP has been nearly stagnant. Between 1993–94 to 2005–06 (budgetary estimates) while the state's overall income grew by 61 per cent at constant prices, the agriculture domestic product remained the same, a growth of one per cent, with the contribution of agriculture to the state's income

Table 7.12: Poverty Reduction—Targets, Progress, Positives, Impediments and Requirements

Target	Current Progress	Positive Forces	Impeding Forces	Requirements
Tenth Plan targets reduction of national poverty ratio to 21 per cent by 2007 and further to 11 per cent by 2012. MP's current poverty estimate is 37.4 per cent and this needs to be at least halved within the next five to six years	At the current rate of economic growth and affirmative action on employment and poverty reduction, while there is a sense of urgency within government, this is not possible	Large investments in anti-poverty programmes, and associated attack on poverty by way of better water management, push to agro industries, micro credit, to rural support enterprises in fisheries, horticulture and animal husbandry and the massive rural employment guarantee programme that could ensure that few new households get pushed into poverty due to lack of work and wages	Slow rate of economic growth, stagnation in agriculture and manufacturing. Poor infrastructure impeding investments and productivity	Public and private investments to increase growth, greater effort in implementing anti-poverty and security programmes such as SGSY and NREGP, public investment in management of water and forests and selected interventions in growth areas like fisheries, horticulture, provision of micro credit and financial infrastructure

falling from 40 per cent 12 years ago to 25 per cent today. What is also worrying is that even in the last five years or so, manufacturing (both registered and unregistered) has actually been declining. It is the boom in construction, transport including railways, trade, hotels and restaurants, communications banking and other financial services, and fisheries that seem to be pulling up the state from an otherwise poor performance in some core sectors.

If the services sector, is going to be the main growth source in the coming years, then the infrastructure related with it that is, roads, other physical connectivity, IT, finance and credit infrastructure, and urban infrastructure becomes even more important for overall and niche area growth. Construction of course is a direct corollary of investments in infrastructure.

7.5 HUMAN DEVELOPMENT IN MADHYA PRADESH

The general state of human development is progressive but backward in MP. Within MP geographically, rural areas and the areas in its south-west, south-east, and north-west, and central belts are more backward than the rest of the state. These are also regions which are forested, have a large ST population, have an undulating terrain and agriculture is not as advanced as in other areas. Socially, men do better than women, and members of the SCs are comparatively worse-off than others. The other vulnerable group is the STs. In terms of economic groups, the landless labourer, the marginal and small farmer (especially

in rain-fed regions), the forest produce collector, the construction worker, and the household based artisan—both in handicrafts and in small manufacturing and household based servicing—are amongst the most economically insecure livelihoods.

These communities and regions also appear to coincide with the educationally and health-wise backward population. The backward regions, in today's context, seem to have only public funds and public institutions as their only source for investments and for delivery of essential services. These zones and these people need direct investments in their towns and villages and in their homes to help them break the shackles of backwardness imposed by poor education, poor health, precarious livelihoods, and poor infrastructure of every kind.

The state's macro indicators are still a long way from what is required to spin the state out of the low economic and social development status it finds itself in. The challenges of ensuring a level of education where every child studies up to five if not seven years in school, there is regular attendance, and standards of achievement reach a high level are still very steep. Similarly in health, reduction in infant mortality, in the morbidity burden, in reducing water-borne diseases, improving sanitation and ensuring good quality and affordable health care for infants, for mothers, and the infirm and ill are still not at satisfactory levels. These components which together enable a human being to become capable of leading a reasonable quality of life—empowered, happy, and with dignity—are still not within reach of the average citizen of MP. For the poor, the members of marginalized and vulnerable communities and groups and those residing in backward areas, this situation is even further away from their reality.

The last decade has seen many extraordinary changes, in education, in water and forest management, but at the same time the state lost out in provision of basic roads and electricity. It is time for the state to again invest in these and remove the infrastructure deficit, which is also obstructing the path towards a much faster economic growth.

Education and health need good teachers, good doctors, and good school buildings and good health centres, but they also need proper and adequate electricity, and an approach road for easy access. People



Bal Sanjeevani—A programme against malnutrition

of the state have to become more productive if they wish to start earning more. For this, they require electricity to run their units, roads to markets and source, credit to expand their business and for use in emergencies.

It is these areas, where the state government has been investing in the last few years. There is also a conducive environment for infrastructure development at the national level with substantial financial allocations for rural infrastructure and common national infrastructure, which benefits all states. In this scenario, the disadvantages of a low revenue base can be overcome by gearing up the state's capacity to absorb the funds that are now available from the central government and using the many other tools

available, such as partnerships with the private sector. The state of MP appears to be taking on these opportunities for most of the infrastructure, but there is still a long way to go in some of the crucial human development sectors such as incomes, growth, basic education, and basic health services.

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Table A7.1: Poverty Status of Indian States

State	Rural			Urban			Combined		
	1973–74	1993–94	1999–2000	1973–74	1993–94	1999–2000	1973–74	1993–94	1999–2000
Andhra Pradesh	48.41	15.92	11.05	50.61	38.33	26.63	48.86	22.19	15.77
Arunachal Pradesh	52.67	45.01	40.04	36.92	7.73	7.47	51.93	39.35	33.47
Assam	52.67	45.01	40.04	36.92	7.73	4.47	51.21	40.86	36.09
Bihar	62.99	58.21	44.30	52.96	34.50	32.91	61.91	54.96	42.60
Goa	46.85	5.34	1.35	37.69	27.03	7.52	44.26	14.92	4.40
Gujarat	46.35	22.18	13.17	52.57	27.89	15.59	48.15	24.21	14.07
Haryana	34.23	28.02	8.27	40.18	16.38	9.99	35.36	25.05	8.74
Himachal Pradesh	27.42	30.34	7.94	13.17	9.18	4.63	26.39	28.44	7.63
Jammu & Kashmir	45.51	30.34	3.97	21.32	9.18	1.98	40.83	25.17	3.48
Karnataka	55.14	29.88	17.38	52.53	40.14	25.25	54.47	33.16	20.04
Kerala	59.19	25.76	9.38	62.74	24.55	20.27	59.79	25.43	12.72
Madhya Pradesh	62.66	40.64	37.06	57.65	48.38	38.44	61.78	42.52	37.43
Maharashtra	57.71	37.93	23.72	43.87	35.15	26.81	53.24	36.86	25.02
Manipur	52.67	45.01	40.04	36.92	7.73	7.47	49.96	33.78	28.54
Meghalaya	52.67	45.01	40.04	36.92	7.73	7.47	50.20	37.92	33.87
Mizoram	52.67	45.01	40.04	36.92	7.73	7.47	50.32	25.66	19.47
Nagaland	52.67	45.01	40.04	36.92	7.73	7.47	50.81	37.92	32.67
Orissa	67.28	49.72	48.01	55.62	41.64	42.83	66.18	48.56	47.15
Punjab	28.21	11.95	6.35	27.96	11.35	5.75	28.15	11.77	6.16
Rajasthan	44.76	26.46	13.74	52.13	30.49	19.85	46.14	27.41	15.28
Sikkim	52.67	45.01	40.04	36.92	7.73	7.47	50.86	41.43	36.55
Tamil Nadu	57.43	32.48	20.55	49.40	39.77	22.11	54.94	35.03	21.12
Tripura	52.67	45.01	40.04	36.92	7.73	7.47	51.00	39.01	34.44
Uttar Pradesh	56.53	42.28	31.22	60.09	35.39	30.89	57.07	40.85	31.15
West Bengal	73.16	40.80	31.85	34.67	22.41	14.86	63.43	35.66	27.02
A & N Island	57.43	32.48	20.55	49.40	39.77	22.11	55.56	34.47	20.99
Chandigarh	27.96	11.35	5.75	27.96	11.35	5.75	27.96	11.35	5.75
Dadra & Nagar Haveli	46.85	51.95	17.57	37.69	39.93	13.52	46.55	50.84	17.14
Daman & Diu	NA	5.34	1.35	NA	27.03	7.52	NA	15.80	4.44
Delhi	24.44	1.90	0.40	52.23	16.03	9.42	49.61	14.69	8.23
Lakshadweep	59.19	25.76	9.38	62.74	24.55	20.27	59.68	25.04	15.60
Pondicherry	57.43	32.48	20.55	49.40	39.77	22.11	53.82	37.40	21.67
All India	56.44	37.27	27.09	49.01	32.36	23.62	54.88	35.97	26.10

Source: Economic Survey (2001–02) GoI, New Delhi.

THE HUMAN DEVELOPMENT INDEX FOR MADHYA PRADESH, 2005

DISTRICT Enrollment	EDUCATION			HEALTH		INCOME		Human Development Index
	Literacy	Children's Expectancy in Schools	Education	Life	Health	Adjusted Per Capita Income	Income	
	A	B	D	E	F	G	H	
Indore	0.729	0.995	0.817	0.746	0.746	0.568	0.568	0.710
Bhopal	0.720	1.000	0.813	0.665	0.665	0.562	0.562	0.680
Harda	0.626	0.937	0.730	0.510	0.510	0.718	0.718	0.652
Gwalior	0.655	0.974	0.761	0.672	0.672	0.480	0.480	0.638
Dewas	0.559	0.993	0.704	0.639	0.639	0.539	0.539	0.627
Ujjain	0.677	0.978	0.778	0.580	0.580	0.519	0.519	0.626
Raisen	0.675	1.000	0.783	0.505	0.505	0.574	0.574	0.621
Narsimhapur	0.740	1.000	0.827	0.531	0.531	0.500	0.500	0.619
Neemuch	0.615	1.000	0.744	0.558	0.558	0.516	0.516	0.606
Shajapur	0.660	1.000	0.773	0.555	0.555	0.488	0.488	0.605
Bhind	0.638	1.000	0.759	0.582	0.582	0.468	0.468	0.603
Seoni	0.591	0.980	0.721	0.582	0.582	0.485	0.485	0.596
Dhar	0.487	0.956	0.643	0.641	0.641	0.504	0.504	0.596
Hoshangabad	0.653	0.938	0.748	0.510	0.510	0.527	0.527	0.595
Jabalpur	0.725	0.961	0.803	0.542	0.542	0.420	0.420	0.589
Ratlam	0.642	0.958	0.748	0.551	0.551	0.467	0.467	0.589
Sidhi	0.447	0.993	0.629	0.550	0.550	0.587	0.587	0.589
Mandla	0.537	1.000	0.691	0.626	0.626	0.443	0.443	0.587
Chhindwara	0.608	0.994	0.737	0.591	0.591	0.406	0.406	0.578
Mandsaur	0.658	0.994	0.770	0.558	0.558	0.396	0.396	0.575
Damoh	0.549	1.000	0.700	0.484	0.484	0.530	0.530	0.571
Sehore	0.565	0.994	0.708	0.491	0.491	0.500	0.500	0.567
Dindori	0.487	1.000	0.658	0.626	0.626	0.411	0.411	0.565
Shahdol	0.517	1.000	0.678	0.535	0.535	0.478	0.478	0.564
Sagar	0.626	1.000	0.750	0.484	0.484	0.454	0.454	0.563
Katni	0.583	1.000	0.722	0.542	0.542	0.399	0.399	0.554
Vidisha	0.558	0.977	0.697	0.495	0.495	0.466	0.466	0.553
Datia	0.666	0.982	0.771	0.504	0.504	0.375	0.375	0.550
Balaghat	0.635	1.000	0.757	0.558	0.558	0.317	0.317	0.544
Guna	0.548	0.981	0.692	0.476	0.476	0.448	0.448	0.539
Betul	0.609	0.997	0.738	0.494	0.494	0.378	0.378	0.537
Rewa	0.547	1.000	0.698	0.476	0.476	0.403	0.403	0.526
West Nimar (Khargone)	0.595	0.978	0.723	0.576	0.576	0.277	0.277	0.525
Morena	0.572	1.000	0.715	0.540	0.540	0.314	0.314	0.523
East Nimar (Khandwa)	0.582	0.954	0.706	0.544	0.544	0.307	0.307	0.519
Satna	0.577	1.000	0.718	0.410	0.410	0.419	0.419	0.516
Rajgarh	0.470	1.000	0.647	0.487	0.487	0.398	0.398	0.511
Sheopur	0.403	0.955	0.587	0.540	0.540	0.392	0.392	0.506
Umaria	0.522	1.000	0.681	0.535	0.535	0.287	0.287	0.501
Shivpuri	0.533	1.000	0.689	0.372	0.372	0.409	0.409	0.490
Panna	0.563	0.968	0.698	0.466	0.466	0.274	0.274	0.479
Tikamgarh	0.479	0.963	0.640	0.463	0.463	0.273	0.273	0.459
Chhatarpur	0.458	0.955	0.624	0.424	0.424	0.305	0.305	0.451
Barwani	0.378	0.824	0.527	0.576	0.576	0.173	0.173	0.426
Jhabua	0.333	0.922	0.529	0.513	0.513	0.151	0.151	0.398

Technical Notes on the Human Development Index

The district level human development index for Madhya Pradesh¹ was first calculated in the Madhya Pradesh Human development Report 1995 and then subsequently in 1998 and 2002. In these years while some of the data remained the same, there was a shift in methodology as it evolved both in the UNDP international reports and in accordance with data availability at the district level.

The district wise human development index in this report also changes both in the data it uses and the methodology. The districts HDIs in the four MP reports are therefore not strictly comparable.

I HUMAN DEVELOPMENT INDEX

The Human Development Index is a composite index comprising of levels of human development in education, longevity or health, and in access to opportunities measured in per capita incomes. With the present status of districts in these parameters related with certain absolute achievement positions, or some desirable achievement positions. This index is a measure of how far a district has travelled, from a minimum level of achievement, and the path still to travel.

The index is calculated by the following formula:

$$\text{HDI}_{ij} (\text{Index}) = \frac{\text{Value}_{ij} - \text{Min}_j}{\text{Target}_j - \text{Min}_j}$$

HDI_{ij} = Index of deprivation for the i^{th} district for the j^{th} criterion.

Target j = This is the maximum achievable target for the j^{th} criterion (for example, it is 100 per cent for literacy).

Value ij = This is the value of the i^{th} district for the j^{th} criterion.

Min j = This is the minimum value for the j^{th} criterion (it is 0% for literacy)

The methodology is illustrated later, with an example of Betul district.

The criteria used for the district HDI and the methodology applied for the Madhya Pradesh Human Development Index (MPHDI) for districts are given below. It needs to be mentioned here that calculations for the indices and the data used for such calculations should not be used in isolation from the index. Much of the district data used is relevant in comparing districts and may not be a proper indicator in isolation to the index.

I.1 Education

UNDP uses adult literacy rate (literacy of population 15 years and above) as one of the two parameters. The other parameter used is enrolment of children aged 6-14 years. Data for literacy is now available for the year 2001 from the Census undertaken. Taking literacy of ages six and above and enrolment rates of children aged six to fourteen leads to double counting of the educational attainment of the population aged six to fourteen, as many children attending schools would also be literate. However, as we do not have data to calculate literacy for 15 years and above, we use the available data only.

Literacy rate for the population was calculated as percentage share of all literate in a district over the total population of people above 6 years of age in the district.

¹ It pertained to the undivided state of Madhya Pradesh, which included the newly carved state of Chhattisgarh.

For the target maximum figure for the purpose of calculating the Index of Deprivation in literacy, we use 100 per cent this time, as against 80 per cent used in 1995. The minimum rate is taken as 0 per cent.

The second component of education is the combined school level enrolment. The Rajiv Gandhi Shiksha Mission, Government of Madhya Pradesh, has provided the figures for children enrolled in schools in the year 2005–06.

The enrolment figures in some cases have exceeded the estimate for population in age group 6-14 years. In such cases we have taken the enrolment rate to be 100 per cent.

The target maximum for this enrolment has been taken at 100 percent, and the target maximum is 0 percent enrolment.

The two indices of literacy and school level enrolment were combined to get the Index of Deprivation for Education. The indices were combined in a weighted average, with 2/3 for literacy and 1/3 for all children in schools. A higher weight for literacy was taken to give importance to this most essential criterion and keeping in mind the problems of data in enrolment figures.

1.2 Health

Life Expectancy is the single criteria to assess the health status. In 1995, data for Life Expectancy was not available for all the districts and hence, Infant Mortality Rates were used for the year 1981 based on Census Fertility tables. Since then, Census has released Fertility tables for 1991 that permits us to arrive at indirect estimates for Life Expectancy at birth for districts. The indirect estimates for 1991 were arrived at using methodology applied by Census for calculating mortality tables for 1981.² These estimates are subject to corrections, after final fertility tables are released, and Census publishes estimates for Life Expectancy based on this data, however these are not yet available to us.

No data has been released from the 2001 census, which would help us in making estimations on either the Infant Mortality Rate or the Life Expectancy in the districts of Madhya Pradesh in 2001. However,

we do have the life expectancy of the state as a whole and for its regions from National Sample Surveys Regional estimates. We used these regional estimates and the state level estimates to project district level life expectancies in the state from 1991 to the year 2001.

For the maximum target, a figure of 85 years was taken, and for the minimum value, figure of 25 years was applied to calculate the Health Development Index.

1.3 Income

The UNDP HDI uses ‘adjusted per capita income for countries’ to calculate the Index of Income. The State Government does not calculate district per capita incomes or district domestic product in Madhya Pradesh. Since it is extremely difficult to assess district domestic products directly, and thereby come to an assessment of per capita income, we have used district incomes derived from the Net State Domestic Product (NSDP) for our use.

Data for calculating the District Domestic Product (DDP) is not available to enable a district-to-district calculation. The state domestic product is calculated under 16 categories by using sources from the State’s own production and economic activities (such as, for agriculture, fisheries, forests, electricity etc). Estimation of the volume of products is done from different sources using centrally administered surveys by the Central Statistics Organisation (CSO), Annual Survey of Industries (ASI), etc. For Railways, Industry, Unregistered Manufacturing, Gas, Water, data from a mix of various sources is used. Unfortunately this is not available for districts, and we have to resort to other means to divide the SDP district wise, under the 16 major categories. Further, while the State Domestic Product is a sum of estimates in 16 different categories, many of these 16 are a sum of different components. Unfortunately, no information of the break up of the 16 categories into its sub-categories was available. This was a major constraint in arriving at estimates for relative strengths of districts in per capita incomes. The Department of Economics and Statistics has recently undertaken the

² The methodology has been taken from ‘Indirect Estimates of Fertility and Mortality at the District Level, 1981, Occasional Paper No. 4 of 1994, Office of Registrar General of India.

task of preparing district income estimates, but the data is not yet ready.³ This prevented us from more valid estimates for district and per capita incomes. However, the methodology adopted for arriving at district and per capita incomes is a ‘best possible’ attempt by us, drawing on the methodology used by the Department of Economics and Statistics to arrive at State level figures, and applying it to the district level. The basic methodology suggested by CSO was also applied wherever possible.

A note of caution is necessary here. Calculating district level incomes is a difficult task given the lack of data at this level of dis-aggregation. What was needed for developing an index based on income was to get district level figures that would indicate the relative strength of districts in terms of per capita incomes drawn from estimates of share of districts to the state and NSDP. In the absence of such data across all the categories for the NSDP, the income index for the MPHDI relies on various surrogate measures. The income component for the MPHDI should in no way be taken as calculations for the district domestic product. The district shares of NSDP, and the per capita derived from these estimates are neither a substitute nor a surrogate for district domestic product and per capita incomes from it, but only a comparable figure for districts for this report.

The State NSDP is calculated under the 16 categories, using different methods for each category. Much of the calculations and adjustments are made on the basis of estimates and data from CSO and other studies, and applied to State level data, to arrive at State level estimates. For example, in unregistered manufacturing estimates of value added for unregistered manufacturing for five digit level of NIC is derived from the 1984–85 survey of Directory Manufacturing Establishments (DMEs), Non-Directory Establishments (NDEs), and Own Account Enterprises (OAE). The Industry wise estimates are adjusted by moving them backwards and forwards for the current years estimates. Since district level figures for DME and NDE are not available separately and

or under five- digit levels, we attempted to estimate district shares of unregistered manufacturing by using data on Establishments and Own account enterprises available district wise (rural and urban) from the provisional results of the Economic Census 1998. Similarly, calculations for district shares are somewhat related to or correspond to, wherever possible, the methodology of the NSDP.

For some categories like agriculture, industry, mining, forestry, banking and public administration fairly good district level indicators were available that were used to distribute the domestic products of these categories along districts. Using different indicators, share of districts (in percentage) to the specific domestic product was estimated, and this share was applied to the domestic product of that category to arrive at district level domestic product for that category.

For other categories, we used data for employment, own account enterprises and establishments, etc. to arrive at district level shares.

The methodology used for the major categories is given below. In all, 95.31 per cent of the net state domestic product for 2005–06 was allocated to districts on these lines. The share of the 16 categories of NSDP is given in what follows.

1. Agriculture (including Animal Husbandry)

Data was not available for agriculture, horticulture and animal husbandry separately. To estimate district shares of agriculture (including livestock production), district wise production of all major produce such as cereals, pulses, and oilseeds was taken and state’s average prices for these were applied to get the district production in price for agriculture. The agriculture domestic product was then divided along districts according to the share of each district to the total production (in price) in cereals, pulses and oilseeds.

2. Forestry and Logging

Incomes from Forestry and Logging were not used in 1995, due to lack of data. While there is no data

³ The CSO has issued instructions to States to calculate their district domestic products, along with suggested methodology. The methodology is drawn from the successful experience of assessing district domestic products by the states such as Kerala, Uttar Pradesh, and Rajasthan for the past two decades. Madhya Pradesh Government has now undertaken this task.

available to estimate district's share in the domestic product of Forestry and Logging, we have used surrogates instead. Figures for area of districts under forests and forest revenue accruing to the State from forestry from the districts were used. The share of area under forests for every district to total area of State under forests was given two thirds weight and contribution of district to total revenue from forestry of the state was give one third weight. The combined weights arrived at were applied to forests contribution to State Domestic Product.

3. Fisheries

Data on district wise fish production, the value of fish, and other fishery related data was available from the fishery department, and the domestic product corresponds largely to these figures. Fisheries domestic product was allocated to districts accordingly.

4. Mining and Quarrying

Data on production and value of production for all major and minor minerals in the state was available district wise. The share of each district to the total production value was taken and applied to the mining and quarrying domestic product of the state to arrive at district wise figures.

5. Manufacturing – Registered

In Small Scale Industries (SSI), district wise number of small units (SSI) and investments in them to date, and current employment data was obtained from Department of Commerce & Industries. For assessing contribution of SSI per district, we did a regression analysis between net value added (dependent variable) and units of SSI and fixed investment (independent variables). Using this equation, we arrived at an estimate of net value added by SSIs in each district for 2005–06, and the share of each district to this overall estimated SSI net value added was taken as the share of district SSIs to total SSIs contribution to the registered manufacturing domestic product. Data for turnovers and outputs in the Large and Medium scale Industries (LMI) sector was obtained. Available data gave us annual district wise large and medium scale industry investments, with current employment. We calculated

the share of each district to LMI contribution to registered manufacturing domestic product by first adjusting the total LMI investment to the price levels of 1950–51, using the wholesale price index for industrial products. This was used to measure the district wise investment in LMI. We estimated from fieldwork, data available from surveys and regression analysis from available turnover and output data, the relative contribution of data of LMI units, employment and investment (adjusted) to total LMI sector. According to this estimate, LMI units was multiplied by a factor of 2, investment by 4 and employment by a factor of 1, and the weighted average of the total gave us a comparable column of data to calculate district wise shares of LMI. The share of each district in this table was taken to be the share of districts to LMIs share of registered manufacturing domestic product. The SSI and LMI weighted share was taken together assigning a weight of 4 to LMI and 1 to SSI and share of districts to total states was applied to state domestic product in manufacturing—registered.

6. Manufacturing – Unregistered

For NSDP, unregistered manufacturing is calculated by using net value added from the 1984–85 survey on directly manufacturing establishments, non-directory establishments, and own account enterprises, which gives data for four digit level under the NIC classification. District wise distribution of DME and NDE is not available and, data on establishments is not available below 1 digit NIC. We took data for unregistered manufacturing from the Economic Census 1998. The Economic Census gives district-wise number of own account enterprises (non-agriculture) and establishments in manufacturing. No data was available to get a share of OAE, and establishments to unregistered manufacturing. We added up the number of OAE to establishments for every district. The resultant sums were divided by the total number of OAE and establishments in the state, to get percentage shares for each district. These shares were assumed to correspond to district shares of the domestic product of manufacturing-unregistered. This share was applied to manufacturing unregistered domestic product to arrive at district shares.

7. Construction

In construction district level data was scarce, and wherever available was not consistent or available in all districts. In the absence of such figures we had to resort to the provisional data from the Economic Census 1998. Taking figures of OAEs in construction, they were added to the number of establishments in construction in each district. The sums were divided by the total number of OAE and establishments in construction in the state. The shares so arrived at were taken as its share in construction domestic product.

8. Electricity, Gas and Water

No satisfactory estimates could be developed due to absence of disaggregated data especially for gas and water, and this category was thus left out.

9. Railways

Data on districtwise length of railway lines (in km) was obtained from the office of Divisional Railway Manager, Bhopal.

10. Transport by Other Means and Storage

The assumption here is that the value of Transport and Storage should correspond to the vehicles and the revenue from transport from a district. The average of share of each district's total vehicles to all vehicles in the state and vehicles on roads to total vehicles on road in the state was taken, and combined in equal weight with the total revenue contributed by the district to total revenue from transport in the State. The share so arrived at was multiplied to contribution of Transport by Other Means and Storage to NSDP.

11. Communication

No data was available to satisfactorily assess district share in communications.

12. Trade, Hotels and Restaurants

Domestic product from Trade, Hotels and Restaurants was distributed amongst the districts on the basis of Establishments and OAEs in each district in Wholesale Trade, Retail Trade and Hotels and Restaurants, according to the Economic Survey 1998.

13. Banking and Insurance

Banking and Insurance domestic product was divided on the share of each district on the deposits and loans in each district over the last five years.

14. Real Estate, Ownership of Dwellings and Business Service

No satisfactory data was available for this category.

15. Public Administration

This was based upon estimates of expenditure on Public Administration by the State Government, and strengths of the employment of state administration employees in each district, based on actual salaries given to permanent and temporary employees. Since there was a high positive correlation between the two, share of salaries of government employees to total salaries of government employees in Madhya Pradesh was used. This share was applied to contribution of Public Administration to NSDP to get estimates for districts.

16. Other Services

Figures for employment under other services were taken from the 2001 Census. The employment figures were divided by the total employment in other services in Madhya Pradesh to arrive at district shares and these shares were applied to domestic product from other services to arrive at district figures.

1.4 Adjusted Incomes

By themselves, the estimates for per capita incomes does not give an idea of the distortions in distribution or the levels of poverty in the districts, and the depth of deprivation of the poor. UNDP for their income component of the Human Development Index, used the Aitkinson's formula to adjust incomes, based upon marginal utility of incomes. This adjustment reduces the impact of very high incomes in some districts, and makes district more comparable to each other to assess relative levels of achievement in incomes. However, one problem with this method was that it discounted incomes above a threshold level (minimum level) quite drastically. The UNDP HDI, now uses a different method of adjusting poverty. The same method has been used to discount incomes for our district human development indices.

Income is discounted by using the following formula:

$$\text{Income Index} = \frac{\log y - \log y_{\min}}{\log y_{\max} - \log y_{\min}}$$

y : income of the district
 y_{\min} : Minimum income
 y_{\max} : Maximum target income

For a minimum income level and we calculated district wise poverty line by taking the poverty line developed by the Planning Commission based upon per capita monthly expenditure separately for rural and urban and adjusted to 1991–92 prices. To arrive at the district poverty line, we took a weighted average of rural and urban population with the adjusted rural and urban poverty line. The per capita incomes calculated for each district were divided by the resultant poverty line for each district, the product indicating the number of times district per capita was to the poverty line.

The three indices of development for health, education and income are then combined in a simple average to get the Human Development Index.

1.5 Calculation of HDI for Betul

Education

Index for literacy of Betul:

Target for literacy = 100.0 per cent
 Minimum literacy = 0.0 per cent
 Literacy of Betul = 60.9 per cent

The calculation is:

$$\frac{60.9 (\text{Literacy in Betul}) - 0.0 (\text{Minimum Literacy})}{100 (\text{Target Literacy}) - 0.0 (\text{Minimum Literacy})}$$

Therefore, Index for Betul in literacy = 0.609

Similarly, the enrolment rate of children in Betul aged 6-14 years -

Index for Enrolment of Betul:

Target for Enrolment = 100.0 per cent
 Minimum Enrolment = 0.0 per cent
 Enrolment in Betul = 99.7 per cent

The calculation is:

$$\frac{99.7 (\text{Enrolment in Betul}) - 0.0 (\text{Minimum Enrolment})}{100 (\text{Target Enrolment}) - 0.0 (\text{Minimum Enrolment})}$$

Therefore, Index for Betul in Enrolment = 0.997

These two are combined with a weightage of 1/3rd to enrolment and 2/3rd to Literacy giving the Education Development Index

$$(2/3) \times 0.609 + (1/3) \times 0.997 = 0.406 + 0.332 = 0.738$$

Health

Index for Life expectancy of Betul:

Target for Life expectancy = 85 years
 Minimum Life expectancy = 25 years
 Life expectancy in Betul = 54.7 years

The calculation is:

$$\frac{54.7 (\text{Life Expectancy in Betul}) - 25.0 (\text{Minimum Life expectancy})}{85.0 (\text{Target Life Expectancy}) - 25.0 (\text{Minimum Life Expectancy})}$$

Therefore, Index for Betul in literacy = 0.494

Income

Target for Maximum per capita income = Rs 56,830 (the per capita income of Delhi)

Minimum per capita income = Rs 6,532 (the per capita income for the income based poverty line)

The per capita income estimated for Betul for 2004–05 was Rs 14814

$$\begin{aligned} \text{Income Index} &= \frac{\log 14814 - \log 6532}{\log 56830 - \log 6532} \\ &= \frac{4.171 - 3.815}{4.755 - 3.815} = 0.378 \end{aligned}$$

y : income of the district
 y_{\min} : Minimum income
 y_{\max} : Maximum target income

Human Development Index

Combining the three indices and taking their average we get

$$\text{HDI of Betul (average of the three indices)} = (0.738 + 0.494 + 0.378)/3 = 0.537$$

BALAGHAT



Demography	2001
Total Population	1497968
Share of Madhya Pradesh Population	2.5
Urban Population	193972
Population of Scheduled Castes	116070
Population of Scheduled Tribes	326540
Density of Population (per sq km)	162
Decadal Growth Rate (1991–2001)	
Total	9.7
Rural	5.5
Urban	49.5
SC	2.6
ST	9.3

Health	2006
Population per Health Centre	5695
Rural Population Served per PHC	43204
Rural Population Served per SHC	5581
Total Fertility Rate	3.1

Gender	2001	
Gender Ratio	All	1022
	Rural	1030
	Urban	970
	SC	1038
	ST	1050
Workers Participation Rate-Female	46.3	
	2004–05	
Female Enrolment Rate (age 6–14)	104.2	

Habitat	2004
Urban Population Residing in Slum	32698
Ground Water Development (%)	13.3
Normal Rainfall (in mm)	1556
Average Annual Rainfall (in mm)	836
Per Capita Forest Area (in Ha)	0.34

Basic Information	2001
Area (in sq. km)	9229
Total Inhabited Villages	1269
Total Habitations	5382
Forest Villages	89
Major Industrial Areas:	

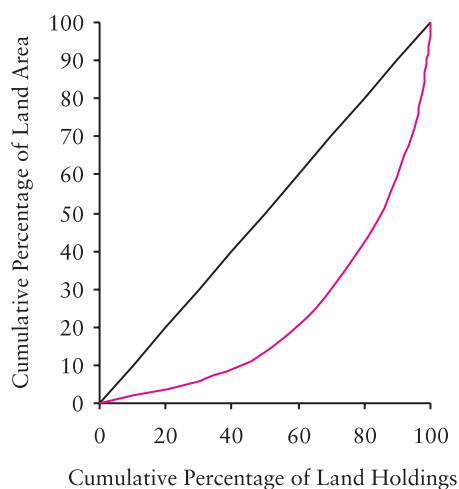
Literacy and Retention			
Literacy-2001	SC	ST	All
All	76.9	53.6	68.7
Male	89.2	66.9	80.6
Female	65.3	41.1	57.2
Rural	75.5	52.2	66.7
Urban	84.2	67.4	82.1
Retention Rate (age 6–11) 2004–05			87.0

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	2091	100.0
With Own Building	2082	99.6
With Drinking Water Facility	1950	93.3
With Toilet Facility	1995	95.4

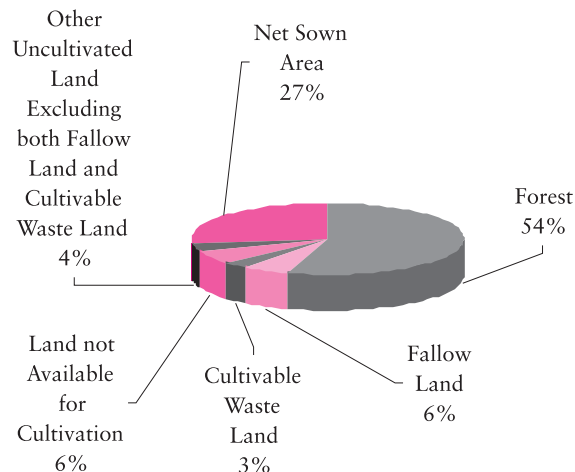
Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	39.9	54.4
Households with Electricity	29.3	58.3
Households with Toilet	7.1	13.2
Households with All Three Facilities	3.6	6.9
Households Without Any of the Three Facilities	14.8	17.8
Villages Electrified	99.3	84.5

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	28.8
Rural Roads per Village (in Km)		1.4
Telephone per Lakh Population (BSNL)	Mar-05	1172
Population per Post Office		6787
Total Electricity Consumption per Consumer (in Kwh)	2003–04	1620
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	548
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	859
Consumption per Industrial Unit (in Kwh)	2003–04	96761
Number of Registered Vehicles per Lakh Population	Mar-05	2633
Tractors per 10 Villages	2004	9.1
Average Land Holding Size (in Ha)	2000–01	1.2

Lorenz Curve of Land Holdings



Land Use Classification 2004-05



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	259.7	124.5
Pulses (in Kgs)	12.6	8.1
Foodgrains (in Kgs)	272.3	132.6
Oilseeds (in Kgs)	6.8	22.8
Yield of Food Grains (in Kgs/Ha)	1246.0	1327.4

Credit

Households Availing Banking Services (in %)	2001
Total	18.1
Rural	14.4
Urban	43.9

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	27.1
% of Net Irrigated to Net Sown Area	2003-04	44.6
Cropped Area under Food Grains (in '000 Ha)	2003-04	317.0
Fertilizer Consumption (in Kgs/Ha)	2002-03	37.6
Cropping Intensity	2004-05	120.9
Net Area Sown (in '000 Ha)	2004-05	275.4
Gross Cropped Area (in '000 Ha)		348.8
Double Cropped Area to Net Area Sown	2004-05	26.7
Net Irrigated Area (in '000 Ha)	2003-04	122.9
Gross Irrigated Area (in '000 Ha)		142.6

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Baihar	39.56	0.83	0.51	2.12	2.68	59.35
Balaghat	24.99	1.51	2.73	5.44	0.88	47.66
Waraseoni	48.11	1.02	0.83	1.82	0.68	63.23
Birsa	48.04	0.29	0.03	0.45	0.54	59.12
Katangi	44.71	0.30	0.37	0.69	0.77	58.18
Khairlanji	52.15	1.11	0.80	5.30	1.95	77.98
Kirnapur	49.92	0.52	1.30	8.89	2.20	76.13
Lalbarra	58.00	0.11	1.11	7.11	0.04	50.20
Lanji	61.81	0.57	0.55	6.72	0.73	77.51
Paraswada	65.62	1.31	0.29	0.84	3.81	62.96

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetcac (%)	Maternal mortality ratio
Baihar	93.63	37.22	22.43	26.92	15.95	910
Balaghat	69.96	36.68	28.43	10.65	10.84	647
Waraseoni	84.73	45.83	37.33	37.09	20.81	589
Birsa	97.17	17.97	2.70	15.56	15.85	919
Katangi	88.03	63.31	25.78	9.69	5.03	660
Khairlanji	87.93	42.63	17.01	16.06	6.06	873
Kirnapur	88.08	35.35	33.00	11.39	15.51	642
Lalbarra	78.20	41.67	41.67	15.84	7.95	662
Lanji	87.31	40.82	27.04	7.61	13.78	581
Paraswada	90.93	58.41	34.20	8.47	6.45	730

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Baihar	4.05	25.50	65.33	68.92	74.32	72.60
Balaghat	4.34	10.99	47.06	83.33	97.92	17.02
Waraseoni	3.38	11.38	51.61	96.77	96.77	36.07
Birsa	3.80	12.67	32.08	70.59	98.08	54.17
Katangi	3.62	10.97	19.28	72.09	89.53	81.18
Khairlanji	3.49	13.67	56.41	100.00	100.00	41.46
Kirnapur	3.85	9.17	55.74	85.71	94.64	69.23
Lalbarra	3.58	9.14	20.75	69.01	67.61	34.29
Lanji	6.92	9.32	45.45	100.00	100.00	26.09
Paraswada	2.27	20.59	40.00	86.79	84.91	78.43

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Baihar	106	154	71.23	48.27	3.98	123	24.57	168
Balaghat	84	118	66.77	40.97	4.41	125	25.75	146
Waraseoni	89	104	68.04	33.56	3.58	94	20.17	141
Birsa	77	107	70.50	43.63	3.74	122	26.11	71
Katangi	82	116	68.89	33.02	3.83	123	26.30	106
Khairlanji	93	132	64.42	40.92	3.75	114	26.64	106
Kirnapur	90	128	49.25	37.63	4.12	130	26.21	81
Lalbarra	107	155	69.24	42.64	4.11	116	23.87	152
Lanji	74	102	56.74	42.94	3.47	98	21.64	128
Paraswada	104	150	69.15	48.72	3.71	112	23.60	161

Source: Centre for Population Studies, Administration Academy, Bhopal

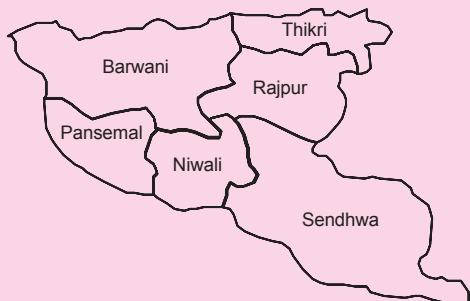
Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Katangi	72.4	69.4	90.6	54.6	52.9	65.4	14.0	9.1	44.0
Waraseoni	64.6	63.4	88.1	54.7	54.0	69.8	10.4	7.7	62.4
Balaghat	68.0	56.1	89.1	60.4	52.3	74.8	29.2	9.4	64.2
Kirnapur	61.7	61.7	0.0	58.7	58.7	0.0	7.5	7.5	0.0
Baihar	36.8	30.8	67.7	46.0	45.1	50.5	10.9	6.4	33.6
Lanji	54.0	54.0	0.0	57.5	57.5	0.0	6.9	6.9	0.0

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)						
Tehsil	All Three Facilities Available			None of the Facilities		
	Total	Rural	Urban	Total	Rural	Urban
Katangi	7.4	3.5	31.1	10.3	11.5	2.8
Waraseoni	4.7	2.8	40.5	13.7	14.3	2.2
Balaghat	19.7	4.3	46.8	12.7	18.7	2.1
Kirnapur	3.2	3.2	0.0	13.7	13.7	0.0
Baihar	4.3	1.6	17.9	32.7	36.2	15.1
Lanji	2.8	2.8	0.0	16.7	16.7	0.0

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/ Transistor	Television	Telephone	Bicycle	Scooter/ Motor Cycle/ Moped	Car/ Jeep/ Van	None of the Specified Assets
Katangi	20.4	23.4	15.3	2.2	64.1	6.6	1.0	30.6
Waraseoni	16.6	16.4	11.8	2.0	57.7	5.7	0.9	37.4
Balaghat	25.5	20.7	29.7	7.5	57.7	13.8	1.4	33.8
Kirnapur	17.3	13.9	9.6	1.2	53.0	4.2	0.6	43.0
Baihar	15.2	18.5	11.7	2.1	40.3	6.5	0.8	52.4
Lanji	15.9	14.8	11.3	1.1	54.4	4.3	0.7	40.9

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Katangi	12.4	87.2	0.4	0.3	0.1
Waraseoni	8.2	91.2	0.6	0.4	0.2
Balaghat	26.7	72.2	1.1	0.8	0.3
Kirnapur	3.8	94.1	2.1	1.9	0.3
Baihar	5.7	88.8	5.5	3.0	2.5
Lanji	5.5	92.2	2.3	1.4	0.9

BARWANI



Demography	2001
Total Population	1081441
Share of Madhya Pradesh Population	1.8
Urban Population	157975
Population of Scheduled Castes	68426
Population of Scheduled Tribes	724735
Density of Population (per sq km)	199
Decadal Growth Rate (1991–2001)	
Total	29.9
Rural	30.7
Urban	25.5
SC	18.7
ST	34.3

Health	2006
Population per Health Centre	3846
Rural Population Served per PHC	31993
Rural Population Served per SHC	3691
Total Fertility Rate	5.1

Gender	2001	
Gender Ratio	All	971
	Rural	977
	Urban	940
	SC	978
	ST	982
Workers Participation Rate-Female	43.7	
	2004–05	
Female Enrolment Rate (age 6–14)	85.5	

Habitat	2004
Urban Population Residing in Slum	21033
Ground Water Development (%)	57.8
Normal Rainfall (in mm)	596
Average Annual Rainfall (in mm)	369
Per Capita Forest Area (in Ha)	0.33

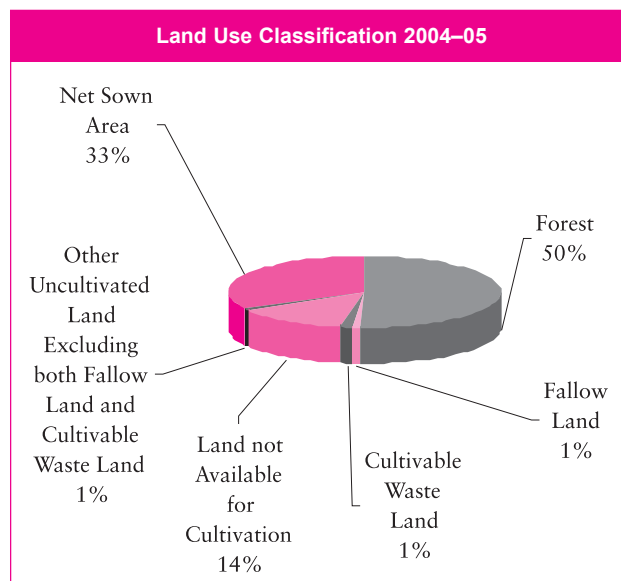
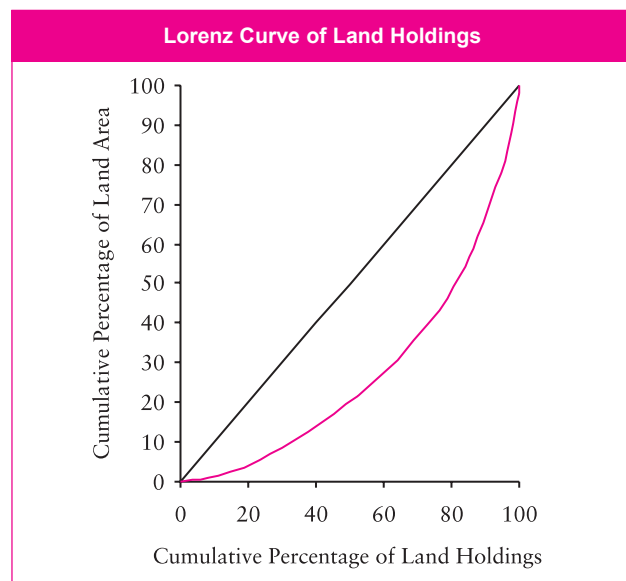
Basic Information	2001
Area (in sq. km)	5422
Total Inhabited Villages	714
Total Habitations	3770
Forest Villages	142
Major Industrial Areas:	
<i>Barwani, Thikri</i>	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	46.1	28.4	41.5
Male	58.2	37.0	51.0
Female	33.7	19.7	31.8
Rural	41.4	27.5	35.4
Urban	59.7	54.1	74.5
Retention Rate (age 6–11) 2004–05			62.8

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	2142	100.0
With Own Building	1825	85.2
With Drinking Water Facility	1439	67.2
With Toilet Facility	975	45.5

Basic Amenities (%)	1991	2001
Households with Safe Drinking Water	na	78.2
Households with Electricity	na	65.6
Households with Toilet	na	14.1
Households with All Three Facilities	na	12.9
Households Without Any of the Three Facilities	na	13.6
Villages Electrified	na	86.1

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	34.6
Rural Roads per Village (in Km)		1.2
Telephone per Lakh Population (BSNL)	Mar-05	1214
Population per Post Office		10176
Total Electricity Consumption per Consumer (in Kwh)	2003–04	2251
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	557
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	839
Consumption per Industrial Unit (in Kwh)	2003–04	11559
Number of Registered Vehicles per Lakh Population	Mar-05	2440
Tractors per 10 Villages	2004	20.6
Average Land Holding Size (in Ha)	2000–01	2.6



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	155.4	352.6
Pulses (in Kgs)	49.3	1616.6
Foodgrains (in Kgs)	204.7	369.2
Oilseeds (in Kgs)	31.8	12.6
Yield of Food Grains (in Kgs/Ha)	1038.0	1276.1

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	33.0
% of Net Irrigated to Net Sown Area	2003-04	31.6
Cropped Area under Food Grains (in '000 Ha)	2003-04	158.5
Fertilizer Consumption (in Kgs/Ha)	2002-03	55.6
Cropping Intensity	2004-05	116.1
Net Area Sown (in '000 Ha)	2004-05	231.6
Gross Cropped Area (in '000 Ha)		268.8
Double Cropped Area to Net Area Sown	2004-05	16.1
Net Irrigated Area (in '000 Ha)	2003-04	73.3
Gross Irrigated Area (in '000 Ha)		73.3

Credit

Households Availing Banking Services (in %)	2001
Total	19.5
Rural	16.2
Urban	37.3

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Barwani	39.30	0.82	0.95	4.01	0.74	46.68
Pati	30.90	0.32	2.20	2.46	0.91	37.31
Thikri	46.72	0.95	3.30	7.95	2.48	62.02
Rajpur	36.11	1.56	2.42	5.01	0.48	49.98
Pansemal	33.46	5.51	3.28	4.30	0.39	50.78
Sendhwa	28.86	0.83	3.28	5.46	1.28	40.78
Niwali	31.25	1.64	9.18	4.30	0.90	48.82

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Barwani	89.48	11.28	9.87	29.24	23.15	867
Pati	97.83	28.52	1.44	33.94	17.75	964
Thikri	91.39	58.39	6.65	22.23	65.86	882
Rajpur	89.48	25.00	12.66	25.30	17.19	899
Pansemal	91.18	86.52	9.74	24.04	5.90	956
Sendhwa	80.52	20.08	4.17	21.93	14.13	944
Niwali	89.14	59.21	16.71	23.09	5.08	820

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Barwani	3.78	24.12	38.24	58.33	80.56	5.88
Pati	1.57	10.21	27.27	84.62	100.00	7.69
Thikri	4.78	26.25	35.44	84.21	87.72	32.65
Rajpur	2.85	19.44	36.59	65.00	75.00	25.00
Pansemal	4.66	9.96	13.33	86.67	86.67	25.00
Sendhwa	3.38	31.86	12.50	83.33	75.00	0.00
Niwali	2.92	17.72	35.29	81.82	90.91	0.00

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Barwani	82	116	57.55	73.65	4.63	145	28.48	183
Pati	79	110	76.55	54.9	5.59	174	29.04	220
Thikri	79	110	62.13	42.76	4.16	144	23.69	183
Rajpur	89	127	60.22	51.82	4.67	144	24.32	169
Pansemal	90	128	56.83	62.1	4.37	142	27.96	208
Sendhwa	81	113	60.38	40.28	4.76	157	30.43	208
Niwali	87	123	44.22	46.49	4.63	151	30.96	163

Source: Centre for Population Studies, Administration Academy, Bhopal

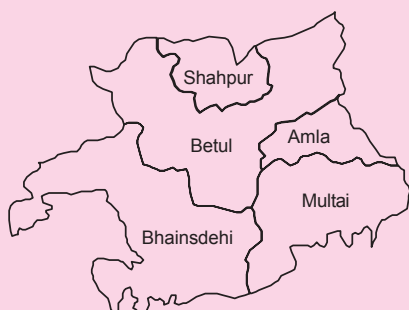
Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Barwani	52.9	43.8	95.6	66.2	59.8	96.6	18.3	6.8	72.8
Thikri	87.7	87.3	89.4	92.4	91.3	97.5	16.8	11.5	43.2
Rajpur	77.3	76.2	86.9	84.3	83.2	93.9	11.8	7.5	47.3
Pansemal	70.1	67.0	96.5	83.5	81.9	97.5	5.8	2.3	35.0
Niwali	69.9	65.7	90.6	82.2	79.6	95.3	13.0	7.8	39.1
Sendhwa	54.7	45.8	95.3	74.0	69.8	93.0	13.9	3.4	61.5

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Barwani	17.0	5.6	70.5	25.0	30.2	0.6	
Thikri	15.4	9.9	42.4	1.5	1.7	0.6	
Rajpur	11.0	6.9	45.1	5.2	5.6	2.5	
Pansemal	5.4	2.0	34.8	11.1	12.4	0.2	
Niwali	11.8	6.5	37.8	8.1	9.4	1.8	
Sendhwa	12.5	2.6	57.8	17.7	21.5	0.3	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/ Transistor	Television	Telephone	Bicycle	Scooter/ Motor Cycle/ Moped	Car/ Jeep/ Van	None of the Specified Assets
Barwani	21.1	13.6	18.9	4.1	23.4	8.9	1.1	64.4
Thikri	21.1	16.4	28.5	3.5	41.4	11.7	1.4	44.5
Rajpur	15.5	15.0	19.0	3.5	35.4	7.8	1.0	51.1
Pansemal	16.0	15.9	15.1	2.5	25.8	6.9	1.4	59.6
Niwali	17.3	13.0	15.5	3.1	21.6	5.9	1.2	64.2
Sendhwa	21.9	14.4	15.4	4.0	19.9	6.2	1.3	65.0

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Barwani	30.6	66.1	3.3	1.5	1.8	
Thikri	36.1	62.1	1.7	0.7	1.1	
Rajpur	29.3	69.2	1.6	0.6	1.0	
Pansemal	13.2	79.8	7.0	2.0	5.0	
Niwali	31.2	65.3	3.5	0.5	3.0	
Sendhwa	21.8	73.9	4.3	2.0	2.3	

BETUL



Demography	2001
Total Population	1395175
Share of Madhya Pradesh Population	2.3
Urban Population	259119
Population of Scheduled Castes	147604
Population of Scheduled Tribes	549907
Density of Population (per sq km)	139
Decadal Growth Rate (1991–2001)	
Total	18.1
Rural	18.1
Urban	17.8
SC	15.8
ST	24.1

Health	2006
Population per Health Centre	4941
Rural Population Served per PHC	39834
Rural Population Served per SHC	4557
Total Fertility Rate	3.9

Gender	2001	
Gender Ratio	All	965
	Rural	977
	Urban	916
	SC	948
	ST	994
Workers Participation Rate-Female	37.0	
	2004–05	
Female Enrolment Rate (age 6–14)	98.4	

Habitat	2004
Urban Population Residing in Slum	27582
Ground Water Development (%)	25.0
Normal Rainfall (in mm)	1082
Average Annual Rainfall (in mm)	846
Per Capita Forest Area (in Ha)	0.28

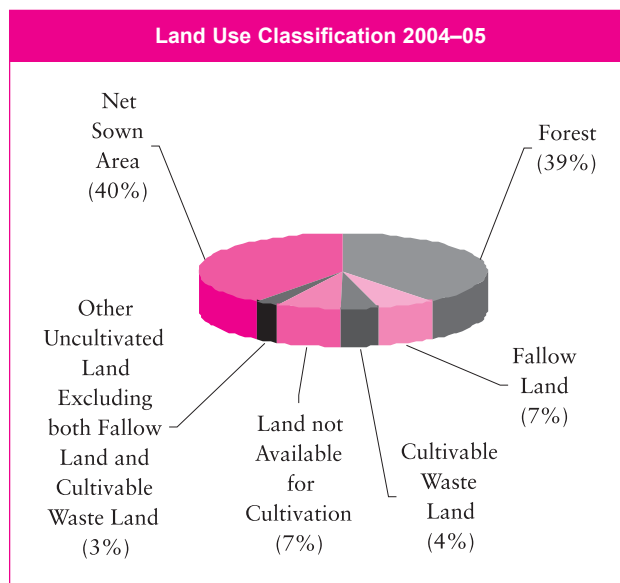
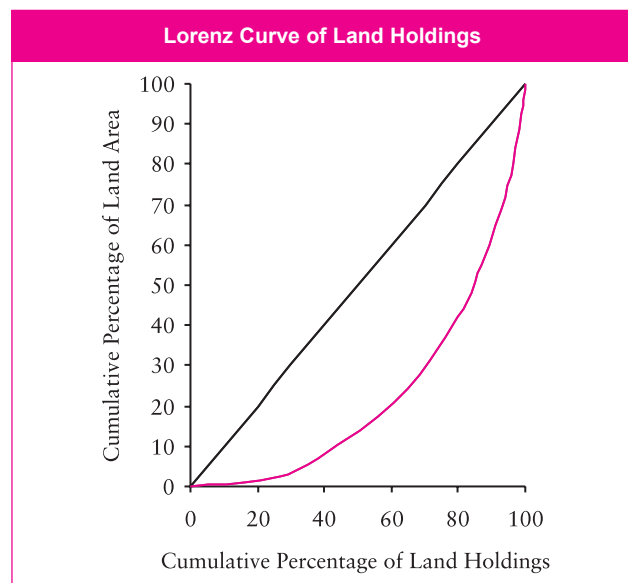
Basic Information	2001
Area (in sq. km)	10043
Total Inhabited Villages	1328
Total Habitations	2546
Forest Villages	111
Major Industrial Areas:	
<i>Betul, Multai, Amla, Bhainsdehi</i>	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	74.6	46.0	66.4
Male	85.1	58.1	76.8
Female	63.6	34.0	55.6
Rural	71.9	45.4	62.0
Urban	80.7	64.2	84.5
Retention Rate (age 6–11) 2004–05			77.1

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	2002	100.0
With Own Building	2002	100.0
With Drinking Water Facility	1641	82.0
With Toilet Facility	1440	71.9

Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	59.7	72.9
Households with Electricity	46.8	74.8
Households with Toilet	13.1	20.2
Households with All Three Facilities	10.3	17.2
Households Without Any of the Three Facilities	24.0	9.1
Villages Electrified	99.2	94.0

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	14.7
Rural Roads per Village (in Km)		0.6
Telephone per Lakh Population (BSNL)	Mar-05	1977
Population per Post Office		6809
Total Electricity Consumption per Consumer (in Kwh)	2003–04	2676
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	514
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	1100
Consumption per Industrial Unit (in Kwh)	2003–04	140851
Number of Registered Vehicles per Lakh Population	Mar–05	4166
Tractors per 10 Villages	2004	59.9
Average Land Holding Size (in Ha)	2000–01	2.6



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	185.0	228.4
Pulses (in Kgs)	24.8	29.5
Foodgrains (in Kgs)	209.8	257.9
Oilseeds (in Kgs)	66.8	105.8
Yield of Food Grains (in Kgs/Ha)	901.0	1143.8

Credit

Households Availing Banking Services (in %)	2001
Total	33.3
Rural	26.7
Urban	60.2

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	39.8
% of Net Irrigated to Net Sown Area	2003-04	24.8
Cropped Area under Food Grains (in '000 Ha)	2003-04	325.3
Fertilizer Consumption (in Kgs/Ha)	2002-03	35.3
Cropping Intensity	2004-05	132.0
Net Area Sown (in '000 Ha)	2004-05	401.0
Gross Cropped Area (in '000 Ha)		529.5
Double Cropped Area to Net Area Sown	2004-05	32.0
Net Irrigated Area (in '000 Ha)	2003-04	99.5
Gross Irrigated Area (in '000 Ha)		99.5

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Amla	39.72	0.57	0.44	1.50	1.89	44.62
Athner	53.92	1.75	3.35	7.47	1.02	69.49
Betul	41.36	1.28	5.24	5.17	1.25	54.64
Bhainsdehi	50.93	0.51	0.84	5.68	0.01	58.74
Bhimpur	42.23	1.08	4.39	2.09	0.05	51.40
Chicholi	42.86	1.50	3.90	6.60	0.31	55.68
Ghodadongri	41.28	0.27	0.51	1.30	0.24	44.05
Multai	40.59	3.32	8.62	6.70	2.87	63.04
Prabhatpattanam	43.21	0.98	1.03	6.78	0.38	53.04
Shahpur	38.23	2.46	8.70	10.89	5.50	66.48

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Betul	71.63	49.01	28.61	9.49	7.68	716
Chicholi	63.45	35.73	32.46	19.22	17.40	604
Ghodadongri	93.95	21.41	6.50	28.28	24.10	1137
Bhainsdehi	94.38	85.01	7.91	19.86	16.98	1268
Athner	43.04	56.53	13.24	8.59	4.46	767
Bhimpura	94.60	77.89	5.14	20.43	28.44	987
Shahpur	86.59	73.44	18.18	4.57	7.38	903
Multai	91.71	89.00	9.54	6.95	6.22	948
Prabhatpattnam	95.52	37.27	6.82	31.28	30.84	1039
Aamla	92.08	27.17	9.52	43.58	26.22	1047

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Betul	2.52	15.13	21.05	89.19	86.49	23.68
Chicholi	8.32	19.82	12.28	75.47	92.45	28.30
Ghodadongri	3.73	19.91	14.52	36.67	98.33	30.00
Bhainsdehi	2.81	19.49	25.00	89.83	96.61	63.16
Athner	2.55	13.56	37.25	100.00	98.08	25.00
Bhimpura	5.30	44.13	3.57	91.38	94.83	75.44
Shahpur	3.41	22.07	18.60	93.02	86.05	83.72
Multai	3.90	17.62	34.38	94.29	100.00	73.53
Prabhatpattnam	5.09	23.41	33.33	54.76	83.33	40.00
Aamla	3.67	16.11	31.88	82.26	90.32	39.34

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Aamla	98	140	64.54	42.07	5.49	173	30.33	145
Athner	77	107	41.55	35.57	4.94	133	23.01	222
Betul	93	132	58.92	40.05	4.82	146	27.97	174
Bhainsdehi	115	168	69.24	45.69	5.02	152	30.79	131
Bhimpur	86	121	71.78	59.34	4.64	127	24.28	296
Chicholi	84	119	52.19	45.83	5.22	137	25.17	204
Ghodadongri	101	146	76.34	50.86	5.31	171	32.73	137
Multai	89	127	53.51	39.69	4.87	161	29.45	110
Prabhatpattanam	93	133	56.82	40.59	4.43	109	19.09	179
Shahpur	98	140	64.94	52.23	4.63	137	25.29	207

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Bhainsdehi	65.4	64.3	84.9	68.0	68.0	68.3	8.6	7.0	40.2
Betul	79.9	70.4	95.8	78.7	68.3	96.2	33.0	16.2	61.3
Shahpur	70.3	69.1	94.1	73.0	72.0	93.2	12.0	9.2	70.1
Multai	74.1	72.4	94.1	66.7	64.6	90.3	12.9	7.8	70.5
Amla	80.4	78.1	91.6	73.5	70.0	90.7	17.5	7.7	65.1

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Bhainsdehi	6.5	4.8	37.9	13.0	13.0	11.6	
Betul	29.3	11.5	59.4	6.6	10.3	0.5	
Shahpur	9.1	6.4	66.2	10.7	11.1	1.3	
Multai	10.0	5.2	64.5	9.8	10.6	0.9	
Amla	14.3	5.0	59.8	7.4	8.7	0.8	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Bhainsdehi	25.3	11.3	11.2	1.4	19.7	4.1	0.7	69.3
Betul	37.8	18.4	37.4	7.6	52.7	18.4	2.1	34.4
Shahpur	20.9	13.4	13.0	2.3	41.2	5.9	1.0	50.9
Multai	38.1	15.8	23.5	3.1	31.2	6.6	1.0	53.0
Amla	32.8	18.0	25.2	3.5	36.5	8.3	1.0	50.2

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Bhainsdehi	15.0	83.4	1.5	0.8	0.7
Betul	40.9	55.9	3.2	1.4	1.8
Shahpur	28.8	69.9	1.3	0.6	0.7
Multai	24.2	75.3	0.5	0.2	0.3
Amla	25.4	72.9	1.7	1.0	0.7

BHIND



Demography	2001
Total Population	1428559
Share of Madhya Pradesh Population	2.4
Urban Population	338933
Population of Scheduled Castes	306786
Population of Scheduled Tribes	6720
Density of Population (per sq km)	320
Decadal Growth Rate (1991–2001)	
Total	17.2
Rural	12.6
Urban	35.0
SC	17.9
ST	104.2

Health	2006
Population per Health Centre	7482
Rural Population Served per PHC	60849
Rural Population Served per SHC	6318
Total Fertility Rate	4.0

Gender	2001	
Gender Ratio	All	829
	Rural	825
	Urban	843
	SC	812
	ST	877
Workers Participation Rate-Female	22.9	
	2004–05	
Female Enrolment Rate (age 6–14)	99.6	

Habitat	2004
Urban Population Residing in Slum	42358
Ground Water Development (%)	71.3
Normal Rainfall (in mm)	662
Average Annual Rainfall (in mm)	407
Per Capita Forest Area (in Ha)	0.01

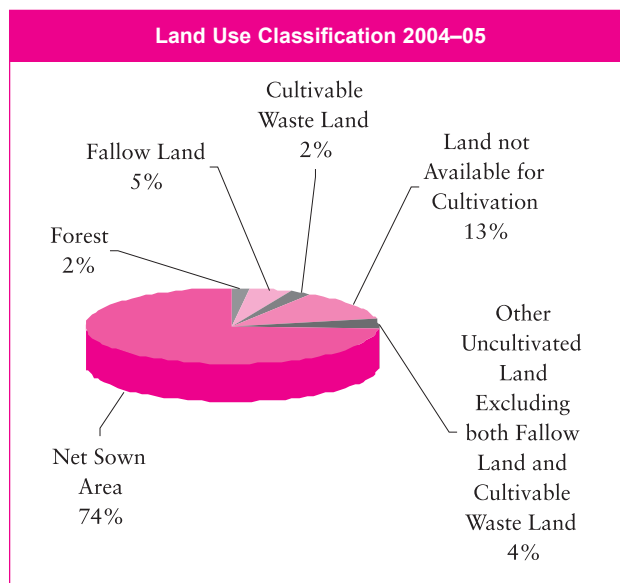
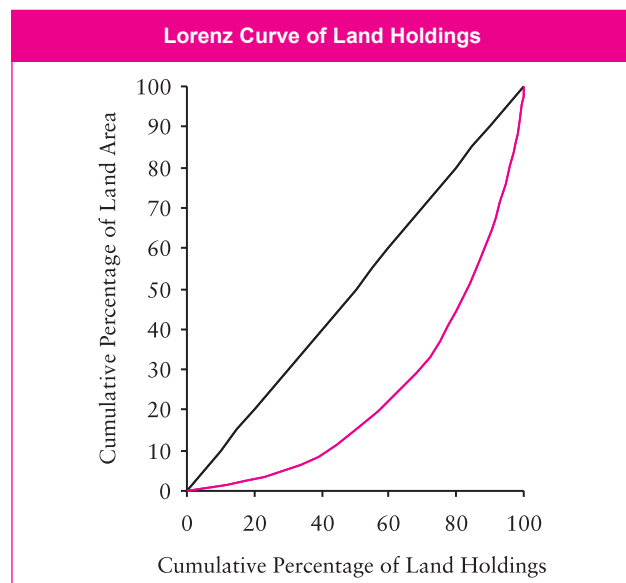
Basic Information	2001
Area (in sq. km)	4459
Total Inhabited Villages	877
Total Habitations	1887
Forest Villages	0
Major Industrial Areas:	
<i>Mehgaon, Gohad</i>	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	64.0	53.5	70.5
Male	78.6	67.6	83.2
Female	45.9	37.2	55.2
Rural	64.3	43.9	69.1
Urban	62.9	57.7	75.0
Retention Rate (age 6–11) 2004–05			86.2

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	1769	100.0
With Own Building	1769	100.0
With Drinking Water Facility	1366	77.2
With Toilet Facility	166	9.4

Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	36.9	54.9
Households with Electricity	34.9	43.2
Households with Toilet	11.6	21.9
Households with All Three Facilities	9.1	14.0
Households Without Any of the Three Facilities	45.8	28.1
Villages Electrified	100.0	93.5

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	32.1
Rural Roads per Village (in Km)		0.9
Telephone per Lakh Population (BSNL)	Mar-05	1262
Population per Post Office		5946
Total Electricity Consumption per Consumer (in Kwh)	2003–04	3342
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	607
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	1157
Consumption per Industrial Unit (in Kwh)	2003–04	69513
Number of Registered Vehicles per Lakh Population	Mar-05	3533
Tractors per 10 Villages	2004	53.5
Average Land Holding Size (in Ha)	2000–01	2.0



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	175.1	163.5
Pulses (in Kgs)	48.5	57.2
Foodgrains (in Kgs)	223.6	220.7
Oilseeds (in Kgs)	93.6	100.6
Yield of Food Grains (in Kgs/Ha)	1426.0	1501.2

Credit

	2001
Households Availing Banking Services (in %)	2001
Total	23.9
Rural	18.7
Urban	41.3

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	74.0
% of Net Irrigated to Net Sown Area	2003-04	33.4
Cropped Area under Food Grains (in '000 Ha)	2003-04	216.8
Fertilizer Consumption (in Kgs/Ha)	2002-03	50.5
Cropping Intensity	2004-05	108.1
Net Area Sown (in '000 Ha)	2004-05	329.3
Gross Cropped Area (in '000 Ha)		355.9
Double Cropped Area to Net Area Sown	2004-05	8.1
Net Irrigated Area (in '000 Ha)	2003-04	109.7
Gross Irrigated Area (in '000 Ha)		113.0

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Ater	27.47	6.07	2.36	8.28	5.98	51.47
Bhind	27.77	9.58	2.74	9.50	1.70	53.42
Gohad	27.10	5.60	3.02	8.28	3.89	48.80
Lahar	28.59	4.47	9.26	7.07	1.79	53.01
Mehgaon	30.77	1.78	5.06	5.22	3.73	47.76

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Ater	72.00	27.07	3.44	54.66	32.95	1077
Bhind	59.27	37.00	6.80	54.20	24.78	1177
Gohad	77.41	29.67	21.59	43.19	18.43	852
Lahar	57.23	41.15	11.51	32.84	18.14	790
Mehgaon	79.45	24.83	6.61	65.15	27.36	928

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Ater	3.67	23.15	21.13	33.33	69.35	14.52
Bhind	4.65	9.52	52.63	39.39	78.79	26.67
Gohad	2.48	15.22	32.56	83.78	59.46	69.44
Lahar	3.33	9.23	31.43	44.12	79.41	25.00
Mehgaon	3.37	8.99	40.91	40.63	31.25	9.09

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Ater	91	129	79.59	41.84	5.08	148	28.17	212
Bhind	105	152	82.44	49	5.21	162	31.09	165
Gohad	98	141	74.48	37.86	4.65	151	31.17	153
Lahar	77	107	69.11	43.92	4.36	114	22.86	204
Mehgaon	83	117	83.12	43.19	5.01	147	28.78	206

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Ater	21.2	21.2	0.0	63.1	63.1	0.0	10.8	10.8	0.0
Bhind	48.1	25.0	82.6	75.3	59.6	98.6	31.9	6.9	69.1
Mehgaon	34.5	29.1	78.4	31.5	27.1	66.8	16.4	11.9	52.8
Gohad	47.9	40.6	72.6	41.3	32.0	72.7	19.8	11.4	48.2
Ron	39.0	39.0	0.0	70.4	70.4	0.0	13.3	13.3	0.0
Mihona	49.4	45.7	66.8	47.5	42.9	69.3	20.0	14.3	46.6
Lahar	50.5	40.0	76.8	53.5	48.2	66.7	20.7	9.9	47.9

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Ater	3.1	3.1	0.0	29.7	29.7	0.0	
Bhind	27.0	2.4	63.9	19.1	31.6	0.6	
Mehgaon	6.0	1.6	41.7	41.6	45.3	11.6	
Gohad	10.1	3.4	32.6	33.3	40.3	9.6	
Ron	7.7	7.7	0.0	16.9	16.9	0.0	
Mihona	9.3	3.5	37.0	27.6	29.9	16.3	
Lahar	12.1	3.1	34.7	25.0	31.3	9.2	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Ater	18.2	22.7	13.4	0.9	54.1	5.3	1.0	39.0
Bhind	30.4	24.2	31.0	4.8	63.7	11.0	1.5	27.2
Mehgaon	20.4	22.8	21.4	2.1	50.7	6.3	1.1	39.2
Gohad	16.4	19.0	24.1	3.3	46.4	7.4	1.2	40.8
Ron	19.8	24.0	17.4	1.7	53.1	4.8	1.0	39.3
Mihona	29.2	26.1	23.1	1.9	59.2	5.7	1.1	33.5
Lahar	27.3	22.7	26.3	2.2	45.4	5.8	0.9	41.2

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Ater	71.0	1.8	27.2	26.2	1.0
Bhind	79.6	7.9	12.5	11.9	0.6
Mehgaon	68.2	12.2	19.6	18.1	1.5
Gohad	66.2	17.0	16.8	14.9	1.9
Ron	44.9	53.2	1.9	1.5	0.4
Mihona	46.1	52.7	1.2	1.2	0.1
Lahar	49.6	49.5	0.9	0.8	0.1

BHOPAL



Demography	2001
Total Population	1843510
Share of Madhya Pradesh Population	3.1
Urban Population	1482718
Population of Scheduled Castes	258173
Population of Scheduled Tribes	60561
Density of Population (per sq km)	665
Decadal Growth Rate (1991–2001)	
Total	36.4
Rural	33.3
Urban	37.2
SC	38.4
ST	47.0

Health	2006
Population per Health Centre	28474
Rural Population Served per PHC	41654
Rural Population Served per SHC	6612
Total Fertility Rate	3.0

Gender	2001	
Gender Ratio	All	895
	Rural	885
	Urban	898
	SC	902
	ST	901
Workers Participation Rate-Female	14.9	
	2004–05	
Female Enrolment Rate (age 6–14)	99.8	

Habitat	2004
Urban Population Residing in Slum	318831
Ground Water Development (%)	57.0
Normal Rainfall (in mm)	1188
Average Annual Rainfall (in mm)	758
Per Capita Forest Area (in Ha)	0.02

Basic Information 2001

Area (in sq. km)	2772
Total Inhabited Villages	511
Total Habitations	747
Forest Villages	1
Major Industrial Areas:	
<i>Phanda</i>	

Literacy and Retention

Literacy-2001	SC	ST	All
All	61.2	59.0	74.6
Male	72.4	66.7	81.9
Female	48.8	50.3	66.4
Rural	45.4	29.6	52.7
Urban	67.2	69.0	79.6
Retention Rate (age 6–11) 2004–05			70.9

Primary School Infrastructure (2004–05)

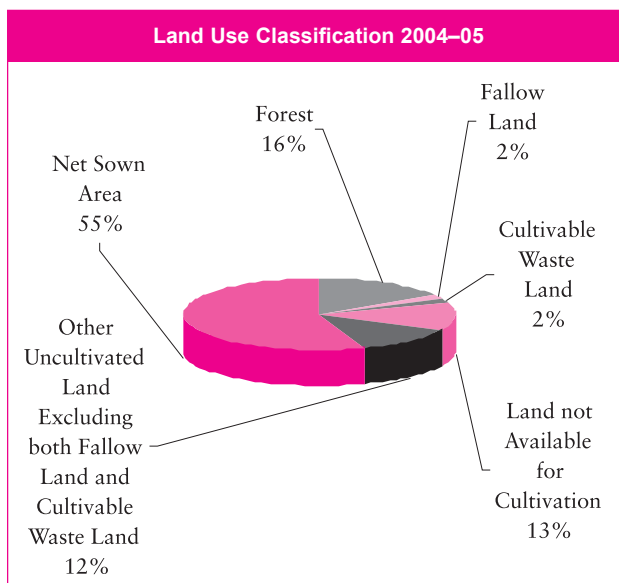
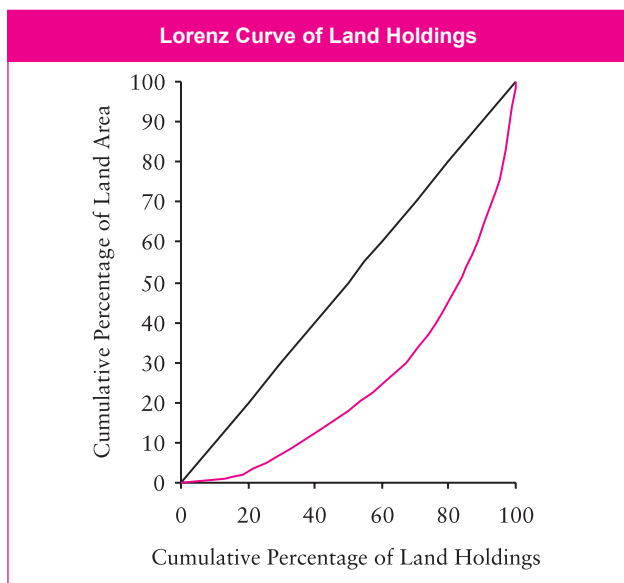
	Number	(%)
Number of Primary Schools	831	100.0
With Own Building	805	96.9
With Drinking Water Facility	771	92.8
With Toilet Facility	215	25.9

Basic Amenities (in %) 1991 2001

Households with Safe Drinking Water	89.1	95.1
Households with Electricity	78.5	96.3
Households with Toilet	58.3	65.8
Households with All Three Facilities	53.1	63.6
Households Without Any of the Three Facilities	4.5	0.5
Villages Electrified	99.3	94.3

Infrastructure Facilities

Road Length per 100 sq.km (in Km)	2002–03	31.2
Rural Roads per Village (in Km)		0.4
Telephone per Lakh Population (BSNL)	Mar-05	6800
Population per Post Office		15813
Total Electricity Consumption per Consumer (in Kwh)	2003–04	2767
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	1291
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	2117
Consumption per Industrial Unit (in Kwh)	2003–04	74837
Number of Registered Vehicles per Lakh Population	Mar-05	21221
Tractors per 10 Villages	2004	98.7
Average Land Holding Size (in Ha)	2000–01	2.6



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	78.8	59.6
Pulses (in Kgs)	25.0	18.9
Foodgrains (in Kgs)	103.8	78.5
Oilseeds (in Kgs)	34.8	47.4
Yield of Food Grains (in Kgs/Ha)	1375.0	1367.9

Credit

	2001
Households Availing Banking Services (in %)	2001
Total	42.5
Rural	23.1
Urban	47.0

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	55.2
% of Net Irrigated to Net Sown Area	2003-04	50.3
Cropped Area under Food Grains (in '000 Ha)	2003-04	112.6
Fertilizer Consumption (in Kgs/Ha)	2002-03	44.4
Cropping Intensity	2004-05	142.9
Net Area Sown (in '000 Ha)	2004-05	153.4
Gross Cropped Area (in '000 Ha)		219.2
Double Cropped Area to Net Area Sown	2004-05	42.4
Net Irrigated Area (in '000 Ha)	2003-04	76.6
Gross Irrigated Area (in '000 Ha)		76.6

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Berasia	32.08	1.44	5.34	4.17	9.41	53.06
Phanda	51.56	3.64	7.25	6.82	7.56	77.54

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Berasia	90.83	81.94	8.01	20.04	23.41	1074
Phanda	78.07	73.56	22.40	12.83	7.07	420

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Berasia	3.42	15.56	21.74	29.17	50.00	21.28
Phanda	6.15	24.33	43.66	59.32	62.07	14.00

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Berasia	98	141	79.53	53.82	6.14	211	34.59	386
Phanda	50	65	82.22	44.99	5.15	164	27.49	202

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Berasia	82.7	81.6	91.9	79.8	78.7	89.3	16.6	11.3	61.6
Huzur	98.1	93.2	98.6	97.0	92.2	97.5	72.0	19.0	77.7

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Berasia	13.3	8.2	57.0	3.2	3.4	1.4	
Huzur	70.0	17.8	75.6	0.1	0.7	0.1	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Berasia	27.2	12.7	29.4	3.7	22.3	6.3	1.1	56.5
Huzur	44.5	34.4	71.6	24.2	39.8	38.0	7.0	17.6

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Berasia	14.6	82.9	2.5	1.0	1.5
Huzur	73.7	19.8	6.5	4.7	1.8

CHHATARPUR



Demography	2001
Total Population	1474723
Share of Madhya Pradesh Population	2.4
Urban Population	324295
Population of Scheduled Castes	342990
Population of Scheduled Tribes	51593
Density of Population (per sq km)	170
Decadal Growth Rate (1991–2001)	
Total	27.3
Rural	23.1
Urban	45.1
SC	25.0
ST	18.7

Health	2006
Population per Health Centre	7255
Rural Population Served per PHC	33590
Rural Population Served per SHC	6753
Total Fertility Rate	3.5

Gender	2001	
Gender Ratio	All	869
	Rural	868
	Urban	874
	SC	867
	ST	919
Workers Participation Rate-Female	29.7	
	2004–05	
Female Enrolment Rate (age 6–14)	96.5	

Habitat	2004
Urban Population Residing in Slum	29135
Ground Water Development (%)	57.2
Normal Rainfall (in mm)	994
Average Annual Rainfall (in mm)	893
Per Capita Forest Area (in Ha)	0.15

Basic Information 2001

Area (in sq. km)	8687
Total Inhabited Villages	1076
Total Habitations	1964
Forest Villages	0
Major Industrial Areas:	
<i>Chhatarpur</i>	

Literacy and Retention

Literacy-2001	SC	ST	All
All	42.3	29.1	53.3
Male	54.7	39.0	65.3
Female	27.7	18.1	39.3
Rural	39.4	27.9	47.4
Urban	56.4	47.6	73.2
Retention Rate (age 6–11) 2004–05			75.2

Primary School Infrastructure (2004–05)

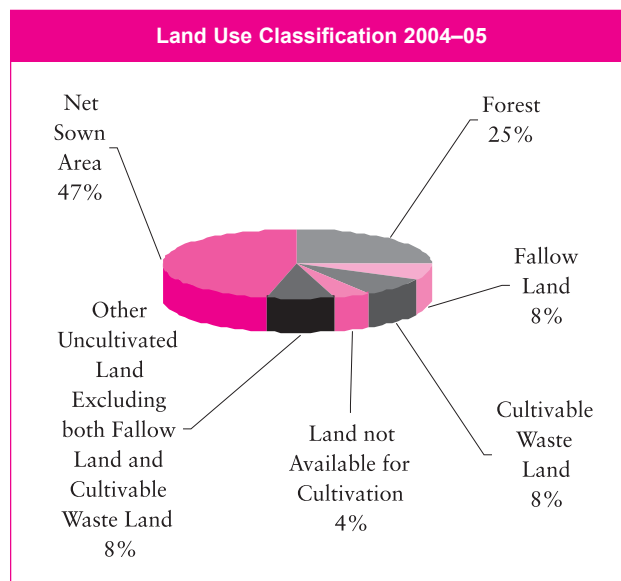
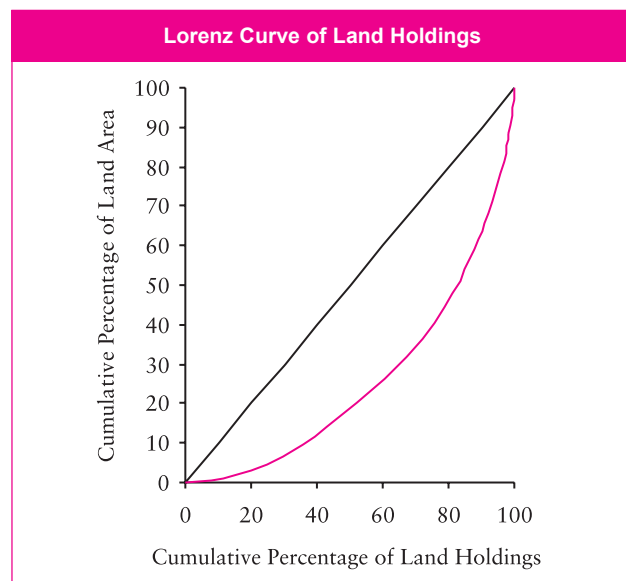
	Number	(%)
Number of Primary Schools	1895	100.0
With Own Building	1702	89.8
With Drinking Water Facility	1603	84.6
With Toilet Facility	500	26.4

Basic Amenities (in %) 1991 2001

Households with Safe Drinking Water	22.8	38.1
Households with Electricity	31.7	46.6
Households with Toilet	8.7	15.3
Households with All Three Facilities	4.9	8.3
Households Without Any of the Three Facilities	55.5	34.6
Villages Electrified	100.0	89.2

Infrastructure Facilities

Road Length per 100 sq.km (in Km)	2002–03	26.1
Rural Roads per Village (in Km)		1.2
Telephone per Lakh Population (BSNL)	Mar-05	1337
Population per Post Office		7188
Total Electricity Consumption per Consumer (in Kwh)	2003–04	3858
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	682
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	1089
Consumption per Industrial Unit (in Kwh)	2003–04	192320
Number of Registered Vehicles per Lakh Population	Mar-05	3534
Tractors per 10 Villages	2004	48.6
Average Land Holding Size (in Ha)	2000–01	2.1



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	235.4	191.8
Pulses (in Kgs)	77.1	88.2
Foodgrains (in Kgs)	312.5	280
Oilseeds (in Kgs)	30.6	22
Yield of Food Grains (in Kgs/Ha)	1273.0	1148.7

Credit

	2001
Households Availing Banking Services (in %)	26.2
Rural	30.9
Urban	47.0

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	46.3
% of Net Irrigated to Net Sown Area	2003-04	53.2
Cropped Area under Food Grains (in '000 Ha)	2003-04	377.3
Fertilizer Consumption (in Kgs/Ha)	2002-03	31.7
Cropping Intensity	2004-05	126.9
Net Area Sown (in '000 Ha)	2004-05	399.6
Gross Cropped Area (in '000 Ha)		507.0
Double Cropped Area to Net Area Sown	2004-05	26.9
Net Irrigated Area (in '000 Ha)	2003-04	206.3
Gross Irrigated Area (in '000 Ha)		206.3

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Bada-Malhera	32.11	3.41	3.32	4.58	3.02	47.21
Bijawar	26.19	2.19	4.03	7.75	2.18	42.93
Bakswaha	46.38	0.27	3.42	6.01	0.39	56.87
Gaurihar	33.43	3.86	3.32	11.30	8.61	61.71
Chhatarpur	37.03	0.67	1.62	4.66	1.43	46.02
Laundi	28.18	1.16	4.94	5.54	2.83	43.74
Nowgaon	23.71	2.37	4.69	2.77	3.46	37.88
Rajnagar	25.48	1.79	4.74	8.54	3.85	44.93

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Bada-Malhera	80.78	38.43	16.83	37.66	33.86	760
Bijawar	73.58	25.70	8.24	31.61	29.33	1138
Bakswaha	87.50	14.47	6.11	30.77	21.15	855
Gaurihar	59.52	35.45	14.22	29.97	32.95	916
Chhatarpur	80.24	19.76	9.83	47.78	21.56	1282
Laundi	78.94	30.52	21.79	36.61	29.29	1063
Nowgaon	68.87	31.73	27.40	24.61	16.73	861
Rajnagar	87.68	12.98	9.27	54.42	18.88	1052

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Bada-Malhera	3.90	22.54	38.30	69.77	79.07	28.21
Bijawar	2.94	16.91	22.22	41.56	68.83	13.16
Bakswaha	3.67	18.71	6.67	56.25	81.25	0.00
Gaurihar	2.99	11.61	40.98	40.00	74.00	16.00
Chhatarpur	4.07	23.70	25.00	88.89	86.11	70.00
Laundi	3.45	12.66	28.79	69.35	73.77	42.62
Nowgaon	3.12	20.54	44.23	84.31	82.35	48.00
Rajnagar	4.40	21.02	29.17	52.27	70.45	9.52

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Bada-Malhera	81	113	77.46	41.93	4.87	171	35.54	415
Bijawar	104	150	76.95	45.05	5.52	166	32.65	418
Bakswaha	76	106	88.23	23.18	5.67	177	36.36	272
Gaurihar	93	133	53.87	38.61	5.18	138	27.5	503
Chhatarpur	120	175	83.48	48	6.33	198	38	530
Laundi	122	178	72.78	51.04	5.55	158	29.63	352
Nowgaon	109	158	69.2	52.51	5.23	162	30.09	350
Rajnagar	98	140	83.03	56.27	5.3	164	35.24	487

Source: Centre for Population Studies, Administration Academy, Bhopal.

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)

Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Gaurihar	18.1	16.6	43.3	40.6	41.2	31.7	9.8	7.6	46.7
Laundi	34.0	26.1	72.7	27.6	25.6	37.3	12.3	5.3	46.0
Nowgaon	59.7	46.7	88.1	32.6	24.5	50.2	21.1	7.4	51.0
Chhatarpur	61.3	45.8	90.6	54.4	42.1	77.4	28.5	5.9	71.0
Rajnagar	50.0	46.5	72.4	36.4	35.2	43.9	12.0	7.2	42.0
Bada-Malhera	45.1	40.8	72.3	34.6	33.1	43.9	7.2	3.3	31.6
Bijawar	40.8	34.2	77.6	34.1	34.2	33.0	8.4	3.8	34.2

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)

Tehsil	All Three Facilities Available			None of the Facilities		
	Total	Rural	Urban	Total	Rural	Urban
Gaurihar	2.0	1.5	11.8	44.6	45.4	30.9
Laundi	5.0	0.8	25.3	47.1	52.3	21.4
Nowgaon	10.8	2.2	29.6	30.0	40.4	7.4
Chhatarpur	21.3	2.1	57.5	21.4	31.6	2.3
Rajnagar	4.6	1.8	22.0	31.5	33.8	16.4
Bada-Malhera	4.0	1.2	21.8	37.3	39.9	21.1
Bijawar	3.3	1.3	14.6	40.5	44.6	17.6

Households Availing Banking Services and Owning Specified Assets—2001

Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Gaurihar	11.1	27.5	6.7	0.6	42.5	3.1	0.6	48.3
Laundi	23.4	25.3	11.4	1.4	50.8	4.6	0.9	41.3
Nowgaon	39.2	29.8	25.7	4.0	67.1	10.4	1.3	25.2
Chhatarpur	30.6	26.7	30.6	7.3	70.0	14.2	1.9	21.6
Rajnagar	23.6	24.5	13.6	2.1	65.6	7.3	1.2	27.5
Bada-Malhera	23.9	19.0	9.8	1.0	46.2	3.9	0.6	46.9
Bijawar	23.9	20.0	11.2	1.3	41.5	3.9	0.8	50.2

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)

Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Gaurihar	12.7	87.1	0.2	0.2	0.0
Laundi	28.8	71.1	0.1	0.1	0.0
Nowgaon	51.9	47.6	0.5	0.4	0.1
Chhatarpur	50.8	48.7	0.5	0.3	0.2
Rajnagar	31.2	68.4	0.4	0.4	0.0
Bada-Malhera	48.7	51.1	0.2	0.2	0.0
Bijawar	56.4	42.3	1.3	0.9	0.4

CHHINDWARA



Demography	2001
Total Population	1849283
Share of Madhya Pradesh Population	3.1
Urban Population	452203
Population of Scheduled Castes	214201
Population of Scheduled Tribes	641421
Density of Population (per sq km)	157
Decadal Growth Rate (1991–2001)	
Total	17.9
Rural	15.8
Urban	24.8
SC	11.9
ST	18.6

Health	2006
Population per Health Centre	5116
Rural Population Served per PHC	22780
Rural Population Served per SHC	4743
Total Fertility Rate	3.5

Gender	2001	
Gender Ratio	All	952
	Rural	961
	Urban	925
	SC	937
	ST	989
Workers Participation Rate-Female	33.0	
	2004–05	
Female Enrolment Rate (age 6–14)	97.4	

Habitat	2004
Urban Population Residing in Slum	56010
Ground Water Development (%)	50.8
Normal Rainfall (in mm)	934
Average Annual Rainfall (in mm)	505
Per Capita Forest Area (in Ha)	0.26

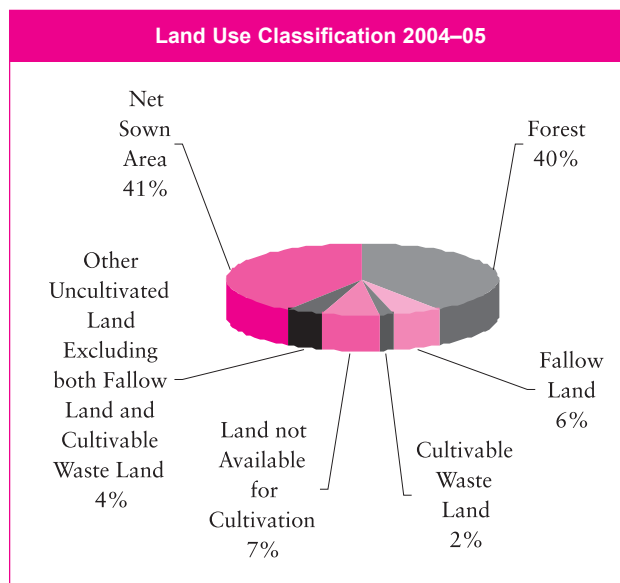
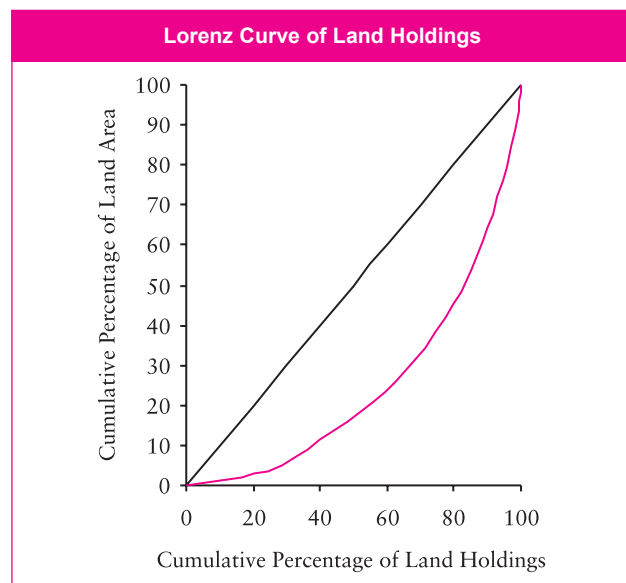
Basic Information	2001
Area (in sq. km)	11815
Total Inhabited Villages	1903
Total Habitations	4482
Forest Villages	49
Major Industrial Areas:	
<i>Chhindwara, Chaurai, Parasia</i>	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	71.8	48.7	65.8
Male	82.3	61.2	76.4
Female	60.6	36.1	54.6
Rural	69.1	47.3	60.5
Urban	77.7	65.8	81.3
Retention Rate (age 6–11) 2004–05			77.5

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	2732	100.0
With Own Building	2363	86.5
With Drinking Water Facility	660	24.2
With Toilet Facility	404	14.8

Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	56.9	73.3
Households with Electricity	66.3	84.6
Households with Toilet	14.1	20.8
Households with All Three Facilities	10.5	17.6
Households Without Any of the Three Facilities	18.4	6.9
Villages Electrified	100.0	95.6

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	18.8
Rural Roads per Village (in Km)		0.8
Telephone per Lakh Population (BSNL)	Mar-05	1953
Population per Post Office		7315
Total Electricity Consumption per Consumer (in Kwh)	2003–04	2040
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	527
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	902
Consumption per Industrial Unit (in Kwh)	2003–04	89206
Number of Registered Vehicles per Lakh Population	Mar-05	4513
Tractors per 10 Villages	2004	14.0
Average Land Holding Size (in Ha)	2000–01	2.2



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	198.6	262.2
Pulses (in Kgs)	45.0	43.3
Foodgrains (in Kgs)	243.6	305.5
Oilseeds (in Kgs)	66.8	108.7
Yield of Food Grains (in Kgs/Ha)	1143.0	1602.2

Credit

Households Availing Banking Services (in %)	2001
Total	32.3
Rural	25.3
Urban	54.5

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	40.9
% of Net Irrigated to Net Sown Area	2003-04	23.2
Cropped Area under Food Grains (in '000 Ha)	2003-04	364.4
Fertilizer Consumption (in Kgs/Ha)	2002-03	38.8
Cropping Intensity	2004-05	124.3
Net Area Sown (in '000 Ha)	2004-05	484.1
Gross Cropped Area (in '000 Ha)		601.5
Double Cropped Area to Net Area Sown	2004-05	24.3
Net Irrigated Area (in '000 Ha)	2003-04	112.4
Gross Irrigated Area (in '000 Ha)		121.5

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Amarwara	48.45	0.53	1.96	2.18	0.43	54.38
Bichhua	33.29	0.64	4.05	4.52	2.28	45.70
Chhindwara	48.39	1.06	4.56	3.69	1.25	60.17
Chaurai	43.08	0.68	4.10	4.96	1.71	55.96
Harrai	52.24	0.43	9.02	3.29	0.71	66.82
Junnardeo	45.69	0.89	4.25	6.43	0.78	58.75
Mohkheda	38.24	1.75	1.30	7.54	4.35	54.69
Pandhurna	22.53	0.23	4.82	4.69	12.49	44.85
Parasia	44.42	1.32	4.13	7.41	3.57	63.48
Sausar	44.97	1.55	12.43	6.43	1.20	76.35
Tamia	33.90	1.39	6.19	2.72	3.38	48.88

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetcac (%)	Maternal mortality ratio
Amarwada	82.86	21.77	15.93	38.40	46.81	840
Bichhua	53.52	55.71	11.43	7.14	13.04	791
Chhindwara	60.54	42.50	17.73	18.00	16.90	977
Chaurai	45.77	57.75	14.08	14.58	24.14	999
Harrai	78.65	30.89	18.97	24.12	26.02	649
Junnardeo	55.84	41.99	22.08	16.96	3.17	642
Mohkheda	54.58	48.71	26.57	19.25	11.11	594
Pandhurna	52.94	50.00	3.13	35.29	30.77	839
Parasia	37.25	51.76	29.80	10.16	5.98	663
Sausar	42.20	51.74	21.80	27.91	22.42	663
Tamia	50.36	48.55	16.30	11.87	10.55	767

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Amarwada	3.91	16.49	20.93	44.44	75.56	46.67
Bichhua	3.67	4.67	51.09	74.34	100.00	100.00
Chhindwara	4.03	13.16	66.67	89.66	100.00	78.57
Chaurai	5.72	15.22	17.39	87.50	100.00	30.43
Harrai	5.89	23.29	58.62	58.06	96.77	22.58
Junnardeo	7.54	18.54	45.45	57.14	85.71	14.71
Mohkheda	4.44	13.69	67.65	69.70	96.97	71.88
Pandhurna	8.00	14.75	20.00	60.00	100.00	50.00
Parasia	4.83	9.48	72.00	96.00	92.00	20.00
Sausar	1.32	8.04	80.65	89.66	100.00	20.00
Tamia	10.44	23.88	61.54	91.30	100.00	42.86

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Amarwada	90	120	69.24	41.38	4.5	140	28.12	1429
Bichhua	80	110	73.06	48.48	4.9	153	49.58	206
Chhindwara	110	150	62.24	43.48	4.48	120	23	1416
Chaurai	100	150	71.63	43.48	4.53	140	28.92	3224
Harrai	70	100	69.3	39.35	3.72	155	30.29	295
Junnardeo	80	100	66.57	32.44	4.05	129	26.1	253
Mohkheda	80	100	59.59	27.43	4.58	126	22.99	304
Pandhurna	70	100	71.09	36.84	4.97	139	26.78	471
Parasia	90	120	58.26	41.15	4.1	118	22	561
Sausar	80	110	45.95	43.35	5.42	140	25.34	943
Tamia	80	110	68.82	39.29	4.49	187	33.37	454

Source: Centre for Population Studies, Administration Academy, Bhopal

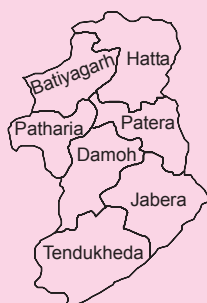
Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Tamia	71.4	71.4	0.0	54.5	54.5	0.0	4.3	4.3	0.0
Amarwara	74.6	73.4	87.7	75.9	74.9	85.9	8.0	3.9	50.7
Chaurai	81.6	80.9	89.6	72.8	71.4	90.9	11.7	7.9	59.8
Jamai	82.1	77.4	93.4	64.1	57.7	79.5	29.1	14.3	64.6
Parasia	85.4	80.4	91.4	73.6	68.4	79.8	29.2	10.2	51.9
Chhindwara	89.9	88.2	92.8	73.3	64.5	89.0	31.1	9.1	70.5
Sausar	89.7	90.1	88.7	81.9	81.8	82.4	20.3	14.1	40.2
Bichhua	89.4	89.4	0.0	70.9	70.9	0.0	7.4	7.4	0.0
Pandhurna	89.4	88.6	92.3	81.8	79.4	90.2	14.3	6.4	41.7

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)						
Tehsil	All Three Facilities Available			None of the Facilities		
	Total	Rural	Urban	Total	Rural	Urban
Tamia	3.1	3.1	0.0	16.0	16.0	0.0
Amarwara	6.7	2.7	48.3	10.7	11.3	4.5
Chaurai	10.1	6.6	54.8	7.0	7.4	1.2
Jamai	24.0	11.2	54.7	10.9	14.6	1.9
Parasia	24.5	8.6	43.6	6.3	9.6	2.3
Chhindwara	27.4	7.2	63.4	4.5	6.5	1.1
Sausar	15.7	11.6	28.5	3.0	3.4	1.6
Bichhua	5.5	5.5	0.0	4.8	4.8	0.0
Pandhurna	12.9	5.6	38.0	3.7	4.2	1.7

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Tamia	26.0	15.6	8.8	1.3	15.4	3.6	0.7	71.2
Amarwara	18.3	14.9	9.2	1.8	19.9	4.6	0.8	68.2
Chaurai	24.9	15.7	19.5	2.8	34.1	8.5	0.8	53.1
Jamai	38.5	16.6	30.8	3.4	30.7	9.9	1.2	51.5
Parasia	37.4	18.3	36.3	4.5	36.0	11.8	1.6	43.2
Chhindwara	41.9	22.9	36.2	9.4	49.7	17.6	2.1	35.9
Sausar	30.0	25.2	33.9	3.5	29.4	7.1	0.9	47.6
Bichhua	24.8	20.3	16.1	2.2	24.8	4.7	0.4	61.0
Pandhurna	29.6	23.1	23.5	3.3	25.9	6.0	1.0	54.6

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Tamia	13.4	82.8	3.8	2.5	1.3	
Amarwara	7.6	91.4	1.0	0.7	0.3	
Chaurai	15.3	80.2	4.5	3.6	0.9	
Jamai	31.0	66.6	2.4	1.9	0.4	
Parasia	35.9	63.3	0.7	0.6	0.1	
Chhindwara	34.0	63.4	2.6	2.1	0.5	
Sausar	31.6	65.3	3.2	1.5	1.6	
Bichhua	7.0	83.8	9.1	6.9	2.3	
Pandhurna	19.7	77.8	2.4	0.9	1.5	

D A M O H



Demography	2001
Total Population	1083949
Share of Madhya Pradesh Population	1.8
Urban Population	204351
Population of Scheduled Castes	211258
Population of Scheduled Tribes	136175
Density of Population (per sq km)	148
Decadal Growth Rate (1991–2001)	
Total	20.7
Rural	19.6
Urban	25.4
SC	17.1
ST	22.6

Health	2006
Population per Health Centre	6779
Rural Population Served per PHC	96211
Rural Population Served per SHC	5939
Total Fertility Rate	4.0

Gender	2001	
Gender Ratio	All	901
	Rural	901
	Urban	900
	SC	882
	ST	950
Workers Participation Rate-Female	35.8	
	2004–05	
Female Enrolment Rate (age 6–14)	98.7	

Habitat	2004
Urban Population Residing in Slum	38391
Ground Water Development (%)	57.6
Normal Rainfall (in mm)	1090
Average Annual Rainfall (in mm)	992
Per Capita Forest Area (in Ha)	0.25

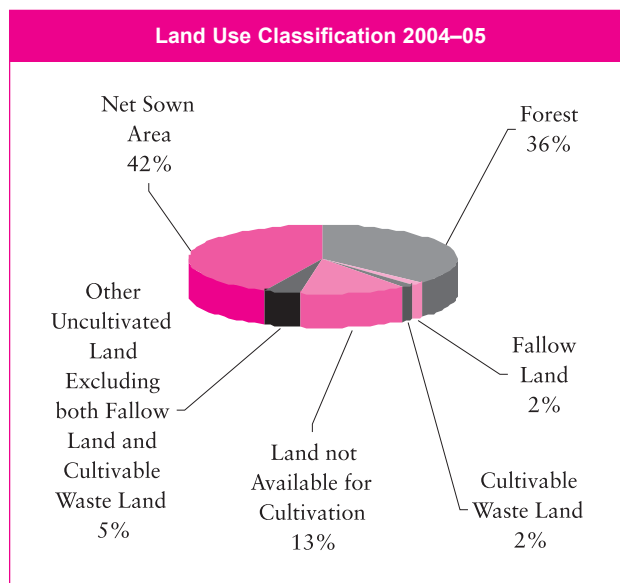
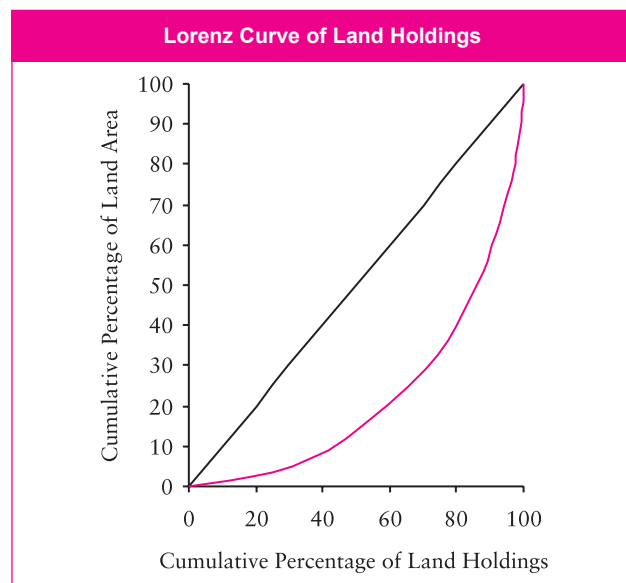
Basic Information	2001
Area (in sq. km)	7306
Total Inhabited Villages	1205
Total Habitations	1450
Forest Villages	1
Major Industrial Areas:	
<i>Damoh</i>	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	52.2	41.4	61.8
Male	65.8	54.4	74.7
Female	36.7	27.6	47.3
Rural	48.4	40.7	57.1
Urban	68.3	60.1	80.9
Retention Rate (age 6–11) 2004–05			72.7

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	1417	100.0
With Own Building	1317	92.9
With Drinking Water Facility	932	65.8
With Toilet Facility	668	47.1

Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	38.4	55.7
Households with Electricity	36.1	64.7
Households with Toilet	10.1	13.9
Households with All Three Facilities	6.6	9.9
Households Without Any of the Three Facilities	43.7	18.8
Villages Electrified	99.7	80.7

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	21.7
Rural Roads per Village (in Km)		0.7
Telephone per Lakh Population (BSNL)	Mar-05	1285
Population per Post Office		7259
Total Electricity Consumption per Consumer (in Kwh)	2003–04	1849
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	464
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	712
Consumption per Industrial Unit (in Kwh)	2003–04	85478
Number of Registered Vehicles per Lakh Population	Mar-05	2978
Tractors per 10 Villages	2004	30.6
Average Land Holding Size (in Ha)	2000–01	2.0



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	171.4	132.7
Pulses (in Kgs)	67.3	142.4
Foodgrains (in Kgs)	238.7	275.0
Oilseeds (in Kgs)	50.2	32.5
Yield of Food Grains (in Kgs/Ha)	876.0	905.2

Credit

	2001
Households Availing Banking Services (in %)	2001
Total	22.8
Rural	19.3
Urban	40.2

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	42.6
% of Net Irrigated to Net Sown Area	2003-04	32.7
Cropped Area under Food Grains (in '000 Ha)	2003-04	342.0
Fertilizer Consumption (in Kgs/Ha)	2002-03	25.1
Cropping Intensity	2004-05	128.9
Net Area Sown (in '000 Ha)	2004-05	310.9
Gross Cropped Area (in '000 Ha)		400.4
Double Cropped Area to Net Area Sown	2004-05	28.9
Net Irrigated Area (in '000 Ha)	2003-04	100.9
Gross Irrigated Area (in '000 Ha)		102.8

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Batiyagarh	30.35	0.54	6.49	4.12	0.40	42.36
Damoh	37.46	1.52	5.10	8.47	0.94	55.71
Hatta	40.91	0.32	4.60	9.06	0.58	55.95
Jabera	47.93	1.71	7.14	7.19	1.10	66.45
Patera	42.11	1.15	3.96	5.75	1.04	54.78
Patharia	46.47	0.44	4.84	9.80	0.41	62.23
Tendukheda	36.06	1.69	6.39	9.30	1.07	55.20

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Batiyagarh	64.44	35.16	13.68	29.77	42.95	812
Damoh	46.38	55.08	8.43	29.12	36.04	1190
Hatta	88.64	15.29	11.98	46.18	44.17	1120
Jabera	78.11	24.87	21.97	43.54	59.04	731
Patera	85.21	17.93	4.04	55.88	52.76	1258
Patharia	81.90	17.37	12.54	32.02	44.15	870
Tendukheda	75.56	24.49	23.03	42.87	45.03	753

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Batiyagarh	2.51	15.64	43.64	74.00	76.00	8.00
Damoh	5.67	18.17	43.27	63.95	81.61	9.52
Hatta	3.42	20.68	47.76	68.18	86.36	4.55
Jabera	3.51	23.63	14.58	61.96	79.35	14.44
Patera	6.13	16.30	10.42	40.00	75.00	12.50
Patharia	5.33	16.13	17.65	39.02	85.37	5.00
Tendukheda	5.87	22.28	10.45	58.21	61.19	26.98

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Batiyagarh	82	115	90.33	56.04	4.75	115	20.98	403
Damoh	109	158	68.67	34.01	4.56	152	34.46	254
Hatta	109	159	85.35	39.17	4.53	129	25.25	504
Jabera	85	120	87.75	38.9	4.35	124	25.53	335
Patera	107	155	76.76	43.75	4.84	120	26.58	346
Patharia	86	121	87.86	32.18	4.64	129	25.32	356
Tendukheda	89	127	75.06	51.18	4.6	132	26.01	229

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Hatta	61.4	54.2	92.5	65.4	59.9	88.7	15.3	5.5	57.0
Patera	52.7	52.7	0.0	59.0	59.0	0.0	7.5	7.5	0.0
Batiyagarh	59.5	59.5	0.0	57.6	57.6	0.0	5.7	5.7	0.0
Patharia	71.8	69.7	89.1	66.8	65.6	77.4	12.5	8.4	47.5
Damoh	77.2	66.4	90.9	52.6	41.7	66.3	26.8	4.7	54.6
Jabera	61.2	61.2	0.0	48.5	48.5	0.0	5.9	5.9	0.0
Tendukheda	51.5	49.2	78.0	44.3	40.4	88.9	6.9	4.3	36.2

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Hatta	13.1	3.8	52.7	16.0	19.4	1.8	
Patera	4.8	4.8	0.0	21.8	21.8	0.0	
Batiyagarh	4.3	4.3	0.0	21.1	21.1	0.0	
Patharia	9.1	5.9	36.2	10.9	11.9	1.9	
Damoh	18.3	2.6	38.2	14.3	23.1	3.3	
Jabera	4.4	4.4	0.0	23.3	23.3	0.0	
Tendukheda	4.5	2.0	32.1	30.3	32.7	2.6	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Hatta	25.8	20.6	16.8	2.5	44.0	7.2	0.8	47.4
Patera	21.1	15.6	10.9	1.2	33.0	3.2	0.5	59.3
Batiyagarh	22.0	15.2	13.1	1.3	26.3	3.0	0.5	63.3
Patharia	28.1	19.0	25.6	2.1	40.1	6.1	0.8	47.6
Damoh	26.9	19.8	33.4	5.9	49.4	10.9	1.4	40.0
Jabera	12.5	13.1	11.3	0.7	22.6	3.0	0.3	68.1
Tendukheda	18.8	15.2	10.0	1.0	29.6	2.7	0.4	62.2

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Hatta	53.0	45.8	1.1	0.4	0.7	
Patera	37.5	61.8	0.7	0.5	0.2	
Batiyagarh	64.9	33.6	1.5	0.6	0.9	
Patharia	67.0	32.4	0.6	0.4	0.2	
Damoh	60.5	38.2	1.3	1.0	0.3	
Jabera	61.5	38.2	0.3	0.1	0.2	
Tendukheda	83.0	16.7	0.3	0.2	0.1	

DATIA



Demography	2001
Total Population	628240
Share of Madhya Pradesh Population	1.0
Urban Population	137549
Population of Scheduled Castes	156732
Population of Scheduled Tribes	9977
Density of Population (per sq km)	233
Decadal Growth Rate (1991–2001)	
Total	21.9
Rural	19.7
Urban	30.5
SC	22.4
ST	31.2

Health	2006
Population per Health Centre	6936
Rural Population Served per PHC	48801
Rural Population Served per SHC	6710
Total Fertility Rate	4.0

Gender	2001	
Gender Ratio	All	857
	Rural	854
	Urban	870
	SC	848
	ST	910
Workers Participation Rate-Female	43.2	
	2004–05	
Female Enrolment Rate (age 6–14)	98.0	

Habitat	2004
Urban Population Residing in Slum	19343
Ground Water Development (%)	44.3
Normal Rainfall (in mm)	742
Average Annual Rainfall (in mm)	581
Per Capita Forest Area (in Ha)	0.04

Basic Information 2001

Area (in sq. km)	2691
Total Inhabited Villages	542
Total Habitations	1079
Forest Villages	0
Major Industrial Areas:	
<i>Datia</i>	

Literacy and Retention

Literacy-2001	SC	ST	All
All	67.9	40.4	71.8
Male	82.3	50.3	84.3
Female	50.9	29.6	57.2
Rural	67.3	37.3	70.0
Urban	71.3	55.4	78.3
Retention Rate (age 6–11) 2004–05			79.5

Primary School Infrastructure (2004–05)

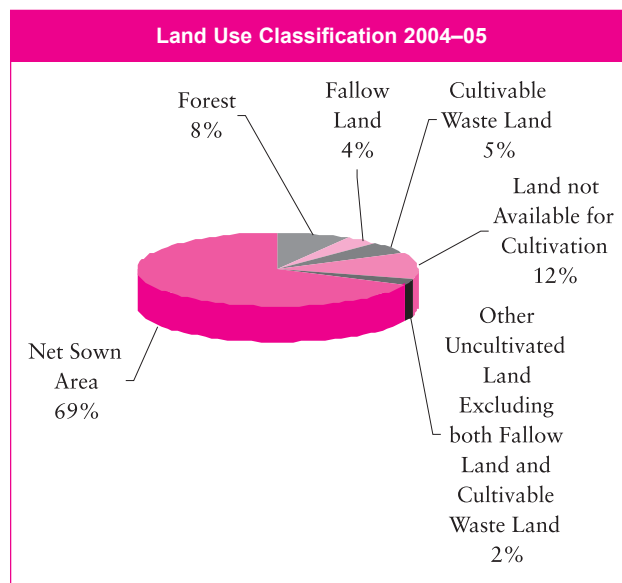
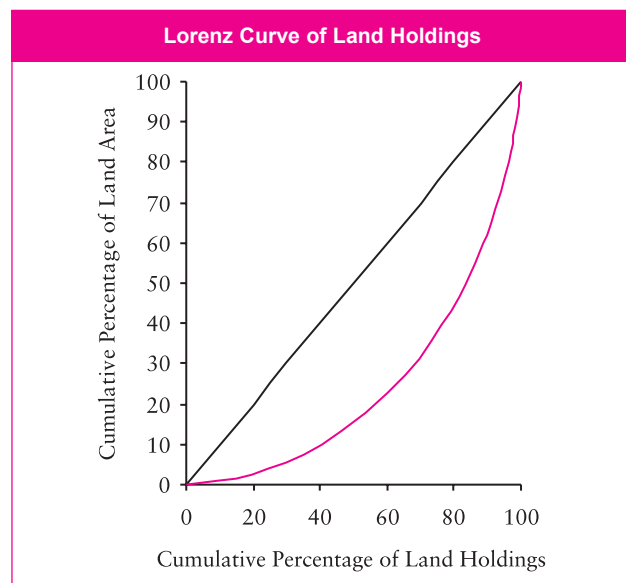
	Number	(%)
Number of Primary Schools	828	100.0
With Own Building	759	91.7
With Drinking Water Facility	639	77.2
With Toilet Facility	118	14.3

Basic Amenities (%) 1991 2001

Households with Safe Drinking Water	57.1	68.1
Households with Electricity	52.2	67.4
Households with Toilet	16.4	21.4
Households with All Three Facilities	12.7	16.3
Households Without Any of the Three Facilities	24.2	12.3
Villages Electrified	100.0	94.9

Infrastructure Facilities

Road Length per 100 sq.km (in Km)	2002–03	28.2
Rural Roads per Village (in Km)		0.6
Telephone per Lakh Population (BSNL)	Mar-05	1571
Population per Post Office		7158
Total Electricity Consumption per Consumer (in Kwh)	2003–04	44.75
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	533
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	834
Consumption per Industrial Unit (in Kwh)	2003–04	130792
Number of Registered Vehicles per Lakh Population	Mar-05	3908
Tractors per 10 Villages	2004	96.0
Average Land Holding Size (in Ha)	2000–01	2.1



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	259.6	302.4
Pulses (in Kgs)	145.0	153.8
Foodgrains (in Kgs)	404.6	456.2
Oilseeds (in Kgs)	25.4	24.1
Yield of Food Grains (in Kgs/Ha)	1386.0	1442.7

Credit

	2001
Households Availing Banking Services (in %)	2001
Total	28.3
Rural	23.2
Urban	48.4

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	68.1
% of Net Irrigated to Net Sown Area	2003-04	56.8
Cropped Area under Food Grains (in '000 Ha)	2003-04	206.7
Fertilizer Consumption (in Kgs/Ha)	2002-03	43.5
Cropping Intensity	2004-05	116.1
Net Area Sown (in '000 Ha)	2004-05	201.4
Gross Cropped Area (in '000 Ha)		233.7
Double Cropped Area to Net Area Sown	2004-05	16.1
Net Irrigated Area (in '000 Ha)	2003-04	113.2
Gross Irrigated Area (in '000 Ha)		114.7

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Datia	46.82	1.49	2.76	5.03	1.61	59.68
Bhander	45.79	1.58	3.06	3.30	1.14	56.39
Sewda	38.30	4.86	6.55	4.58	3.14	63.64

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Datia	65.76	33.81	21.55	40.09	21.44	888
Bhander	90.68	39.22	9.27	42.61	39.32	788
Sewda	51.28	40.29	12.09	33.72	32.18	835

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Datia	2.40	26.17	42.86	68.48	95.70	33.33
Bhander	4.32	22.34	23.81	73.68	84.21	21.05
Sewda	2.57	29.27	41.38	87.50	93.75	68.75

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Datia	102	147	72.94	49.5	4.7	119	21.18	565
Bhander	74	102	82.77	42.72	3.73	110	22.89	488
Sewda	82	115	72.01	51.5	4.75	137	26.54	552

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Seondha	61.8	58.1	82.2	75.3	72.2	92.3	16.8	10.7	50.4
Datia	74.1	73.5	80.7	62.5	60.6	82.1	15.5	11.4	57.2
Bhander	65.6	50.0	90.4	67.0	58.7	80.2	32.6	10.2	68.3

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)						
Tehsil	All Three Facilities Available			None of the Facilities		
	Total	Rural	Urban	Total	Rural	Urban
Seondha	11.8	5.6	45.9	12.0	13.6	2.9
Datia	10.7	6.7	50.9	10.9	11.3	7.2
Bhander	27.3	4.8	63.2	14.2	20.0	5.0

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Seondha	24.1	16.9	27.8	3.3	31.4	5.6	1.0	50.7
Datia	27.1	16.7	29.1	3.1	54.3	7.6	0.9	34.5
Bhander	34.1	24.3	40.2	9.4	47.9	13.3	1.3	35.8

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Seondha	61.2	38.3	0.6	0.4	0.2
Datia	70.8	28.4	0.8	0.6	0.2
Bhander	65.4	34.2	0.4	0.4	0.0

DEWAS



Demography	2001
Total Population	1308223
Share of Madhya Pradesh Population	2.2
Urban Population	358347
Population of Scheduled Castes	238934
Population of Scheduled Tribes	215151
Density of Population (per sq km)	186
Decadal Growth Rate (1991–2001)	
Total	26.5
Rural	24.0
Urban	33.9
SC	27.3
ST	38.4

Health	2006
Population per Health Centre	6787
Rural Population Served per PHC	45985
Rural Population Served per SHC	5509
Total Fertility Rate	3.8

Gender	2001	
Gender Ratio	All	930
	Rural	934
	Urban	918
	SC	928
	ST	955
Workers Participation Rate-Female	36.4	
	2004–05	
Female Enrolment Rate (age 6–14)	93.6	

Habitat	2004
Urban Population Residing in Slum	49309
Ground Water Development (%)	66.4
Normal Rainfall (in mm)	975
Average Annual Rainfall (in mm)	658
Per Capita Forest Area (in Ha)	0.16

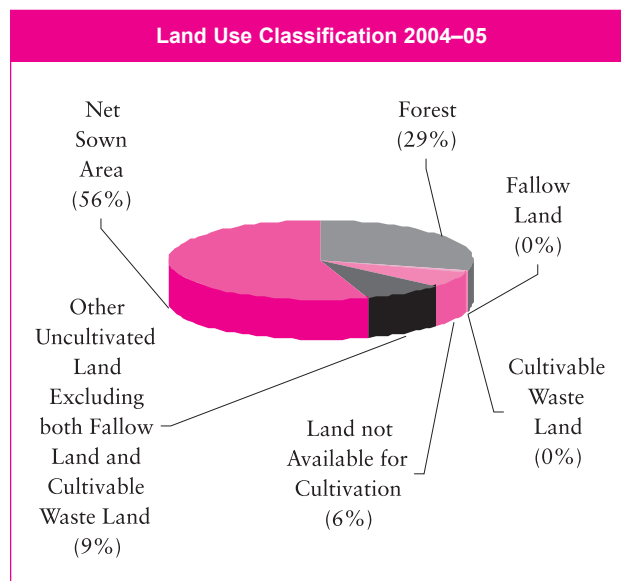
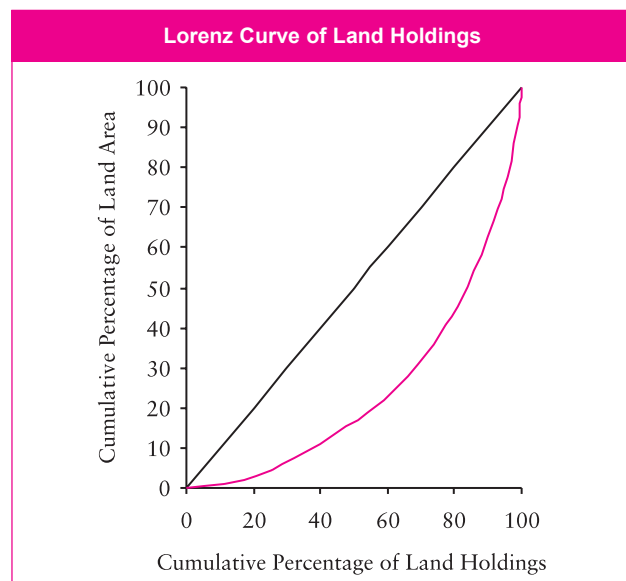
Basic Information	2001
Area (in sq. km)	7020
Total Inhabited Villages	1058
Total Habitations	1513
Forest Villages	19
Major Industrial Areas:	
<i>Dewas, Bagli</i>	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	53.5	32.8	60.9
Male	69.8	45.5	75.7
Female	35.9	19.5	45.0
Rural	50.0	31.2	54.6
Urban	65.1	47.4	77.1
Retention Rate (age 6–11) 2004–05			68.4

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	1491	100.0
With Own Building	1430	95.9
With Drinking Water Facility	1386	93.0
With Toilet Facility	760	51.0

Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	65.1	79.1
Households with Electricity	65.0	89.1
Households with Toilet	20.3	28.3
Households with All Three Facilities	15.8	24.5
Households Without Any of the Three Facilities	15.3	2.9
Villages Electrified	98.7	92.9

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	16.6
Rural Roads per Village (in Km)		0.7
Telephone per Lakh Population (BSNL)	Mar-05	2318
Population per Post Office		8357
Total Electricity Consumption per Consumer (in Kwh)	2003–04	2743
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	743
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	866
Consumption per Industrial Unit (in Kwh)	2003–04	74261
Number of Registered Vehicles per Lakh Population	Mar-05	4718
Tractors per 10 Villages	2004	39.8
Average Land Holding Size (in Ha)	2000–01	2.9



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	247.3	202.2
Pulses (in Kgs)	84.9	66.6
Foodgrains (in Kgs)	332.2	268.8
Oilseeds (in Kgs)	258.9	281.2
Yield of Food Grains (in Kgs/Ha)	1661.0	1614.4

Credit

	2001
Households Availing Banking Services (in %)	
Total	30.4
Rural	23.9
Urban	47.3

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	54.9
% of Net Irrigated to Net Sown Area	2003-04	40.1
Cropped Area under Food Grains (in '000 Ha)	2003-04	228.3
Fertilizer Consumption (in Kgs/Ha)	2002-03	45.2
Cropping Intensity	2004-05	151.9
Net Area Sown (in '000 Ha)	2004-05	384.9
Gross Cropped Area (in '000 Ha)		584.6
Double Cropped Area to Net Area Sown	2004-05	51.9
Net Irrigated Area (in '000 Ha)	2003-04	154.3
Gross Irrigated Area (in '000 Ha)		154.4

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Bagli	35.36	1.60	4.53	3.27	0.11	62.90
Dewas	17.77	6.21	6.99	7.41	1.19	49.09
Kannod	28.59	3.82	7.99	7.11	0.64	64.26
Khategaon	23.74	5.00	6.59	5.92	0.48	50.12
Sonkatch	16.17	6.62	6.48	2.76	1.16	44.02
Tonkkhurd	11.15	7.08	6.84	3.09	1.37	42.64

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Bagli	21.12	47.10	21.51	23.04	51.39	577
Dewas	50.88	42.34	32.13	25.94	26.00	488
Kannod	5.87	46.73	39.90	25.25	44.99	584
Khategaon	20.07	50.00	33.64	24.18	36.24	679
Sonkatch	47.68	47.98	23.70	24.15	28.11	624
Tonkkhurd	47.01	47.46	20.97	27.89	22.17	582

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Bagali	4.97	45.67	0.00	100.00	100.00	0.00
Dewas	4.64	43.88	64.00	98.00	98.00	2.00
Kannod	5.68	47.63	0.00	100.00	100.00	0.00
Khategaon	3.96	53.38	0.00	100.00	100.00	4.17
Sonkatch	7.60	48.11	56.34	100.00	98.59	0.00
Tonkkhurd	3.50	44.05	78.26	97.83	97.83	2.27

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Bagli	67	92	90.54	40.85	6.83	145	20.82	386
Dewas	68	93	89.16	45.76	5.76	130	20.06	328
Kannod	92	131	19.55	66.79	5.73	126	22.48	532
Khategaon	96	138	42.94	65.26	5.08	142	21.25	578
Sonkatch	75	104	86.9	50.68	5.8	127	21.86	473
Tonkkhurd	67	91	81.13	68.71	5.09	108	24.52	308

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Tonk Khurd	95.6	95.6	0.0	80.2	80.2	0.0	12.4	12.4	0.0
Sonkatch	77.4	74.0	95.9	85.3	83.0	97.3	20.1	11.3	67.7
Dewas	94.3	90.6	97.2	92.0	87.5	95.6	50.4	16.7	76.8
Kannod	87.2	85.3	94.0	65.4	64.4	68.9	17.5	9.8	45.7
Bagli	89.2	88.8	91.7	69.6	69.5	70.2	18.9	13.7	49.9
Khategaon	83.1	81.7	91.8	69.3	65.3	93.1	17.1	9.9	60.6

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Tonk Khurd	10.3	10.3	0.0	0.8	0.8	0.0	
Sonkatch	17.3	8.1	66.7	3.4	4.0	0.2	
Dewas	47.5	14.0	73.8	0.6	1.1	0.2	
Kannod	11.3	5.2	33.9	4.4	5.2	1.5	
Bagli	14.2	9.9	40.2	4.3	4.5	3.3	
Khategaon	13.5	6.1	57.6	6.3	7.1	1.2	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/ Transistor	Television	Telephone	Bicycle	Scooter/ Motor Cycle/ Moped	Car/ Jeep/ Van	None of the Specified Assets
Tonk Khurd	29.2	16.0	36.2	3.8	39.3	8.6	1.4	42.2
Sonkatch	29.9	13.9	36.9	4.5	36.1	8.2	1.1	44.9
Dewas	43.1	30.1	64.2	14.6	61.5	24.6	3.0	19.4
Kannod	22.7	15.4	21.7	2.9	34.3	7.1	0.9	52.4
Bagli	21.2	17.3	34.5	4.4	36.0	10.5	1.3	45.4
Khategaon	21.7	16.5	25.3	3.6	31.1	6.8	0.9	53.0

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Tonk Khurd	36.4	63.2	0.5	0.4	0.1
Sonkatch	37.1	61.6	1.4	0.3	1.0
Dewas	55.7	42.7	1.6	0.8	0.9
Kannod	33.6	60.2	6.2	1.3	5.0
Bagli	34.3	63.0	2.7	0.9	1.8
Khategaon	43.8	48.4	7.8	1.8	6.0

DHAR



Demography	2001
Total Population	1740329
Share of Madhya Pradesh Population	2.9
Urban Population	288184
Population of Scheduled Castes	112976
Population of Scheduled Tribes	948434
Density of Population (per sq km)	213
Decadal Growth Rate (1991–2001)	
Total	27.3
Rural	22.3
Urban	60.4
SC	19.1
ST	29.7

Health	2006
Population per Health Centre	4363
Rural Population Served per PHC	33452
Rural Population Served per SHC	4014
Total Fertility Rate	4.1

Gender	2001	
Gender Ratio	All	955
	Rural	971
	Urban	875
	SC	953
	ST	981
Workers Participation Rate-Female	40.5	
	2004–05	
Female Enrolment Rate (age 6–14)	92.5	

Habitat	2004
Urban Population Residing in Slum	23819
Ground Water Development (%)	99.4
Normal Rainfall (in mm)	880
Average Annual Rainfall (in mm)	874
Per Capita Forest Area (in Ha)	0.07

Basic Information	2001
Area (in sq. km)	8153
Total Inhabited Villages	1487
Total Habitations	6322
Forest Villages	14
Major Industrial Areas:	
<i>Nalchha, Sardarpur, Dhar, Kukshi</i>	

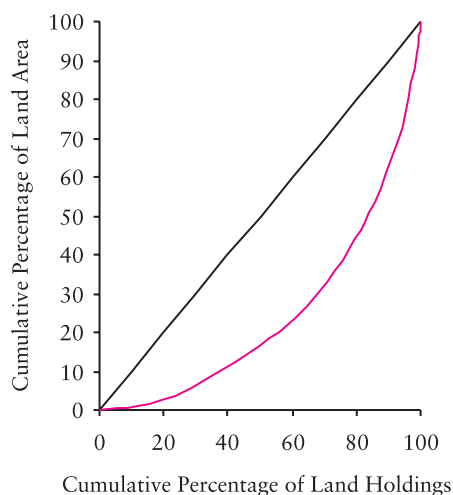
Literacy and Retention			
Literacy-2001	SC	ST	All
All	54.4	36.7	52.5
Male	71.0	49.0	65.7
Female	37.0	24.2	38.6
Rural	51.5	36.0	47.8
Urban	65.4	48.5	75.0
Retention Rate (age 6–11) 2004–05			86.1

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	3212	100.0
With Own Building	2916	90.8
With Drinking Water Facility	1767	55.0
With Toilet Facility	596	18.6

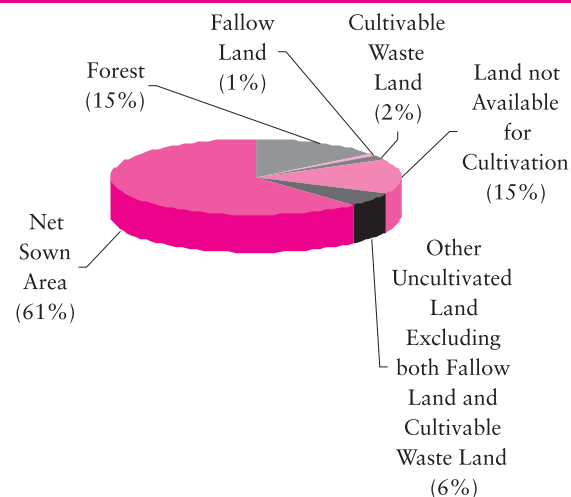
Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	73.0	81.8
Households with Electricity	59.2	82.8
Households with Toilet	14.4	23.0
Households with All Three Facilities	12.6	20.9
Households Without Any of the Three Facilities	15.3	5.2
Villages Electrified	99.7	94.1

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	25.5
Rural Roads per Village (in Km)		0.8
Telephone per Lakh Population (BSNL)	Mar-05	1962
Population per Post Office		8832
Total Electricity Consumption per Consumer (in Kwh)	2003–04	4064
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	593
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	902
Consumption per Industrial Unit (in Kwh)	2003–04	140663
Number of Registered Vehicles per Lakh Population	Mar-05	4037
Tractors per 10 Villages	2004	46.3
Average Land Holding Size (in Ha)	2000–01	2.8

Lorenz Curve of Land Holdings



Land Use Classification 2004–05



Per Capita Agriculture Production

	1998–99	2003–04
Cereals (in Kgs)	271.7	298.6
Pulses (in Kgs)	32.0	16.1
Foodgrains (in Kgs)	303.7	314.8
Oilseeds (in Kgs)	168.2	145.8
Yield of Food Grains (in Kgs/Ha)	1431.0	1757.1

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004–05	61.8
% of Net Irrigated to Net Sown Area	2003–04	42.9
Cropped Area under Food Grains (in '000 Ha)	2003–04	327.2
Fertilizer Consumption (in Kgs/Ha)	2002–03	63.2
Cropping Intensity	2004–05	140.4
Net Area Sown (in '000 Ha)	2004–05	506.1
Gross Cropped Area (in '000 Ha)		710.6
Double Cropped Area to Net Area Sown	2004–05	40.4
Net Irrigated Area (in '000 Ha)	2003–04	217.1
Gross Irrigated Area (in '000 Ha)		217.1

Credit

Households Availing Banking Services (in %)	2001
Total	31.7
Rural	30.0
Urban	39.6

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Bagh	32.46	9.88	2.75	1.69	1.71	50.73
Badnawar	35.34	1.57	2.18	1.97	0.32	43.19
Dahi	27.68	3.01	3.01	1.41	0.87	39.89
Dhar	20.02	1.55	2.98	4.97	1.21	31.61
Dharamपुरi	52.02	2.70	9.94	7.35	0.87	73.48
Gandhwani	31.59	2.92	2.31	2.21	2.43	43.47
Kukshi	45.63	8.27	2.18	5.70	2.59	65.64
Manawar	55.18	0.49	7.69	4.36	0.80	68.72
Nalchha	33.63	7.40	4.79	6.80	3.66	60.32
Tirla	36.33	8.00	8.63	4.84	1.22	65.16
Umarban	49.57	4.18	6.19	5.96	1.31	68.74
Nisarpur	49.92	8.62	4.61	4.97	1.76	71.15
Sardarpur	63.65	0.90	3.43	3.71	0.09	71.85

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Bagh	32.17	56.99	18.97	19.16	51.31	658
Badnawar	47.73	50.30	28.80	16.44	27.38	588
Dahi	42.13	56.63	23.47	12.69	30.18	601
Dhar	92.85	88.41	6.93	84.56	31.53	980
Dharamपुरi	63.33	39.38	35.70	10.09	15.35	487
Gandhwani	37.72	61.09	13.74	13.24	37.07	740
Kukshi	63.75	37.71	27.65	42.13	27.29	784
Manawar	88.89	27.39	11.27	43.99	40.23	698
Nalchha	39.68	57.46	12.28	24.87	41.33	1219
Tirla	31.13	68.68	5.82	11.29	68.26	929
Umarban	65.35	39.85	33.22	20.09	8.32	559
Nisarpur	46.39	48.28	40.00	17.77	11.75	446
Sardarpur	59.35	38.64	22.41	8.44	8.42	603

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Bagh	9.03	21.31	12.12	93.94	96.97	3.03
Badnawar	6.43	19.98	64.71	74.51	72.55	15.69
Dahi	3.44	18.44	66.67	100.00	100.00	16.67
Dhar	5.04	19.04	19.75	80.60	74.63	14.49
Dharamपुरi	1.54	15.49	50.98	94.74	94.74	94.74
Gandhwani	8.94	16.69	21.57	69.57	76.09	0.00
Kukshi	3.43	14.24	51.28	80.00	86.67	65.52
Manawar	3.93	12.90	57.14	28.57	94.29	85.71
Nalchha	6.95	20.72	13.33	75.47	84.91	15.38
Tirla	12.59	15.90	11.36	67.07	68.67	7.23
Umarban	4.55	18.68	29.55	81.40	83.72	37.50
Nisarpur	2.95	13.36	38.89	66.67	73.33	58.62
Sardarpur	5.73	24.56	75.31	90.48	95.24	57.14

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Bagh	73	101	74.15	49.81	5.19	173	32.1	211
Badnawar	77	108	74.5	42.86	5.16	148	27.52	488
Dahi	72	100	76.27	49.19	5.69	169	30.02	373
Dhar	88	124	89.34	46.87	4.19	114	24.17	266
Dharamपुरi	72	99	44.69	28.19	3.61	129	29.2	269
Gandhwani	75	104	73.1	40.76	5.82	181	33.63	531
Kukshi	100	144	68.43	42.79	4.76	132	25.58	370
Manawar	68	94	57.43	43.11	3.79	111	23.15	521
Nalchha	119	174	65.02	49.05	5.91	173	31.33	272
Tirla	82	115	55.78	46.32	5.77	205	35.51	169
Umarban	79	110	54.67	41.97	4.32	126	26.13	442
Nisarpur	71	98	56.33	34.37	3.78	130	28.66	190
Sardarpur	71	98	79.96	27.32	4.65	149	29.54	575

Source: Centre for Population Studies, Administration Academy, Bhopal

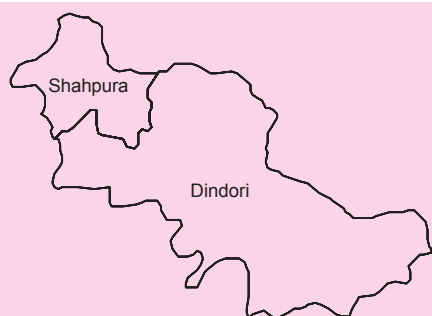
Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Badnawar	90.2	89.6	96.0	92.9	92.4	97.6	25.5	21.6	65.3
Sardarpur	83.8	82.9	92.4	82.6	81.2	96.0	17.4	13.0	60.3
Dhar	86.9	82.3	94.0	87.6	87.9	86.9	38.0	16.7	71.5
Gandhwani	63.7	63.7	0.0	65.4	65.4	0.0	7.2	7.2	0.0
Kukshi	69.5	67.2	92.9	76.1	75.1	87.0	15.7	11.1	63.8
Manawar	93.5	92.9	98.4	77.4	75.8	91.5	16.8	10.7	71.1
Dharampuri	85.9	83.1	94.7	81.3	77.5	93.1	23.5	13.7	53.0

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Badnawar	24.3	20.6	62.8	1.9	2.0	0.1	
Sardarpur	15.7	11.3	58.3	4.7	5.1	0.7	
Dhar	34.0	15.4	63.3	2.7	3.6	1.3	
Gandhwani	6.2	6.2	0.0	13.8	13.8	0.0	
Kukshi	14.5	10.0	60.7	10.0	10.7	3.1	
Manawar	14.9	9.0	67.1	2.1	2.3	0.2	
Dharampuri	22.1	12.3	51.8	5.6	6.9	1.8	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Badnawar	34.6	18.1	37.3	7.3	41.9	16.9	1.7	37.2
Sardarpur	42.7	19.4	24.8	6.1	35.0	10.9	2.4	47.1
Dhar	36.7	23.4	42.9	9.8	39.1	17.2	2.4	37.8
Gandhwani	17.6	13.6	7.9	1.9	21.5	4.9	1.2	66.7
Kukshi	25.2	14.3	15.1	2.7	26.8	8.4	1.2	59.8
Manawar	30.3	16.7	21.9	2.7	44.2	12.0	1.4	39.9
Dharampuri	30.3	17.1	31.5	5.7	36.5	13.4	2.0	44.8

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Badnawar	30.7	67.1	2.2	1.7	0.6
Sardarpur	41.9	57.1	1.1	0.8	0.3
Dhar	45.3	52.1	2.6	1.4	1.2
Gandhwani	41.4	56.9	1.7	1.3	0.4
Kukshi	45.8	53.0	1.3	0.6	0.6
Manawar	32.2	66.3	1.6	0.9	0.6
Dharampuri	37.1	61.4	1.5	0.7	0.8

DINDORI



Demography	2001
Total Population	580730
Share of Madhya Pradesh Population	1.0
Urban Population	26870
Population of Scheduled Castes	33848
Population of Scheduled Tribes	374447
Density of Population (per sq km)	78
Decadal Growth Rate (1991–2001)	
Total	11.8
Rural	12.8
Urban	16.3
SC	1.5
ST	14.7

Health	2006
Population per Health Centre	3333
Rural Population Served per PHC	23505
Rural Population Served per SHC	3252
Total Fertility Rate	3.2

Gender	2001	
Gender Ratio	All	991
	Rural	993
	Urban	945
	SC	944
	ST	1011
Workers Participation Rate-Female	55.0	
	2004–05	
Female Enrolment Rate (age 6–14)	102.4	

Habitat	2004
Urban Population Residing in Slum	na
Ground Water Development (%)	7.8
Normal Rainfall (in mm)	1344
Average Annual Rainfall (in mm)	1148
Per Capita Forest Area (in Ha)	0.04

Basic Information 2001

Area (in sq. km)	7470
Total Inhabited Villages	899
Total Habitations	3818
Forest Villages	130
Major Industrial Areas:	
<i>Dindori, Amarapur</i>	

Literacy and Retention

Literacy-2001	SC	ST	All
All	64.5	49.3	54.2
Male	80.7	64.8	70.0
Female	47.4	34.0	38.2
Rural	63.5	49.0	52.8
Urban	85.5	70.0	81.0
Retention Rate (age 6–11) 2004–05			76.7

Primary School Infrastructure (2004–05)

	Number	(%)
Number of Primary Schools	1376	100.0
With Own Building	1164	84.6
With Drinking Water Facility	504	36.6
With Toilet Facility	0.0	0.0

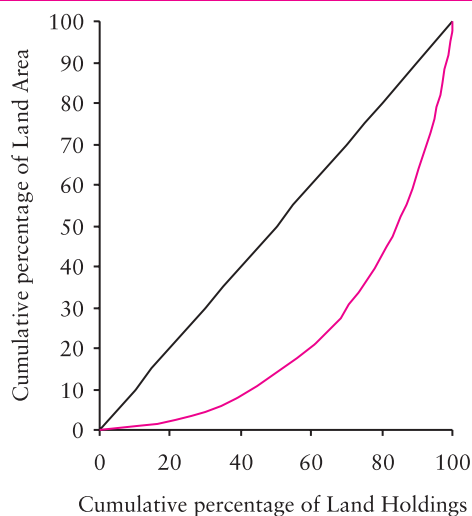
Basic Amenities (in %) 1991 2001

Households with Safe Drinking Water	na	47.5
Households with Electricity	na	37.3
Households with Toilet	na	5.8
Households with All Three Facilities	na	3.7
Households Without Any of the Three Facilities	na	41.0
Villages Electrified	na	90.9

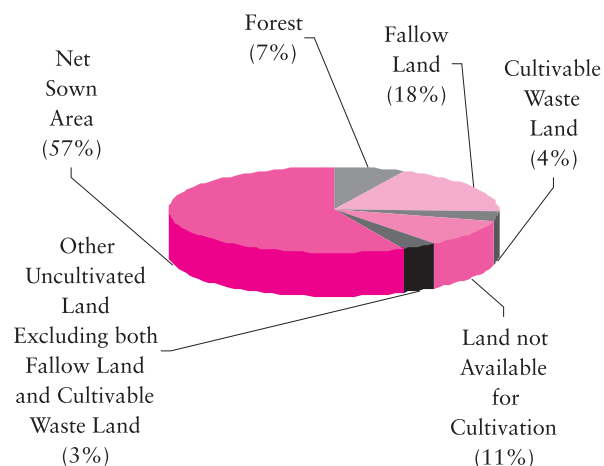
Infrastructure Facilities

Road Length per 100 sq.km (in Km)	2002–03	27.5
Rural Roads per Village (in Km)		1.0
Telephone per Lakh Population (BSNL)	Mar-05	417
Population per Post Office		7542
Total Electricity Consumption per Consumer (in Kwh)	2003–04	726
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	401
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	677
Consumption per Industrial Unit (in Kwh)	2003–04	29004
Number of Registered Vehicles per Lakh Population	Mar-05	1203
Tractors per 10 Villages	2004	3.1
Average Land Holding Size (in Ha)	2000–01	2.4

Lorenz Curve of Land Holdings



Land Use Classification 2004-05



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	270.0	210.2
Pulses (in Kgs)	28.3	25.3
Foodgrains (in Kgs)	298.3	235.5
Oilseeds (in Kgs)	46.5	39.0
Yield of Food Grains (in Kgs/Ha)	692.0	648.9

Credit

	2001
Households Availing Banking Services (in %)	2001
Total	11.3
Rural	9.9
Urban	40.2

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	56.8
% of Net Irrigated to Net Sown Area	2003-04	0.8
Cropped Area under Food Grains (in '000 Ha)	2003-04	216.2
Fertilizer Consumption (in Kgs/Ha)	2002-03	2.9
Cropping Intensity	2004-05	133.6
Net Area Sown (in '000 Ha)	2004-05	204.0
Gross Cropped Area (in '000 Ha)		272.6
Double Cropped Area to Net Area Sown	2004-05	33.6
Net Irrigated Area (in '000 Ha)	2003-04	1.6
Gross Irrigated Area (in '000 Ha)		1.6

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Dindori	43.57	8.94	1.87	8.30	1.34	65.23
Amarpur	45.16	0.41	0.52	2.07	0.31	49.83
Karanjia	43.68	0.62	1.01	3.62	1.96	51.14
Samnapur	43.60	1.86	4.95	5.61	0.99	58.60
Bajag	34.34	0.33	0.41	8.29	1.18	45.45
Mehadwani	36.56	0.77	0.68	2.40	1.54	43.61
Shahpura	57.68	1.80	2.44	5.55	0.37	71.87

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Dindori	96.55	17.54	1.75	48.28	15.52	1395
Amarpur	91.55	56.34	11.27	18.31	29.58	921
Karanjia	92.40	65.85	10.98	18.40	16.05	1075
Samnapur	93.51	50.00	12.27	3.62	19.85	1366
Bajag	98.90	33.70	1.37	20.90	58.05	1203
Mehadwani	87.55	26.91	12.45	24.50	16.67	788
Shahpura	90.51	72.79	9.18	10.77	18.58	866

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Dindori	2.79	22.00	20.00	66.67	100.00	80.00
Amarpur	1.31	22.31	33.33	66.67	66.67	0.00
Karanjia	2.38	22.15	33.33	93.33	100.00	42.86
Samnapur	2.63	15.09	14.71	80.00	72.00	56.00
Bajag	3.14	15.59	28.00	100.00	100.00	36.36
Mehadwani	2.16	7.84	18.75	76.47	88.24	35.71
Shahpura	3.04	13.82	46.15	93.94	75.00	64.52

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Dindori	114	166	62.35	53.85	4.66	144	31.17	259
Amarpur	89	126	53.06	24.62	3.79	115	22.15	733
Karanjia	103	148	62.75	40.46	3.98	127	23.24	271
Samnapur	133	197	62.74	47.71	3.92	125	25.91	303
Bajag	98	140	74.33	43.06	3.34	94	21.37	440
Mehadwani	78	109	63.46	47.74	3.4	77	16.1	376
Shahpura	81	114	45.92	33.33	3.33	89	17.17	450

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Shahpura	66.1	64.1	89.4	61.3	58.7	91.3	8.3	4.6	51.2
Dindori	30.3	28.1	85.4	44.2	43.0	73.0	5.3	3.8	42.6

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Shahpura	6.1	2.5	48.6	16.6	17.9	1.5	
Dindori	3.2	1.8	37.6	42.2	43.5	8.1	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Shahpura	11.8	18.2	8.0	1.1	14.7	3.3	0.8	69.5
Dindori	11.1	17.4	5.0	0.8	11.9	2.7	0.6	74.4

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Shahpura	52.2	47.1	0.7	0.6	0.1
Dindori	34.8	62.9	2.3	1.5	0.7

EAST NIMAR



Demography	2001
Total Population	1713134
Share of Madhya Pradesh Population	2.8
Urban Population	459921
Population of Scheduled Castes	189688
Population of Scheduled Tribes	508532
Density of Population (per sq km)	159
Decadal Growth Rate (1991–2001)	
Total	19.7
Rural	20.8
Urban	16.7
SC	16.3
ST	32.7

Health	2006
Population per Health Centre	7632
Rural Population Served per PHC	55094
Rural Population Served per SHC	6436
Total Fertility Rate	3.9

Gender	2001	
Gender Ratio	All	936
	Rural	936
	Urban	936
	SC	928
	ST	559
Workers Participation Rate-Female	34.4	
	2004–05	
Female Enrolment Rate (age 6–14)	88.4	

Habitat	2004
Urban Population Residing in Slum	56367
Ground Water Development (%)	58.8
Normal Rainfall (in mm)	1025
Average Annual Rainfall (in mm)	652
Per Capita Forest Area (in Ha)	0.29

Basic Information	2001
Area (in sq. km)	10779
Total Inhabited Villages	1060
Total Habitations	3006
Forest Villages	118
Major Industrial Areas:	
<i>Khandwa</i>	

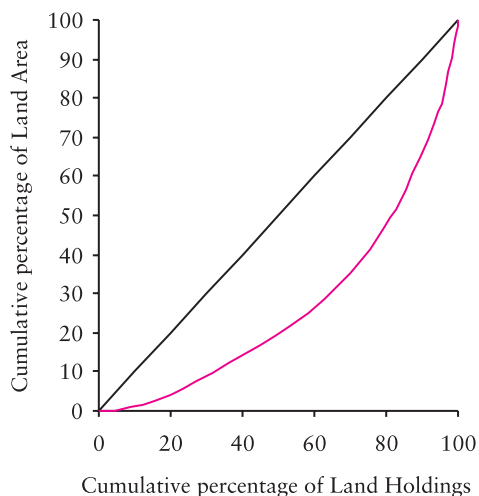
Literacy and Retention			
Literacy-2001	SC	ST	All
All	61.6	36.2	61.8
Male	76.5	49.4	73.7
Female	45.4	22.2	48.9
Rural	59.4	35.4	55.8
Urban	68.0	54.9	77.2
Retention Rate (age 6–11) 2004–05			61.7

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	1726	100.0
With Own Building	1631	94.5
With Drinking Water Facility	1337	82.0
With Toilet Facility	262	19.6

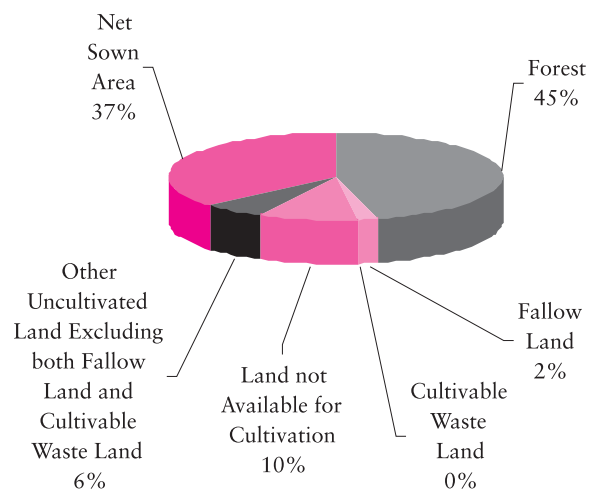
Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	68.9	85.3
Households with Electricity	60.0	82.6
Households with Toilet	17.9	23.0
Households with All Three Facilities	15.0	20.9
Households Without Any of the Three Facilities	15.0	4.2
Villages Electrified	99.3	98.9

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	21.9
Rural Roads per Village (in Km)		1.6
Telephone per Lakh Population (BSNL)	Mar-05	2006
Population per Post Office		8367
Total Electricity Consumption per Consumer (in Kwh)	2003–04	3297
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	772
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	1132
Consumption per Industrial Unit (in Kwh)	2003–04	50524
Number of Registered Vehicles per Lakh Population	Mar-05	4538
Tractors per 10 Villages	2004	46.3
Average Land Holding Size (in Ha)	2000–01	2.9

Lorenz Curve of Land Holdings



Land Use Classification 2004-05



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	144.0	111.6
Pulses (in Kgs)	27.5	21.3
Foodgrains (in Kgs)	171.5	131.1
Oilseeds (in Kgs)	54.2	63.7
Yield of Food Grains (in Kgs/Ha)	1176.0	1246.7

Credit

	2001
Households Availing Banking Services (in %)	
Total	29.7
Rural	25.9
Urban	41.2

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	36.8
% of Net Irrigated to Net Sown Area	2003-04	32.2
Cropped Area under Food Grains (in '000 Ha)	2003-04	186.7
Fertilizer Consumption (in Kgs/Ha)	2002-03	53.0
Cropping Intensity	2004-05	122.5
Net Area Sown (in '000 Ha)	2004-05	411.2
Gross Cropped Area (in '000 Ha)		503.7
Double Cropped Area to Net Area Sown	2004-05	22.5
Net Irrigated Area (in '000 Ha)	2003-04	135.7
Gross Irrigated Area (in '000 Ha)		145.2

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Baldi	36.82	4.53	2.82	7.26	4.37	57.81
Burhanpur	43.52	1.24	5.91	5.74	1.66	59.98
Chhegaon Makhan	36.31	1.34	2.39	6.25	0.52	53.39
Harsud	31.22	1.19	8.23	6.60	0.34	51.45
Khaknar	39.62	0.43	2.09	2.66	0.40	48.80
Khalwa	43.04	1.64	1.37	7.79	0.28	57.18
Pandhana	33.90	0.42	0.94	4.97	0.49	49.18
Punasa	25.46	1.07	3.57	8.79	1.24	42.00
Khandwa	31.33	0.68	4.00	6.25	3.87	47.68

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Baldi	62.41	28.26	12.32	44.37	53.15	977
Burhanpur	60.38	43.81	12.89	29.74	15.21	823
Chhegaon Makhan	64.06	35.53	5.97	29.78	28.41	880
Harsud	65.75	36.21	4.74	25.35	12.10	828
Khaknar	71.28	32.71	13.97	44.12	17.49	798
Khalwa	60.93	39.39	12.82	23.70	27.40	804
Pandhana	51.30	48.26	4.69	40.45	18.24	829
Punasa	69.44	30.51	8.69	36.76	30.31	818
Khandwa	74.48	24.23	4.90	63.31	68.22	861

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Baldi	5.10	12.30	7.14	65.38	69.23	68.00
Burhanpur	2.23	17.44	74.60	88.71	98.39	80.65
Chhegaon Makhan	3.93	17.14	25.00	70.97	96.77	83.05
Harsud	2.42	17.48	8.33	83.33	83.33	72.22
Khaknar	2.55	14.50	37.63	78.57	92.05	79.76
Khalwa	2.94	18.20	15.15	78.95	87.27	73.47
Pandhana	4.70	25.19	20.00	62.12	90.91	86.15
Punasa	3.66	19.40	28.13	94.90	76.53	88.30
Khandwa	1.94	18.53	3.23	96.77	83.87	96.77

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Baldi	96	138	75.14	44.79	5.54	175	33.14	546
Burhanpur	82	116	69.32	48.25	4.82	131	25.64	552
Chhegaon Makhan	78	109	73.65	38.8	5.15	125	22.58	567
Harsud	72	100	73.28	40.6	4.94	119	21.79	584
Khaknar	81	114	73.98	53.13	4.78	123	22.72	470
Khalwa	80	112	64.99	42.43	5.17	127	23.18	567
Pandhana	72	100	71.1	54.06	4.8	147	27.09	468
Punasa	76	106	76.45	56.8	5.39	134	23.97	580
Khandwa	75	104	69.8	70.23	5.36	127	23.63	580

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Harsud	72.1	71.1	90.6	79.8	79.3	88.7	11.2	8.5	60.5
Khandwa	85.9	84.1	90.7	84.3	80.8	93.5	26.4	11.5	64.4
Pandhana	80.9	79.8	93.5	77.4	76.3	90.4	11.1	8.6	39.7
Burhanpur	85.7	80.9	93.1	92.9	89.0	99.1	31.6	13.8	59.2
Nepanagar	82.7	78.3	96.8	84.4	80.6	96.4	17.8	5.0	58.1

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Harsud	8.2	5.9	51.7	6.2	6.5	1.0	
Khandwa	24.0	9.5	60.9	3.3	3.9	1.6	
Pandhana	8.4	5.8	38.2	5.9	6.3	2.3	
Burhanpur	29.9	12.0	57.5	2.4	3.9	0.2	
Nepanagar	17.3	4.6	57.8	8.2	10.5	1.1	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Harsud	29.4	16.5	14.8	2.1	23.4	5.1	1.0	61.6
Khandwa	31.5	18.2	34.8	7.6	33.5	13.1	1.6	47.2
Pandhana	28.2	14.6	23.0	2.6	22.9	5.5	1.0	59.3
Burhanpur	26.9	13.0	38.1	7.7	30.0	10.6	1.5	48.8
Nepanagar	33.3	16.1	27.1	4.8	24.5	8.6	0.9	58.0

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Harsud	29.4	67.5	3.1	0.8	2.4	
Khandwa	35.8	59.9	4.3	2.1	2.2	
Pandhana	19.4	76.7	3.9	1.3	2.6	
Burhanpur	35.9	57.4	6.7	2.6	4.1	
Nepanagar	22.0	68.5	9.5	3.0	6.5	

GUNA



Demography	2001
Total Population	1666767
Share of Madhya Pradesh Population	2.8
Urban Population	354813
Population of Scheduled Castes	283527
Population of Scheduled Tribes	203742
Density of Population (per sq km)	151
Decadal Growth Rate (1991–2001)	
Total	27.2
Rural	24.4
Urban	38.8
SC	23.9
ST	29.4

Health	2006
Population per Health Centre	8372
Rural Population Served per PHC	58528
Rural Population Served per SHC	7390
Total Fertility Rate	4.6

Gender	2001	
Gender Ratio	All	885
	Rural	882
	Urban	898
	SC	887
	ST	925
Workers Participation Rate-Female	29.2	
	2004–05	
Female Enrolment Rate (age 6–14)	96.1	

Habitat	2004
Urban Population Residing in Slum	229998
Ground Water Development (%)	54.4
Normal Rainfall (in mm)	735
Average Annual Rainfall (in mm)	874
Per Capita Forest Area (in Ha)	0.09

Basic Information	2001
Area (in sq. km)	11065
Total Inhabited Villages	2059
Total Habitations	2583
Forest Villages	1
Major Industrial Areas:	
<i>Guna, Chachaura</i>	

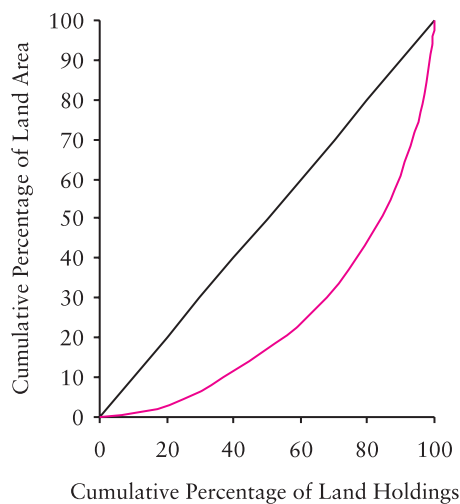
Literacy and Retention			
Literacy-2001	SC	ST	All
All	52.8	31.6	59.5
Male	68.0	44.2	74.1
Female	35.4	17.7	42.9
Rural	50.8	30.7	55.3
Urban	61.7	48.6	74.7
Retention Rate (age 6–11) 2004–05			76.0

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	2696	100.0
With Own Building	2377	88.2
With Drinking Water Facility	2035	85.6
With Toilet Facility	1098	54.0

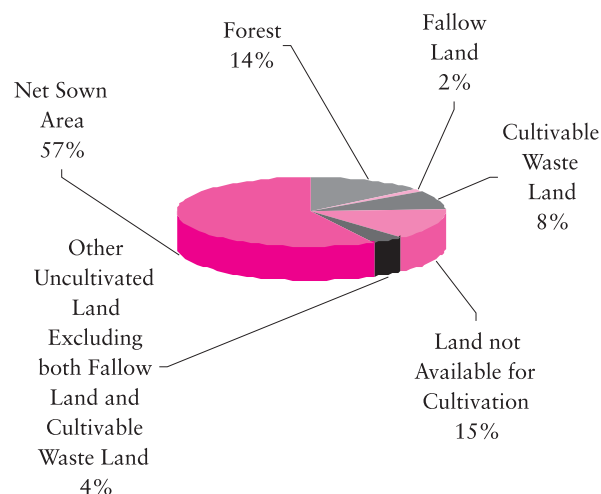
Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	54.1	73.9
Households with Electricity	43.4	69.2
Households with Toilet	11.8	17.7
Households with All Three Facilities	9.5	15.1
Households Without Any of the Three Facilities	29.1	10.5
Villages Electrified	92.5	90.1

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	13.7
Rural Roads per Village (in Km)		0.4
Telephone per Lakh Population (BSNL)	Mar–05	1471
Population per Post Office		9222
Total Electricity Consumption per Consumer (in Kwh)	2003–04	1774
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	636
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	815
Consumption per Industrial Unit (in Kwh)	2003–04	18219
Number of Registered Vehicles per Lakh Population	Mar–05	5197
Tractors per 10 Villages	2004	72.2
Average Land Holding Size (in Ha)	2000–01	2.6

Lorenz Curve of Land Holdings



Land Use Classification 2004-05



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	201.0	196.1
Pulses (in Kgs)	125.1	100.1
Foodgrains (in Kgs)	326.1	296.2
Oilseeds (in Kgs)	61.7	102.5
Yield of Food Grains (in Kgs/Ha)	1061.0	1021.9

Credit

	2001
Households Availing Banking Services (in %)	2001
Total	22.2
Rural	16.9
Urban	41.4

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	57.8
% of Net Irrigated to Net Sown Area	2003-04	32.2
Cropped Area under Food Grains (in '000 Ha)	2003-04	506.9
Fertilizer Consumption (in Kgs/Ha)	2002-03	18.8
Cropping Intensity	2004-05	129.0
Net Area Sown (in '000 Ha)	2004-05	635.1
Gross Cropped Area (in '000 Ha)		819.3
Double Cropped Area to Net Area Sown	2004-05	29.0
Net Irrigated Area (in '000 Ha)	2003-04	202.3
Gross Irrigated Area (in '000 Ha)		202.5

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Aaron	34.89	1.84	1.62	8.14	2.69	49.64
Ashoknagar	20.63	4.60	9.81	6.43	1.97	47.97
Bamori	42.96	1.11	2.10	1.83	2.22	50.78
Chachaura	40.52	1.65	5.30	6.49	4.34	62.54
Chanderi	28.77	2.42	5.19	4.70	0.92	43.16
Guna	32.14	1.10	1.42	5.71	4.98	46.07
Ishagarh	40.51	2.35	6.35	7.88	1.46	60.22
Mungaoli	30.91	2.85	7.34	5.24	1.84	49.58
Raghogarh	42.58	1.66	5.98	5.91	2.60	62.29

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Aaron	80.04	41.27	19.10	30.35	17.14	675
Ashoknagar	16.94	55.28	35.77	3.20	6.61	508
Bamhori	76.32	25.25	14.39	60.81	35.61	1105
Chachaura	20.41	51.02	30.61	8.16	12.24	600
Chanderi	89.87	17.38	8.82	60.53	76.27	1204
Guna	60.44	38.67	5.93	49.48	49.70	1032
Ishagarh	24.36	71.38	14.31	12.74	22.86	804
Mungaoli	71.68	32.09	13.06	38.60	45.02	862
Raghogarh	9.01	50.45	44.14	0.90	0.91	537

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Aaron	3.60	11.31	38.71	87.10	77.42	87.10
Ashoknagar	3.32	27.50	11.11	84.21	94.74	0.00
Bamhori	2.60	17.53	66.67	66.67	56.25	0.00
Chachaura	3.09	37.13	0.00	90.48	90.48	0.00
Chanderi	4.53	15.40	18.33	76.67	58.06	41.38
Guna	7.78	19.00	59.52	63.41	75.61	68.29
Ishagarh	4.00	11.87	53.45	78.57	95.24	70.73
Mungaoli	3.12	23.13	25.00	71.88	87.50	0.00
Raghogarh	3.22	35.20	2.13	95.65	89.13	2.22

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Aaron	75	104	84.04	47.4	5.04	151	30.98	401
Ashoknagar	75	105	92.09	25.86	6.6	150	29.31	204
Bamhori	112	163	87.04	46.53	5.39	160	32.78	561
Chachaura	81	113	95.41	37.08	6.88	139	24.32	469
Chanderi	111	162	70.09	23.36	5.17	161	35.3	340
Guna	91	129	79.17	50.94	5.95	184	33.63	296
Ishagarh	82	115	44.24	38.24	4.82	173	34.97	419
Mungaoli	86	122	87.2	27.33	5.68	150	22.12	370
Raghogarh	91	129	96.37	37.09	6.75	143	24.88	280

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Isagarh	64.2	62.1	91.9	77.2	76.4	87.4	11.0	7.5	57.1
Chanderi	48.3	37.9	88.1	69.0	63.1	91.5	12.7	3.3	48.8
Guna	75.0	67.3	91.8	86.7	82.8	95.4	25.1	5.8	67.8
Ashoknagar	65.2	58.1	85.1	67.6	57.9	95.1	20.8	7.5	58.2
Raghogarh	88.7	87.8	91.4	72.8	69.3	83.0	18.4	8.4	48.0
Mungaoli	43.2	38.0	88.2	57.1	55.8	68.3	11.5	6.0	58.7
Kumbhraj	73.3	70.5	90.1	59.5	54.8	87.0	11.6	5.4	47.9
Aron	74.8	71.1	90.6	83.1	80.4	94.5	15.8	8.0	49.0
Chachaura	85.9	84.7	92.0	71.1	71.4	69.4	13.7	5.8	51.8

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)						
Tehsil	All Three Facilities Available			None of the Facilities		
	Total	Rural	Urban	Total	Rural	Urban
Isagarh	8.0	4.7	52.3	8.6	9.1	2.2
Chanderi	10.2	1.0	45.3	18.0	22.4	1.3
Guna	23.0	4.3	64.2	4.7	6.6	0.6
Ashoknagar	17.8	4.6	55.1	15.1	19.8	1.8
Raghogarh	16.5	6.7	45.5	3.9	4.2	3.1
Mungaoli	8.1	3.5	47.5	27.2	29.5	6.7
Kumbhraj	7.9	1.7	44.4	11.5	13.1	1.7
Aron	13.0	5.1	46.3	6.0	7.2	0.6
Chachaura	11.0	4.1	44.5	4.3	4.2	5.0

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Isagarh	18.1	20.8	21.7	2.2	31.8	5.7	1.7	52.0
Chanderi	18.6	16.3	20.9	2.7	26.4	4.6	0.9	57.0
Guna	26.4	20.3	36.7	7.3	45.1	12.1	1.4	38.7
Ashoknagar	26.1	19.0	32.4	6.3	36.3	9.2	1.5	45.3
Raghogarh	27.5	17.2	35.8	5.5	31.8	9.1	2.3	46.9
Mungaoli	17.7	17.3	18.4	3.4	22.6	4.7	0.8	62.1
Kumbhraj	15.4	18.2	24.5	2.1	21.8	5.1	0.9	57.9
Aron	13.9	15.0	21.4	1.5	30.3	4.5	1.0	56.5
Chachaura	19.9	18.7	28.7	2.3	24.1	6.6	1.5	54.9

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Isagarh	32.8	61.5	5.8	3.8	1.9
Chanderi	64.5	30.7	4.8	2.4	2.4
Guna	37.1	58.4	4.6	2.4	2.2
Ashoknagar	19.9	77.4	2.7	2.1	0.6
Raghogarh	21.8	76.5	1.7	0.7	1.0
Mungaoli	26.6	67.1	6.3	4.9	1.3
Kumbhraj	18.7	79.9	1.4	1.2	0.2
Aron	12.1	85.8	2.1	1.4	0.7
Chachaura	21.8	76.9	1.3	1.0	0.3

GWALIOR



Demography	2001
Total Population	1632109
Share of Madhya Pradesh Population	2.7
Urban Population	983008
Population of Scheduled Castes	308664
Population of Scheduled Tribes	56948
Density of Population (per sq km)	358
Decadal Growth Rate (1991-2001)	
Total	26.2
Rural	35.4
Urban	20.8
SC	19.4
ST	41.8

Health	2006
Population per Health Centre	25019
Rural Population Served per PHC	107886
Rural Population Served per SHC	12380
Total Fertility Rate	3.3

Gender	2001	
Gender Ratio	All	848
	Rural	833
	Urban	857
	SC	846
	ST	912
Workers Participation Rate-Female	14.7	
	2004-05	
Female Enrolment Rate (age 6-14)	98.1	

Habitat	2004
Urban Population Residing in Slum	14546
Ground Water Development (%)	32.1
Normal Rainfall (in mm)	1057
Average Annual Rainfall (in mm)	644
Per Capita Forest Area (in Ha)	0.07

Basic Information 2001

Area (in sq. km)	4560
Total Inhabited Villages	706
Total Habitations	889
Forest Villages	0
Major Industrial Areas:	
<i>Ghatigaon, Dabra</i>	

Literacy and Retention

Literacy-2001	SC	ST	All
All	60.1	36.1	69.4
Male	74.3	46.3	80.4
Female	43.1	24.8	56.4
Rural	52.2	24.8	53.4
Urban	66.7	64.8	79.4
Retention Rate (age 6-11) 2004-05			63.8

Primary School Infrastructure (2004-05)

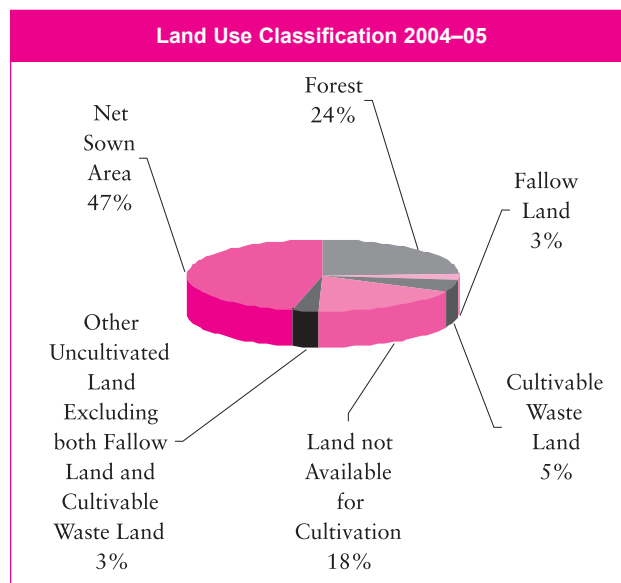
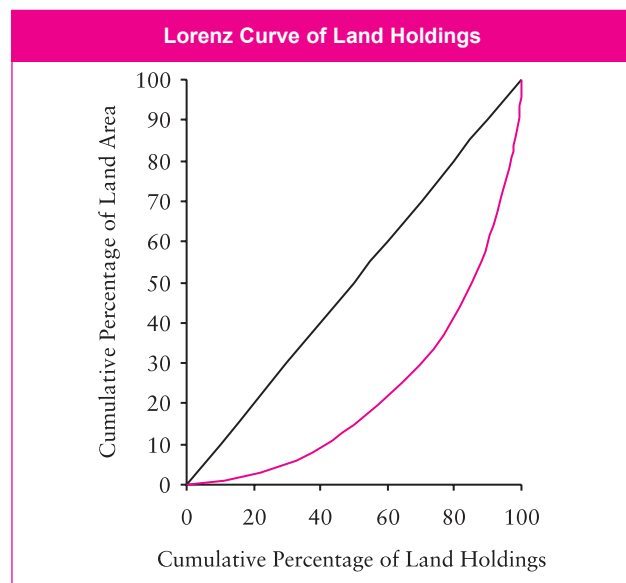
	Number	(%)
Number of Primary Schools	1421	100.0
With Own Building	1300	91.5
With Drinking Water Facility	814	57.3
With Toilet Facility	881	62.0

Basic Amenities (in %) 1991 2001

Households with Safe Drinking Water	66.4	82.7
Households with Electricity	69.6	86.0
Households with Toilet	40.5	54.4
Households with All Three Facilities	35.2	50.1
Households Without Any of the Three Facilities	15.8	4.7
Villages Electrified	99.1	72.0

Infrastructure Facilities

Road Length per 100 sq.km (in Km)	2002-03	23.9
Rural Roads per Village (in Km)		1.1
Telephone per Lakh Population (BSNL)	Mar-05	4828
Population per Post Office		9046
Total Electricity Consumption per Consumer (in Kwh)	2003-04	2628
Domestic Consumption of Electricity per Consumer (in Kwh)	2003-04	1112
Non-Domestic Consumption per Consumer (in Kwh)	2003-04	1949
Consumption per Industrial Unit (in Kwh)	2003-04	44865
Number of Registered Vehicles per Lakh Population	Mar-05	16402
Tractors per 10 Villages	2004	104.6
Average Land Holding Size (in Ha)	2000-01	2.0



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	194.9	205.2
Pulses (in Kgs)	22.6	32.0
Foodgrains (in Kgs)	217.5	237.1
Oilseeds (in Kgs)	36.7	32.9
Yield of Food Grains (in Kgs/Ha)	1939.0	2104.8

Credit

Households Availing Banking Services (in %)	2001
Total	41.3
Rural	24.5
Urban	52.2

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	46.5
% of Net Irrigated to Net Sown Area	2003-04	55.0
Cropped Area under Food Grains (in '000 Ha)	2003-04	192.6
Fertilizer Consumption (in Kgs/Ha)	2002-03	70.7
Cropping Intensity	2004-05	125.4
Net Area Sown (in '000 Ha)	2004-05	212.2
Gross Cropped Area (in '000 Ha)		266.2
Double Cropped Area to Net Area Sown	2004-05	25.4
Net Irrigated Area (in '000 Ha)	2003-04	113.3
Gross Irrigated Area (in '000 Ha)		144.1

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Bhitarwar	23.59	1.83	1.33	4.67	3.47	45.43
Dabra	31.82	1.53	6.19	2.48	3.05	46.12
Morar	14.94	0.64	0.99	7.90	10.63	35.51
Ghatigaon	30.22	0.80	0.75	1.46	2.31	36.66

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Bhitarwar	61.23	42.20	13.49	26.86	16.13	1081
Dabra	70.05	29.86	11.81	46.74	29.30	839
Morar	58.36	41.01	4.89	48.92	11.25	1608
Ghatigaon	77.74	22.82	3.36	64.85	32.78	1723

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Bhitarwar	2.86	29.24	30.43	74.47	80.43	15.22
Dabra	6.82	17.64	19.35	62.00	82.00	22.45
Morar	0.54	16.03	90.70	65.85	100.00	58.54
Ghatigaon	1.24	20.76	75.00	100.00	93.75	0.00

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Bhitarwar	108	157	73.09	52.08	6.01	157	30.56	479
Dabra	82	115	67.32	42.71	4.37	133	29.1	336
Morar	138	206	84.4	60.89	6.39	192	27.62	415
Ghatigaon	144	215	78.64	54.29	7.27	201	34.82	789

Source: Centre for Population Studies, Administration Academy, Bhopal

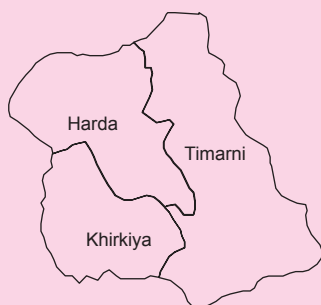
Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Gird	90.4	74.3	96.0	91.3	74.5	97.1	66.0	14.7	83.8
Pichhore	74.7	66.8	91.5	66.4	54.0	92.8	29.1	12.3	64.6
Bhitarwar	73.4	71.6	85.2	49.7	44.6	83.9	15.3	11.0	44.1

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Gird	62.4	9.6	80.7	1.8	5.9	0.3	
Pichhore	25.3	8.3	61.4	11.7	16.7	1.2	
Bhitarwar	10.0	5.5	39.6	14.1	15.9	2.5	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Gird	45.1	26.3	66.0	22.1	62.7	29.9	4.1	16.4
Pichhore	33.6	18.8	45.3	9.5	51.4	11.9	1.4	32.0
Bhitarwar	27.4	15.7	34.6	2.5	39.6	8.0	1.1	43.5

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Gird	85.9	10.4	3.7	3.1	0.6	
Pichhore	58.5	33.0	8.5	8.0	0.4	
Bhitarwar	49.5	36.9	13.6	13.3	0.3	

HARDA



Demography	2001
Total Population	474416
Share of Madhya Pradesh Population	0.8
Urban Population	101167
Population of Scheduled Castes	76200
Population of Scheduled Tribes	126322
Density of Population (per sq km)	142
Decadal Growth Rate (1991–2001)	
Total	24.6
Rural	23.1
Urban	30.4
SC	18.9
ST	37.2

Health	2006
Population per Health Centre	3281
Rural Population Served per PHC	27610
Rural Population Served per SHC	2896
Total Fertility Rate	4.2

Gender	2001	
Gender Ratio	All	919
	Rural	923
	Urban	905
	SC	902
	ST	943
Workers Participation Rate-Female	36.4	
	2004–05	
Female Enrolment Rate (age 6–14)	96.4	

Habitat	2004
Urban Population Residing in Slum	61172
Ground Water Development (%)	33.3
Normal Rainfall (in mm)	1223
Average Annual Rainfall (in mm)	1053
Per Capita Forest Area (in Ha)	0.20

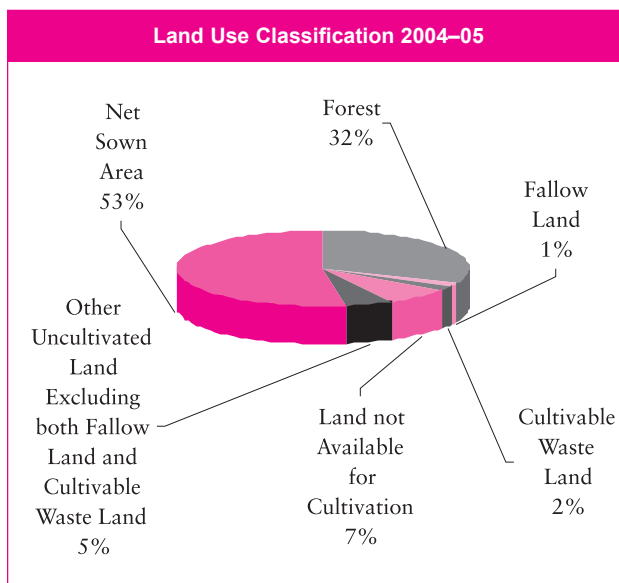
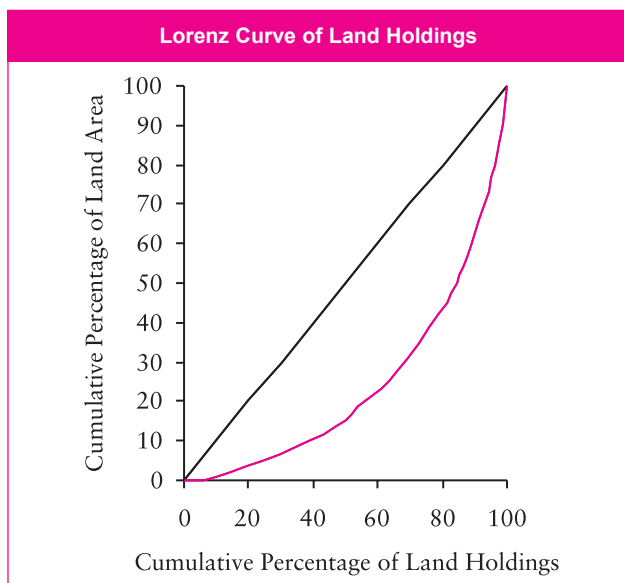
Basic Information	2001
Area (in sq. km)	3330
Total Inhabited Villages	497
Total Habitations	1347
Forest Villages	45
Major Industrial Areas:	
<i>Harda</i>	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	66.3	38.4	66.5
Male	79.6	51.3	77.9
Female	51.6	24.7	54.1
Rural	64.3	37.5	61.7
Urban	74.5	60.7	83.4
Retention Rate (age 6–11) 2004–05			83.8

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	540	100.0
With Own Building	539	99.8
With Drinking Water Facility	434	80.4
With Toilet Facility	182	33.7

Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	na	70.1
Households with Electricity	na	88.8
Households with Toilet	na	30.0
Households with All Three Facilities	na	19.6
Households Without Any of the Three Facilities	na	2.6
Villages Electrified	na	78.1

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	14.5
Rural Roads per Village (in Km)		0.4
Telephone per Lakh Population (BSNL)	Mar–05	2595
Population per Post Office		7296
Total Electricity Consumption per Consumer (in Kwh)	2003–04	3208
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	715
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	928
Consumption per Industrial Unit (in Kwh)	2003–04	79602
Number of Registered Vehicles per Lakh Population	Mar–05	6511
Tractors per 10 Villages	2004	81.4
Average Land Holding Size (in Ha)	2000–01	5.4



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	370.0	379.5
Pulses (in Kgs)	89.5	76.4
Foodgrains (in Kgs)	459.5	455.9
Oilseeds (in Kgs)	288.9	408.3
Yield of Food Grains (in Kgs/Ha)	1774.0	1723.3

Credit

	2001
Households Availing Banking Services (in %)	
Total	33.9
Rural	30.6
Urban	46.3

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	52.6
% of Net Irrigated to Net Sown Area	2003-04	75.3
Cropped Area under Food Grains (in '000 Ha)	2003-04	131.2
Fertilizer Consumption (in Kgs/Ha)	2002-03	66.2
Cropping Intensity	2004-05	175.9
Net Area Sown (in '000 Ha)	2004-05	174.0
Gross Cropped Area (in '000 Ha)		305.9
Double Cropped Area to Net Area Sown	2004-05	75.9
Net Irrigated Area (in '000 Ha)	2003-04	128.8
Gross Irrigated Area (in '000 Ha)		128.8

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Khirkiya	49.25	0.64	0.14	3.24	0.02	54.19
Harda	44.68	0.72	0.90	3.67	0.78	51.18
Timarni	52.19	4.63	0.58	1.65	0.04	59.82

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Khirkiya	73.90	28.41	26.94	45.52	42.64	729
Harda	67.69	46.15	33.85	38.97	25.13	836
Timarni	52.38	59.05	23.81	9.43	22.64	855

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Khirkiya	5.90	10.35	10.53	77.78	81.48	46.15
Harda	10.05	16.05	38.10	50.00	87.50	12.50
Timarni	2.76	16.60	10.77	89.80	91.84	43.18

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Khirkiya	92	131	58.28	50.25	4.27	116	24.18	496
Harda	118	173	77.63	45.03	5.6	152	29.51	441
Timarni	102	147	60.18	79.21	4.12	134	20.91	385

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Khirkiya	88.5	88.0	92.0	74.7	72.1	91.8	21.0	15.5	56.2
Harda	93.3	91.2	97.4	66.9	57.2	86.1	36.2	20.0	68.5
Timarni	83.1	81.8	91.9	69.9	66.2	94.7	30.4	24.6	69.1

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)						
Tehsil	All Three Facilities Available			None of the Facilities		
	Total	Rural	Urban	Total	Rural	Urban
Khirkiya	13.0	7.1	51.4	2.0	2.2	0.6
Harda	25.2	8.1	59.3	2.4	3.4	0.4
Timarni	18.2	11.4	64.8	3.5	3.9	0.3

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/ Transistor	Television	Telephone	Bicycle	Scooter/ Motor Cycle/ Moped	Car/ Jeep/ Van	None of the Specified Assets
Khirkiya	31.8	13.0	25.4	4.1	27.8	7.2	1.0	55.0
Harda	34.7	15.8	42.8	10.1	37.2	14.0	1.8	40.1
Timarni	34.9	14.4	32.0	4.8	29.4	9.8	1.3	49.8

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Khirkiya	41.5	52.0	6.5	1.7	4.8
Harda	53.0	40.6	6.4	1.4	5.0
Timarni	50.6	42.5	6.9	0.8	6.1

HOSHANGABAD



Demography	2001
Total Population	1084265
Share of Madhya Pradesh Population	1.8
Urban Population	334394
Population of Scheduled Castes	170780
Population of Scheduled Tribes	164049
Density of Population (per sq km)	162
Decadal Growth Rate (1991-2001)	
Total	22.3
Rural	21.4
Urban	24.3
SC	20.0
ST	28.2

Health	2006
Population per Health Centre	8556
Rural Population Served per PHC	31782
Rural Population Served per SHC	7444
Total Fertility Rate	3.7

Gender	2001	
Gender Ratio	All	896
	Rural	897
	Urban	895
	SC	896
	ST	932
Workers Participation Rate-Female	20.5	
	2004-05	
Female Enrolment Rate (age 6-14)	96.4	

Habitat	2004
Urban Population Residing in Slum	331220
Ground Water Development (%)	10.2
Normal Rainfall (in mm)	872
Average Annual Rainfall (in mm)	1106
Per Capita Forest Area (in Ha)	0.24

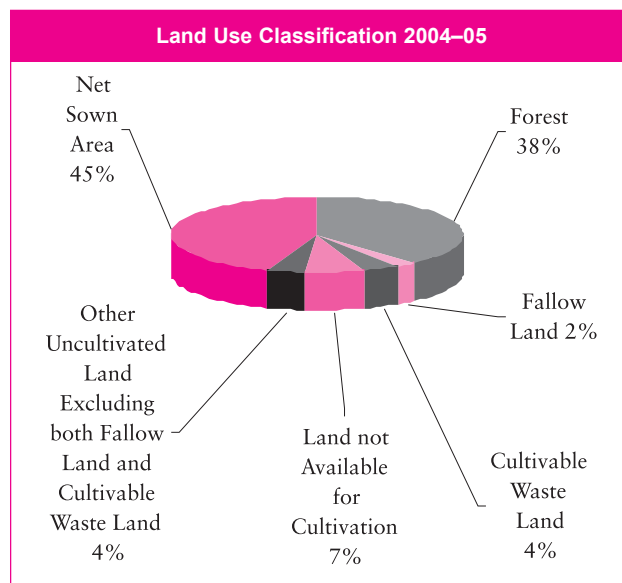
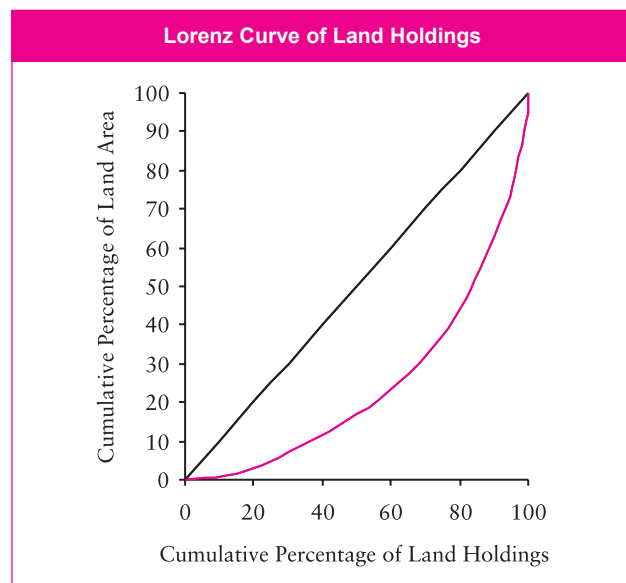
Basic Information	2001
Area (in sq. km)	6707
Total Inhabited Villages	923
Total Habitations	1073
Forest Villages	63
Major Industrial Areas:	
<i>Kesala, Pipariya</i>	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	65.3	47.4	70.0
Male	77.7	59.5	80.8
Female	51.3	34.2	57.8
Rural	59.5	44.5	63.0
Urban	77.9	71.3	84.8
Retention Rate (age 6-11) 2004-05			84.4

Primary School Infrastructure (2004-05)		
	Number	(%)
Number of Primary Schools	1170	100.0
With Own Building	1170	100.0
With Drinking Water Facility	991	84.7
With Toilet Facility	896	76.6

Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	59.4	78.6
Households with Electricity	53.2	81.5
Households with Toilet	23.1	37.1
Households with All Three Facilities	16.1	30.4
Households Without Any of the Three Facilities	17.7	4.1
Villages Electrified	90.4	89.7

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002-03	12.7
Rural Roads per Village (in Km)		0.6
Telephone per Lakh Population (BSNL)	Mar-05	3080
Population per Post Office		6640
Total Electricity Consumption per Consumer (in Kwh)	2003-04	2922
Domestic Consumption of Electricity per Consumer (in Kwh)	2003-04	714
Non-Domestic Consumption per Consumer (in Kwh)	2003-04	1243
Consumption per Industrial Unit (in Kwh)	2003-04	108761
Number of Registered Vehicles per Lakh Population	Mar-05	7271
Tractors per 10 Villages	2004	91.6
Average Land Holding Size (in Ha)	2000-01	2.8



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	331.7	407.4
Pulses (in Kgs)	80.6	83.1
Foodgrains (in Kgs)	412.3	490.5
Oilseeds (in Kgs)	174.5	182.9
Yield of Food Grains (in Kgs/Ha)	1707.0	2015.5

Credit

	2001
Households Availing Banking Services (in %)	2001
Total	33.8
Rural	25.9
Urban	51.5

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	44.5
% of Net Irrigated to Net Sown Area	2003-04	84.3
Cropped Area under Food Grains (in '000 Ha)	2003-04	274.7
Fertilizer Consumption (in Kgs/Ha)	2002-03	87.2
Cropping Intensity	2004-05	167.9
Net Area Sown (in '000 Ha)	2004-05	297.5
Gross Cropped Area (in '000 Ha)		499.6
Double Cropped Area to Net Area Sown	2004-05	67.9
Net Irrigated Area (in '000 Ha)	2003-04	249.1
Gross Irrigated Area (in '000 Ha)		249.1

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Hoshangabad	50.76	0.70	0.35	1.08	1.41	54.98
Babai	45.31	0.40	0.14	0.53	0.10	47.18
Kesla	43.77	0.96	1.30	3.08	0.19	50.17
Sohagpur	44.84	1.32	2.37	9.92	0.08	59.15
Bankhedi	41.27	0.28	1.36	1.83	2.48	47.76
Pipariya	39.10	0.36	2.90	4.01	2.20	48.92
Seoni Malwa	56.04	0.39	3.80	3.72	0.14	64.36

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Hoshangabad	56.58	38.95	18.68	19.73	5.91	792
Babai	68.90	34.14	15.71	38.38	9.46	972
Kesla	57.30	40.26	11.05	37.69	34.64	956
Sohagpur	56.51	44.02	11.96	22.66	14.96	784
Bankhedi	69.96	36.73	4.54	40.64	9.57	1224
Pipariya	60.55	39.19	10.38	26.37	8.25	1378
Seoni Malwa	79.02	77.05	19.34	2.64	1.66	627

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Hoshangabad	4.51	23.06	34.48	34.78	60.87	13.04
Babai	1.91	3.51	14.89	13.46	67.31	65.38
Kesla	5.63	22.70	18.64	39.39	68.18	23.53
Sohagpur	1.46	10.23	54.17	45.00	95.00	15.00
Bankhedi	2.54	12.37	7.69	68.18	68.18	95.45
Pipariya	4.09	16.51	46.88	28.57	64.29	41.38
Seoni Malwa	6.08	15.57	70.00	89.29	89.29	52.63

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Hoshangabad	87	123	70.69	44.63	4.11	130	24.88	301
Babai	101	145	84.04	41.77	5.1	160	31.73	372
Kesla	92	131	69.79	30.21	5.02	123	23.77	836
Sohagpur	77	108	77.72	44.35	5.2	147	29.37	531
Bankhedi	105	151	80.43	42.61	4.45	133	27.49	470
Pipariya	130	193	80.12	40.49	4.72	143	28.53	355
Seoni Malwa	70	97	66.15	40.8	4.76	159	35.53	249

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Seonimalva	82.2	79.8	95.4	67.5	64.1	86.3	35.7	27.8	79.1
Kesala	88.7	82.8	94.6	81.1	65.8	96.6	52.7	25.6	79.9
Hoshngabad	89.4	81.2	95.1	80.1	57.6	95.8	57.5	31.8	75.2
Babai	71.5	69.0	89.7	71.0	69.1	85.2	18.6	13.3	58.8
Sohagpur	65.2	59.7	91.7	77.9	76.0	86.7	25.2	15.5	72.0
Pipariya	84.1	77.8	95.4	87.6	82.4	96.8	32.7	14.9	64.6
Bankheri	78.4	78.4	0.0	84.1	84.1	0.0	14.7	14.7	0.0

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Seonimalva	22.5	14.5	66.9	5.3	6.2	0.7	
Kesala	46.0	15.7	76.5	2.5	4.8	0.2	
Hoshngabad	49.5	16.2	72.5	2.8	6.4	0.4	
Babai	13.0	7.5	54.4	7.6	8.1	3.7	
Sohagpur	18.7	9.9	60.9	6.2	7.3	0.5	
Pipariya	30.0	11.8	62.7	2.7	4.1	0.3	
Bankheri	12.6	12.6	0.0	3.8	3.8	0.0	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/ Transistor	Television	Telephone	Bicycle	Scooter/ Motor Cycle/ Moped	Car/ Jeep/ Van	None of the Specified Assets
Seonimalva	30.6	14.1	38.5	4.5	30.9	10.0	1.8	44.3
Kesala	41.8	23.8	55.3	10.9	61.3	21.7	1.7	25.4
Hoshngabad	43.3	21.7	57.6	9.4	54.1	28.5	2.4	26.2
Babai	19.1	9.5	27.6	2.9	28.8	8.4	1.3	55.5
Sohagpur	34.0	16.2	26.3	3.2	40.5	8.2	1.2	46.1
Pipariya	31.6	17.1	38.0	7.3	42.5	13.5	1.8	40.2
Bankheri	25.5	13.5	19.2	3.0	37.8	8.1	0.8	51.2

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Seonimalva	56.5	37.8	5.8	1.7	4.1
Kesala	71.2	26.0	2.8	1.4	1.4
Hoshngabad	69.0	27.0	4.0	1.5	2.6
Babai	46.0	50.8	3.2	0.7	2.6
Sohagpur	47.7	48.6	3.8	1.2	2.5
Pipariya	58.1	38.7	3.2	2.3	0.9
Bankheri	35.6	62.5	1.9	0.5	1.4

INDORE



Demography	2001
Total Population	2465827
Share of Madhya Pradesh Population	4.1
Urban Population	1730363
Population of Scheduled Castes	388459
Population of Scheduled Tribes	163872
Density of Population (per sq km)	663
Decadal Growth Rate (1991–2001)	
Total	34.3
Rural	31.0
Urban	35.8
SC	27.0
ST	62.4

Health	2006
Population per Health Centre	13440
Rural Population Served per PHC	52612
Rural Population Served per SHC	4362
Total Fertility Rate	2.9

Gender	2001	
Gender Ratio	All	912
	Rural	937
	Urban	902
	SC	939
	ST	918
Workers Participation Rate-Female	19.1	
	2004–05	
Female Enrolment Rate (age 6–14)	102.5	

Habitat	2004
Urban Population Residing in Slum	252519
Ground Water Development (%)	106.2
Normal Rainfall (in mm)	1315
Average Annual Rainfall (in mm)	842
Per Capita Forest Area (in Ha)	0.02

Basic Information 2001

Area (in sq. km)	3898
Total Inhabited Villages	624
Total Habitations	1685
Forest Villages	4
Major Industrial Areas:	
<i>Indore, Mhow</i>	

Literacy and Retention

Literacy-2001	SC	ST	All
All	63.1	38.4	75.2
Male	76.0	48.9	84.6
Female	49.5	26.9	64.8
Rural	51.8	31.4	57.5
Urban	69.3	52.5	82.3
Retention Rate (age 6–11) 2004–05			64.0

Primary School Infrastructure (2004–05)

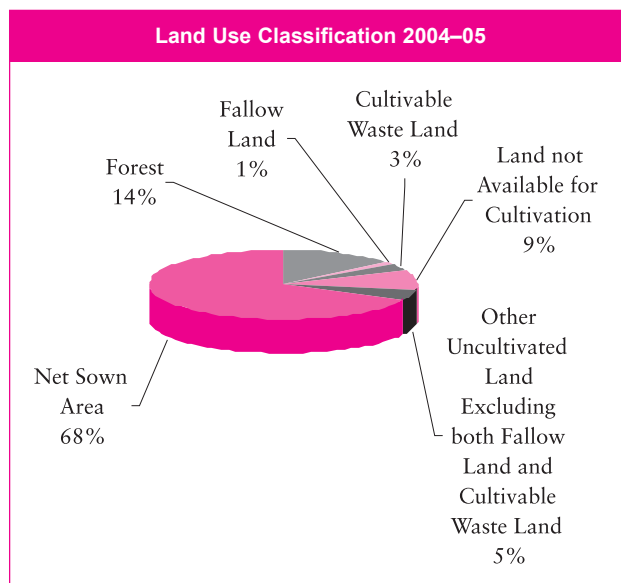
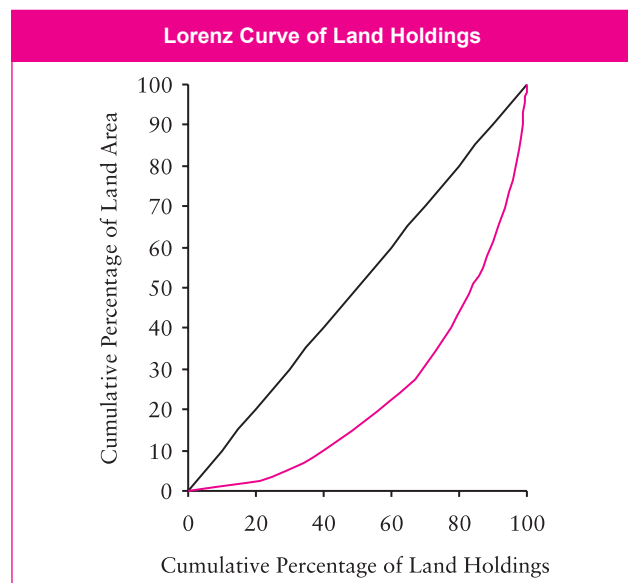
	Number	(%)
Number of Primary Schools	1127	100.0
With Own Building	1020	90.5
With Drinking Water Facility	873	77.5
With Toilet Facility	832	73.8

Basic Amenities (in %) 1991 2001

Households with Safe Drinking Water	89.0	94.2
Households with Electricity	75.6	95.2
Households with Toilet	48.4	67.1
Households with All Three Facilities	41.4	62.9
Households Without Any of the Three Facilities	2.6	0.4
Villages Electrified	98.5	96.1

Infrastructure Facilities

Road Length per 100 sq.km (in Km)	2002–03	38.4
Rural Roads per Village (in Km)		1.7
Telephone per Lakh Population (BSNL)	Mar–05	6146
Population per Post Office		63060
Total Electricity Consumption per Consumer (in Kwh)	2003–04	2537
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	1216
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	1650
Consumption per Industrial Unit (in Kwh)	2003–04	43507
Number of Registered Vehicles per Lakh Population	Mar–05	26125
Tractors per 10 Villages	2004	116.0
Average Land Holding Size (in Ha)	2000–01	2.4



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	148.1	118.1
Pulses (in Kgs)	16.0	10.0
Foodgrains (in Kgs)	164.1	128.0
Oilseeds (in Kgs)	107.8	90.3
Yield of Food Grains (in Kgs/Ha)	2202.0	2078.9

Credit

Households Availing Banking Services (in %)	2001
Total	44.7
Rural	30.8
Urban	50.4

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	67.5
% of Net Irrigated to Net Sown Area	2003-04	55.0
Cropped Area under Food Grains (in '000 Ha)	2003-04	161.1
Fertilizer Consumption (in Kgs/Ha)	2002-03	78.5
Cropping Intensity	2004-05	167.1
Net Area Sown (in '000 Ha)	2004-05	258.7
Gross Cropped Area (in '000 Ha)		432.3
Double Cropped Area to Net Area Sown	2004-05	67.1
Net Irrigated Area (in '000 Ha)	2003-04	142.2
Gross Irrigated Area (in '000 Ha)		142.2

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Depalpur	33.50	4.49	5.44	4.07	0.52	63.28
Indore	47.17	4.43	7.52	7.40	0.95	81.11
Mhow	28.99	6.45	7.63	5.88	0.50	66.39
Sawer	44.40	6.57	9.72	5.78	0.42	75.83

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Depalpur	58.32	33.88	32.99	29.67	18.13	489
Indore	45.21	41.62	30.84	5.67	13.03	514
Mhow	58.01	31.63	30.25	38.08	9.18	504
Sawer	63.82	41.21	29.15	7.54	17.41	530

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Depalpur	7.10	55.14	35.06	100.00	100.00	0.00
Indore	4.73	55.43	30.88	100.00	100.00	0.00
Mhow	6.26	52.93	43.84	98.63	98.63	0.00
Sawer	5.00	58.13	70.00	96.67	96.67	0.00

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Depalpur	69	95	71.63	60.22	4.93	109	26.94	629
Indore	70	96	93.05	50.35	5.26	111	26.29	701
Mhow	68	94	66.48	51.6	5.48	132	29.2	717
Sawer	70	96	91.84	23.12	5.44	122	28.17	756

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Depalpur	86.7	85.1	93.7	97.5	97.5	97.7	24.0	14.4	64.2
Indore	89.6	88.8	95.8	97.1	97.9	90.2	24.7	19.3	70.8
Mhow	97.0	92.5	97.5	94.7	91.2	95.1	79.7	30.9	86.3
Sawer	93.7	91.8	96.7	87.3	83.0	93.9	47.5	33.3	69.4

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Depalpur	22.1	12.5	61.8	0.3	0.4	0.1	
Indore	22.3	17.8	60.8	0.2	0.2	0.2	
Mhow	75.1	27.8	81.4	0.2	0.6	0.2	
Sawer	42.9	27.9	66.2	1.1	1.5	0.4	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/ Transistor	Television	Telephone	Bicycle	Scooter/ Motor Cycle/ Moped	Car/ Jeep/ Van	None of the Specified Assets
Depalpur	35.0	20.7	48.7	6.9	43.6	16.4	2.4	30.9
Indore	33.5	23.9	53.2	6.4	51.3	20.1	2.8	26.9
Mhow	47.7	42.0	78.9	27.2	61.5	41.0	8.3	9.6
Sawer	40.4	30.4	60.4	14.1	52.8	26.2	4.4	24.4

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Depalpur	32.7	63.7	3.6	2.2	1.4	
Indore	37.3	60.5	2.2	2.2	1.1	
Mhow	75.8	22.2	1.9	1.0	0.9	
Sawer	53.7	43.3	3.1	1.3	1.7	

JABALPUR



Demography	2001
Total Population	2151203
Share of Madhya Pradesh Population	3.6
Urban Population	1227340
Population of Scheduled Castes	273953
Population of Scheduled Tribes	322890
Density of Population (per sq km)	413
Decadal Growth Rate (1991–2001)	
Total	21.7
Rural	21.7
Urban	21.6
SC	16.6
ST	22.6

Health	2006
Population per Health Centre	6173
Rural Population Served per PHC	31851
Rural Population Served per SHC	2946
Total Fertility Rate	2.9

Gender	2001	
Gender Ratio	All	908
	Rural	926
	Urban	895
	SC	921
	ST	958
Workers Participation Rate-Female	22.7	
	2004–05	
Female Enrolment Rate (age 6–14)	98.8	

Habitat	2004
Urban Population Residing in Slum	13363
Ground Water Development (%)	41.8
Normal Rainfall (in mm)	750
Average Annual Rainfall (in mm)	1300
Per Capita Forest Area (in Ha)	0.04

Basic Information 2001

Area (in sq. km)	5211
Total Inhabited Villages	1449
Total Habitations	9372
Forest Villages	6
Major Industrial Areas:	
<i>Jabalpur</i>	

Literacy and Retention

Literacy-2001	SC	ST	All
All	68.4	51.8	75.7
Male	79.8	65.1	84.6
Female	56.0	37.9	65.9
Rural	61.3	47.7	63.8
Urban	73.5	66.9	84.2
Retention Rate (age 6–11) 2004–05			69.0

Primary School Infrastructure (2004–05)

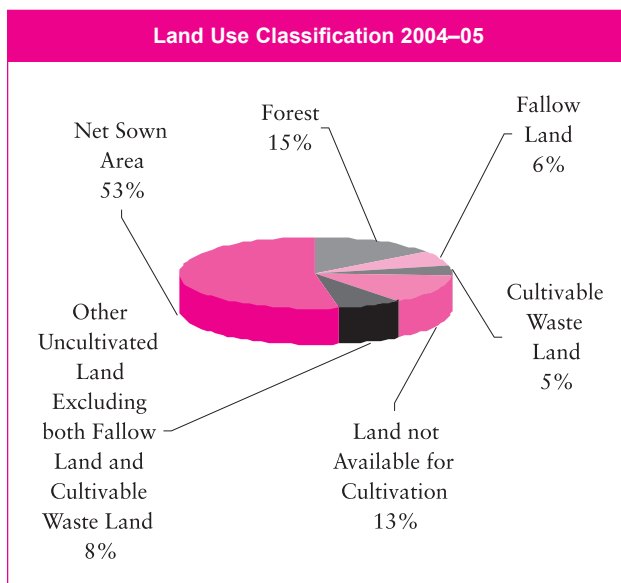
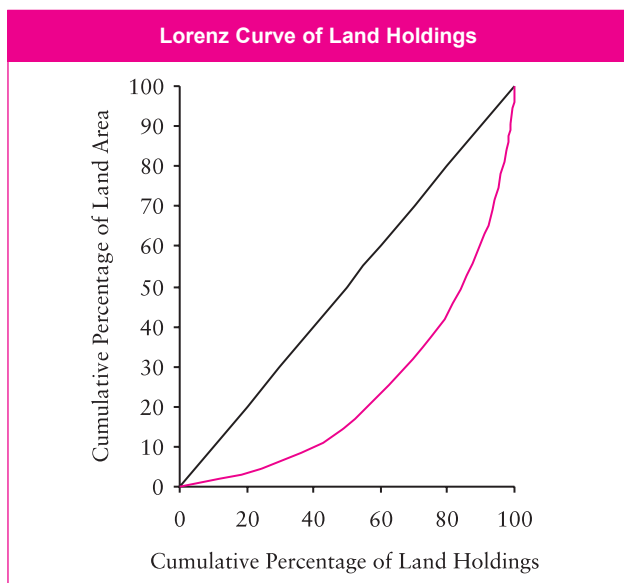
	Number	(%)
Number of Primary Schools	1610	100.0
With Own Building	1530	95.0
With Drinking Water Facility	1069	66.4
With Toilet Facility	517	32.1

Basic Amenities (in %) 1991 2001

Households with Safe Drinking Water	67.0	88.9
Households with Electricity	50.4	82.4
Households with Toilet	26.8	45.1
Households with All Three Facilities	21.4	40.6
Households Without Any of the Three Facilities	19.7	3.2
Villages Electrified	94.1	92.8

Infrastructure Facilities

Road Length per 100 sq.km (in Km)	2002–03	30.1
Rural Roads per Village (in Km)		0.8
Telephone per Lakh Population (BSNL)	Mar–05	3935
Population per Post Office		12510
Total Electricity Consumption per Consumer (in Kwh)	2003–04	2002
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	847
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	1375
Consumption per Industrial Unit (in Kwh)	2003–04	50114
Number of Registered Vehicles per Lakh Population	Mar–05	15035
Tractors per 10 Villages	2004	28.9
Average Land Holding Size (in Ha)	2000–01	1.7



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	92.6	114.0
Pulses (in Kgs)	36.9	60.3
Foodgrains (in Kgs)	129.5	174.3
Oilseeds (in Kgs)	13.6	3.4
Yield of Food Grains (in Kgs/Ha)	879.0	1106.1

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	52.7
% of Net Irrigated to Net Sown Area	2003-04	35.5
Cropped Area under Food Grains (in '000 Ha)	2003-04	352.6
Fertilizer Consumption (in Kgs/Ha)	2002-03	55.2
Cropping Intensity	2004-05	137.6
Net Area Sown (in '000 Ha)	2004-05	274.1
Gross Cropped Area (in '000 Ha)		377.0
Double Cropped Area to Net Area Sown	2004-05	37.3
Net Irrigated Area (in '000 Ha)	2003-04	97.5
Gross Irrigated Area (in '000 Ha)		111.3

Credit

Households Availing Banking Services (in %)	2001
Total	32.4
Rural	15.6
Urban	47.6

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Bargi	53.71	2.09	1.75	3.29	0.99	62.90
Kundam	47.41	0.35	1.26	3.07	1.41	55.04
Majholi	45.11	0.80	1.70	4.50	2.28	55.05
Panagar	52.76	0.90	4.19	5.06	1.63	65.62
Patan	60.83	0.35	0.19	3.19	0.67	65.62
Sihora	48.99	0.97	1.92	4.04	1.28	58.26
Shahpur	48.99	0.97	1.92	4.04	1.28	58.26

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Bargi	68.70	30.78	15.87	17.36	16.64	910
Kundam	85.24	16.13	13.65	29.37	15.44	1007
Majholi	86.19	18.39	14.95	18.69	11.78	1185
Panagar	55.44	45.40	12.02	8.04	5.77	1140
Patan	69.91	61.67	28.74	14.42	10.40	604
Sihora	69.86	32.27	13.31	23.09	21.05	1105
Shahpur	79.08	20.50	20.50	12.58	9.30	859

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Bargi	2.31	17.31	9.09	63.46	86.79	88.68
Kundam	5.86	15.06	39.06	46.03	87.50	80.36
Majholi	4.59	11.86	29.51	30.99	68.57	69.57
Panagar	3.67	10.64	27.12	49.09	85.45	62.00
Patan	5.09	14.76	11.48	70.69	50.00	42.59
Sihora	3.51	14.32	26.00	75.56	93.33	79.07
Shahpur	7.15	28.57	24.56	38.78	65.31	95.65

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Bargi	95	136	60.52	32.46	3.77	89	19.41	511
Kundam	101	146	69.65	36.44	4.21	119	26.68	486
Majholi	121	177	72.4	43.21	4.65	139	30.13	275
Panagar	111	161	76.35	19.34	4.29	123	28.31	709
Patan	79	111	61	11.11	3.43	92	21.53	651
Sihora	110	159	69.9	42.93	4.34	123	26.96	594
Shahpur	97	139	58.23	35.63	4.13	123	26.26	331

Source: Centre for Population Studies, Administration Academy, Bhopal

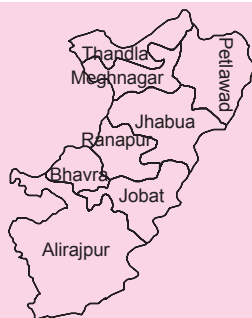
Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Sihora	76.3	74.0	90.0	86.3	84.9	94.4	13.0	8.1	42.3
Patan	70.1	67.5	89.7	92.7	93.4	87.2	18.6	15.5	41.0
Jabalpur	90.1	77.5	93.9	90.5	80.1	93.7	62.8	18.3	76.4
Kundam	46.1	46.1	0.0	67.7	67.7	0.0	9.3	9.3	0.0

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)						
Tehsil	All Three Facilities Available			None of the Facilities		
	Total	Rural	Urban	Total	Rural	Urban
Sihora	11.3	6.3	40.6	4.0	4.6	0.8
Patan	15.8	12.8	37.9	2.9	3.0	2.1
Jabalpur	57.1	14.1	70.3	1.5	5.0	0.5
Kundam	5.6	5.6	0.0	20.5	20.5	0.0

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Sihora	19.5	14.8	19.7	2.6	39.8	6.5	0.9	49.6
Patan	18.5	12.3	20.6	2.9	30.3	7.6	1.2	56.9
Jabalpur	41.1	29.8	63.1	16.0	66.0	33.4	4.3	17.6
Kundam	9.6	12.9	7.2	1.2	20.9	3.0	0.5	70.2

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Sihora	25.8	73.5	0.6	0.4	0.2
Patan	36.8	61.0	2.1	0.9	1.2
Jabalpur	64.0	34.7	1.3	0.8	0.5
Kundam	20.7	78.4	0.9	0.6	0.3

J H A B U A



Demography	2001
Total Population	1394561
Share of Madhya Pradesh Population	2.3
Urban Population	121031
Population of Scheduled Castes	39290
Population of Scheduled Tribes	1211116
Density of Population (per sq km)	206
Decadal Growth Rate (1991–2001)	
Total	23.4
Rural	23.4
Urban	23.4
SC	13.4
ST	25.1

Health	2006
Population per Health Centre	8459
Rural Population Served per PHC	74448
Rural Population Served per SHC	8732
Total Fertility Rate	5.4

Gender	2001	
Gender Ratio	All	986
	Rural	992
	Urban	927
	SC	968
	ST	993
Workers Participation Rate-Female	50.7	
	2004–05	
Female Enrolment Rate (age 6–14)	78.5	

Habitat	2004
Urban Population Residing in Slum	16627
Ground Water Development (%)	29.6
Normal Rainfall (in mm)	1107
Average Annual Rainfall (in mm)	1350
Per Capita Forest Area (in Ha)	0.09

Basic Information 2001

Area (in sq. km)	6778
Total Inhabited Villages	1313
Total Habitations	1510
Forest Villages	0
Major Industrial Areas:	

Literacy and Retention

Literacy-2001	SC	ST	All
All	43.4	30.6	36.6
Male	54.4	41.7	48.0
Female	32.2	19.4	25.7
Rural	37.0	29.4	32.3
Urban	69.5	65.9	80.5
Retention Rate (age 6–11) 2004–05			61.5

Primary School Infrastructure (2004–05)

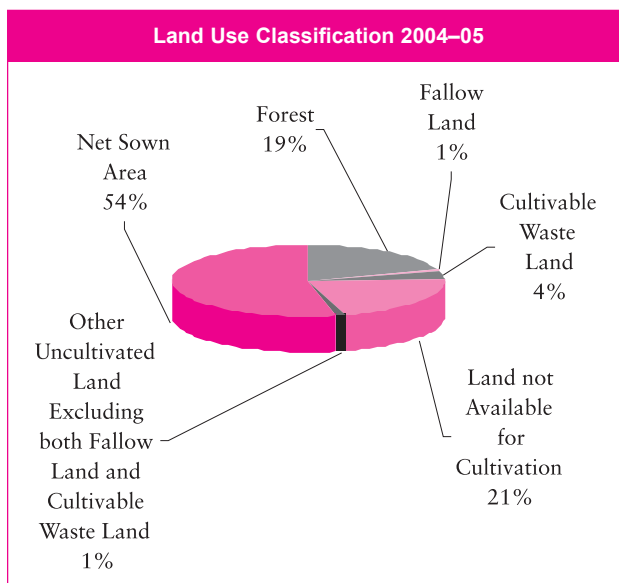
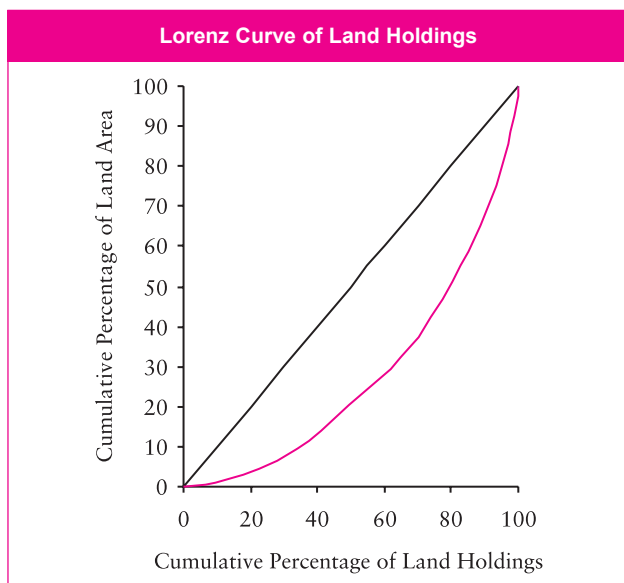
	Number	(%)
Number of Primary Schools	3690	100.0
With Own Building	3526	95.6
With Drinking Water Facility	2804	76.0
With Toilet Facility	1393	37.8

Basic Amenities (in %) 1991 2001

Households with Safe Drinking Water	64.2	79.2
Households with Electricity	32.9	49.1
Households with Toilet	8.8	12.7
Households with All Three Facilities	7.5	10.9
Households Without Any of the Three Facilities	28.2	13.5
Villages Electrified	95.2	95.2

Infrastructure Facilities

Road Length per 100 sq.km (in Km)	2002–03	42.6
Rural Roads per Village (in Km)		1.7
Telephone per Lakh Population (BSNL)	Mar–05	1133
Population per Post Office		8618
Total Electricity Consumption per Consumer (in Kwh)	2003–04	1451
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	483
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	782
Consumption per Industrial Unit (in Kwh)	2003–04	48832
Number of Registered Vehicles per Lakh Population	Mar–05	1720
Tractors per 10 Villages	2004	8.6
Average Land Holding Size (in Ha)	2000–01	2.0



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	214.4	209.5
Pulses (in Kgs)	53.8	39.1
Foodgrains (in Kgs)	268.2	248.5
Oilseeds (in Kgs)	28.2	26.1
Yield of Food Grains (in Kgs/Ha)	927.0	1121.3

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	53.3
% of Net Irrigated to Net Sown Area	2003-04	15.1
Cropped Area under Food Grains (in '000 Ha)	2003-04	322.4
Fertilizer Consumption (in Kgs/Ha)	2002-03	36.2
Cropping Intensity	2004-05	118.5
Net Area Sown (in '000 Ha)	2004-05	360.1
Gross Cropped Area (in '000 Ha)		426.6
Double Cropped Area to Net Area Sown	2004-05	18.5
Net Irrigated Area (in '000 Ha)	2003-04	54.1
Gross Irrigated Area (in '000 Ha)		54.9

Credit

Households Availing Banking Services (in %)	2001
Total	27.2
Rural	23.9
Urban	59.0

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Alirajpur	45.90	0.89	6.28	3.54	0.17	59.92
Bhavra	43.78	0.47	4.34	6.49	0.16	57.33
Jhabua	39.06	1.62	3.38	3.61	4.70	53.83
Jobat	43.61	0.73	5.36	6.29	0.12	59.85
Katthiwada	47.20	1.04	4.15	8.79	0.06	63.64
Meghnagar	51.25	0.68	2.47	6.43	0.40	62.49
Petlawad	38.08	1.55	6.51	9.47	3.27	60.58
Rama	44.10	1.50	4.04	1.71	1.68	55.26
Ranapur	46.13	0.68	5.61	3.60	0.10	58.42
Sondwa	48.26	0.78	7.82	1.59	0.20	61.64
Thandla	27.90	1.45	3.73	5.15	2.95	42.39
Udaigarh	43.00	0.36	5.39	5.89	0.05	58.41

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Alirajpur	15.09	82.64	14.43	12.62	19.90	682
Bhavra	10.24	89.00	2.82	7.25	16.22	880
Jhabua	22.64	76.74	8.14	15.47	17.72	882
Jobat	17.45	81.51	11.46	11.89	16.01	738
Katthiwada	9.84	87.87	3.93	12.62	43.09	840
Meghnagar	38.05	60.11	3.72	21.20	29.15	819
Petlawad	27.75	73.42	12.61	12.61	23.43	765
Rama	39.59	59.70	10.07	35.36	39.71	745
Ranapur	16.62	78.41	10.80	15.08	22.74	736
Sondwa	15.00	78.86	7.05	12.00	45.70	819
Thandla	56.20	41.48	14.23	32.48	39.29	805
Udaigarh	7.58	90.16	3.28	8.39	18.95	801

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Alirajpur	2.24	13.89	60.00	96.55	96.55	82.76
Bhavra	3.29	13.84	77.50	87.50	87.88	69.70
Jhabua	1.94	13.25	37.50	78.57	82.14	70.37
Jobat	1.93	13.63	94.44	81.82	81.82	72.73
Katthiwada	5.00	23.83	68.97	87.50	75.00	62.50
Meghnagar	6.03	17.13	25.00	75.00	75.00	40.00
Petlawad	4.10	11.86	50.55	75.00	95.59	71.21
Rama	4.17	11.12	7.14	60.00	76.00	32.00
Ranapur	1.69	15.22	83.87	90.48	95.24	85.71
Sondwa	2.37	16.92	67.65	84.62	92.31	69.23
Thandla	2.38	18.21	18.18	92.86	100.00	81.48
Udaigarh	3.68	15.35	39.29	96.30	81.48	92.59

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Alirajpur	70	96	40.42	27.56	4.77	280	57.63	264
Bhavra	74	103	43.47	27.72	5.27	177	34.26	448
Jhabua	81	113	46.62	47.08	5.69	174	32.27	528
Jobat	72	99	42.17	36.94	5	184	38.13	239
Katthiwada	72	99	40.07	29.86	4.2	155	32.11	497
Meghnagar	70	97	53.77	40.51	4.76	169	34.69	410
Petlawad	76	106	46.38	36.74	4.83	166	33.15	382
Rama	71	98	50.65	46.65	4.86	166	32.75	451
Ranapur	71	98	43.13	36.47	5.33	172	34.58	597
Sondwa	74	103	33.07	38.58	5.14	158	32.27	608
Thandla	82	115	71.87	55.08	5.34	182	35.57	301
Udaigarh	68	93	47.08	30.22	4.82	186	37.44	362

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Thandla	42.3	36.9	94.9	75.6	73.3	98.3	11.2	4.6	75.5
Petlawad	74.0	72.2	96.7	81.7	80.3	99.3	15.9	11.9	68.1
Meghnagar	42.8	37.9	89.4	86.7	85.5	98.3	10.9	4.8	69.1
Jhabua	56.2	50.5	93.4	79.3	76.3	98.8	14.8	5.2	77.5
Bhavra	37.5	33.0	74.7	78.9	77.6	89.5	11.9	6.6	54.9
Jobat	37.9	33.3	98.3	88.1	87.3	98.5	12.1	6.3	88.3
Alirajpur	41.7	37.4	91.0	70.4	68.4	92.8	12.0	6.6	73.6
Ranapur	50.1	45.6	86.4	86.3	85.0	97.4	9.6	2.5	67.4

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Thandla	9.9	3.4	73.1	17.3	19.1	0.0	
Petlawad	14.1	10.1	67.2	7.1	7.6	0.1	
Meghnagar	9.5	3.3	68.1	9.3	10.2	0.5	
Jhabua	13.7	4.1	76.0	11.9	13.7	0.2	
Bhavra	8.8	3.7	51.0	15.5	16.9	4.0	
Jobat	9.9	4.1	86.2	8.9	9.6	0.0	
Alirajpur	9.5	4.3	69.9	21.9	23.6	1.8	
Ranapur	8.1	1.7	60.5	7.4	8.4	0.0	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Thandla	25.9	11.8	10.9	3.8	20.1	5.3	0.9	69.0
Petlawad	41.9	15.5	14.1	4.0	34.1	6.6	1.1	54.5
Meghnagar	23.3	9.5	8.9	2.2	24.1	4.9	0.7	66.6
Jhabua	29.1	14.6	14.1	4.0	20.5	7.5	1.0	65.0
Bhavra	33.0	12.9	7.8	2.1	21.9	3.9	1.2	67.5
Jobat	23.9	9.8	8.7	2.3	23.1	3.5	1.1	68.1
Alirajpur	22.6	11.2	9.2	2.3	21.0	4.4	0.8	69.7
Ranapur	14.6	10.6	7.2	2.4	19.1	3.5	0.7	71.8

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Thandla	25.7	73.8	0.5	0.4	0.1	
Petlawad	43.9	55.6	0.5	0.4	0.1	
Meghnagar	24.7	75.0	0.3	0.2	0.1	
Jhabua	35.4	63.1	1.5	0.9	0.6	
Bhavra	36.7	62.9	0.4	0.2	0.2	
Jobat	26.1	73.2	0.7	0.2	0.5	
Alirajpur	47.6	51.6	0.8	0.4	0.4	
Ranapur	23.4	75.7	0.9	0.6	0.3	

KATNI



Demography	2001
Total Population	1064167
Share of Madhya Pradesh Population	1.8
Urban Population	225261
Population of Scheduled Castes	122171
Population of Scheduled Tribes	245518
Density of Population (per sq km)	215
Decadal Growth Rate (1991–2001)	
Total	20.7
Rural	22.6
Urban	14.1
SC	16.3
ST	16.3

Health	2006
Population per Health Centre	5566
Rural Population Served per PHC	30959
Rural Population Served per SHC	5277
Total Fertility Rate	3.6

Gender	2001	
Gender Ratio	All	941
	Rural	950
	Urban	908
	SC	954
	ST	981
Workers Participation Rate-Female	31.3	
	2004–05	
Female Enrolment Rate (age 6–14)	108.7	

Habitat	2004
Urban Population Residing in Slum	104077
Ground Water Development (%)	36.6
Normal Rainfall (in mm)	755
Average Annual Rainfall (in mm)	1055
Per Capita Forest Area (in Ha)	0.09

Basic Information 2001

Area (in sq. km)	4950
Total Inhabited Villages	882
Total Habitations	1052
Forest Villages	2
Major Industrial Areas:	
<i>Katni, Dhimarkhera</i>	

Literacy and Retention

Literacy-2001	SC	ST	All
All	56.0	40.6	63.6
Male	72.3	55.9	77.9
Female	38.9	25.0	48.2
Rural	53.1	39.9	58.5
Urban	66.3	50.1	81.5
Retention Rate (age 6–11) 2004–05			81.6

Primary School Infrastructure (2004–05)

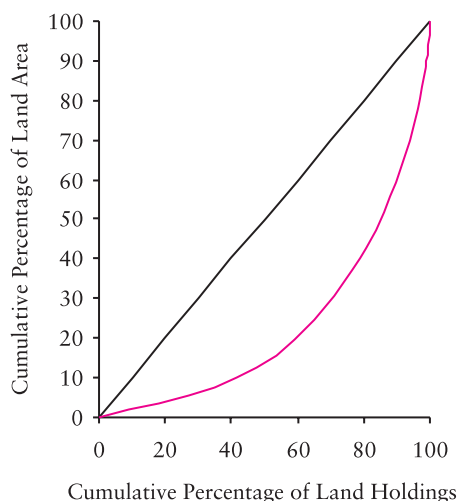
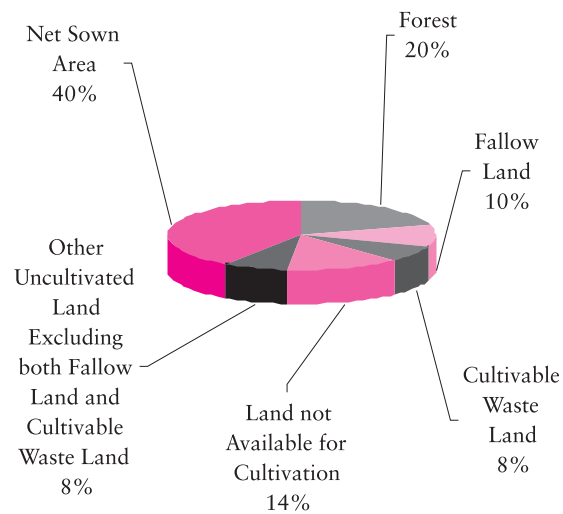
	Number	(%)
Number of Primary Schools	1394	100.0
With Own Building	1254	90.0
With Drinking Water Facility	1087	78.0
With Toilet Facility	500	35.9

Basic Amenities (in %) 1991 2001

Households with Safe Drinking Water	na	67.8
Households with Electricity	na	63.2
Households with Toilet	na	17.1
Households with All Three Facilities	na	14.3
Households Without Any of the Three Facilities	na	12.3
Villages Electrified	na	88.9

Infrastructure Facilities

Road Length per 100 sq.km (in Km)	2002–03	25.5
Rural Roads per Village (in Km)		0.8
Telephone per Lakh Population (BSNL)	Mar–05	1396
Population per Post Office		5144
Total Electricity Consumption per Consumer (in Kwh)	2003–04	1981
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	559
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	987
Consumption per Industrial Unit (in Kwh)	2003–04	73061
Number of Registered Vehicles per Lakh Population	Mar–05	4199
Tractors per 10 Villages	2004	20.8
Average Land Holding Size (in Ha)	2000–01	1.3

Lorenz Curve of Land Holdings**Land Use Classification 2004–05****Per Capita Agriculture Production**

	1998–99	2003–04
Cereals (in Kgs)	195.1	175.8
Pulses (in Kgs)	24.0	26.7
Foodgrains (in Kgs)	219.1	202.6
Oilseeds (in Kgs)	6.0	4.2
Yield of Food Grains (in Kgs/Ha)	911.0	905.7

Credit

Households Availing Banking Services (in %)	2001
Total	23.6
Rural	17.3
Urban	50.1

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004–05	40.2
% of Net Irrigated to Net Sown Area	2003–04	30.6
Cropped Area under Food Grains (in '000 Ha)	2003–04	247.1
Fertilizer Consumption (in Kgs/Ha)	2002–03	43.2
Cropping Intensity	2004–05	132.5
Net Area Sown (in '000 Ha)	2004–05	198.2
Gross Cropped Area (in '000 Ha)		262.5
Double Cropped Area to Net Area Sown	2004–05	32.5
Net Irrigated Area (in '000 Ha)	2003–04	60.5
Gross Irrigated Area (in '000 Ha)		68.4

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Bahoriband	49.10	2.18	1.72	6.37	1.47	61.92
Badwara	26.64	0.78	5.25	6.07	2.49	55.26
Dhimarkheda	35.91	0.36	5.73	6.92	0.50	50.87
Katni	34.79	2.49	4.83	6.70	1.10	52.25
Rithi	46.43	3.94	8.99	6.70	0.23	67.08
Vijayraghvarh	28.05	0.99	4.99	6.82	0.33	53.34

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Bahoriband	76.71	33.38	25.27	19.16	19.43	767
Badwara	68.31	49.82	40.61	7.73	23.69	506
Dhimarkheda	82.56	43.22	21.25	15.27	35.19	741
Katni	66.81	41.06	32.94	13.19	41.34	694
Rithi	34.35	45.80	25.19	12.50	18.38	609
Vijayraghavgarh	71.93	44.37	32.75	4.50	18.58	513

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Bahoriband	1.44	11.57	63.16	68.75	68.75	32.26
Badwara	6.62	17.98	57.14	100.00	93.33	80.00
Dhimarkheda	4.84	19.96	30.30	82.86	94.29	77.14
Katni	2.78	11.34	52.78	79.41	85.71	88.57
Rithi	5.71	16.26	0.00	100.00	95.45	77.27
Vijayraghavgarh	0.95	11.90	58.33	90.00	90.00	100.00

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Bahoriband	94	134	55.08	36.39	3.9	107	21.13	391
Badwara	81	113	45.02	39.02	4.05	117	26.41	579
Dhimarkheda	85	120	62.53	37.22	3.66	109	24.45	423
Katni	97	139	57.82	44.16	4.11	169	38.84	289
Rithi	75	105	30.54	100	4.08	129	29.03	75
Vijayraghavgarh	72	100	52.68	41.83	3.56	109	23.98	165

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Murwara	68.5	59.0	88.8	67.4	55.7	92.2	23.9	5.9	62.0
Vijayraghavgarh	61.5	56.6	86.7	61.0	55.2	91.1	14.0	6.8	51.5
Bahoriband	51.9	51.9	0.0	71.7	71.7	0.0	7.2	7.2	0.0
Dhimar Kheda	59.0	59.0	0.0	72.6	72.6	0.0	8.2	8.2	0.0

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)						
Tehsil	All Three Facilities Available			None of the Facilities		
	Total	Rural	Urban	Total	Rural	Urban
Murwara	20.8	2.9	58.9	11.4	16.1	1.6
Vijayraghavgarh	11.2	4.1	48.5	15.9	18.6	1.9
Bahoriband	4.7	4.7	0.0	12.2	12.2	0.0
Dhimar Kheda	5.7	5.7	0.0	11.7	11.7	0.0

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/ Transistor	Television	Telephone	Bicycle	Scooter/ Motor Cycle/ Moped	Car/ Jeep/ Van	None of the Specified Assets
Murwara	29.6	20.1	29.5	5.4	53.7	11.4	1.3	35.0
Vijayraghavgarh	26.4	22.3	16.7	2.4	55.2	7.2	0.8	37.8
Bahoriband	13.9	14.3	12.0	1.8	33.4	3.8	0.9	58.2
Dhimar Kheda	10.7	15.6	9.5	1.1	30.5	2.7	0.4	61.5

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Murwara	34.6	64.5	1.0	0.8	0.1	
Vijayraghavgarh	26.4	72.7	0.9	0.8	0.1	
Bahoriband	16.6	81.2	2.2	2.1	0.2	
Dhimar Kheda	15.8	82.9	1.2	0.7	0.6	

MANDLA



Demography	2001
Total Population	894236
Share of Madhya Pradesh Population	1.5
Urban Population	91914
Population of Scheduled Castes	41305
Population of Scheduled Tribes	511798
Density of Population (per sq km)	154
Decadal Growth Rate (1991–2001)	
Total	41.3
Rural	44.1
Urban	21.0
SC	20.9
ST	47.7

Health	2006
Population per Health Centre	2720
Rural Population Served per PHC	18884
Rural Population Served per SHC	3243
Total Fertility Rate	3.4

Gender	2001	
Gender Ratio	All	996
	Rural	1002
	Urban	946
	SC	951
	ST	1028
Workers Participation Rate-Female	48.3	
	2004–05	
Female Enrolment Rate (age 6–14)	105.5	

Habitat	2004
Urban Population Residing in Slum	35828
Ground Water Development (%)	5.5
Normal Rainfall (in mm)	835
Average Annual Rainfall (in mm)	1273
Per Capita Forest Area (in Ha)	0.66

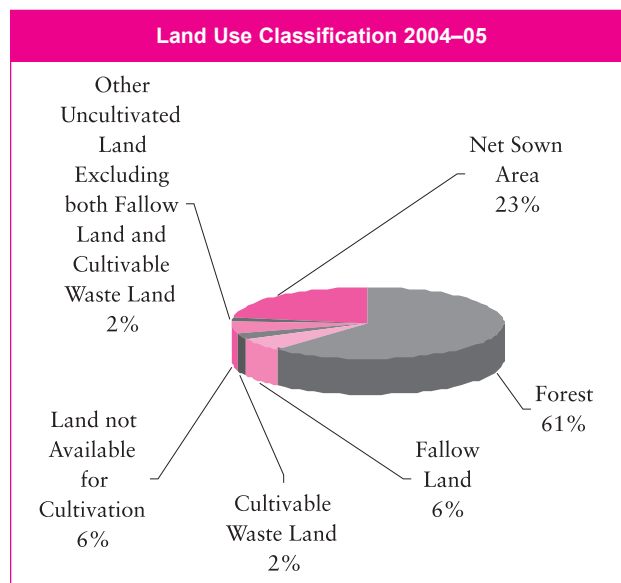
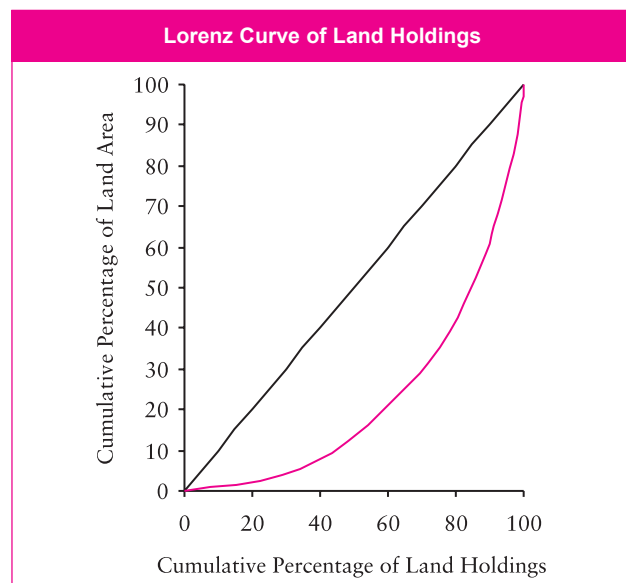
Basic Information	2001
Area (in sq. km)	5800
Total Inhabited Villages	1214
Total Habitations	4046
Forest Villages	40
Major Industrial Areas:	
<i>Bichhiya, Mandla</i>	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	76.2	50.7	59.6
Male	88.9	66.1	73.7
Female	63.0	35.7	45.5
Rural	73.8	50.0	56.5
Urban	85.5	76.6	85.2
Retention Rate (age 6–11) 2004–05			63.3

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	2072	100.0
With Own Building	1958	94.5
With Drinking Water Facility	1567	75.6
With Toilet Facility	1500	72.4

Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	38.5	55.2
Households with Electricity	30.6	49.4
Households with Toilet	5.5	11.5
Households with All Three Facilities	4.0	9.1
Households Without Any of the Three Facilities	47.3	28.5
Villages Electrified	99.0	93.7

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	20.8
Rural Roads per Village (in Km)		0.8
Telephone per Lakh Population (BSNL)	Mar–05	1109
Population per Post Office		7267
Total Electricity Consumption per Consumer (in Kwh)	2003–04	672
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	492
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	839
Consumption per Industrial Unit (in Kwh)	2003–04	9773
Number of Registered Vehicles per Lakh Population	Mar–05	1659
Tractors per 10 Villages	2004	4.6
Average Land Holding Size (in Ha)	2000–01	1.8



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	156.7	174.0
Pulses (in Kgs)	17.9	18.2
Foodgrains (in Kgs)	174.6	192.2
Oilseeds (in Kgs)	16.6	18.6
Yield of Food Grains (in Kgs/Ha)	666.0	717.6

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	22.6
% of Net Irrigated to Net Sown Area	2003-04	7.8
Cropped Area under Food Grains (in '000 Ha)	2003-04	246.2
Fertilizer Consumption (in Kgs/Ha)	2002-03	15.6
Cropping Intensity	2004-05	129.5
Net Area Sown (in '000 Ha)	2004-05	217.9
Gross Cropped Area (in '000 Ha)		282.1
Double Cropped Area to Net Area Sown	2004-05	29.5
Net Irrigated Area (in '000 Ha)	2003-04	16.9
Gross Irrigated Area (in '000 Ha)		16.9

Credit

Households Availing Banking Services (in %)	2001
Total	17.1
Rural	13.9
Urban	47.9

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Mandla	47.97	2.05	1.98	7.73	1.41	62.12
Mohgaon	50.12	0.40	0.66	1.06	4.69	58.64
Ghughari	42.94	0.82	2.46	12.36	1.35	63.03
Nainpur	39.96	2.76	8.43	7.01	0.46	61.03
Bichhiya	48.64	2.57	2.39	0.64	0.42	57.41
Mawai	47.00	4.20	2.51	9.43	1.31	65.98
Niwas	44.74	0.75	3.22	17.99	0.12	67.32
Narayanganj	42.35	0.44	0.75	2.11	0.75	50.84
Bijadodi	49.33	0.46	1.37	1.79	2.53	56.70

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Mandla	76.12	33.65	25.36	18.08	19.48	740
Mohgaon	91.74	8.33	8.77	42.98	30.00	906
Ghughari	97.59	54.51	1.74	9.25	30.58	909
Nainpur	74.42	37.18	21.38	12.86	19.46	712
Bichhiya	88.84	67.53	13.30	3.91	17.58	777
Mawai	99.48	83.33	13.54	1.56	35.42	835
Niwas	87.99	67.98	14.46	5.35	9.65	751
Narayanganj	93.78	31.25	10.58	10.65	14.29	749
Bijadodi	92.18	56.31	10.92	9.15	20.34	777

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Mandla	1.40	11.81	65.96	75.61	70.73	35.00
Mohgaon	3.59	8.27	29.41	29.41	94.12	12.50
Ghughari	1.67	15.46	7.69	100.00	100.00	100.00
Nainpur	2.79	15.08	7.41	66.67	98.08	33.33
Bichhiya	2.59	20.41	20.25	98.11	85.19	32.56
Mawai	3.28	17.45	5.56	66.67	71.43	42.86
Niwas	2.75	9.26	22.86	86.96	79.17	69.57
Narayanganj	3.42	20.42	25.81	86.36	100.00	63.64
Bijadodi	3.79	12.35	10.00	88.89	92.59	11.54

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Mandla	91	130	56.64	37.02	3.91	105	20.85	463
Mohgaon	84	119	65.05	40.22	4.55	110	20.37	836
Ghughari	75	105	56.38	47.11	3.25	108	23.42	167
Nainpur	82	115	53.07	38.02	3.81	107	21.35	236
Bichhiya	78	109	73.15	28.23	3.2	108	20.36	383
Mawai	84	118	49.32	45.32	3.33	104	25.52	269
Niwas	77	107	49.83	42.34	3.29	110	23.42	438
Narayanganj	72	100	48.89	36.87	3.62	166	32.09	763
Bijadodi	75	104	61.14	32.51	3.48	118	23.42	397

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Niwas	55.6	55.6	0.0	69.1	69.1	0.0	6.0	6.0	0.0
Mandla	43.8	33.3	88.8	49.8	40.5	89.5	17.2	5.6	66.7
Bichhiya	43.0	43.0	0.0	47.9	47.9	0.0	5.8	5.8	0.0
Nainpur	65.2	59.9	95.5	60.8	56.0	88.5	14.8	5.6	68.0

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Niwas	3.9	3.9	0.0	15.7	15.7	0.0	
Mandla	14.4	3.5	60.8	37.1	45.2	2.7	
Bichhiya	3.6	3.6	0.0	33.8	33.8	0.0	
Nainpur	12.2	3.6	61.7	16.4	19.0	1.0	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Niwas	14.3	14.8	7.7	1.1	19.4	3.5	0.7	70.0
Mandla	19.4	15.7	17.1	3.1	27.2	8.2	1.3	60.5
Bichhiya	14.8	15.2	7.4	0.9	23.1	3.7	0.6	67.3
Nainpur	19.3	17.8	15.6	1.8	37.6	5.6	0.6	53.1

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Niwas	42.6	56.2	1.1	0.6	0.5	
Mandla	24.2	74.8	1.1	0.9	0.2	
Bichhiya	7.4	89.9	2.7	2.2	0.5	
Nainpur	16.8	80.8	2.4	2.2	0.2	

MANDSAUR



Demography	2001
Total Population	1183724
Share of Madhya Pradesh Population	2.0
Urban Population	220704
Population of Scheduled Castes	212262
Population of Scheduled Tribes	37526
Density of Population (per sq km)	214
Decadal Growth Rate (1991–2001)	
Total	23.7
Rural	25.9
Urban	15.0
SC	24.8
ST	37.7

Health	2006
Population per Health Centre	4803
Rural Population Served per PHC	36017
Rural Population Served per SHC	4521
Total Fertility Rate	3.5

Gender	2001	
Gender Ratio	All	956
	Rural	960
	Urban	941
	SC	952
	ST	945
Workers Participation Rate-Female	40.4	
	2004–05	
Female Enrolment Rate (age 6–14)	98.3	

Habitat	2004
Urban Population Residing in Slum	20364
Ground Water Development (%)	109.5
Normal Rainfall (in mm)	1379
Average Annual Rainfall (in mm)	872
Per Capita Forest Area (in Ha)	0.03

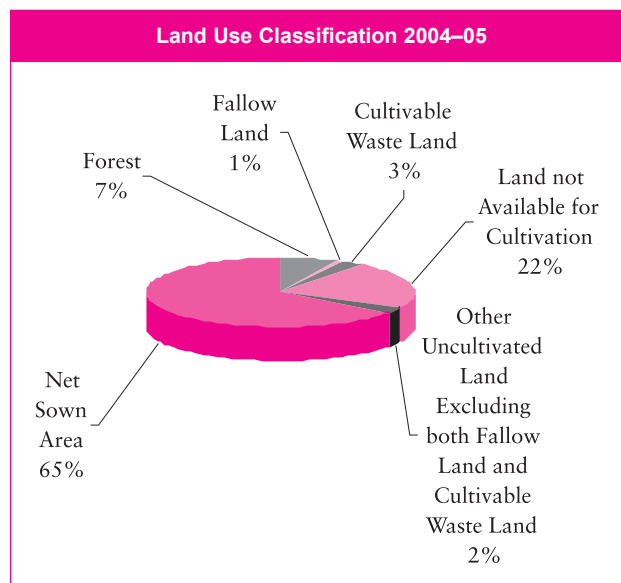
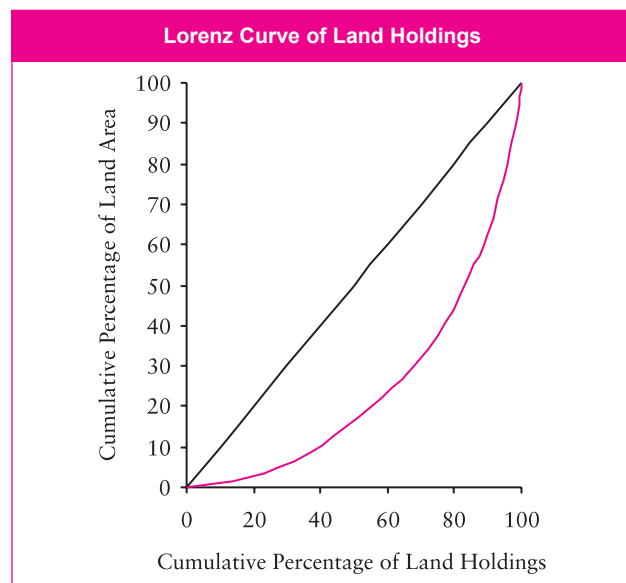
Basic Information	2001
Area (in sq. km)	5535
Total Inhabited Villages	899
Total Habitations	3860
Forest Villages	0
Major Industrial Areas:	
<i>Mandsaur, Malhargarh</i>	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	61.8	47.1	70.3
Male	78.5	60.6	85.2
Female	44.4	32.8	54.7
Rural	61.0	47.3	67.8
Urban	69.0	45.3	81.1
Retention Rate (age 6–11) 2004–05			73.8

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	1248	100.0
With Own Building	1248	100.0
With Drinking Water Facility	536	42.9
With Toilet Facility	370	29.6

Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	50.0	62.4
Households with Electricity	61.5	86.8
Households with Toilet	13.4	18.8
Households with All Three Facilities	6.4	14.0
Households Without Any of the Three Facilities	25.2	6.0
Villages Electrified	100.0	95.3

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	22.2
Rural Roads per Village (in Km)		0.9
Telephone per Lakh Population (BSNL)	Mar–05	2547
Population per Post Office		5806
Total Electricity Consumption per Consumer (in Kwh)	2003–04	1476
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	534
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	640
Consumption per Industrial Unit (in Kwh)	2003–04	40753
Number of Registered Vehicles per Lakh Population	Mar–05	6967
Tractors per 10 Villages	2004	68.4
Average Land Holding Size (in Ha)	2000–01	2.2



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	245.7	173.1
Pulses (in Kgs)	75.9	32.9
Foodgrains (in Kgs)	321.6	206.0
Oilseeds (in Kgs)	257.7	178.2
Yield of Food Grains (in Kgs/Ha)	1543.0	1369.6

Credit

Households Availing Banking Services (in %)	2001
Total	29.9
Rural	26.6
Urban	44.6

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	65.1
% of Net Irrigated to Net Sown Area	2003-04	18.9
Cropped Area under Food Grains (in '000 Ha)	2003-04	185.8
Fertilizer Consumption (in Kgs/Ha)	2002-03	46.9
Cropping Intensity	2004-05	150.0
Net Area Sown (in '000 Ha)	2004-05	359.3
Gross Cropped Area (in '000 Ha)		539.1
Double Cropped Area to Net Area Sown	2004-05	50.0
Net Irrigated Area (in '000 Ha)	2003-04	67.1
Gross Irrigated Area (in '000 Ha)		67.5

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Bhanpura	51.46	1.97	5.87	3.44	0.23	65.18
Garoth	52.26	3.24	9.76	4.19	1.04	73.03
Malhargarh	50.66	1.00	1.84	6.69	2.42	63.74
Mandsaur	49.31	2.35	6.03	4.82	1.71	65.70
Sitamau	47.77	1.61	5.87	7.25	0.93	65.63

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetrac (%)	Maternal mortality ratio
Bhanpura	85.19	27.06	13.00	30.26	25.88	698
Garoth	74.24	31.15	24.20	38.61	25.73	713
Malhargarh	78.21	30.15	27.39	31.97	3.35	586
Mandsaur	73.56	31.77	30.08	20.81	16.00	660
Sitamau	81.00	24.52	19.50	33.08	23.70	643

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Bhanpura	4.44	17.31	42.31	13.51	24.32	5.41
Garoth	2.65	16.22	31.58	70.00	83.87	6.67
Malhargarh	4.19	19.17	46.77	62.26	62.26	47.06
Mandsaur	4.36	19.39	44.19	78.79	80.00	47.06
Sitamau	2.88	15.54	30.00	81.13	86.79	40.38

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Bhanpura	70	97	77.6	40.89	4.15	117	24.71	391
Garoth	86	121	84.47	31.4	3.97	120	25.42	327
Malhargarh	75	104	69.99	27.48	3.66	115	25.52	182
Mandsaur	88	125	81.99	37.54	4.52	143	29.83	259
Sitamau	72	99	75.26	37.74	4.27	131	29.15	278

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Bhanpura	80.9	78.6	97.6	62.1	57.8	92.4	18.2	13.4	51.7
Malhargarh	89.3	88.3	94.7	61.9	59.6	74.0	13.0	7.3	43.8
Garoth	83.5	81.0	96.8	46.2	41.4	71.8	13.5	5.5	55.9
Mandsaur	92.9	91.1	97.0	69.2	63.9	81.0	28.2	10.7	67.2
Sitamau	80.7	80.0	93.7	66.3	65.2	86.0	13.5	11.1	56.7

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Bhanpura	12.7	7.4	49.7	7.3	8.3	0.3	
Malhargarh	9.8	4.8	36.6	4.9	5.3	2.3	
Garoth	9.2	2.7	43.5	10.0	11.6	1.4	
Mandsaur	21.5	6.7	54.1	3.1	4.2	0.5	
Sitamau	10.1	7.9	51.3	7.7	8.1	0.6	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Bhanpura	32.5	22.0	36.8	4.1	51.1	9.4	1.2	32.5
Malhargarh	20.4	18.4	36.0	4.4	50.6	15.1	1.1	34.8
Garoth	30.4	22.6	33.1	4.0	56.6	9.7	0.8	31.7
Mandsaur	31.6	24.2	49.9	11.9	53.4	21.3	2.1	25.5
Sitamau	33.1	23.6	28.2	3.2	46.4	8.7	0.8	39.0

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Bhanpura	60.5	36.8	2.6	2.3	0.3	
Malhargarh	28.7	70.1	1.1	0.9	0.2	
Garoth	38.4	60.1	1.5	1.3	0.2	
Mandsaur	44.2	53.1	2.7	2.4	0.4	
Sitamau	27.3	71.0	1.7	1.2	0.5	

MORENA



Demography	2001
Total Population	1592714
Share of Madhya Pradesh Population	2.6
Urban Population	343305
Population of Scheduled Castes	335728
Population of Scheduled Tribes	12974
Density of Population (per sq km)	319
Decadal Growth Rate (1991–2001)	
Total	24.5
Rural	26.1
Urban	19.0
SC	25.1
ST	51.2

Health	2006
Population per Health Centre	9038
Rural Population Served per PHC	31892
Rural Population Served per SHC	9171
Total Fertility Rate	4.2

Gender	2001	
Gender Ratio	All	822
	Rural	817
	Urban	842
	SC	817
	ST	894
Workers Participation Rate-Female	23.7	
	2004–05	
Female Enrolment Rate (age 6–14)	104.5	

Habitat	2004
Urban Population Residing in Slum	28727
Ground Water Development (%)	27.0
Normal Rainfall (in mm)	721
Average Annual Rainfall (in mm)	648
Per Capita Forest Area (in Ha)	0.03

Basic Information 2001

Area (in sq. km)	4989
Total Inhabited Villages	760
Total Habitations	1236
Forest Villages	0
Major Industrial Areas:	
<i>Morena, Porsa</i>	

Literacy and Retention

Literacy-2001	SC	ST	All
All	59.1	43.3	64.7
Male	76.2	56.7	79.9
Female	38.0	28.1	46.2
Rural	58.1	40.1	61.6
Urban	62.7	69.1	75.6
Retention Rate (age 6–11) 2004–05			73.3

Primary School Infrastructure (2004–05)

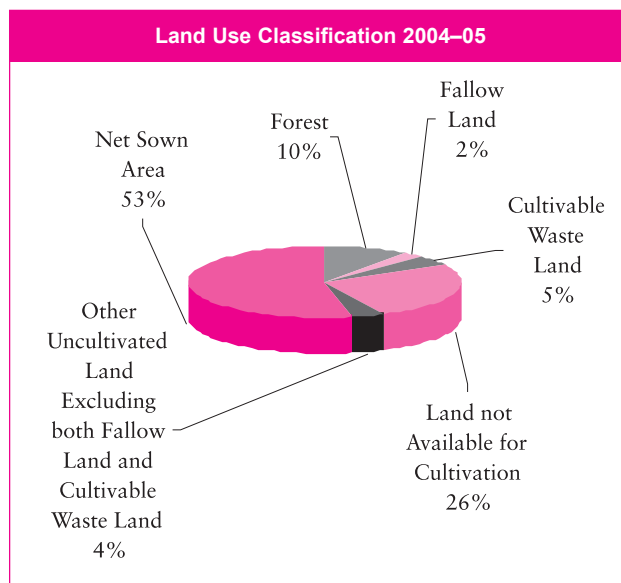
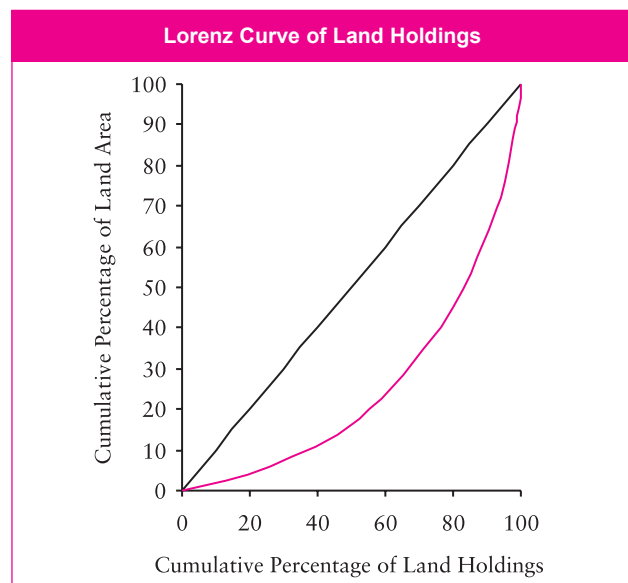
	Number	(%)
Number of Primary Schools	1768	100.0
With Own Building	1768	100.0
With Drinking Water Facility	1402	79.3
With Toilet Facility	230	13.0

Basic Amenities (in %) 1991 2001

Households with Safe Drinking Water	43.6	56.1
Households with Electricity	49.0	54.6
Households with Toilet	11.1	19.7
Households with All Three Facilities	9.4	15.6
Households Without Any of the Three Facilities	32.3	23.3
Villages Electrified	95.2	94.2

Infrastructure Facilities

Road Length per 100 sq.km (in Km)	2002–03	20.5
Rural Roads per Village (in Km)		0.9
Telephone per Lakh Population (BSNL)	Mar–05	1263
Population per Post Office		8319
Total Electricity Consumption per Consumer (in Kwh)	2003–04	3357
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	716
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	884
Consumption per Industrial Unit (in Kwh)	2003–04	62681
Number of Registered Vehicles per Lakh Population	Mar–05	3703
Tractors per 10 Villages	2004	134.2
Average Land Holding Size (in Ha)	2000–01	1.5



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	239.0	208.0
Pulses (in Kgs)	13.9	15.4
Foodgrains (in Kgs)	252.9	223.4
Oilseeds (in Kgs)	114.5	112.1
Yield of Food Grains (in Kgs/Ha)	2376.0	2105.5

Credit

	2001
Households Availing Banking Services (in %)	16.4
Total	11.2
Rural	35.5
Urban	

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	53.7
% of Net Irrigated to Net Sown Area	2003-04	62.7
Cropped Area under Food Grains (in '000 Ha)	2003-04	176.6
Fertilizer Consumption (in Kgs/Ha)	2002-03	45.6
Cropping Intensity	2004-05	124.1
Net Area Sown (in '000 Ha)	2004-05	268.1
Gross Cropped Area (in '000 Ha)		332.6
Double Cropped Area to Net Area Sown	2004-05	24.1
Net Irrigated Area (in '000 Ha)	2003-04	165.4
Gross Irrigated Area (in '000 Ha)		166.3

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Morena	31.34	1.66	5.13	7.54	9.22	55.45
Ambah	32.96	1.95	9.37	4.46	4.63	54.80
Porsa	33.05	1.67	4.17	4.27	1.29	45.35
Joura	43.24	0.57	2.81	3.33	0.50	51.09
Pahargarh	45.76	1.88	6.20	2.50	0.88	59.94
Sabargarh	36.67	2.83	5.46	4.27	0.54	50.49
Kailaras	41.66	1.04	2.75	3.39	0.54	51.23

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Morena	52.08	45.33	5.51	49.55	36.29	1262
Ambah	53.56	44.08	19.97	62.50	22.64	720
Porsa	58.52	34.08	13.25	33.56	27.19	767
Joura	51.77	47.69	1.39	67.46	27.00	1015
Pahargarh	60.06	32.22	11.34	67.37	24.59	909
Sabalgarh	70.30	26.01	20.68	59.09	38.05	820
Kailaras	66.06	33.26	0.75	74.28	21.38	1343

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Morena	3.44	11.51	53.85	50.00	100.00	35.00
Ambah	1.89	14.97	58.62	59.09	78.26	0.00
Porsa	2.33	3.38	100.00	100.00	100.00	0.00
Joura	5.91	15.88	70.69	55.56	86.11	8.33
Pahargarh	4.61	24.84	38.71	54.55	75.93	45.45
Sabalgarh	3.33	11.09	58.82	55.56	66.67	33.33
Kailaras	2.65	9.90	44.19	68.18	81.82	63.64

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Morena	110	160	83.44	52.32	4.61	151	31.94	255
Ambah	81	114	80.18	34.14	4.59	131	26.26	590
Porsa	77	107	76.67	56.7	4.52	129	25.25	361
Joura	83	117	80.24	43.35	4.92	145	29.85	233
Pahargarh	88	125	86.44	45.63	5.26	146	27.71	549
Sabalgarh	93	133	86.08	61.76	5.13	147	28.4	476
Kailaras	108	157	88.03	47.09	5.47	164	30.33	411

Source: Centre for Population Studies, Administration Academy, Bhopal

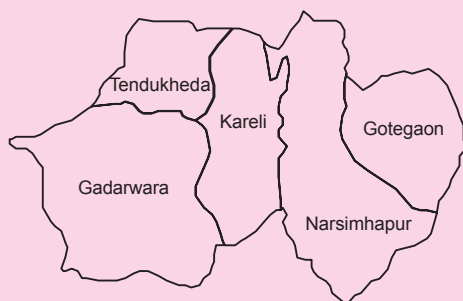
Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Ambah	42.8	33.3	89.3	65.3	58.7	97.6	16.5	6.1	67.4
Porsa	30.3	20.8	81.9	60.7	56.7	82.7	12.4	6.2	46.0
Morena	63.1	46.2	93.3	62.8	44.3	95.8	33.4	9.2	76.6
Joura	47.4	43.5	84.4	45.6	42.7	73.9	12.0	7.2	57.5
Kailaras	68.5	64.0	93.4	46.1	37.2	95.0	15.7	6.1	69.1
Sabalgah	75.9	72.9	85.9	51.8	44.3	77.8	15.8	6.2	48.4

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Ambah	12.6	2.2	62.9	23.2	27.8	0.6	
Porsa	7.5	1.4	41.0	28.8	33.2	5.3	
Morena	29.1	4.8	72.6	21.1	32.5	0.8	
Joura	7.2	2.7	49.8	29.5	31.8	7.4	
Kailaras	13.0	3.5	65.6	20.5	24.0	0.9	
Sabalgah	13.0	3.9	44.3	13.4	15.8	5.3	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/ Transistor	Television	Telephone	Bicycle	Scooter/ Motor Cycle/ Moped	Car/ Jeep/ Van	None of the Specified Assets
Ambah	18.3	21.5	23.4	3.8	54.0	6.6	1.1	35.5
Porsa	13.1	18.1	19.6	2.7	53.3	5.4	1.0	37.7
Morena	22.0	19.4	36.3	6.5	53.8	11.7	1.7	32.7
Joura	10.7	14.3	17.2	1.9	40.5	4.4	0.8	49.5
Kailaras	14.7	12.3	23.0	2.2	42.8	5.4	1.2	46.7
Sabalgah	16.0	13.3	21.2	3.2	35.0	4.8	1.4	53.6

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Ambah	83.4	1.7	14.9	13.8	1.1
Porsa	79.8	2.5	17.7	15.9	1.8
Morena	84.4	5.7	9.9	8.7	1.1
Joura	76.4	11.6	12.0	10.6	1.5
Kailaras	74.7	18.8	6.5	5.2	1.3
Sabalgah	71.9	23.0	5.1	4.1	1.0

NARSIMHAPUR



Demography	2001
Total Population	957646
Share of Madhya Pradesh Population	1.6
Urban Population	153110
Population of Scheduled Castes	154552
Population of Scheduled Tribes	126139
Density of Population (per sq km)	187
Decadal Growth Rate (1991–2001)	
Total	21.9
Rural	20.3
Urban	31.1
SC	18.6
ST	24.4

Health	2006
Population per Health Centre	4880
Rural Population Served per PHC	51910
Rural Population Served per SHC	4502
Total Fertility Rate	3.5

Gender	2001	
Gender Ratio	All	909
	Rural	910
	Urban	904
	SC	908
	ST	955
Workers Participation Rate-Female	29.1	
	2004–05	
Female Enrolment Rate (age 6–14)	100.8	

Habitat	2004
Urban Population Residing in Slum	66201
Ground Water Development (%)	66.8
Normal Rainfall (in mm)	670
Average Annual Rainfall (in mm)	800
Per Capita Forest Area (in Ha)	0.14

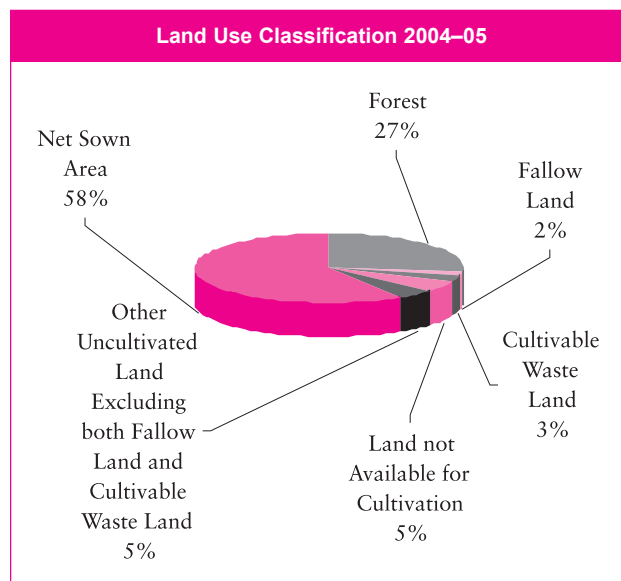
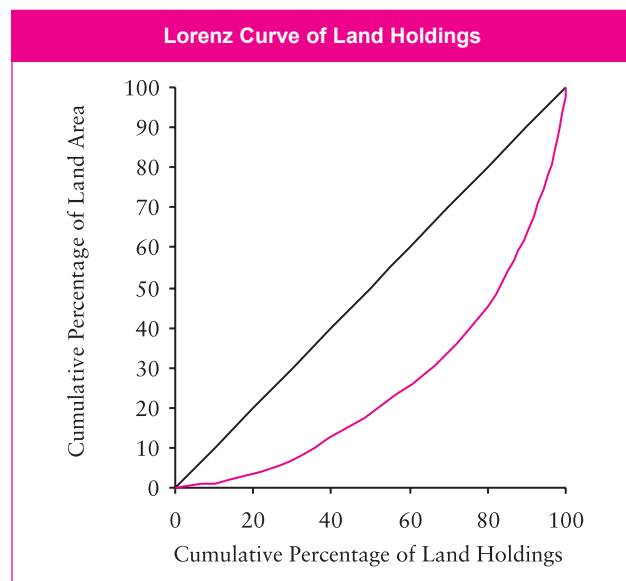
Basic Information	2001
Area (in sq. km)	5133
Total Inhabited Villages	1040
Total Habitations	3958
Forest Villages	12
Major Industrial Areas:	
<i>Narsimhapur, Kareli, Saikheda, Gotegaon</i>	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	73.5	64.4	77.7
Male	83.3	75.0	86.1
Female	62.7	53.2	68.5
Rural	73.4	64.1	76.4
Urban	74.1	67.6	84.4
Retention Rate (age 6–11) 2004–05			86.9

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	1228	100.0
With Own Building	989	80.5
With Drinking Water Facility	975	79.4
With Toilet Facility	455	37.1

Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	84.3	93.1
Households with Electricity	46.3	74.6
Households with Toilet	14.7	28.4
Households with All Three Facilities	13.0	25.6
Households Without Any of the Three Facilities	9.6	2.3
Villages Electrified	99.0	96.0

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	22.3
Rural Roads per Village (in Km)		0.7
Telephone per Lakh Population (BSNL)	Mar–05	2300
Population per Post Office		5665
Total Electricity Consumption per Consumer (in Kwh)	2003–04	1618
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	549
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	919
Consumption per Industrial Unit (in Kwh)	2003–04	9755
Number of Registered Vehicles per Lakh Population	Mar–05	4493
Tractors per 10 Villages	2004	36.5
Average Land Holding Size (in Ha)	2000–01	2.3



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	178.6	208.7
Pulses (in Kgs)	201.9	220.3
Foodgrains (in Kgs)	380.5	429.1
Oilseeds (in Kgs)	172.1	120.1
Yield of Food Grains (in Kgs/Ha)	1301.0	1360.5

Credit

	2001
Households Availing Banking Services (in %)	2001
Total	22.9
Rural	19.9
Urban	39.5

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	59.0
% of Net Irrigated to Net Sown Area	2003-04	56.4
Cropped Area under Food Grains (in '000 Ha)	2003-04	314.2
Fertilizer Consumption (in Kgs/Ha)	2002-03	35.8
Cropping Intensity	2004-05	132.2
Net Area Sown (in '000 Ha)	2004-05	303.1
Gross Cropped Area (in '000 Ha)		400.8
Double Cropped Area to Net Area Sown	2004-05	32.2
Net Irrigated Area (in '000 Ha)	2003-04	170.3
Gross Irrigated Area (in '000 Ha)		171.7

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Chawarpatha	49.95	0.42	1.22	3.98	2.63	60.00
Babai Chichli	47.95	0.59	1.04	3.48	0.05	54.48
Gotegaon	51.25	1.87	6.68	3.51	0.04	66.18
Kareli	52.04	0.97	1.26	4.53	7.06	67.56
Narsimhapur	36.63	7.57	2.55	3.87	0.04	52.60
Saikheda	49.07	1.41	3.75	5.09	2.06	65.20

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Chawarpatha	70.88	36.54	23.46	17.24	15.35	869
Babai Chichli	69.00	38.75	31.09	21.81	31.70	626
Gotegaon	78.05	62.50	20.00	15.00	20.00	583
Kareli	68.24	36.00	11.29	15.93	6.38	1048
Narsimhapur	52.73	46.30	18.52	20.75	34.00	757
Saikheda	78.43	34.70	25.80	15.99	11.98	735

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Chawarpatha	5.00	15.77	50.00	45.83	62.50	33.33
Babai Chichli	3.85	12.50	33.33	71.15	83.02	57.14
Gotegaon	1.87	23.73	40.00	81.82	100.00	50.00
Kareli	2.81	15.98	53.33	53.85	69.23	55.56
Narsimhapur	2.40	21.30	30.00	88.89	77.78	66.67
Saikheda	4.12	14.53	52.27	97.78	100.00	37.78

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Chawarpatha	103	148	62.74	35.75	4.11	101	22.82	730
Babai Chichli	85	120	72.73	66.67	4.13	119	24.93	314
Gotegaon	66	91	44.22	0	3.67	88	19.03	405
Kareli	101	145	70.76	39.4	3.92	115	24.42	322
Narsimhapur	83	117	66.11	27.27	3.43	102	24.49	495
Saikheda	91	129	65.99	41.29	4.01	124	26.06	258

Source: Centre for Population Studies, Administration Academy, Bhopal

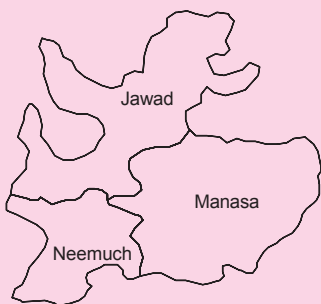
Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Gotegaon	76.6	75.8	81.7	93.9	93.1	99.1	27.0	21.9	60.2
Gadarwara	71.1	67.9	92.5	92.7	91.9	98.7	23.0	17.7	58.9
Narsimhapur	78.4	73.8	90.3	92.9	91.2	97.2	36.2	21.7	73.3
Kareli	76.7	74.6	86.6	93.7	92.8	98.0	37.4	31.6	65.7
Tendukheda	72.6	72.6	0.0	92.3	92.3	0.0	21.5	21.5	0.0

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Gotegaon	24.4	19.4	57.7	2.1	2.4	0.1	
Gadarwara	20.5	14.9	57.9	2.3	2.6	0.2	
Narsimhapur	33.0	18.4	70.4	2.4	3.0	0.9	
Kareli	33.7	27.7	63.1	1.8	2.2	0.2	
Tendukheda	18.8	18.8	0.0	2.6	2.6	0.0	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/ Transistor	Television	Telephone	Bicycle	Scooter/ Motor Cycle/ Moped	Car/ Jeep/ Van	None of the Specified Assets
Gotegaon	21.1	16.1	23.5	4.0	37.7	9.3	1.1	50.8
Gadarwara	22.8	14.0	24.5	4.6	32.9	8.8	1.2	52.5
Narsimhapur	25.2	16.2	31.3	8.0	39.8	14.2	1.6	46.7
Kareli	22.2	15.5	28.8	6.7	39.7	11.8	1.8	45.7
Tendukheda	23.3	13.6	20.4	2.4	24.6	8.5	1.7	59.8

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Gotegaon	40.1	59.1	0.8	0.4	0.4	
Gadarwara	29.9	68.2	1.9	0.7	1.2	
Narsimhapur	47.3	51.4	1.3	0.6	0.7	
Kareli	39.9	59.1	1.0	0.5	0.5	
Tendukheda	27.8	70.5	1.7	0.8	0.9	

NEEMUCH



Demography	2001
Total Population	726070
Share of Madhya Pradesh Population	1.2
Urban Population	202970
Population of Scheduled Castes	91088
Population of Scheduled Tribes	61790
Density of Population (per sq km)	170
Decadal Growth Rate (1991–2001)	
Total	21.3
Rural	21.4
Urban	21.3
SC	19.0
ST	30.4

Health	2006
Population per Health Centre	4741
Rural Population Served per PHC	28815
Rural Population Served per SHC	4002
Total Fertility Rate	3.3

Gender	2001	
Gender Ratio	All	950
	Rural	959
	Urban	925
	SC	962
	ST	933
Workers Participation Rate-Female	40.1	
	2004–05	
Female Enrolment Rate (age 6–14)	98.2	

Habitat	2004
Urban Population Residing in Slum	21168
Ground Water Development (%)	91.7
Normal Rainfall (in mm)	1155
Average Annual Rainfall (in mm)	798
Per Capita Forest Area (in Ha)	0.13

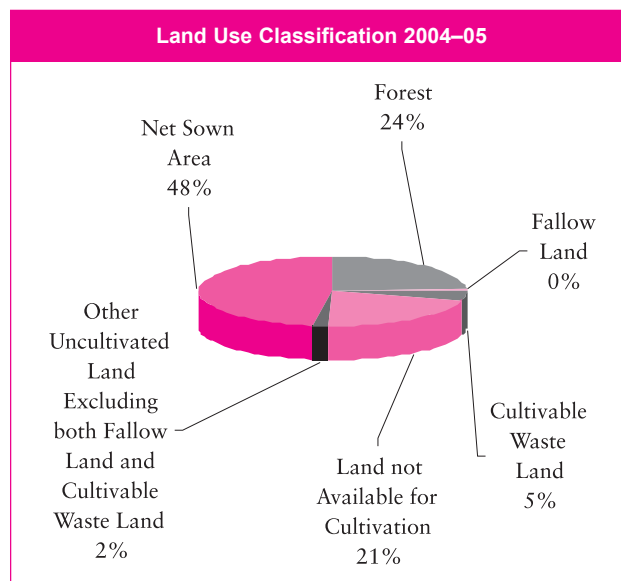
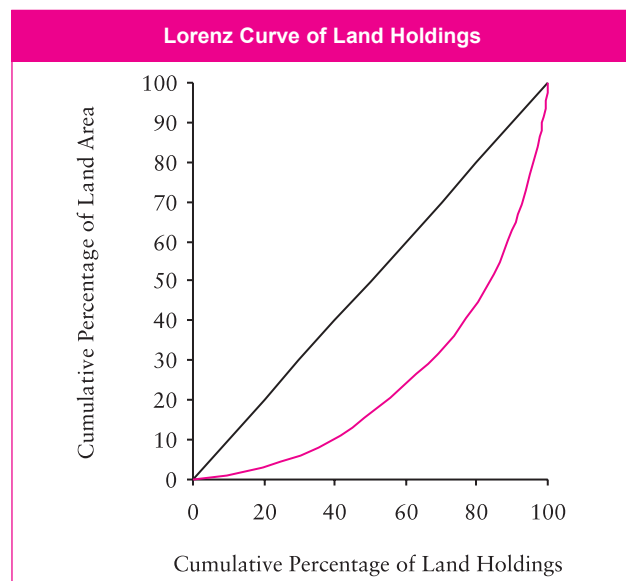
Basic Information	2001
Area (in sq. km)	4256
Total Inhabited Villages	676
Total Habitations	2151
Forest Villages	28
Major Industrial Areas:	
<i>Neemuch</i>	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	61.9	33.0	66.2
Male	80.0	46.5	82.5
Female	43.2	18.5	49.0
Rural	57.4	32.3	61.1
Urban	73.8	37.6	78.7
Retention Rate (age 6–11) 2004–05			70.6

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	871	100.0
With Own Building	843	96.8
With Drinking Water Facility	124	14.2
With Toilet Facility	391	44.9

Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	na	71.8
Households with Electricity	na	90.4
Households with Toilet	na	21.1
Households with All Three Facilities	na	17.8
Households Without Any of the Three Facilities	na	3.8
Villages Electrified	na	76.6

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	20.5
Rural Roads per Village (in Km)		0.6
Telephone per Lakh Population (BSNL)	Mar–05	38.76
Population per Post Office		6648
Total Electricity Consumption per Consumer (in Kwh)	2003–04	3654
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	662
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	750
Consumption per Industrial Unit (in Kwh)	2003–04	206644
Number of Registered Vehicles per Lakh Population	Mar–05	8998
Tractors per 10 Villages	2004	44.8
Average Land Holding Size (in Ha)	2000–01	1.9



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	205.6	181.7
Pulses (in Kgs)	89.8	58.9
Foodgrains (in Kgs)	295.4	240.6
Oilseeds (in Kgs)	160.2	182.0
Yield of Food Grains (in Kgs/Ha)	1592.0	1651.1

Credit

	2001
Households Availing Banking Services (in %)	2001
Total	30.3
Rural	25.4
Urban	44.0

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	47.5
% of Net Irrigated to Net Sown Area	2003-04	24.4
Cropped Area under Food Grains (in '000 Ha)	2003-04	110.0
Fertilizer Consumption (in Kgs/Ha)	2002-03	47.0
Cropping Intensity	2004-05	155.8
Net Area Sown (in '000 Ha)	2004-05	186.8
Gross Cropped Area (in '000 Ha)		291.1
Double Cropped Area to Net Area Sown	2004-05	55.8
Net Irrigated Area (in '000 Ha)	2003-04	45.6
Gross Irrigated Area (in '000 Ha)		45.7

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Jawad	47.01	4.03	2.58	8.35	2.62	67.38
Manasa	46.02	2.42	2.13	6.60	0.51	59.06
Neemuch	49.74	0.34	1.79	1.32	0.26	54.82

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetcac (%)	Maternal mortality ratio
Javad	77.30	55.07	29.44	10.05	17.73	620
Manasa	77.60	60.07	27.36	7.12	17.91	651
Neemuch	78.83	24.96	19.22	10.20	10.53	665

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Javad	7.57	30.25	18.09	95.16	67.74	49.15
Manasa	5.34	16.78	30.59	88.24	73.13	37.70
Neemuch	2.85	16.51	46.88	87.88	93.94	27.27

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Jawad	82	116	72.3	32.35	4.36	140	29.5	168
Manasa	83	117	76.04	33.71	4.01	124	27.33	281
Neemuch	74	103	83.25	27.56	3.14	93	22.98	312

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Jawad	91.0	90.4	93.9	85.6	84.0	93.7	16.6	11.7	40.5
Neemuch	93.0	90.3	96.7	71.0	60.7	85.1	31.7	6.0	67.1
Manasa	86.9	84.9	97.4	59.0	54.0	84.8	13.4	7.2	45.7

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)						
Tehsil	All Three Facilities Available			None of the Facilities		
	Total	Rural	Urban	Total	Rural	Urban
Jawad	15.6	10.7	39.3	1.7	1.8	1.1
Neemuch	26.3	3.9	57.0	3.2	5.1	0.6
Manasa	10.3	4.2	41.9	6.6	7.7	1.1

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Jawad	30.2	29.5	34.7	7.1	63.1	15.6	1.8	25.2
Neemuch	31.4	23.1	53.8	15.3	64.8	23.6	2.2	20.8
Manasa	28.9	25.1	34.6	7.0	49.9	13.5	1.2	33.3

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Jawad	74.2	24.5	1.3	1.0	0.3
Neemuch	65.3	33.2	1.5	1.1	0.3
Manasa	49.9	47.2	2.9	2.5	0.4

PANNA



Demography	2001
Total Population	856558
Share of Madhya Pradesh Population	1.4
Urban Population	108184
Population of Scheduled Castes	171353
Population of Scheduled Tribes	131796
Density of Population (per sq km)	120
Decadal Growth Rate (1991-2001)	
Total	24.5
Rural	25.1
Urban	20.8
SC	22.1
ST	28.6

Health	2006
Population per Health Centre	7816
Rural Population Served per PHC	46496
Rural Population Served per SHC	7971
Total Fertility Rate	4.7

Gender	2001	
Gender Ratio	All	901
	Rural	903
	Urban	887
	SC	895
	ST	943
Workers Participation Rate-Female	35.1	
	2004-05	
Female Enrolment Rate (age 6-14)	95.3	

Habitat	2004
Urban Population Residing in Slum	27138
Ground Water Development (%)	24.5
Normal Rainfall (in mm)	750
Average Annual Rainfall (in mm)	1269
Per Capita Forest Area (in Ha)	0.35

Basic Information 2001

Area (in sq. km)	7135
Total Inhabited Villages	939
Total Habitations	1189
Forest Villages	0
Major Industrial Areas:	
<i>Panna, Ajaygarh, Gunnore</i>	

Literacy and Retention

Literacy-2001	SC	ST	All
All	51.2	43.2	61.4
Male	62.8	54.9	73.3
Female	38.0	30.7	48.0
Rural	50.6	43.4	59.1
Urban	56.2	38.5	76.4
Retention Rate (age 6-11) 2004-05			90.5

Primary School Infrastructure (2004-05)

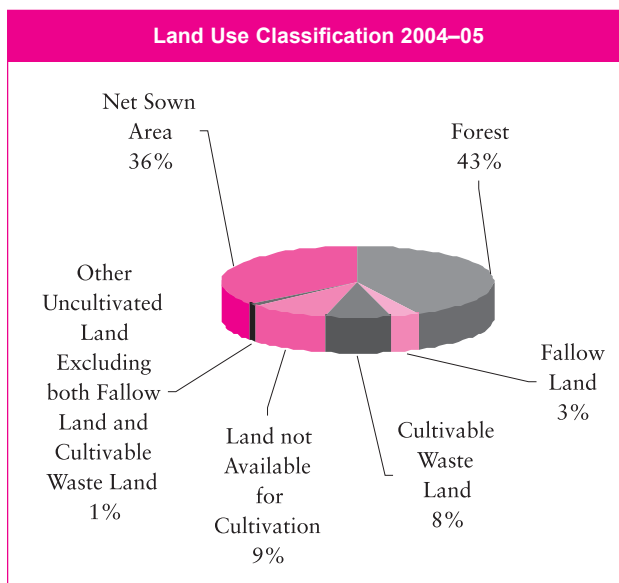
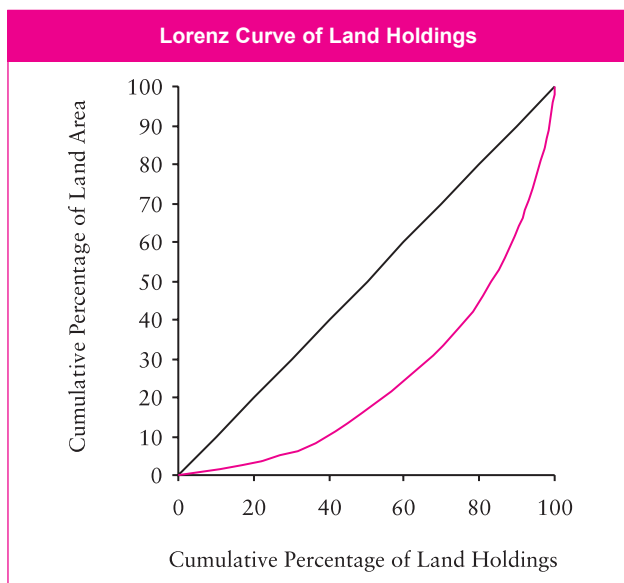
	Number	(%)
Number of Primary Schools	1507	100.0
With Own Building	1507	100.0
With Drinking Water Facility	957	63.5
With Toilet Facility	454	30.1

Basic Amenities (in %) 1991 2001

Households with Safe Drinking Water	28.0	49.2
Households with Electricity	20.8	34.6
Households with Toilet	6.2	11.1
Households with All Three Facilities	4.0	6.8
Households Without Any of the Three Facilities	59.6	34.8
Villages Electrified	93.1	88.1

Infrastructure Facilities

Road Length per 100 sq.km (in Km)	2002-03	16.1
Rural Roads per Village (in Km)		0.5
Telephone per Lakh Population (BSNL)	Mar-05	900
Population per Post Office		5994
Total Electricity Consumption per Consumer (in Kwh)	2003-04	1069
Domestic Consumption of Electricity per Consumer (in Kwh)	2003-04	540
Non-Domestic Consumption per Consumer (in Kwh)	2003-04	967
Consumption per Industrial Unit (in Kwh)	2003-04	13280
Number of Registered Vehicles per Lakh Population	Mar-05	1931
Tractors per 10 Villages	2004	3.0
Average Land Holding Size (in Ha)	2000-01	1.8



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	163.9	130.6
Pulses (in Kgs)	2.7	86.6
Foodgrains (in Kgs)	166.6	217.2
Oilseeds (in Kgs)	13.1	4.4
Yield of Food Grains (in Kgs/Ha)	769.0	729.3

Credit

	2001
Households Availing Banking Services (in %)	2001
Total	19.8
Rural	16.1
Urban	47.6

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	35.5
% of Net Irrigated to Net Sown Area	2003-04	32.4
Cropped Area under Food Grains (in '000 Ha)	2003-04	266.6
Fertilizer Consumption (in Kgs/Ha)	2002-03	25.0
Cropping Intensity	2004-05	117.9
Net Area Sown (in '000 Ha)	2004-05	249.6
Gross Cropped Area (in '000 Ha)		294.4
Double Cropped Area to Net Area Sown	2004-05	17.9
Net Irrigated Area (in '000 Ha)	2003-04	80.0
Gross Irrigated Area (in '000 Ha)		80.0

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Ajaygarh	27.97	0.79	8.65	5.04	6.02	48.84
Gunnor	36.47	1.09	0.87	1.73	0.26	41.48
Panna	39.91	2.20	4.92	4.15	0.66	54.66
Pawai	39.83	0.93	8.53	5.42	2.02	57.91
Shahnagar	41.70	1.09	7.64	5.57	1.14	58.76

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Ajaygarh	89.76	13.17	9.26	35.69	24.15	1008
Panna	88.35	10.61	4.69	24.65	22.40	959
Gunnor	72.41	27.56	5.56	35.95	24.18	1062
Pawai	88.59	9.63	7.71	41.86	14.50	922
Shahnagar	75.03	22.39	7.78	26.75	22.56	820

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Ajaygarh	3.76	24.32	18.57	33.33	51.47	5.88
Panna	4.46	32.16	26.09	45.00	70.00	50.00
Gunnor	7.69	32.11	24.56	56.14	77.19	57.14
Pawai	5.11	38.81	23.81	92.86	80.95	9.52
Shahnagar	6.83	38.08	3.45	94.83	75.86	65.52

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Ajaygarh	94	135	72.24	59.75	4.88	149	29.34	238
Gunnor	83	117	71.56	39.92	4.98	155	33.64	299
Panna	93	132	61.77	49.24	4.79	149	32.69	253
Pawai	84	119	60.49	55.14	4.96	130	25.19	611
Shahnagar	75	105	67.79	47.01	4.96	157	32.43	95

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Ajaigarh	20.8	15.3	72.6	45.5	45.3	47.5	9.2	5.7	42.7
Panna	49.5	35.5	80.1	56.1	49.1	71.6	25.0	9.0	60.2
Gunnor	38.7	35.8	85.5	44.4	45.4	28.0	9.2	7.0	44.7
Pawai	30.9	27.7	71.0	45.7	42.7	83.5	4.5	2.9	25.1
Shahnagar	26.1	26.1	0.0	52.2	52.2	0.0	3.4	3.4	0.0

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Ajaigarh	3.3	1.1	24.2	41.9	44.5	17.2	
Panna	18.8	5.0	49.0	25.7	33.3	8.9	
Gunnor	3.5	2.6	18.8	33.5	34.8	11.8	
Pawai	3.0	1.3	24.5	40.9	43.5	9.3	
Shahnagar	1.9	1.9	0.0	35.6	35.6	0.0	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Ajaigarh	20.2	23.3	6.9	1.5	49.4	4.6	1.0	43.1
Panna	27.0	23.3	21.7	4.8	53.3	9.7	1.4	37.6
Gunnor	20.7	23.8	8.4	1.7	48.5	4.8	0.7	43.9
Pawai	16.3	23.1	6.7	1.0	40.6	3.6	0.7	51.3
Shahnagar	12.8	15.5	5.0	0.9	34.0	2.6	0.4	59.6

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Ajaigarh	10.1	88.6	1.3	1.1	0.1
Panna	40.2	58.3	1.5	1.1	0.5
Gunnor	20.1	78.3	1.6	1.3	0.3
Pawai	18.4	80.1	1.5	1.3	0.2
Shahnagar	12.9	86.5	0.6	0.6	0.0

RAISEN



Demography	2001
Total Population	1125154
Share of Madhya Pradesh Population	1.9
Urban Population	206800
Population of Scheduled Castes	184234
Population of Scheduled Tribes	177139
Density of Population (per sq km)	133
Decadal Growth Rate (1991–2001)	
Total	28.4
Rural	24.3
Urban	50.1
SC	27.0
ST	40.3

Health	2006
Population per Health Centre	8169
Rural Population Served per PHC	73142
Rural Population Served per SHC	7314
Total Fertility Rate	4.5

Gender	2001	
Gender Ratio	All	881
	Rural	884
	Urban	866
	SC	871
	ST	932
Workers Participation Rate-Female	21.9	
	2004–05	
Female Enrolment Rate (age 6–14)	102.3	

Habitat	2004
Urban Population Residing in Slum	12753
Ground Water Development (%)	35.8
Normal Rainfall (in mm)	1125
Average Annual Rainfall (in mm)	953
Per Capita Forest Area (in Ha)	0.30

Basic Information 2001

Area (in sq. km)	8466
Total Inhabited Villages	1429
Total Habitations	1758
Forest Villages	31
Major Industrial Areas:	
<i>Sanchi, Obedullaganj, Bareli</i>	

Literacy and Retention

Literacy-2001	SC	ST	All
All	67.1	54.7	72.2
Male	77.2	65.1	81.6
Female	55.3	43.4	61.3
Rural	66.6	54.6	70.8
Urban	70.3	56.0	77.9
Retention Rate (age 6–11) 2004–05			79.0

Primary School Infrastructure (2004–05)

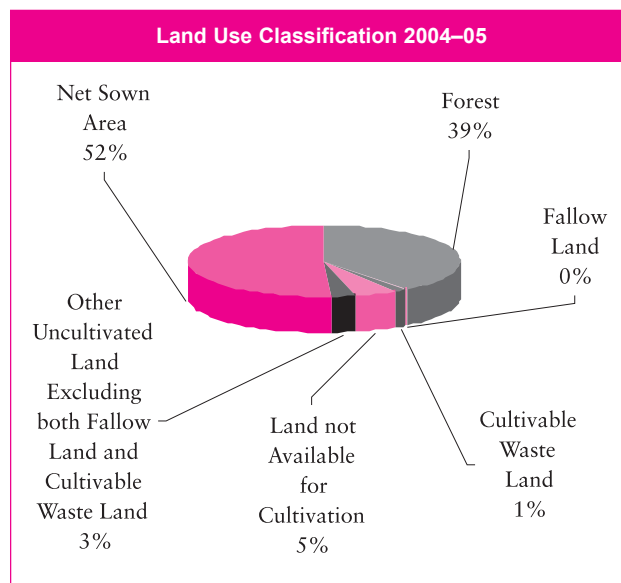
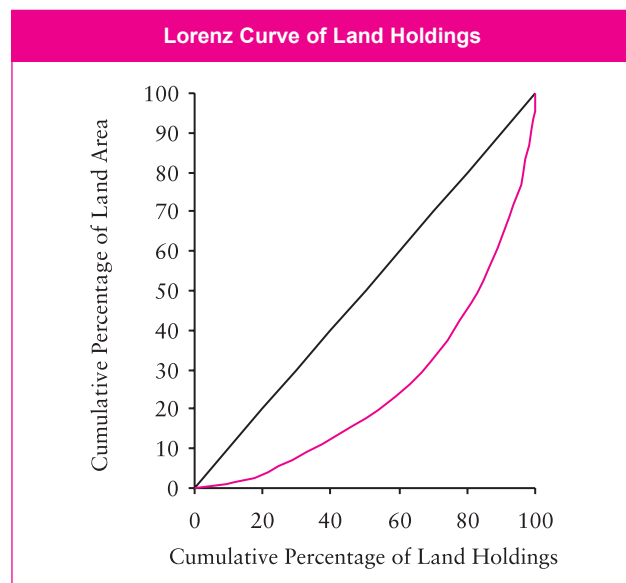
	Number	(%)
Number of Primary Schools	1831	100.0
With Own Building	1811	98.9
With Drinking Water Facility	1291	70.5
With Toilet Facility	1012	55.3

Basic Amenities (in %) 1991 2001

Households with Safe Drinking Water	57.8	80.6
Households with Electricity	45.4	74.5
Households with Toilet	16.6	25.9
Households with All Three Facilities	12.6	21.7
Households Without Any of the Three Facilities	26.7	7.0
Villages Electrified	96.8	90.1

Infrastructure Facilities

Road Length per 100 sq.km (in Km)	2002–03	14.0
Rural Roads per Village (in Km)		0.3
Telephone per Lakh Population (BSNL)	Mar–05	1308
Population per Post Office		5978
Total Electricity Consumption per Consumer (in Kwh)	2003–04	3704
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	578
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	1113
Consumption per Industrial Unit (in Kwh)	2003–04	172782
Number of Registered Vehicles per Lakh Population	Mar–05	3778
Tractors per 10 Villages	2004	67.3
Average Land Holding Size (in Ha)	2000–01	3.0



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	237.1	245.6
Pulses (in Kgs)	56.4	159.3
Foodgrains (in Kgs)	293.5	404.9
Oilseeds (in Kgs)	147.0	60.9
Yield of Food Grains (in Kgs/Ha)	1143.0	1174.9

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	50.8
% of Net Irrigated to Net Sown Area	2003-04	42.0
Cropped Area under Food Grains (in '000 Ha)	2003-04	407.6
Fertilizer Consumption (in Kgs/Ha)	2002-03	53.1
Cropping Intensity	2004-05	118.2
Net Area Sown (in '000 Ha)	2004-05	430.8
Gross Cropped Area (in '000 Ha)		509.4
Double Cropped Area to Net Area Sown	2004-05	18.2
Net Irrigated Area (in '000 Ha)	2003-04	180.8
Gross Irrigated Area (in '000 Ha)		180.8

Credit

Households Availing Banking Services (in %)	2001
Total	20.1
Rural	15.7
Urban	40.2

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Bareilly	43.06	0.79	4.32	4.45	0.07	55.75
Begamganj	27.00	4.30	4.32	4.79	2.31	53.28
Gairatganj	30.87	0.37	2.70	2.89	2.52	39.97
Obedullaganj	34.06	0.92	3.98	4.26	0.24	45.85
Sanchi	28.00	2.59	2.96	6.97	3.90	46.43
Silwani	20.42	1.90	5.20	4.13	1.73	37.96
Udaipura	22.36	15.77	7.66	4.36	4.50	58.70

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Bareli	86.09	24.35	14.78	12.07	14.66	787
Begamganj	45.60	44.44	26.98	10.32	11.11	542
Gairatganj	92.76	66.10	11.04	62.78	18.22	1867
Obedullaganj	75.79	23.99	17.41	53.54	56.46	705
Sanchi	74.31	39.32	19.42	37.18	19.59	1284
Silwani	72.32	37.14	18.35	38.44	45.72	872
Udaipura	63.51	59.46	27.03	5.41	8.11	2138

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Bareli	6.26	22.97	45.95	85.71	95.24	4.76
Begamganj	2.51	32.57	12.82	100.00	94.87	2.56
Gairatganj	2.91	15.00	26.67	80.95	76.19	2.38
Obedullaganj	7.09	22.05	40.58	73.21	67.27	2.08
Sanchi	5.97	30.35	23.81	52.10	62.50	68.91
Silwani	4.26	16.75	24.74	76.40	64.77	17.65
Udaipura	11.00	29.60	0.00	0.00	25.00	66.67

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Bareli	81	114	61.9	11.61	5.09	144	27.3	266
Begamganj	69	95	89.68	24.17	6.26	142	34.02	414
Gairatganj	177	265	76.88	57.74	6.6	193	34.37	469
Obedullaganj	76	106	72.78	50.25	5.4	151	27.11	400
Sanchi	141	211	83.42	60.87	6.29	188	35.49	494
Silwani	95	136	68.46	52.83	5.2	149	27.89	443
Udaipura	264	388	78.38	77.14	5.81	161	31.03	414

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Raisen	79.5	76.7	90.4	81.5	77.2	98.0	22.6	11.2	67.2
Gairatganj	77.7	76.2	95.8	72.3	70.7	92.7	19.7	15.7	68.1
Begamganj	69.4	64.5	85.2	54.1	47.1	76.5	19.6	4.7	67.7
Goharganj	89.9	87.1	95.7	86.4	81.8	95.9	37.4	21.7	69.4
Bareli	71.0	66.6	89.3	90.6	89.5	95.5	28.0	18.8	66.3
Silwani	64.5	64.5	0.0	78.0	78.0	0.0	23.5	23.5	0.0
Udaipura	60.5	57.6	88.4	87.1	86.1	96.3	21.6	16.7	70.3

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Raisen	20.3	8.8	65.5	6.6	8.1	0.6	
Gairatganj	13.6	9.5	63.6	7.3	7.9	0.4	
Begamganj	14.2	2.2	52.6	16.1	19.9	4.0	
Goharganj	34.5	19.5	65.2	4.2	5.9	0.8	
Bareli	23.1	13.7	62.9	3.2	3.7	1.0	
Silwani	19.3		19.3	11.3	11.3	0.0	
Udaipura	16.9	12.0	65.4	5.8	6.3	0.7	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Raisen	22.2	16.9	32.8	4.3	29.8	9.7	1.8	49.2
Gairatganj	18.5	17.4	28.8	3.3	26.3	7.0	1.4	52.2
Begamganj	16.9	14.9	21.8	2.4	27.6	6.2	0.9	57.6
Goharganj	29.0	19.5	42.4	5.8	31.3	11.5	2.1	40.1
Bareli	19.2	16.6	25.3	4.0	27.7	8.8	1.5	54.2
Silwani	14.5	14.0	17.4	2.8	25.3	5.9	1.6	60.5
Udaipura	14.1	15.3	22.6	3.5	23.7	8.3	1.5	58.3

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Raisen	55.3	41.1	3.6	2.0	1.6	
Gairatganj	17.9	81.3	0.9	0.4	0.4	
Begamganj	26.2	73.3	0.5	0.2	0.3	
Goharganj	59.8	37.2	3.0	1.5	1.5	
Bareli	28.9	69.0	2.1	1.0	1.2	
Silwani	12.1	85.4	2.5	1.4	1.1	
Udaipura	23.5	75.0	1.4	0.5	0.9	

RAJGARH



Demography	2001
Total Population	1254085
Share of Madhya Pradesh Population	2.1
Urban Population	217322
Population of Scheduled Castes	218706
Population of Scheduled Tribes	47370
Density of Population (per sq km)	204
Decadal Growth Rate (1991–2001)	
Total	26.3
Rural	25.5
Urban	30.3
SC	22.4
ST	44.5

Health	2006
Population per Health Centre	7004
Rural Population Served per PHC	52799
Rural Population Served per SHC	6638
Total Fertility Rate	4.2

Gender	2001	
Gender Ratio	All	932
	Rural	936
	Urban	915
	SC	934
	ST	928
Workers Participation Rate-Female	44.8	
	2004–05	
Female Enrolment Rate (age 6–14)	97.8	

Habitat	2004
Urban Population Residing in Slum	20998
Ground Water Development (%)	77.7
Normal Rainfall (in mm)	1169
Average Annual Rainfall (in mm)	842
Per Capita Forest Area (in Ha)	0.01

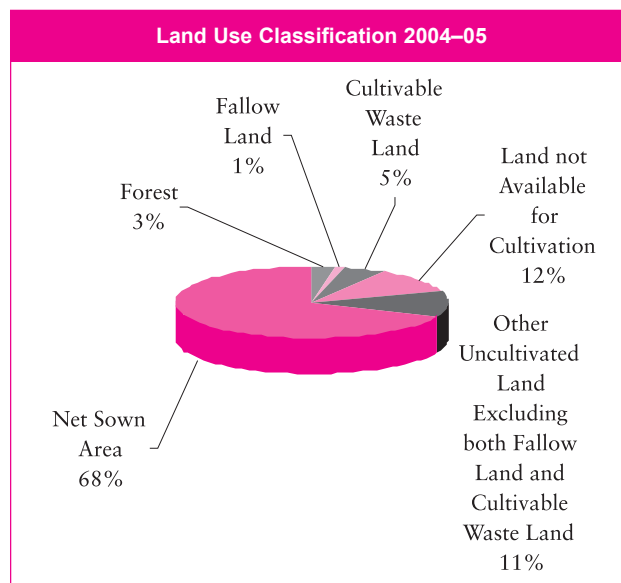
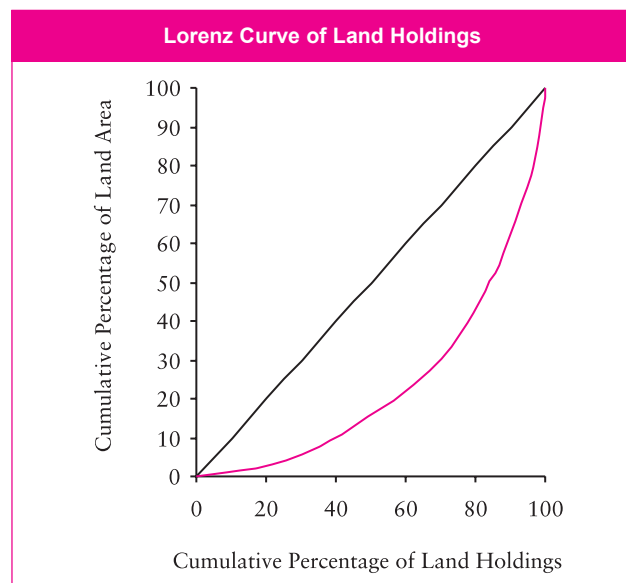
Basic Information	2001
Area (in sq. km)	6153
Total Inhabited Villages	1664
Total Habitations	1969
Forest Villages	5
Major Industrial Areas:	
<i>Narsinghgarh, Sarangpur</i>	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	46.1	46.7	53.7
Male	61.4	61.2	69.1
Female	29.6	30.9	37.1
Rural	44.4	43.6	49.7
Urban	58.1	62.7	72.3
Retention Rate (age 6–11) 2004–05			74.2

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	1883	100.0
With Own Building	1883	100.0
With Drinking Water Facility	1405	74.6
With Toilet Facility	336	17.8

Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	57.0	72.7
Households with Electricity	34.2	85.2
Households with Toilet	10.0	16.3
Households with All Three Facilities	7.1	12.6
Households Without Any of the Three Facilities	29.9	4.0
Villages Electrified	90.1	95.9

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	18.0
Rural Roads per Village (in Km)		0.3
Telephone per Lakh Population (BSNL)	Mar–05	1453
Population per Post Office		8245
Total Electricity Consumption per Consumer (in Kwh)	2003–04	1953
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	505
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	787
Consumption per Industrial Unit (in Kwh)	2003–04	15112
Number of Registered Vehicles per Lakh Population	Mar–05	2472
Tractors per 10 Villages	2004	23.0
Average Land Holding Size (in Ha)	2000–01	2.4



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	227.8	195.9
Pulses (in Kgs)	161.6	73.6
Foodgrains (in Kgs)	389.4	269.5
Oilseeds (in Kgs)	248.6	219.4
Yield of Food Grains (in Kgs/Ha)	1312.0	1404.8

Credit

Households Availing Banking Services (in %)	2001
Total	28.4
Rural	24.9
Urban	45.2

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	68.6
% of Net Irrigated to Net Sown Area	2003-04	37.6
Cropped Area under Food Grains (in '000 Ha)	2003-04	252.1
Fertilizer Consumption (in Kgs/Ha)	2002-03	27.0
Cropping Intensity	2004-05	120.4
Net Area Sown (in '000 Ha)	2004-05	423.1
Gross Cropped Area (in '000 Ha)		607.1
Double Cropped Area to Net Area Sown	2004-05	43.6
Net Irrigated Area (in '000 Ha)	2003-04	158.1
Gross Irrigated Area (in '000 Ha)		158.1

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Biaora	28.01	0.48	0.92	1.73	0.65	32.39
Jirapur	27.63	1.33	1.93	5.65	0.76	38.57
Khilchipur	38.94	0.65	2.39	3.55	2.09	49.04
Narsinghgarh	19.63	1.58	2.95	5.02	1.12	31.16
Rajgarh	25.19	1.50	1.09	4.26	1.70	35.07
Sarangpur	15.20	2.22	1.01	1.11	0.24	20.99

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Biaora	91.46	80.99	9.42	71.10	20.65	764
Jirapur	75.06	63.23	24.37	46.35	27.87	796
Khilchipur	56.24	45.45	26.45	8.87	11.47	883
Narsinghgarh	92.75	88.23	7.04	84.32	30.38	955
Rajgarh	92.10	87.99	7.72	77.24	30.41	945
Sarangpur	90.29	83.15	8.42	77.29	55.94	733

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Biaora	7.53	21.57	15.00	86.67	42.86	0.00
Jirapur	4.88	16.77	57.45	52.86	45.71	3.33
Khilchipur	7.01	17.64	25.00	92.50	78.95	5.56
Narsinghgarh	4.88	18.87	18.82	80.82	73.97	14.67
Rajgarh	6.48	22.49	18.97	88.00	76.00	4.26
Sarangpur	6.21	20.36	44.44	33.33	33.33	0.00

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Biaora	72	100	86.82	39.21	5.24	162	32.08	377
Jirapur	96	138	91.21	48.83	4.4	162	31.51	358
Khilchipur	110	160	86.52	40.26	4.76	121	23.72	465
Narsinghgarh	86	122	89.18	46.81	4.19	114	24.41	256
Rajgarh	86	122	92.76	48.11	4.41	118	23.96	162
Sarangpur	68	93	91.92	39.69	4.6	188	34.11	308

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Jirapur	90.2	89.6	93.7	79.5	77.1	93.0	11.6	4.9	48.8
Khilchipur	74.4	72.6	89.1	71.8	72.6	65.1	13.1	7.7	59.1
Rajgarh	78.4	74.8	95.2	80.9	78.2	93.4	16.3	5.9	65.3
Biaora	86.6	84.2	95.4	63.9	58.5	83.6	16.7	5.0	59.5
Sarangpur	89.0	87.5	94.3	75.7	73.5	83.5	20.6	9.4	60.8
Narsinghgarh	89.1	88.3	93.3	68.7	67.4	76.0	16.9	10.7	52.3

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Jirapur	10.3	3.6	47.2	2.2	2.4	1.1	
Khilchipur	8.7	5.2	39.4	6.7	7.1	3.7	
Rajgarh	13.8	3.4	62.7	3.3	3.9	0.8	
Biaora	13.6	2.6	53.8	6.0	7.1	2.0	
Sarangpur	17.2	6.7	54.7	2.9	3.1	1.9	
Narsinghgarh	11.0	5.9	40.0	3.2	3.3	2.6	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/ Transistor	Television	Telephone	Bicycle	Scooter/ Motor Cycle/ Moped	Car/ Jeep/ Van	None of the Specified Assets
Jirapur	23.0	17.1	19.2	2.3	29.6	5.8	1.0	54.3
Khilchipur	31.0	14.2	15.5	2.6	29.8	5.6	1.0	56.3
Rajgarh	29.4	18.0	23.0	4.3	29.8	8.9	1.5	50.7
Biaora	25.4	17.1	28.0	4.8	34.6	8.6	1.7	45.5
Sarangpur	31.4	20.8	32.2	4.2	39.4	8.1	1.4	41.5
Narsinghgarh	29.5	15.7	34.6	2.9	35.2	7.1	1.1	45.0

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Jirapur	40.8	57.4	1.8	1.2	0.6	
Khilchipur	40.6	58.7	0.7	0.5	0.1	
Rajgarh	39.8	58.8	1.4	0.8	0.6	
Biaora	38.4	60.4	1.2	0.6	0.6	
Sarangpur	42.7	55.4	1.9	1.2	0.6	
Narsinghgarh	42.4	56.3	1.3	0.7	0.6	

RATLAM



Demography	2001
Total Population	1215393
Share of Madhya Pradesh Population	2.0
Urban Population	368434
Population of Scheduled Castes	163001
Population of Scheduled Tribes	314704
Density of Population (per sq km)	250
Decadal Growth Rate (1991–2001)	
Total	25.1
Rural	27.9
Urban	19.0
SC	22.2
ST	39.2

Health	2006
Population per Health Centre	6780
Rural Population Served per PHC	30900
Rural Population Served per SHC	5770
Total Fertility Rate	3.7

Gender	2001	
Gender Ratio	All	958
	Rural	964
	Urban	943
	SC	959
	ST	975
Workers Participation Rate-Female	36.2	
	2004–05	
Female Enrolment Rate (age 6–14)	93.3	

Habitat	2004
Urban Population Residing in Slum	2247
Ground Water Development (%)	129.9
Normal Rainfall (in mm)	1061
Average Annual Rainfall (in mm)	1073
Per Capita Forest Area (in Ha)	0.03

Basic Information	2001
Area (in sq. km)	4861
Total Inhabited Villages	1051
Total Habitations	2418
Forest Villages	0
Major Industrial Areas:	
<i>Ratlam, Jaora</i>	

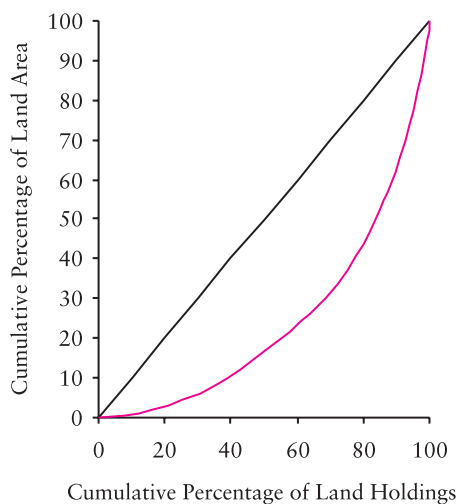
Literacy and Retention			
Literacy-2001	SC	ST	All
All	64.3	41.9	67.2
Male	79.3	55.7	79.5
Female	48.8	27.7	54.3
Rural	61.1	41.3	60.8
Urban	74.6	55.5	80.9
Retention Rate (age 6–11) 2004–05			79.3

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	1667	100.0
With Own Building	1593	95.6
With Drinking Water Facility	1052	63.1
With Toilet Facility	741	44.5

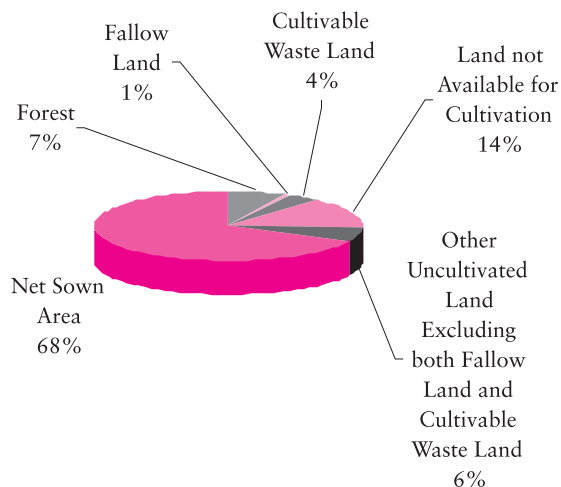
Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	83.1	86.3
Households with Electricity	60.4	81.4
Households with Toilet	25.5	29.4
Households with All Three Facilities	22.6	27.7
Households Without Any of the Three Facilities	9.4	4.7
Villages Electrified	95.2	97.6

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	26.0
Rural Roads per Village (in Km)		0.8
Telephone per Lakh Population (BSNL)	Mar–05	3439
Population per Post Office		7107
Total Electricity Consumption per Consumer (in Kwh)	2003–04	2414
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	754
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	892
Consumption per Industrial Unit (in Kwh)	2003–04	50166
Number of Registered Vehicles per Lakh Population	Mar–05	7850
Tractors per 10 Villages	2004	4.0
Average Land Holding Size (in Ha)	2000–01	2.3

Lorenz Curve of Land Holdings



Land Use Classification 2004-05



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	296.6	300.5
Pulses (in Kgs)	90.9	37.0
Foodgrains (in Kgs)	387.5	337.5
Oilseeds (in Kgs)	270.1	146.5
Yield of Food Grains (in Kgs/Ha)	1757.0	1956.4

Credit

Households Availing Banking Services (in %)	2001
Total	31.0
Rural	23.8
Urban	48.6

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	68.0
% of Net Irrigated to Net Sown Area	2003-04	28.3
Cropped Area under Food Grains (in '000 Ha)	2003-04	219.3
Fertilizer Consumption (in Kgs/Ha)	2002-03	45.2
Cropping Intensity	2004-05	147.8
Net Area Sown (in '000 Ha)	2004-05	330.7
Gross Cropped Area (in '000 Ha)		488.8
Double Cropped Area to Net Area Sown	2004-05	47.8
Net Irrigated Area (in '000 Ha)	2003-04	93.4
Gross Irrigated Area (in '000 Ha)		93.6

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Alot	49.52	1.71	9.48	4.00	3.12	71.04
Bajna	33.62	4.11	9.74	5.15	1.37	56.63
Jaora	51.66	1.13	5.85	4.76	0.36	64.13
Piploda	53.19	1.94	3.99	4.54	1.13	66.76
Ratlam	45.04	2.80	7.49	7.09	1.26	66.33
Sailana	34.37	1.68	7.08	5.34	0.73	51.31

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetcac (%)	Maternal mortality ratio
Alot	60.07	41.79	32.46	6.34	10.04	1080
Bajna	66.80	46.87	31.82	5.47	18.89	551
Jaora	86.51	63.57	14.78	8.78	10.43	707
Piploda	72.99	57.50	28.39	22.78	11.69	600
Ratlam	75.10	53.17	25.3	10.83	19.69	741
Sailana	79.24	36.78	18.82	17.47	24.23	744

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Alot	3.85	28.57	10.00	95.45	100.00	39.02
Bajna	3.18	21.78	13.64	83.33	100.00	61.11
Jaora	5.98	20.94	55.56	93.75	100.00	37.50
Piploda	5.03	22.22	39.29	79.17	75.00	54.17
Ratlam	2.60	17.03	40.98	71.43	78.57	52.73
Sailana	4.52	20.16	4.44	69.23	36.84	37.14

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Alot	148	222	87.51	15.56	5.92	169	26.14	598
Bajna	76	106	59.17	56.45	5	140	29.53	673
Jaora	73	101	69.92	32.35	4.22	140	29.93	154
Piploda	78	109	76.3	38.43	4.15	135	28.46	246
Ratlam	91	129	66.38	41.38	4.24	131	25.92	299
Sailana	82	115	70.15	57.54	4.71	143	28.19	393

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Piploda	89.1	89.2	88.3	80.9	79.6	99.9	14.8	12.1	53.7
Jaora	91.9	90.4	94.9	89.7	85.8	98.1	28.1	8.4	70.3
Alot	82.0	80.2	90.7	79.0	75.3	96.1	14.0	4.2	59.8
Sailana	44.8	39.0	97.5	81.3	80.6	87.8	12.3	6.1	68.6
Bajna	38.3	38.3	0.0	69.7	69.7	0.0	4.5	4.5	0.0
Ratlam	93.8	90.6	97.0	94.4	90.7	98.0	50.0	15.1	84.5

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Piploda	12.7	9.9	52.0	2.3	2.4	0.1	
Jaora	26.7	7.2	68.3	1.3	1.8	0.2	
Alot	12.5	3.0	56.4	5.4	6.4	0.7	
Sailana	10.7	4.9	63.8	12.2	13.4	0.8	
Bajna	3.7	3.7	0.0	21.0	21.0	0.0	
Ratlam	48.0	13.5	82.1	0.6	1.0	0.2	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/ Transistor	Television	Telephone	Bicycle	Scooter/ Motor Cycle/ Moped	Car/ Jeep/ Van	None of the Specified Assets
Piploda	22.4	24.8	41.4	5.4	54.7	15.7	0.9	29.1
Jaora	26.5	22.9	37.1	3.2	52.8	12.5	0.8	31.9
Alot	38.2	19.9	19.1	1.7	49.2	5.4	0.5	40.3
Sailana	14.7	9.7	7.6	1.7	20.5	3.7	0.7	71.0
Bajna	10.2	8.0	5.1	1.4	17.6	3.3	0.3	75.5
Ratlam	24.3	18.0	33.9	5.4	48.0	15.8	1.3	35.5

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Piploda	26.1	71.7	2.2	1.9	0.3	
Jaora	31.2	65.6	3.2	2.7	0.4	
Alot	18.8	79.5	1.7	1.3	0.5	
Sailana	16.2	82.3	1.5	1.1	0.3	
Bajna	12.8	85.2	2.0	1.5	0.6	
Ratlam	51.6	46.1	2.3	1.7	0.6	

REWA



Demography	2001
Total Population	1973306
Share of Madhya Pradesh Population	3.3
Urban Population	320563
Population of Scheduled Castes	307235
Population of Scheduled Tribes	254061
Density of Population (per sq km)	313
Decadal Growth Rate (1991–2001)	
Total	26.9
Rural	25.4
Urban	35.4
SC	33.6
ST	31.6

Health	2006
Population per Health Centre	11615
Rural Population Served per PHC	74026
Rural Population Served per SHC	11148
Total Fertility Rate	4.4

Gender	2001	
Gender Ratio	All	941
	Rural	954
	Urban	878
	SC	939
	ST	924
Workers Participation Rate-Female	37.7	
	2004–05	
Female Enrolment Rate (age 6–14)	97.4	

Habitat	2004
Urban Population Residing in Slum	75540
Ground Water Development (%)	42.4
Normal Rainfall (in mm)	908
Average Annual Rainfall (in mm)	1038
Per Capita Forest Area (in Ha)	0.04

Basic Information 2001

Area (in sq. km)	6314
Total Inhabited Villages	2352
Total Habitations	1638
Forest Villages	0
Major Industrial Areas:	
<i>Rewa, Hanumana</i>	

Literacy and Retention

Literacy-2001	SC	ST	All
All	45.7	35.5	62.0
Male	60.2	47.6	75.6
Female	30.2	22.3	47.6
Rural	44.8	35.1	59.2
Urban	52.2	40.5	76.0
Retention Rate (age 6–11) 2004–05			74.0

Primary School Infrastructure (2004–05)

	Number	(%)
Number of Primary Schools	3376	100.0
With Own Building	2472	73.2
With Drinking Water Facility	3068	90.9
With Toilet Facility	2236	66.2

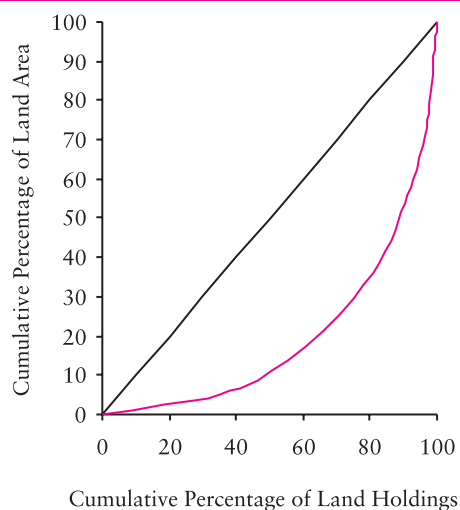
Basic Amenities (in %) 1991 2001

Households with Safe Drinking Water	27.5	45.9
Households with Electricity	29.0	52.0
Households with Toilet	7.6	11.0
Households with All Three Facilities	5.4	7.9
Households Without Any of the Three Facilities	53.7	27.5
Villages Electrified	89.7	80.6

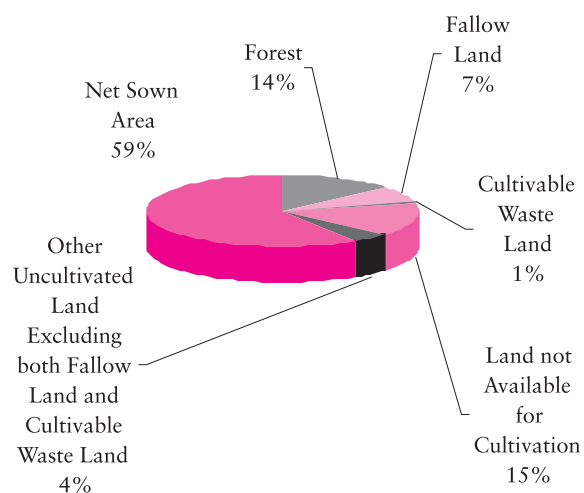
Infrastructure Facilities

Road Length per 100 sq.km (in Km)	2002–03	52.7
Rural Roads per Village (in Km)		1.0
Telephone per Lakh Population (BSNL)	Mar–05	926
Population per Post Office		6422
Total Electricity Consumption per Consumer (in Kwh)	2003–04	2995
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	617
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	1155
Consumption per Industrial Unit (in Kwh)	2003–04	114166
Number of Registered Vehicles per Lakh Population	Mar–05	4668
Tractors per 10 Villages	2004	18.2
Average Land Holding Size (in Ha)	2000–01	1.8

Lorenz Curve of Land Holdings



Land Use Classification 2004-05



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	158.1	174.1
Pulses (in Kgs)	39.1	42.1
Foodgrains (in Kgs)	197.2	216.2
Oilseeds (in Kgs)	11.3	6.6
Yield of Food Grains (in Kgs/Ha)	872.0	968.2

Credit

Households Availing Banking Services (in %)	2001
Total	26.3
Rural	22.4
Urban	49.1

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	59.0
% of Net Irrigated to Net Sown Area	2003-04	23.5
Cropped Area under Food Grains (in '000 Ha)	2003-04	462.2
Fertilizer Consumption (in Kgs/Ha)	2002-03	39.0
Cropping Intensity	2004-05	134.8
Net Area Sown (in '000 Ha)	2004-05	371.1
Gross Cropped Area (in '000 Ha)		500.4
Double Cropped Area to Net Area Sown	2004-05	34.8
Net Irrigated Area (in '000 Ha)	2003-04	87.2
Gross Irrigated Area (in '000 Ha)		93.5

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Gangev	42.92	0.41	2.28	5.03	0.05	56.62
Hanumana	32.55	1.95	1.18	0.30	0.09	38.13
Jawa	42.85	0.36	2.51	7.13	0.20	57.93
Mauganj	49.39	1.50	6.21	1.05	1.37	60.34
Naigarhi	31.12	1.01	3.09	3.48	0.13	42.00
Raipur	47.40	0.72	4.04	2.33	1.80	58.27
Rewa	38.41	1.79	3.22	8.61	1.05	55.70
Sirmour	36.54	3.14	2.80	8.52	0.14	60.61
Teonthar	37.67	0.75	2.51	6.11	0.29	51.62

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Gangev	16.77	65.28	23.15	15.25	29.24	596
Hanumana	87.65	13.70	6.41	69.39	42.69	1347
Jawa	15.97	76.92	9.55	13.55	31.96	784
Mauganj	89.66	42.36	9.8	40.92	27.01	922
Naigarhi	80.13	26.87	22.11	15.59	11.53	580
Raipur	73.70	48.42	27.97	23.80	6.20	724
Rewa	46.78	47.63	15.21	28.47	28.10	742
Sirmour	78.03	22.40	2.6	77.54	18.26	859
Teonthar	9.89	69.95	24.04	6.25	16.39	621

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Gangev	5.11	56.70	2.17	64.71	56.86	0.00
Hanumana	3.04	21.11	36.84	70.00	70.00	22.22
Jawa	4.24	46.10	10.42	54.90	90.38	0.00
Mauganj	1.92	16.24	11.76	40.00	95.24	5.26
Naigarhi	4.32	13.46	10.00	69.23	92.31	0.00
Raipur	3.83	20.12	16.87	68.57	88.57	35.71
Rewa	6.14	17.65	51.52	46.67	91.11	8.89
Sirmour	7.57	24.57	69.23	53.85	100.00	7.69
Teonthar	4.58	72.55	1.69	56.10	76.83	0.00

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Gangev	71	98	57.54	39.45	4.59	179	40.06	351
Hanumana	119	175	86.26	49.83	5.48	178	33.46	322
Jawa	74	102	69	31.69	4.99	166	35.89	475
Mauganj	87	123	82.71	46.69	5.44	165	33.21	343
Naigarhi	68	93	73.47	43.73	4.19	126	26.98	445
Raipur	93	133	83.37	39.79	4.58	140	27.69	358
Rewa	77	107	66.6	37.61	4.52	145	32.63	242
Sirmour	72	100	76.28	45.22	4.78	151	30.71	237
Teonthar	75	105	67.58	38.72	5.33	184	39.64	317

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Teonthar	52.2	50.7	75.5	49.9	48.8	66.8	4.3	3.3	20.0
Sirmour	49.3	46.9	74.4	40.0	37.5	65.4	5.5	3.4	26.8
Hanumana	32.7	30.0	73.9	26.7	25.9	40.1	3.8	3.1	15.2
Mauganj	42.5	39.2	72.3	31.8	31.0	38.1	5.1	3.9	16.1
Huzur	70.9	53.8	91.7	72.2	59.4	87.8	36.0	7.7	70.4
Raipur-Karchuliyan	58.1	58.1	0.0	48.0	48.0	0.0	5.2	5.2	0.0
Gurh	53.5	50.9	77.9	39.6	36.8	65.4	7.9	6.8	18.1

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Teonthar	2.7	1.7	17.0	23.9	24.7	10.6	
Sirmour	2.4	0.8	19.3	29.2	31.1	9.3	
Hanumana	0.7	0.2	8.9	47.3	49.2	18.8	
Mauganj	1.6	0.6	10.9	39.0	41.0	21.0	
Huzur	32.3	5.6	64.9	11.2	18.7	2.0	
Raipur-Karchuliyan	2.1	2.1	0.0	20.8	20.8	0.0	
Gurh	2.9	1.6	15.3	27.0	29.2	7.1	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Teonthar	27.0	26.8	13.7	0.9	53.5	5.2	1.1	39.0
Sirmour	22.1	27.7	13.3	1.2	56.9	7.3	1.4	35.9
Hanumana	21.4	26.9	8.6	0.6	59.7	4.0	1.1	34.8
Mauganj	19.8	28.2	10.0	0.8	63.9	5.5	1.0	31.0
Huzur	39.1	31.1	38.9	10.8	65.0	22.1	3.8	23.0
Raipur-Karchuliyan	25.6	25.0	14.5	1.1	56.5	8.2	1.5	36.6
Gurh	24.8	25.9	13.2	1.2	50.0	7.4	1.4	41.2

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Teonthar	13.8	83.8	2.3	1.4	0.9
Sirmour	18.0	81.2	0.8	0.7	0.1
Hanumana	9.5	90.2	0.3	0.3	0.0
Mauganj	13.7	86.0	0.3	0.2	0.1
Huzur	47.3	51.4	1.3	0.8	0.5
Raipur-Karchuliyan	21.9	77.9	0.2	0.2	0.0
Gurh	24.5	75.0	0.5	0.1	0.4

SAGAR



Demography	2001
Total Population	2021987
Share of Madhya Pradesh Population	3.4
Urban Population	590907
Population of Scheduled Castes	415374
Population of Scheduled Tribes	196478
Density of Population (per sq km)	197
Decadal Growth Rate (1991–2001)	
Total	22.7
Rural	22.7
Urban	22.8
SC	19.6
ST	40.9

Health	2006
Population per Health Centre	7399
Rural Population Served per PHC	52840
Rural Population Served per SHC	5915
Total Fertility Rate	4.2

Gender	2001	
Gender Ratio	All	884
	Rural	880
	Urban	984
	SC	868
	ST	942
Workers Participation Rate-Female	30.4	
	2004–05	
Female Enrolment Rate (age 6–14)	104.6	

Habitat	2004
Urban Population Residing in Slum	38694
Ground Water Development (%)	46.6
Normal Rainfall (in mm)	1071
Average Annual Rainfall (in mm)	1007
Per Capita Forest Area (in Ha)	0.15

Basic Information	2001
Area (in sq. km)	10252
Total Inhabited Villages	1868
Total Habitations	8531
Forest Villages	17
Major Industrial Areas:	
<i>Sagar, Deori</i>	

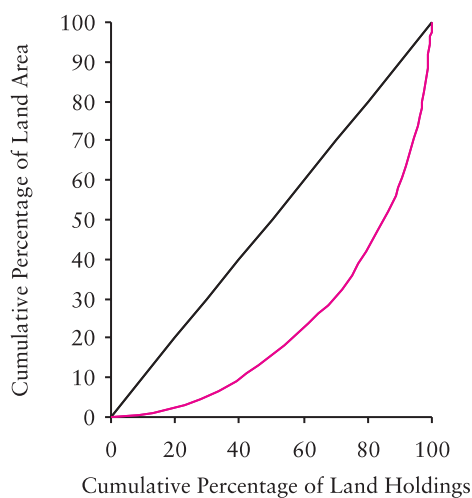
Literacy and Retention			
Literacy-2001	SC	ST	All
All	60.4	38.7	67.7
Male	73.8	50.9	79.4
Female	44.8	25.7	54.4
Rural	55.6	37.5	61.3
Urban	71.8	60.4	82.5
Retention Rate (age 6–11) 2004–05			67.8

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	2167	100.0
With Own Building	2007	92.6
With Drinking Water Facility	1332	61.5
With Toilet Facility	937	43.2

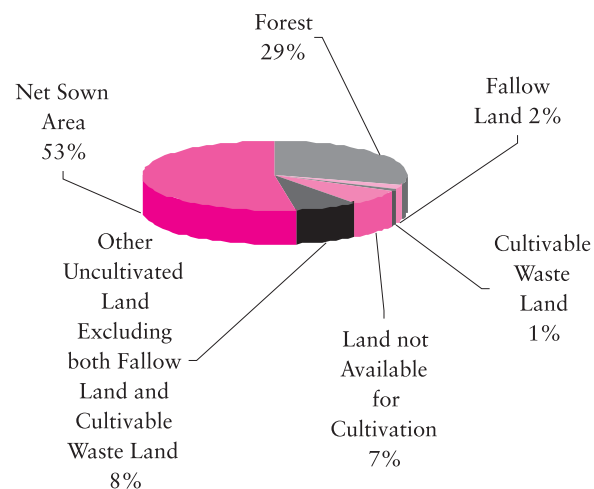
Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	43.1	57.6
Households with Electricity	47.3	69.2
Households with Toilet	15.6	21.3
Households with All Three Facilities	12.0	16.7
Households Without Any of the Three Facilities	35.1	16.2
Villages Electrified	90.1	86.5

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	19.1
Rural Roads per Village (in Km)		0.4
Telephone per Lakh Population (BSNL)	Mar–05	1714
Population per Post Office		9182
Total Electricity Consumption per Consumer (in Kwh)	2003–04	1702
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	519
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	1044
Consumption per Industrial Unit (in Kwh)	2003–04	64790
Number of Registered Vehicles per Lakh Population	Mar–05	4774
Tractors per 10 Villages	2004	58.5
Average Land Holding Size (in Ha)	2000–01	2.2

Lorenz Curve of Land Holdings



Land Use Classification 2004-05



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	153.6	98.5
Pulses (in Kgs)	44.9	103.0
Foodgrains (in Kgs)	198.5	201.5
Oilseeds (in Kgs)	52.8	79.2
Yield of Food Grains (in Kgs/Ha)	958.0	853.6

Credit

Households Availing Banking Services (in %)	2001
Total	23.9
Rural	17.1
Urban	43.0

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	52.5
% of Net Irrigated to Net Sown Area	2003-04	37.9
Cropped Area under Food Grains (in '000 Ha)	2003-04	497.3
Fertilizer Consumption (in Kgs/Ha)	2002-03	27.9
Cropping Intensity	2004-05	137.4
Net Area Sown (in '000 Ha)	2004-05	538.2
Gross Cropped Area (in '000 Ha)		739.6
Double Cropped Area to Net Area Sown	2004-05	37.4
Net Irrigated Area (in '000 Ha)	2003-04	202.1
Gross Irrigated Area (in '000 Ha)		202.1

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Banda	21.32	1.59	8.11	8.89	4.56	45.35
Bina	28.38	3.92	3.44	9.68	0.43	46.47
Deori	40.25	0.89	1.86	2.41	0.17	45.85
Jaisinagar	40.44	0.87	1.19	1.34	3.82	48.23
Kesli	38.23	8.18	3.95	3.43	0.05	54.44
Khurai	38.49	0.66	1.02	3.20	0.15	43.70
Malthon	35.44	1.22	2.10	0.80	0.17	40.16
Rehli	39.74	0.52	3.64	4.37	2.46	51.38
Rahatgarh	33.62	1.26	9.52	9.63	2.80	57.20
Sagar	38.44	0.71	2.00	5.30	0.32	47.81
Shahgarh	42.71	0.44	6.17	2.84	0.39	53.88

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetcac (%)	Maternal mortality ratio
Banda	85.07	12.22	11.65	30.31	14.72	1094
Bina	88.26	28.47	10.17	57.33	18.33	744
Deori	91.62	27.56	13.16	19.34	6.91	933
Jaisinagar	90.64	29.42	10.7	63.56	15.43	1080
Kesli	96.20	40.51	5.06	12.66	48.10	765
Khurai	83.58	48.79	19.18	16.64	13.15	730
Malthon	96.50	6.77	4.26	56.33	35.37	894
Rehli	90.30	19.84	17.69	40.88	39.33	959
Rahatgarh	81.84	62.17	20.35	10.57	64.88	752
Sagar	69.24	30.37	20.86	8.88	6.36	1244
Shahgarh	85.31	20.90	13.72	38.06	27.62	741

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Banda	2.82	20.62	64.04	72.97	83.78	4.00
Bina	4.84	13.84	38.81	84.62	88.46	3.92
Deori	2.90	15.54	64.95	100.00	96.84	85.26
Jaisinagar	3.65	11.84	24.44	64.71	64.71	5.56
Kesli	5.79	14.00	6.25	97.22	100.00	2.78
Khurai	2.89	11.98	30.56	100.00	0.00	0.00
Malthon	3.68	24.79	58.97	85.29	94.12	48.48
Rehli	1.84	18.85	50.68	22.50	20.00	9.52
Rahatgarh	2.88	24.02	33.33	72.00	70.83	5.26
Sagar	3.04	14.51	54.90	16.67	16.67	33.33
Shahgarh	8.72	31.20	59.66	80.81	76.77	57.29

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Banda	106	153	86.44	47.51	5.18	155	28.79	603
Bina	71	98	77.61	46.99	4.67	109	31.53	425
Deori	93	132	78.64	40.88	5.48	177	33.74	385
Jaisinagar	103	149	79.57	54.2	5.69	161	31.53	442
Kesli	67	92	89.3	46.24	5.13	111	31.94	116
Khurai	81	114	79.11	43.3	4.13	141	31.55	277
Malthon	77	107	77.79	50.7	4.2	150	32.81	170
Rehli	103	149	72.79	48.99	4.94	147	29.77	319
Rahatgarh	85	120	31.24	46.24	4.61	180	37.26	138
Sagar	140	209	76.29	36.06	4.89	145	29.73	340
Shahgarh	75	104	61.2	47.57	4.44	134	27.56	426

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Bina	73.2	61.0	93.8	70.9	54.8	97.9	29.3	6.4	67.9
Khurai	60.1	56.2	85.8	57.0	51.6	93.3	13.2	7.9	49.4
Banda	49.5	44.7	82.9	42.1	36.7	79.2	9.2	3.7	46.8
Rahatgarh	61.7	56.0	82.6	52.1	49.8	60.7	16.5	8.0	47.9
Sagar	81.2	71.8	92.9	57.8	46.5	71.8	33.7	8.7	64.7
Garhakota	73.6	68.7	88.4	76.1	71.4	90.1	17.0	5.3	52.0
Rehli	66.2	59.8	91.5	68.9	64.0	88.0	15.2	5.8	52.2
Kesli	74.1	74.1	0.0	54.6	54.6	0.0	9.5	9.5	0.0
Deori	71.4	68.6	88.5	59.4	56.4	77.6	18.6	11.1	65.1

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)						
Tehsil	All Three Facilities Available			None of the Facilities		
	Total	Rural	Urban	Total	Rural	Urban
Bina	26.8	3.3	66.3	12.4	19.4	0.5
Khurai	9.7	4.3	46.9	21.0	23.9	1.5
Banda	6.4	1.3	41.0	31.8	35.6	5.5
Rahatgarh	10.8	4.2	35.4	20.4	23.7	7.9
Sagar	26.2	4.6	53.0	9.5	14.9	2.8
Garhakota	15.3	4.3	48.0	8.8	11.4	1.3
Rehli	13.4	4.2	49.3	14.0	16.9	2.5
Kesli	7.0	7.0	0.0	13.3	13.3	0.0
Deori	13.5	7.1	52.5	14.3	16.1	3.0

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Bina	33.5	18.2	38.9	5.8	45.2	12.4	1.9	40.6
Khurai	27.8	15.7	22.9	2.1	34.9	6.3	0.8	52.9
Banda	19.8	12.0	13.5	1.4	22.7	3.9	0.6	65.6
Rahatgarh	18.5	15.3	19.3	1.9	25.0	5.4	1.3	58.5
Sagar	27.7	20.9	42.9	7.7	42.1	15.5	2.6	38.4
Garhakota	17.8	15.2	23.5	2.5	35.4	6.5	1.5	50.7
Rehli	12.9	16.9	19.7	1.7	36.1	6.3	0.7	52.6
Kesli	13.7	12.7	12.8	1.4	17.5	3.4	1.2	69.1
Deori	21.2	14.3	17.1	2.5	30.9	5.7	0.9	58.3

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Bina	51.6	47.3	1.1	0.7	0.4	
Khurai	44.2	54.9	0.9	0.5	0.3	
Banda	73.8	25.0	1.2	0.6	0.6	
Rahatgarh	26.1	72.1	1.8	0.9	0.8	
Sagar	56.1	42.5	1.4	0.8	0.6	
Garhakota	62.0	36.3	1.7	1.0	0.7	
Rehli	40.9	56.2	2.9	0.9	2.0	
Kesli	11.7	87.4	0.9	0.5	0.4	
Deori	30.2	67.9	1.9	1.0	1.0	

SATNA



Demography	2001
Total Population	1870104
Share of Madhya Pradesh Population	3.1
Urban Population	385553
Population of Scheduled Castes	304217
Population of Scheduled Tribes	268104
Density of Population (per sq km)	249
Decadal Growth Rate (1991–2001)	
Total	27.6
Rural	26.2
Urban	33.3
SC	16.3
ST	32.5

Health	2006
Population per Health Centre	7596
Rural Population Served per PHC	59565
Rural Population Served per SHC	6607
Total Fertility Rate	4.3

Gender	2001	
Gender Ratio	All	925
	Rural	937
	Urban	882
	SC	937
	ST	949
Workers Participation Rate-Female	30.6	
	2004–05	
Female Enrolment Rate (age 6–14)	101.2	

Habitat	2004
Urban Population Residing in Slum	111684
Ground Water Development (%)	68.7
Normal Rainfall (in mm)	1140
Average Annual Rainfall (in mm)	1063
Per Capita Forest Area (in Ha)	0.11

Basic Information	2001
Area (in sq. km)	7502
Total Inhabited Villages	1784
Total Habitations	2230
Forest Villages	0
Major Industrial Areas:	
<i>Sagar, Deori</i>	

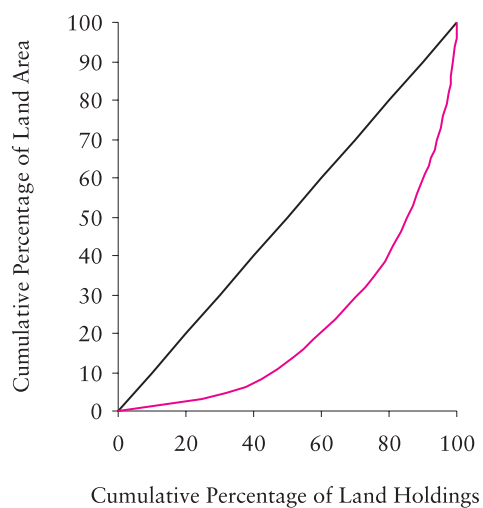
Literacy and Retention			
Literacy-2001	SC	ST	All
All	53.2	38.7	67.7
Male	67.1	48.9	77.1
Female	38.4	24.6	51.0
Rural	52.4	36.6	61.0
Urban	57.2	42.9	77.9
Retention Rate (age 6–11) 2004–05			84.9

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	2690	100.0
With Own Building	2329	88.6
With Drinking Water Facility	2279	84.7
With Toilet Facility	30	1.1

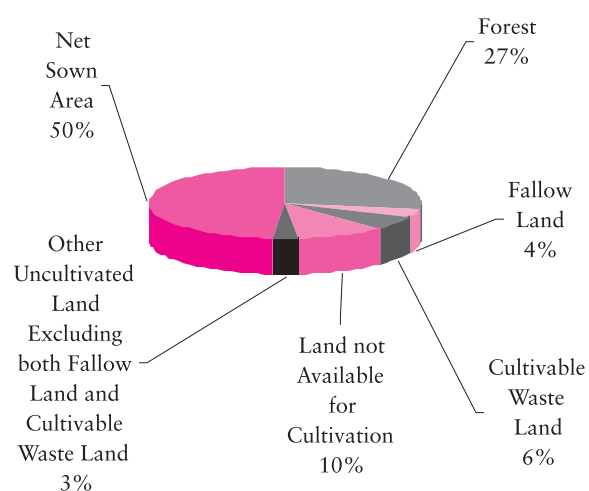
Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	30.5	54.6
Households with Electricity	37.5	62.6
Households with Toilet	9.3	14.2
Households with All Three Facilities	6.9	10.9
Households Without Any of the Three Facilities	46.9	18.7
Villages Electrified	93.1	82.4

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	43.5
Rural Roads per Village (in Km)		1.3
Telephone per Lakh Population (BSNL)	Mar–05	1450
Population per Post Office		6872
Total Electricity Consumption per Consumer (in Kwh)	2003–04	3137
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	624
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	965
Consumption per Industrial Unit (in Kwh)	2003–04	114072
Number of Registered Vehicles per Lakh Population	Mar–05	4683
Tractors per 10 Villages	2004	46.3
Average Land Holding Size (in Ha)	2000–01	1.6

Lorenz Curve of Land Holdings



Land Use Classification 2004-05



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	183.6	157.7
Pulses (in Kgs)	75.3	50.2
Foodgrains (in Kgs)	259.8	207.9
Oilseeds (in Kgs)	15.7	4.8
Yield of Food Grains (in Kgs/Ha)	948.0	915.6

Credit

Households Availing Banking Services (in %)	2001
Total	29.4
Rural	24.8
Urban	48.6

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	48.6
% of Net Irrigated to Net Sown Area	2003-04	36.3
Cropped Area under Food Grains (in '000 Ha)	2003-04	446.0
Fertilizer Consumption (in Kgs/Ha)	2002-03	51.1
Cropping Intensity	2004-05	133.7
Net Area Sown (in '000 Ha)	2004-05	361.0
Gross Cropped Area (in '000 Ha)		482.7
Double Cropped Area to Net Area Sown	2004-05	33.7
Net Irrigated Area (in '000 Ha)	2003-04	130.6
Gross Irrigated Area (in '000 Ha)		130.9

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Amarpatan	26.82	4.54	5.02	3.49	1.45	48.10
Maihar	33.63	3.20	6.88	3.97	1.00	54.80
Majhgawan	49.61	1.44	7.10	3.53	1.41	63.57
Negod	41.72	0.63	1.17	4.64	0.09	51.34
Ramnagar	50.14	2.73	6.19	2.51	1.46	66/97
Rampur-Baghelan	32.97	1.03	4.78	3.81	5.51	50.16
Satna	42.65	1.68	8.71	3.09	0.25	61.27
Unchehara	27.32	3.73	9.21	3.93	1.05	51.30

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Amarpatan	75.75	40.97	20.46	35.15	33.54	705
Maihar	72.00	32.68	23.58	29.22	36.26	737
Majhgawan	84.29	52.41	18.95	21.53	14.42	817
Nagod	87.68	12.34	4.63	35.96	18.63	1055
Ramnagar	90.18	32.74	7.62	56.76	74.32	1048
Rampur-Baghelan	89.73	14.16	9.59	68.33	78.13	991
Satna	64.88	30.48	8.19	10.76	14.66	848
Unchehara	67.10	31.90	8.22	22.59	17.13	948

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Amarpatan	4.37	22.72	23.88	77.59	85.96	63.64
Maihar	4.90	19.49	33.87	68.25	80.95	50.82
Majhgawan	4.99	34.68	27.78	83.58	83.33	45.45
Nagod	3.44	17.97	14.00	59.62	70.59	45.10
Ramnagar	4.84	16.09	11.90	92.31	92.31	30.77
Rampur-Baghelan	3.87	27.87	0.00	50.00	72.73	30.00
Satna	3.61	17.35	30.43	50.79	66.67	30.65
Unchehara	3.54	12.83	17.14	65.52	84.21	32.73

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Amarpatan	80	112	64.56	44.54	4.7	140	27.53	277
Maihar	88	125	67.75	55.04	4.75	116	22.45	343
Majhgawan	90	128	72.27	38.76	4.68	143	29.31	445
Nagod	91	98	75.37	49.1	4.47	117	24.98	395
Ramnagar	95	136	70.69	55.65	4.64	128	25.1	434
Rampur-Baghelan	93	132	78.6	48.11	4.33	136	29.6	259
Satna	78	109	72.86	37.21	4.74	151	29.86	122
Unchehara	87	123	65.62	58.23	5.3	158	29.7	471

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Raghurajnagar	65.2	51.7	84.8	62.2	48.5	81.9	25.3	4.2	55.7
Nagod	62.5	59.4	91.3	54.8	51.2	89.3	10.0	5.8	49.4
Unchehara	64.3	61.7	88.3	37.3	35.0	58.7	6.3	2.7	38.8
Rampur-Baghelan	60.2	58.2	84.9	62.4	63.3	51.3	5.3	4.1	21.2
Amarpatan	62.9	60.5	90.1	51.8	49.2	82.4	8.8	5.6	45.8
Ramnagar	46.2	46.2	0.0	40.7	40.7	0.0	3.1	3.1	0.0
Maihar	65.5	62.3	91.6	49.5	44.7	88.2	12.4	7.6	51.7

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)						
Tehsil	All Three Facilities Available			None of the Facilities		
	Total	Rural	Urban	Total	Rural	Urban
Raghurajnagar	21.0	2.0	48.6	16.1	24.4	4.1
Nagod	7.4	3.3	46.2	19.8	21.7	2.2
Unchehara	3.8	0.7	32.6	22.7	24.2	8.5
Rampur-Baghelan	3.3	2.5	14.6	15.1	15.6	7.5
Amarpatan	5.1	2.0	40.7	17.7	18.9	3.6
Ramnagar	1.1	1.1	0.0	31.7	31.7	0.0
Maihar	8.9	4.4	46.5	18.9	21.0	1.1

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Raghurajnagar	34.5	26.3	27.7	7.2	56.9	13.7	2.0	32.0
Nagod	25.8	21.8	15.1	2.2	55.6	6.8	1.1	36.2
Unchehara	23.7	17.3	13.4	1.1	55.2	4.7	0.6	39.0
Rampur-Baghelan	29.7	27.5	14.7	1.9	61.1	8.7	1.3	32.0
Amarpatan	23.1	27.3	16.0	1.7	57.9	7.1	1.1	35.3
Ramnagar	39.2	28.8	7.4	0.6	49.2	4.6	0.8	43.0
Maihar	23.1	21.8	18.8	3.4	48.7	6.9	1.2	41.6

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Raghurajnagar	40.2	59.0	0.8	0.7	0.2
Nagod	26.3	72.8	0.9	0.7	0.2
Unchehara	22.6	76.9	0.6	0.5	0.1
Rampur-Baghelan	24.6	74.8	0.5	0.5	0.0
Amarpatan	29.3	70.0	0.7	0.6	0.1
Ramnagar	26.6	72.6	0.9	0.8	0.1
Maihar	28.3	70.9	0.8	0.4	0.3

SEHORE



Demography	2001
Total Population	1078912
Share of Madhya Pradesh Population	1.8
Urban Population	193740
Population of Scheduled Castes	221077
Population of Scheduled Tribes	116122
Density of Population (per sq km)	164
Decadal Growth Rate (1991–2001)	
Total	28.2
Rural	28.3
Urban	28.0
SC	29.4
ST	35.6

Health	2006
Population per Health Centre	4027
Rural Population Served per PHC	22785
Rural Population Served per SHC	3886
Total Fertility Rate	4.6

Gender	2001	
Gender Ratio	All	909
	Rural	911
	Urban	899
	SC	910
	ST	943
Workers Participation Rate-Female	34.1	
	2004–05	
Female Enrolment Rate (age 6–14)	99.1	

Habitat	2004
Urban Population Residing in Slum	56015
Ground Water Development (%)	62.4
Normal Rainfall (in mm)	1027
Average Annual Rainfall (in mm)	1049
Per Capita Forest Area (in Ha)	0.16

Basic Information	2001
Area (in sq. km)	6578
Total Inhabited Villages	1011
Total Habitations	5044
Forest Villages	35
Major Industrial Areas:	
<i>Sehore, Ashtha</i>	

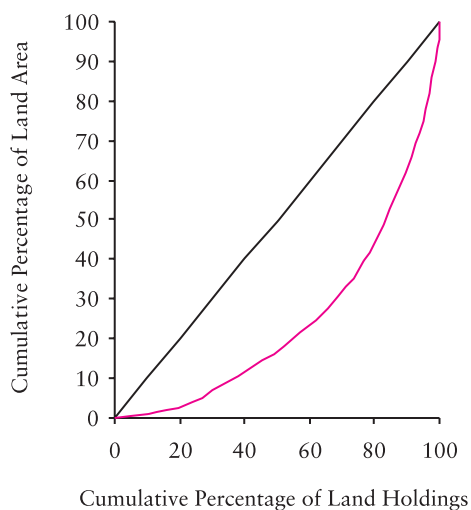
Literacy and Retention			
Literacy-2001	SC	ST	All
All	55.9	43.1	63.1
Male	70.7	55.2	77.3
Female	39.5	35.2	47.4
Rural	53.9	41.7	59.8
Urban	69.0	63.0	77.4
Retention Rate (age 6–11) 2004–05			88.7

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	1393	100.0
With Own Building	1390	99.8
With Drinking Water Facility	725	52.0
With Toilet Facility	767	55.1

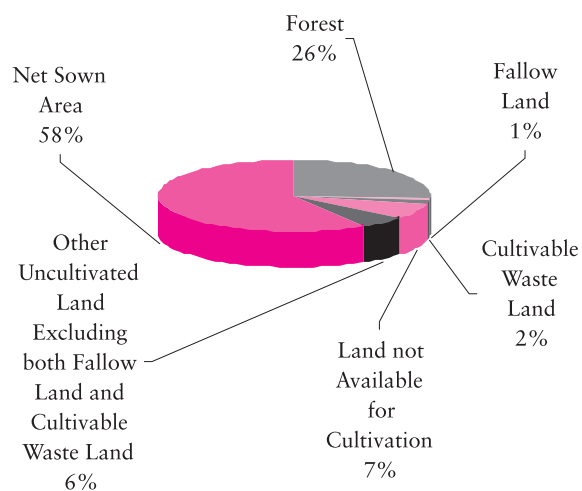
Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	55.9	73.6
Households with Electricity	53.3	84.9
Households with Toilet	16.6	26.9
Households with All Three Facilities	12.1	21.1
Households Without Any of the Three Facilities	22.5	4.6
Villages Electrified	93.1	94.0

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	13.7
Rural Roads per Village (in Km)		0.4
Telephone per Lakh Population (BSNL)	Mar–05	1530
Population per Post Office		7136
Total Electricity Consumption per Consumer (in Kwh)	2003–04	2602
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	589
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	938
Consumption per Industrial Unit (in Kwh)	2003–04	53539
Number of Registered Vehicles per Lakh Population	Mar–05	4882
Tractors per 10 Villages	2004	79.8
Average Land Holding Size (in Ha)	2000–01	3.1

Lorenz Curve of Land Holdings



Land Use Classification 2004–05



Per Capita Agriculture Production

	1998–99	2003–04
Cereals (in Kgs)	301.1	341.8
Pulses (in Kgs)	63.3	83.5
Foodgrains (in Kgs)	364.4	425.3
Oilseeds (in Kgs)	247.6	293.7
Yield of Food Grains (in Kgs/Ha)	1578.0	1710.0

Credit

	2001
Households Availing Banking Services (in %)	2001
Total	29.4
Rural	25.3
Urban	48.0

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004–05	58.3
% of Net Irrigated to Net Sown Area	2003–04	55.7
Cropped Area under Food Grains (in '000 Ha)	2003–04	282.0
Fertilizer Consumption (in Kgs/Ha)	2002–03	41.9
Cropping Intensity	2004–05	159.7
Net Area Sown (in '000 Ha)	2004–05	383.7
Gross Cropped Area (in '000 Ha)		612.7
Double Cropped Area to Net Area Sown	2004–05	59.5
Net Irrigated Area (in '000 Ha)	2003–04	212.8
Gross Irrigated Area (in '000 Ha)		212.8

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Ashta	44.71	0.89	5.48	3.95	0.27	55.72
Budni	33.95	3.99	7.51	5.95	4.43	59.05
Ichhawar	38.04	3.20	17.82	9.02	1.94	70.54
Nasurllahganj	39.59	3.90	5.59	5.95	3.69	60.44
Sehore	40.64	2.01	8.09	4.89	0.26	56.47

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Ashta	75.38	45.39	24.75	57.70	17.85	723
Budni	66.16	33.84	22.18	31.31	35.92	888
Ichhawar	89.41	84.64	10.18	31.79	8.48	960
Nasurllahganj	73.30	50.32	25.44	18.06	17.29	1277
Sehore	55.37	41.93	41.74	55.68	19.57	490

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Ashta	4.78	24.66	22.77	44.07	83.05	12.28
Budni	5.00	26.18	32.50	14.29	75.00	17.86
Ichhawar	9.51	9.41	32.39	96.36	85.45	90.91
Nasurllahganj	5.07	13.41	22.06	83.33	72.92	6.82
Sehore	5.10	33.95	9.89	38.16	65.79	2.60

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Ashta	88	125	78.5	40.5	4.58	141	27.09	222
Budni	103	148	88.52	36.71	4.86	148	27.73	103
Ichhawar	91	129	84.29	39.69	4.68	152	32.12	213
Nasurllahganj	155	232	72.82	47.85	5.02	149	28.44	317
Sehore	80	112	82.43	36.58	4.67	154	30.4	215

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Sehore	89.3	87.1	95.7	77.3	74.4	85.4	34.5	18.4	80.7
Ashta	87.4	85.9	94.8	81.4	78.8	94.8	22.3	12.4	74.7
Ichhawar	78.8	77.5	92.0	61.7	59.3	84.4	16.2	12.1	55.4
Nasrullaganj	81.8	80.2	93.9	55.7	50.7	95.9	22.3	16.3	71.3
Budni	77.4	74.1	92.5	79.7	76.3	95.4	32.6	26.7	59.6

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Sehore	28.6	13.8	71.0	3.1	3.9	0.8	
Ashta	19.4	9.6	71.1	2.7	3.1	0.4	
Ichhawar	10.5	6.4	50.5	9.0	9.8	1.9	
Nasrullaganj	12.8	6.0	67.6	7.9	8.8	0.5	
Budni	25.2	18.3	56.9	4.7	5.6	0.5	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Sehore	33.3	21.4	46.3	8.1	43.6	14.5	2.7	35.4
Ashta	29.1	16.7	35.7	5.3	35.8	8.6	1.1	43.5
Ichhawar	24.5	15.9	26.5	3.4	36.6	6.1	0.8	47.9
Nasrullaganj	26.0	14.4	27.3	3.0	24.2	7.1	1.2	55.9
Budni	28.2	14.9	33.0	4.9	24.2	9.0	1.2	53.1

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Sehore	46.5	51.1	2.4	1.2	1.3
Ashta	53.3	45.5	1.2	0.5	0.7
Ichhawar	48.2	47.2	4.6	1.7	2.9
Nasrullaganj	41.7	50.2	8.1	1.9	6.3
Budni	45.7	49.9	4.4	0.7	3.7

SEONI



Demography	2001
Total Population	1166608
Share of Madhya Pradesh Population	1.9
Urban Population	120687
Population of Scheduled Castes	120657
Population of Scheduled Tribes	429104
Density of Population (per sq km)	133
Decadal Growth Rate (1991–2001)	
Total	16.6
Rural	15.4
Urban	27.3
SC	11.9
ST	16.0

Health	2006
Population per Health Centre	7308
Rural Population Served per PHC	66104
Rural Population Served per SHC	7393
Total Fertility Rate	3.4

Gender	2001	
Gender Ratio	All	981
	Rural	987
	Urban	933
	SC	956
	ST	1016
Workers Participation Rate-Female	43.5	
	2004–05	
Female Enrolment Rate (age 6–14)	99.6	

Habitat	2004
Urban Population Residing in Slum	31625
Ground Water Development (%)	21.9
Normal Rainfall (in mm)	1364
Average Annual Rainfall (in mm)	756
Per Capita Forest Area (in Ha)	0.31

Basic Information	2001
Area (in sq. km)	8758
Total Inhabited Villages	1585
Total Habitations	1271
Forest Villages	36
Major Industrial Areas:	
<i>Keolari, Seoni</i>	

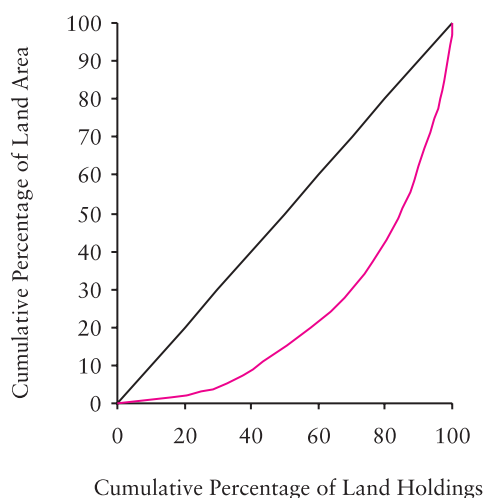
Literacy and Retention			
Literacy-2001	SC	ST	All
All	70.7	53.4	65.6
Male	82.5	67.0	77.2
Female	58.3	40.1	53.8
Rural	69.3	52.9	63.2
Urban	80.9	76.3	85.8
Retention Rate (age 6–11) 2004–05			81.9

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	2210	100.0
With Own Building	2210	100.0
With Drinking Water Facility	1423	64.4
With Toilet Facility	1245	56.3

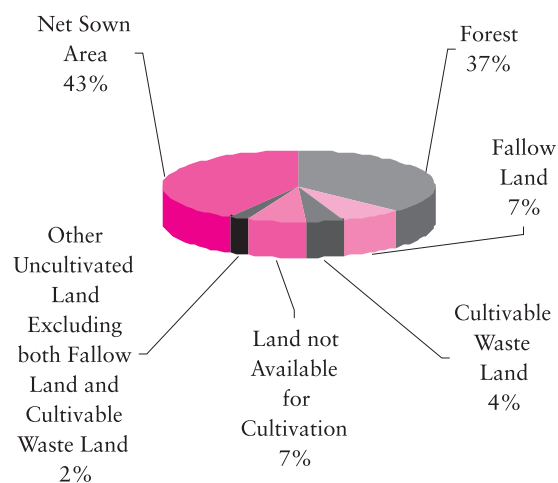
Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	46.5	66.4
Households with Electricity	46.3	66.7
Households with Toilet	7.7	14.6
Households with All Three Facilities	5.6	11.0
Households Without Any of the Three Facilities	30.9	12.4
Villages Electrified	89.7	96.6

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	20.0
Rural Roads per Village (in Km)		0.7
Telephone per Lakh Population (BSNL)	Mar–05	1321
Population per Post Office		6171
Total Electricity Consumption per Consumer (in Kwh)	2003–04	880
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	488
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	801
Consumption per Industrial Unit (in Kwh)	2003–04	5663
Number of Registered Vehicles per Lakh Population	Mar–05	2710
Tractors per 10 Villages	2004	12.5
Average Land Holding Size (in Ha)	2000–01	2.3

Lorenz Curve of Land Holdings



Land Use Classification 2004-05



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	200.9	259.6
Pulses (in Kgs)	114.3	44.4
Foodgrains (in Kgs)	315.2	304.0
Oilseeds (in Kgs)	48.3	84.7
Yield of Food Grains (in Kgs/Ha)	808.0	1022.5

Credit

Households Availing Banking Services (in %)	2001
Total	18.6
Rural	15.5
Urban	46.3

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	41.6
% of Net Irrigated to Net Sown Area	2003-04	26.3
Cropped Area under Food Grains (in '000 Ha)	2003-04	357.7
Fertilizer Consumption (in Kgs/Ha)	2002-03	19.8
Cropping Intensity	2004-05	128.6
Net Area Sown (in '000 Ha)	2004-05	364.6
Gross Cropped Area (in '000 Ha)		468.7
Double Cropped Area to Net Area Sown	2004-05	28.6
Net Irrigated Area (in '000 Ha)	2003-04	96.8
Gross Irrigated Area (in '000 Ha)		96.8

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Barghat	37.74	1.80	1.28	9.92	6.34	58.28
Chhapara	36.32	2.80	12.46	5.32	3.34	61.10
Dhannora	33.86	1.09	1.84	7.09	3.08	47.69
Ghansaur	40.31	1.95	1.70	7.09	3.18	54.85
Seoni	41.33	1.37	1.61	3.64	5.19	54.18
Kewlari	42.51	1.54	1.19	8.67	4.85	59.56
Khurai	32.95	2.48	17.04	7.09	2.21	68.55
Lakhnadaun	38.75	1.70	1.75	6.45	0.41	51.20

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetrac (%)	Maternal mortality ratio
Barghat	76.67	41.74	29.34	10.47	8.15	746
Chhapara	82.42	24.06	19.65	21.15	25.65	881
Dhannora	78.42	21.51	17.64	6.00	6.85	864
Ghansaur	82.62	20.43	18.16	10.90	13.18	904
Seoni	75.99	30.64	19.56	18.03	6.68	947
Kewlari	55.42	45.30	16.83	16.75	15.57	847
Khurai	72.91	40.84	27.28	5.95	14.42	636
Lakhnadaun	83.18	33.80	18.86	50.16	18.64	1146

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Barghat	2.67	12.07	57.45	76.19	93.18	66.67
Chhapara	2.35	20.02	21.05	61.54	89.74	51.35
Dhannora	5.98	20.74	10.71	50.00	96.77	80.65
Ghansaur	4.27	20.32	35.29	70.83	97.22	87.32
Seoni	3.89	25.42	60.87	75.93	79.63	45.28
Kewlari	3.70	19.89	11.76	57.14	88.57	50.00
Khurai	4.72	23.96	1.59	92.31	92.31	28.57
Lakhnadaun	5.19	19.85	32.29	75.00	99.01	77.78

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Barghat	98	140	57.07	38.36	4.31	124	29.45	153
Chhapara	98	141	57.95	42.03	4.57	145	29.45	163
Dhannora	93	132	77.56	40.74	4.85	152	30.7	171
Ghansaur	98	140	72.32	38.85	4.77	153	31.09	0
Seoni	105	151	63.96	42	4.58	140	24.71	122
Kewlari	90	128	67.93	31.1	4.74	151	29.3	153
Khurai	81	113	20.74	45.77	3.8	132	28.94	113
Lakhnadaun	125	184	75.29	35.8	4.92	158	31	210

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Lakhnadon	66.5	65.4	86.4	70.4	70.0	77.6	12.1	9.4	60.1
Ghansor	53.0	51.9	86.3	61.7	60.9	85.9	9.5	7.5	70.8
Keolari	66.6	66.6	0.0	65.2	65.2	0.0	9.8	9.8	0.0
Seoni	78.3	73.0	90.5	78.4	71.8	93.7	27.8	9.8	69.5
Barghat	58.4	56.9	81.3	49.0	46.6	85.0	9.3	6.7	49.8
Kurai	75.1	75.1	0.0	63.7	63.7	0.0	10.0	10.0	0.0

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Lakhnadon	9.6	7.3	51.7	11.8	12.3	3.7	
Ghansor	5.7	4.0	59.2	18.9	19.4	2.5	
Keolari	6.1	6.1	0.0	11.9	11.9	0.0	
Seoni	24.2	6.9	64.4	6.3	8.7	0.8	
Barghat	4.7	2.2	42.8	19.3	20.4	1.9	
Kurai	5.8	5.8	0.0	8.0	8.0	0.0	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/ Transistor	Television	Telephone	Bicycle	Scooter/ Motor Cycle/ Moped	Car/ Jeep/ Van	None of the Specified Assets
Lakhnadon	16.3	14.3	10.5	2.2	26.7	4.9	0.6	63.6
Ghansor	13.3	15.1	7.6	1.2	18.9	3.1	0.5	70.2
Keolari	20.8	19.1	9.7	1.7	40.2	5.3	0.8	51.1
Seoni	27.5	17.6	28.9	6.3	53.0	14.2	1.6	35.5
Barghat	11.3	14.8	11.7	1.3	61.7	6.6	0.5	34.4
Kurai	19.4	18.8	11.9	1.6	52.6	5.9	0.5	40.9

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Lakhnadon	29.9	69.3	0.8	0.6	0.2	
Ghansor	34.7	64.1	1.2	1.0	0.2	
Keolari	11.6	87.3	1.1	0.9	0.2	
Seoni	34.4	63.9	1.7	1.2	0.5	
Barghat	4.1	95.6	0.2	0.2	0.1	
Kurai	8.9	89.5	1.6	1.0	0.7	

SHAHdol



Demography	2001
Total Population	1575303
Share of Madhya Pradesh Population	2.6
Urban Population	398154
Population of Scheduled Castes	115904
Population of Scheduled Tribes	700651
Density of Population (per sq km)	112
Decadal Growth Rate (1991–2001)	
Total	19.1
Rural	14.9
Urban	33.5
SC	16.2
ST	14.3

Health	2006
Population per Health Centre	3351
Rural Population Served per PHC	27427
Rural Population Served per SHC	2731
Total Fertility Rate	3.6

Gender	2001	
Gender Ratio	All	957
	Rural	978
	Urban	897
	SC	951
	ST	993
Workers Participation Rate-Female	34.0	
	2004–05	
Female Enrolment Rate (age 6–14)	103.3	

Habitat	2004
Urban Population Residing in Slum	21487
Ground Water Development (%)	6.6
Normal Rainfall (in mm)	1259
Average Annual Rainfall (in mm)	881
Per Capita Forest Area (in Ha)	0.19

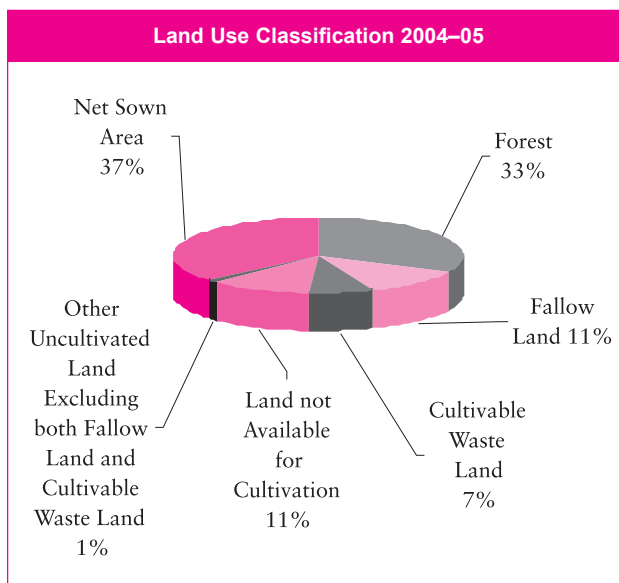
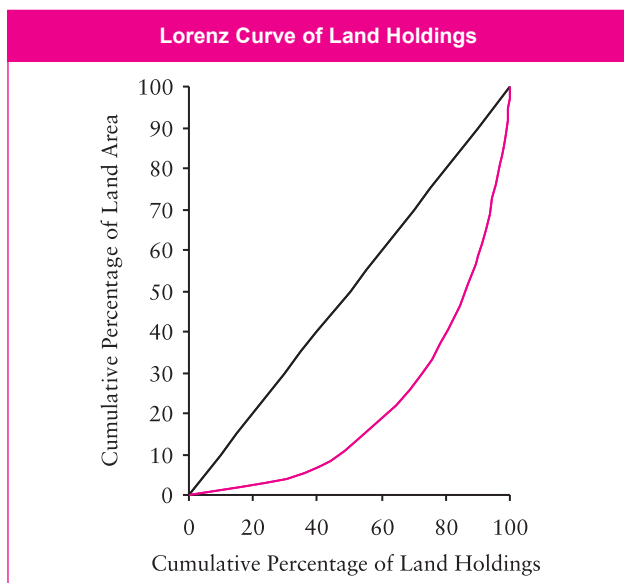
Basic Information	2001
Area (in sq. km)	14028
Total Inhabited Villages	1390
Total Habitations	2586
Forest Villages	0
Major Industrial Areas:	
<i>Sohagpur, Beohari</i>	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	54.4	44.6	58.7
Male	68.7	58.1	71.8
Female	39.4	31.0	45.0
Rural	49.5	44.0	52.2
Urban	65.6	50.4	77.0
Retention Rate (age 6–11) 2004–05			70.3

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	2929	100.0
With Own Building	2825	96.4
With Drinking Water Facility	2180	77.2
With Toilet Facility	684	31.4

Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	26.9	38.6
Households with Electricity	34.4	44.1
Households with Toilet	10.5	16.3
Households with All Three Facilities	7.5	11.9
Households Without Any of the Three Facilities	52.7	38.7
Villages Electrified	97.5	90.0

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	27.4
Rural Roads per Village (in Km)		1.4
Telephone per Lakh Population (BSNL)	Mar–05	1434
Population per Post Office		7038
Total Electricity Consumption per Consumer (in Kwh)	2003–04	3171
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	595
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	986
Consumption per Industrial Unit (in Kwh)	2003–04	275516
Number of Registered Vehicles per Lakh Population	Mar–05	2976
Tractors per 10 Villages	2004	13.3
Average Land Holding Size (in Ha)	2000–01	1.9



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	139.9	149.3
Pulses (in Kgs)	26.3	9.9
Foodgrains (in Kgs)	166.2	159.2
Oilseeds (in Kgs)	9.7	7.8
Yield of Food Grains (in Kgs/Ha)	620.0	741.8

Credit

	2001
Households Availing Banking Services (in %)	2001
Total	25.9
Rural	14.1
Urban	63.9

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	36.5
% of Net Irrigated to Net Sown Area	2003-04	5.7
Cropped Area under Food Grains (in '000 Ha)	2003-04	350.0
Fertilizer Consumption (in Kgs/Ha)	2002-03	9.1
Cropping Intensity	2004-05	117.5
Net Area Sown (in '000 Ha)	2004-05	341.6
Gross Cropped Area (in '000 Ha)		401.4
Double Cropped Area to Net Area Sown	2004-05	17.5
Net Irrigated Area (in '000 Ha)	2003-04	19.2
Gross Irrigated Area (in '000 Ha)		19.2

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Pushparajgarh	55.09	0.92	1.42	0.40	2.80	62.30
Sohagpur	38.41	1.51	6.32	3.85	1.32	53.30
Anuppur	57.84	0.06	0.22	1.22	1.41	62.75
Kotma	25.92	1.61	5.59	5.98	0.23	39.56
Jaithari	41.31	0.68	1.36	1.61	3.01	49.45
Burhar	43.60	0.59	2.02	2.17	6.94	56.79
Beohari	49.81	0.52	1.30	8.89	2.19	64.78
Jaisinghnagar	33.35	0.12	1.00	6.70	0.03	42.67
Gohparu	46.14	1.94	7.00	5.60	2.73	64.26

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Pushparajgarh	96.00	77.96	4.03	33.78	26.01	1282
Sohagpur	95.97	66.94	14.52	14.52	14.52	1254
Anuppur	84.32	29.24	11.44	28.81	23.73	1236
Kotma	99.49	65.67	7.96	2.99	16.92	1132
Jaithari	89.27	20.28	18.34	26.44	29.64	1071
Budhar	91.47	31.40	12.33	24.49	33.94	852
Beohari	89.79	37.96	31.08	10.86	14.36	641
Jaisinghnagar	98.97	70.10	1.03	68.04	81.44	1273
Gohparu	20.66	73.60	12.21	14.51	19.69	781

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Pushparajgarh	3.57	16.86	40.00	81.82	91.67	58.33
Sohagpur	0.00	3.20	100.00	100.00	100.00	50.00
Anuppur	2.81	23.12	70.00	50.00	70.00	15.00
Kotma	3.38	15.50	0.00	100.00	100.00	37.50
Jaithari	3.04	10.91	46.15	100.00	100.00	42.11
Burhar	2.73	28.27	13.51	100.00	96.97	10.00
Beohari	3.16	9.06	58.33	87.10	90.32	70.37
Jaisinghnagar	5.71	31.71	0.00	66.67	100.00	0.00
Gohparu	3.40	21.09	32.08	92.31	100.00	17.31

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Pushparajgarh	109	158	83.35	48.7	4.31	127	24.88	218
Sohagpur	127	187	91.13	51.24	4.28	158	27.89	405
Anuppur	119	175	79.72	44.74	4.27	114	23.97	489
Kotma	103	148	75.64	43.9	4.09	124	26.36	596
Jaithari	116	169	79.7	49.37	3.94	120	27.23	428
Burhar	84	118	82.13	29.51	3.75	111	24.73	218
Beohari	87	124	54.22	37.8	3.69	192	38.27	809
Jaisinghnagar	103	149	85.96	42.82	4.04	129	32.56	171
Gohparu	77	107	85.21	45.65	6.31	149	21.25	350

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Beohari	37.2	29.0	78.3	50.3	46.1	71.7	10.8	3.0	50.4
Jaisinghnagar	26.5	24.5	64.0	9.0	8.0	27.9	3.5	2.8	18.1
Sohagpur	56.6	42.1	86.1	44.2	32.4	68.2	24.2	6.0	61.0
Jaitpur	17.9	17.9	0.0	26.9	26.9	0.0	1.8	1.8	0.0
Kotma	59.0	35.3	83.1	56.0	37.0	75.4	30.7	2.6	59.2
Anuppur	63.8	46.7	87.1	50.3	29.5	78.5	27.0	5.6	56.1
Jaithari	46.4	42.1	90.8	24.4	20.3	67.4	7.5	4.6	37.1
Pushprajgarh	14.3	12.9	50.2	26.5	26.0	38.0	2.9	2.3	18.5

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)						
Tehsil	All Three Facilities Available			None of the Facilities		
	Total	Rural	Urban	Total	Rural	Urban
Beohari	7.9	0.5	45.2	33.1	37.1	13.1
Jaisinghnagar	0.5	0.1	8.4	65.5	67.5	26.7
Sohagpur	16.3	2.6	44.1	27.4	38.4	5.3
Jaitpur	0.3	0.3	0.0	59.7	59.7	0.0
Kotma	25.8	0.4	51.5	23.0	39.0	6.7
Anuppur	23.2	2.3	51.7	23.1	36.1	5.4
Jaithari	4.4	1.6	33.2	41.2	44.8	3.9
Pushprajgarh	1.1	0.7	13.0	64.6	65.6	41.1

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/ Transistor	Television	Telephone	Bicycle	Scooter/ Motor Cycle/ Moped	Car/ Jeep/ Van	None of the Specified Assets
Beohari	28.4	25.2	9.9	1.5	45.8	5.6	0.7	46.7
Jaisinghnagar	11.8	20.3	3.5	0.6	50.8	3.0	0.4	44.6
Sohagpur	29.8	22.7	26.6	4.9	57.8	12.2	1.5	33.5
Jaitpur	7.5	17.9	2.7	0.4	51.3	2.6	0.4	44.5
Kotma	40.7	24.1	33.2	4.3	67.4	16.3	1.2	24.5
Anuppur	44.0	26.9	31.3	4.1	67.9	15.2	1.3	25.2
Jaithari	14.6	17.4	8.1	1.5	58.1	3.5	0.5	37.4
Pushprajgarh	8.5	14.7	3.4	0.9	9.6	1.9	0.5	78.7

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Beohari	22.1	77.7	0.2	0.1	0.1	
Jaisinghnagar	7.9	91.8	0.3	0.2	0.1	
Sohagpur	28.2	70.9	0.8	0.5	0.3	
Jaitpur	2.6	97.0	0.3	0.3	0.0	
Kotma	35.0	64.8	0.2	0.2	0.0	
Anuppur	30.8	68.7	0.5	0.4	0.1	
Jaithari	9.3	90.4	0.3	0.2	0.1	
Pushprajgarh	26.6	69.2	4.2	3.4	0.8	

SHAJAPUR



Demography	2001
Total Population	1290685
Share of Madhya Pradesh Population	2.1
Urban Population	239230
Population of Scheduled Castes	283639
Population of Scheduled Tribes	35302
Density of Population (per sq km)	208
Decadal Growth Rate (1991–2001)	
Total	24.9
Rural	23.6
Urban	30.8
SC	22.9
ST	44.4

Health	2006
Population per Health Centre	6797
Rural Population Served per PHC	38973
Rural Population Served per SHC	6681
Total Fertility Rate	4.1

Gender	2001	
Gender Ratio	All	927
	Rural	928
	Urban	920
	SC	923
	ST	918
Workers Participation Rate-Female	42.0	
	2004–05	
Female Enrolment Rate (age 6–14)	101.4	

Habitat	2004
Urban Population Residing in Slum	42791
Ground Water Development (%)	107.2
Normal Rainfall (in mm)	1186
Average Annual Rainfall (in mm)	801
Per Capita Forest Area (in Ha)	0.00

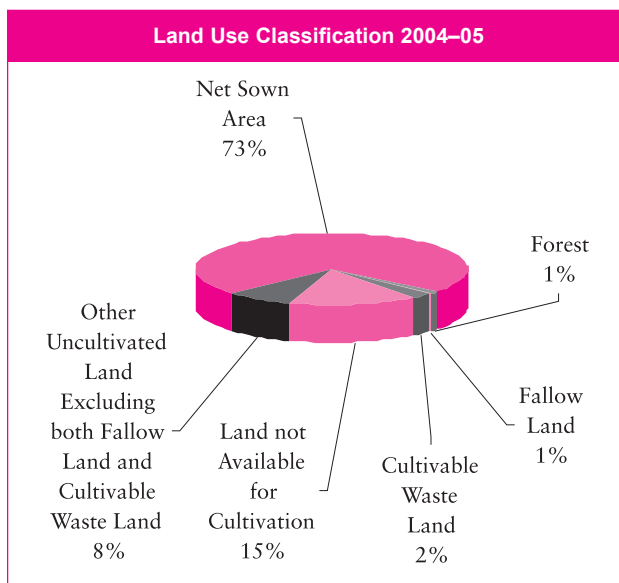
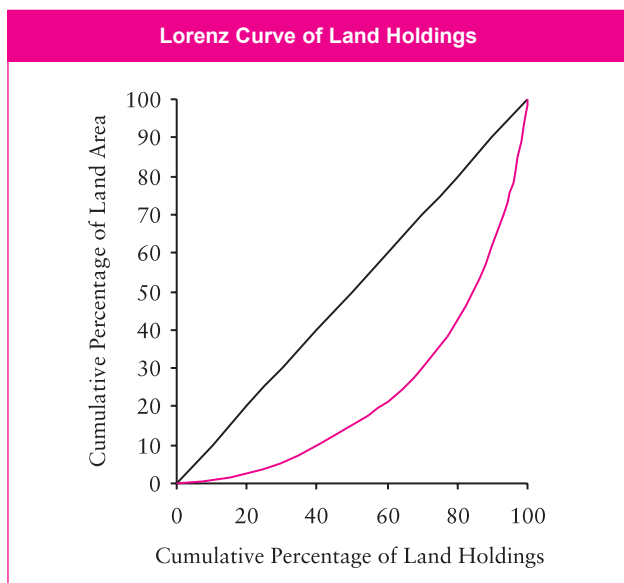
Basic Information	2001
Area (in sq. km)	6195
Total Inhabited Villages	1068
Total Habitations	3810
Forest Villages	0
Major Industrial Areas:	
Shajapur, Agar	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	63.3	60.3	70.9
Male	75.9	73.1	83.3
Female	49.5	46.2	57.4
Rural	63.0	59.4	69.1
Urban	65.9	67.8	78.2
Retention Rate (age 6–11) 2004–05			72.0

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	1528	100.0
With Own Building	1483	97.1
With Drinking Water Facility	788	51.6
With Toilet Facility	799	52.3

Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	62.1	78.4
Households with Electricity	54.8	90.3
Households with Toilet	12.7	18.4
Households with All Three Facilities	10.0	16.1
Households Without Any of the Three Facilities	19.8	2.9
Villages Electrified	90.5	94.8

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	25.2
Rural Roads per Village (in Km)		1.0
Telephone per Lakh Population (BSNL)	Mar–05	160
Population per Post Office		7971
Total Electricity Consumption per Consumer (in Kwh)	2003–04	2126
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	626
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	723
Consumption per Industrial Unit (in Kwh)	2003–04	28031
Number of Registered Vehicles per Lakh Population	Mar–05	3461
Tractors per 10 Villages	2004	62.6
Average Land Holding Size (in Ha)	2000–01	2.6



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	278.3	213.3
Pulses (in Kgs)	14.7	61.2
Foodgrains (in Kgs)	293.0	274.6
Oilseeds (in Kgs)	292.8	227.2
Yield of Food Grains (in Kgs/Ha)	1524.0	1363.7

Credit

Households Availing Banking Services (in %)	2001
Total	40.5
Rural	39.5
Urban	45.2

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	73.1
% of Net Irrigated to Net Sown Area	2003-04	40.8
Cropped Area under Food Grains (in '000 Ha)	2003-04	271.8
Fertilizer Consumption (in Kgs/Ha)	2002-03	26.6
Cropping Intensity	2004-05	151.6
Net Area Sown (in '000 Ha)	2004-05	452.3
Gross Cropped Area (in '000 Ha)		683.7
Double Cropped Area to Net Area Sown	2004-05	51.1
Net Irrigated Area (in '000 Ha)	2003-04	183.9
Gross Irrigated Area (in '000 Ha)		184.1

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Agar	31.00	1.23	7.74	6.15	2.54	55.95
Badod	40.84	1.26	4.27	9.57	5.29	61.96
Kalapipal	34.12	1.14	3.71	7.35	2.19	48.91
Moman Badodiya	43.39	2.04	1.89	1.79	0.34	50.08
Nalkheda	40.35	0.92	8.39	3.99	5.41	59.59
Shajapur	47.60	0.62	4.60	4.27	2.03	60.75
Shujalpur	48.45	0.71	2.74	9.94	5.74	69.10
Susner	36.40	2.95	6.77	6.15	3.28	56.33

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Agar	76.08	29.16	21.41	19.09	13.67	676
Badod	61.34	38.95	35.58	15.36	7.53	614
Kalapipal	79.15	22.52	22.04	37.62	18.52	872
Moman Badodiya	68.41	31.92	28.40	33.42	31.52	703
Nalkheda	71.46	34.81	27.69	24.42	8.75	1058
Shajapur	72.42	51.37	29.73	20.37	4.85	726
Shujalpur	63.79	38.67	2.00	30.99	7.46	1414
Susner	80.58	17.82	7.22	17.78	18.40	930

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Agar	5.36	29.72	11.11	72.22	80.56	25.71
Badod	4.53	29.40	25.53	82.61	82.61	39.53
Kalapipal	5.09	20.31	45.00	41.18	79.41	12.12
Moman Badodiya	5.43	16.55	27.94	61.67	85.71	29.51
Nalkheda	3.90	19.66	16.67	60.61	81.82	72.41
Shajapur	3.90	20.49	17.50	69.01	88.73	36.62
Shujalpur	1.73	13.67	17.39	40.00	89.23	40.91
Susner	3.87	14.14	28.13	30.95	68.29	21.62

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Barwani	82	116	57.55	73.65	4.63	145	28.48	183
Agar	78	109	86.82	47.47	5.13	139	23.67	387
Badod	90	128	84.78	46.83	5.62	148	23.62	583
Kalapipal	101	145	79.56	54.3	4.86	155	30.21	176
Moman Badodiya	91	129	82.15	35.3	5.27	172	36.87	431
Nalkheda	134	199	81.64	40.16	5.05	166	33.93	140
Shajapur	96	138	83.28	39.32	4.57	141	27.99	322
Shujalpur	116	169	82.22	45.99	4.54	133	26.05	380
Susner	84	119	80.43	35.61	4.84	135	28.22	369

Source: Centre for Population Studies, Administration Academy, Bhopal

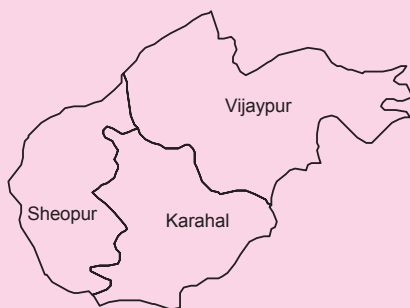
Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Susner	74.7	69.6	93.6	71.9	67.9	86.7	12.4	4.3	42.1
Nalkheda	91.1	90.4	94.3	74.9	74.1	78.0	13.5	6.5	42.9
Badod	91.0	90.9	91.8	76.7	75.8	84.4	6.3	0.9	57.7
Agar	86.5	84.6	91.4	78.5	71.5	96.8	19.0	5.7	53.3
Shajapur	93.9	92.5	97.3	81.3	76.6	92.5	33.4	15.2	77.1
Moman Badodiya	95.2	95.2	0.0	77.5	77.5	0.0	9.3	9.3	0.0
Shujalpur	91.8	90.2	95.4	84.6	81.9	90.7	23.3	7.3	58.9
Kalapipal	92.3	92.3	0.0	76.0	76.0	0.0	14.7	14.7	0.0

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)						
Tehsil	All Three Facilities Available			None of the Facilities		
	Total	Rural	Urban	Total	Rural	Urban
Susner	10.4	2.6	39.1	8.8	10.7	1.7
Nalkheda	11.9	5.3	40.1	2.8	3.1	1.9
Badod	5.4	0.6	50.8	3.4	3.6	2.1
Agar	17.4	4.4	50.9	4.1	5.5	0.4
Shajapur	29.3	11.3	72.6	1.2	1.6	0.3
Moman Badodiya	7.7	7.7	0.0	1.3	1.3	0.0
Shujalpur	21.2	6.0	55.2	1.7	1.8	1.6
Kalapipal	11.9	11.9	0.0	2.7	2.7	0.0

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Susner	36.8	21.1	21.4	2.2	43.0	5.6	0.8	43.2
Nalkheda	45.1	22.1	27.7	3.0	43.2	7.3	0.8	40.2
Badod	52.7	21.3	17.7	1.1	41.3	4.9	0.5	45.0
Agar	35.1	21.9	28.9	4.6	42.9	9.7	1.1	41.2
Shajapur	37.8	19.2	40.8	7.6	40.8	12.2	1.6	39.0
Moman Badodiya	34.4	21.0	28.1	3.8	37.5	7.6	1.6	43.9
Shujalpur	46.0	22.2	44.3	5.7	42.1	9.6	1.3	35.4
Kalapipal	40.8	19.0	41.3	3.0	41.9	7.3	1.1	38.1

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Susner	38.5	60.3	1.3	0.8	0.5	
Nalkheda	28.6	69.3	2.1	1.8	0.3	
Badod	11.5	85.7	2.8	2.4	0.4	
Agar	29.1	69.7	1.2	0.6	0.6	
Shajapur	44.5	54.5	1.0	0.8	0.2	
Moman Badodiya	30.6	68.4	1.1	0.7	0.4	
Shujalpur	57.2	41.9	0.9	0.5	0.4	
Kalapipal	53.2	45.7	1.1	0.7	0.4	

SHEOPUR



Demography	2001
Total Population	559495
Share of Madhya Pradesh Population	0.9
Urban Population	88571
Population of Scheduled Castes	90420
Population of Scheduled Tribes	120482
Density of Population (per sq km)	85
Decadal Growth Rate (1991–2001)	
Total	29.7
Rural	27.6
Urban	42.1
SC	25.9
ST	39.1

Health	2006
Population per Health Centre	3269
Rural Population Served per PHC	26595
Rural Population Served per SHC	3075
Total Fertility Rate	4.6

Gender	2001	
Gender Ratio	All	895
	Rural	898
	Urban	887
	SC	869
	ST	945
Workers Participation Rate-Female	31.5	
	2004–05	
Female Enrolment Rate (age 6–14)	82.9	

Habitat	2004
Urban Population Residing in Slum	29295
Ground Water Development (%)	18.2
Normal Rainfall (in mm)	990
Average Annual Rainfall (in mm)	682
Per Capita Forest Area (in Ha)	0.52

Basic Information	2001
Area (in sq. km)	6606
Total Inhabited Villages	533
Total Habitations	1092
Forest Villages	9
Major Industrial Areas:	
<i>Sheopur</i>	

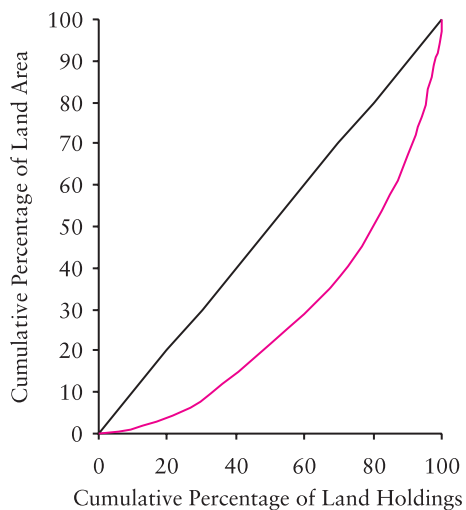
Literacy and Retention			
Literacy-2001	SC	ST	All
All	45.6	21.1	46.4
Male	61.6	32.0	61.8
Female	27.1	9.4	29.1
Rural	44.3	20.4	42.6
Urban	53.1	37.1	66.1
Retention Rate (age 6–11) 2004–05			85.0

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	777	100.0
With Own Building	733	94.3
With Drinking Water Facility	418	53.8
With Toilet Facility	144	18.5

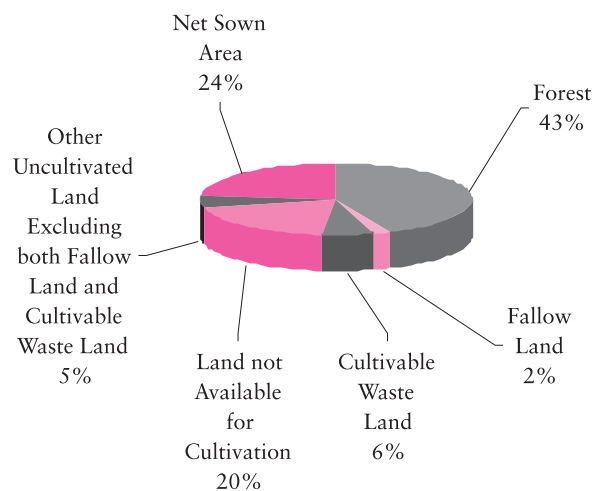
Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	na	82.9
Households with Electricity	na	64.8
Households with Toilet	na	11.9
Households with All Three Facilities	na	10.1
Households Without Any of the Three Facilities	na	6.1
Villages Electrified	na	80.2

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	10.8
Rural Roads per Village (in Km)		0.8
Telephone per Lakh Population (BSNL)	Mar–05	1143
Population per Post Office		9700
Total Electricity Consumption per Consumer (in Kwh)	2003–04	840
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	522
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	712
Consumption per Industrial Unit (in Kwh)	2003–04	3236
Number of Registered Vehicles per Lakh Population	Mar–05	3515
Tractors per 10 Villages	2004	81.0
Average Land Holding Size (in Ha)	2000–01	1.9

Lorenz Curve of Land Holdings



Land Use Classification 2004-05



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	443.3	281.5
Pulses (in Kgs)	29.8	26.6
Foodgrains (in Kgs)	473.1	308.1
Oilseeds (in Kgs)	239.4	220.7
Yield of Food Grains (in Kgs/Ha)	2652.0	2022.8

Credit

	2001
Households Availing Banking Services (in %)	2001
Total	15.2
Rural	11.0
Urban	38.1

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	23.0
% of Net Irrigated to Net Sown Area	2003-04	64.6
Cropped Area under Food Grains (in '000 Ha)	2003-04	89.8
Fertilizer Consumption (in Kgs/Ha)	2002-03	22.4
Cropping Intensity	2004-05	122.0
Net Area Sown (in '000 Ha)	2004-05	157.9
Gross Cropped Area (in '000 Ha)		192.6
Double Cropped Area to Net Area Sown	2004-05	22.0
Net Irrigated Area (in '000 Ha)	2003-04	100.5
Gross Irrigated Area (in '000 Ha)		104.9

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Sheopur	28.93	2.41	9.98	6.59	1.34	50.20
Vijaypur	15.51	3.73	6.88	3.45	5.79	36.47
Karahal	27.69	0.51	3.78	0.31	2.51	36.09

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Sheopur	83.10	36.79	29.29	31.66	13.52	677
Vijaypur	38.61	55.68	26.93	21.05	7.27	647
Karahal	90.33	24.88	18.71	87.91	33.69	699

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Sheopur	2.61	16.22	37.50	51.28	66.67	60.53
Vijaypur	6.84	29.08	35.14	75.00	80.56	27.27
Karahal	5.27	20.20	39.02	46.34	97.56	27.03

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Sheopur	89	126	78.89	47.83	5.25	173	32.63	247
Vijaypur	82	116	47.14	50.83	5.96	193	34.42	367
Karahal	77	108	92.11	65.59	5.77	205	36.52	190

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Vijaypur	63.6	61.6	87.7	75.4	74.1	90.2	9.2	6.6	40.4
Sheopur	72.0	65.1	92.4	84.1	80.3	95.1	15.6	3.5	51.4
Karahal	44.5	44.5	0.0	93.7	93.7	0.0	5.2	5.2	0.0

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)						
Tehsil	All Three Facilities Available			None of the Facilities		
	Total	Rural	Urban	Total	Rural	Urban
Vijaypur	6.6	3.9	38.7	7.1	7.5	2.0
Sheopur	14.5	2.5	49.7	6.3	8.0	1.2
Karahal	3.3	3.3	0.0	3.6	3.6	0.0

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/ Transistor	Television	Telephone	Bicycle	Scooter/ Motor Cycle/ Moped	Car/ Jeep/ Van	None of the Specified Assets
Vijaypur	10.8	12.8	12.1	1.4	22.4	2.8	0.7	66.5
Sheopur	20.0	15.5	29.0	3.6	23.3	8.5	1.4	53.7
Karahal	8.4	13.4	6.8	1.1	28.9	3.1	0.7	62.3

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Vijaypur	75.2	12.1	12.7	7.1	5.6
Sheopur	49.6	44.9	5.5	3.6	1.9
Karahal	78.0	14.6	7.4	4.9	2.4

SHIVPURI



Demography	2001
Total Population	1441950
Share of Madhya Pradesh Population	2.4
Urban Population	239673
Population of Scheduled Castes	270864
Population of Scheduled Tribes	161393
Density of Population (per sq km)	140
Decadal Growth Rate (1991–2001)	
Total	27.3
Rural	25.1
Urban	39.3
SC	23.5
ST	26.3

Health	2003
Population per Health Centre	1664
Rural Population Served per PHC	192118
Rural Population Served per SHC	15110
Total Fertility Rate	5.1

Gender	2001	
Gender Ratio	All	858
	Rural	854
	Urban	874
	SC	854
	ST	945
Workers Participation Rate-Female	37.3	
	2004–05	
Female Enrolment Rate (age 6–14)	102.0	

Habitat	2004
Urban Population Residing in Slum	11714
Ground Water Development (%)	68.2
Normal Rainfall (in mm)	741
Average Annual Rainfall (in mm)	593
Per Capita Forest Area (in Ha)	0.23

Basic Information	2001
Area (in sq. km)	10277
Total Inhabited Villages	1326
Total Habitations	917
Forest Villages	15
Major Industrial Areas:	
<i>Pohri, Shivpuri, Pichhore</i>	

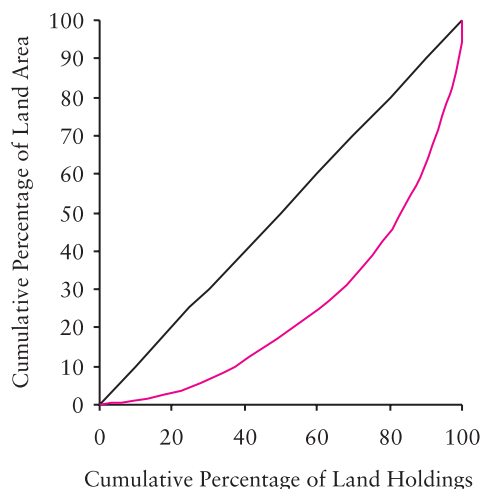
Literacy and Retention			
Literacy-2001	SC	ST	All
All	54.9	33.9	58.9
Male	70.5	47.2	74.1
Female	36.4	19.7	40.8
Rural	53.3	33.7	55.4
Urban	64.6	38.4	75.2
Retention Rate (age 6–11) 2004–05			78.4

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	2202	100.0
With Own Building	2152	97.9
With Drinking Water Facility	2116	96.1
With Toilet Facility	2116	96.1

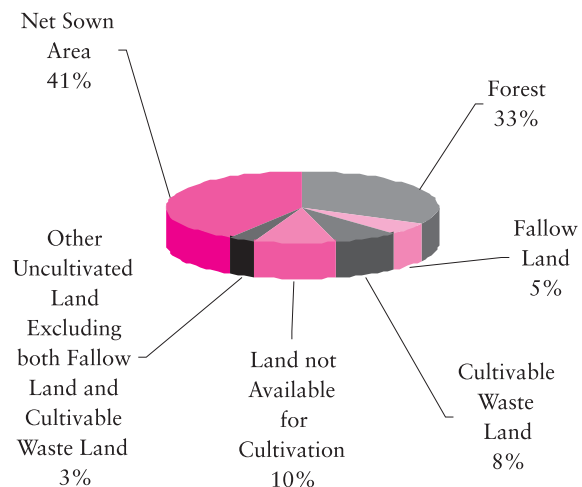
Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	55.1	58.6
Households with Electricity	44.1	61.0
Households with Toilet	9.9	15.8
Households with All Three Facilities	8.1	12.3
Households Without Any of the Three Facilities	29.2	19.0
Villages Electrified	98.4	87.1

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	13.6
Rural Roads per Village (in Km)		0.4
Telephone per Lakh Population (BSNL)	Mar–05	1429
Population per Post Office		7089
Total Electricity Consumption per Consumer (in Kwh)	2003–04	2190
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	668
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	818
Consumption per Industrial Unit (in Kwh)	2003–04	7147
Number of Registered Vehicles per Lakh Population	Mar–05	3686
Tractors per 10 Villages	2004	52.3
Average Land Holding Size (in Ha)	2000–01	2.3

Lorenz Curve of Land Holdings



Land Use Classification 2004-05



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	202.7	242.2
Pulses (in Kgs)	9.8	69.3
Foodgrains (in Kgs)	212.5	311.5
Oilseeds (in Kgs)	102.0	120.4
Yield of Food Grains (in Kgs/Ha)	1326.0	1571.8

Credit

Households Availing Banking Services (in %)	2001
Total	22.3
Rural	18.4
Urban	42.5

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	41.1
% of Net Irrigated to Net Sown Area	2003-04	45.8
Cropped Area under Food Grains (in '000 Ha)	2003-04	299.9
Fertilizer Consumption (in Kgs/Ha)	2002-03	16.7
Cropping Intensity	2004-05	134.3
Net Area Sown (in '000 Ha)	2004-05	409.5
Gross Cropped Area (in '000 Ha)		550.1
Double Cropped Area to Net Area Sown	2004-05	34.3
Net Irrigated Area (in '000 Ha)	2003-04	183.4
Gross Irrigated Area (in '000 Ha)		186.7

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Badarwas	49.50	0.46	0.51	0.69	0.43	52.20
Karera	30.49	1.58	2.01	9.45	0.16	49.19
Khaniyadhana	30.33	2.54	2.04	12.32	2.35	49.77
Kolaras	37.24	1.73	0.56	0.44	0.42	41.06
Narwar	35.91	3.11	3.32	10.48	5.91	59.83
Pichhore	42.87	1.48	3.83	6.53	0.38	55.62
Pohari	41.00	0.38	0.54	1.92	0.26	44.57
Shivpuri	32.95	1.95	5.63	12.60	5.65	59.68

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Badarwas	71.46	23.48	4.55	68.61	53.81	973
Karera	71.96	20.21	12.78	43.33	11.04	784
Khaniyadhana	72.80	63.20	23.20	1.60	2.40	569
Kolaras	73.99	25.80	3.88	64.01	43.92	948
Narwar	48.41	50.40	45.04	3.37	4.50	433
Pichhore	63.45	35.74	32.77	19.21	17.41	601
Pohari	90.89	22.12	9.85	26.97	24.16	1074
Shivpuri	61.78	50.93	35.77	5.00	4.60	515

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Badarwas	4.48	39.31	37.50	40.63	84.38	3.23
Karera	6.66	13.08	18.18	63.41	79.27	11.11
Khaniyadhana	5.36	30.09	0.00	66.67	100.00	0.00
Kolaras	4.15	19.06	6.38	14.63	77.50	2.70
Narwar	5.32	25.60	7.89	71.88	71.88	34.38
Pichhore	8.30	19.84	12.28	75.47	92.45	27.27
Pohari	3.87	18.86	14.93	41.27	98.41	36.51
Shivpuri	4.48	27.56	11.43	90.48	70.97	34.38

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Badarwas	84	118	85.87	39.71	5.37	149	30.78	386
Karera	78	109	76.94	57.17	5.04	157	26.25	544
Khaniyadhana	68	94	75.1	57.5	4.72	148	30.78	220
Kolaras	81	114	85.37	41.76	5.14	162	33.22	351
Narwar	75	104	72.52	43.46	4.54	154	31.87	221
Pichhore	84	119	52.51	45.69	5.22	138	25.34	498
Pohari	101	145	75.18	50.35	5.15	165	31.36	232
Shivpuri	76	106	66.53	47.55	5.04	153	29.25	637

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Pohari	65.7	65.7	0.0	42.8	42.8	0.0	9.3	9.3	0.0
Shivpuri	80.8	65.0	95.4	85.6	77.7	92.7	38.4	5.0	69.2
Narwar	51.7	48.6	81.3	47.1	44.5	72.7	9.5	6.3	39.8
Karera	54.1	49.7	90.3	50.2	46.1	83.2	13.0	7.1	61.4
Kolaras	67.3	65.9	81.3	62.8	60.9	81.6	11.8	7.9	50.8
Pichhore	57.9	54.5	91.3	55.2	53.3	73.7	9.3	4.7	54.6
Khaniyadhana	38.7	36.2	81.4	49.2	48.6	58.4	8.7	6.1	51.6

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)						
Tehsil	All Three Facilities Available			None of the Facilities		
	Total	Rural	Urban	Total	Rural	Urban
Pohari	5.7	5.7	0.0	21.2	21.2	0.0
Shivpuri	34.9	2.0	65.1	3.6	7.0	0.6
Narwar	6.4	3.5	34.9	28.1	30.0	9.1
Karera	8.5	2.5	57.4	23.5	25.8	4.8
Kolaras	8.6	5.0	43.9	13.5	14.2	7.2
Pichhore	7.0	3.1	44.8	21.3	23.3	2.2
Khaniyadhana	4.3	2.1	41.1	31.7	32.8	11.9

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Pohari	17.3	17.4	10.9	2.8	33.5	5.0	0.9	56.6
Shivpuri	28.7	18.7	43.2	13.5	51.1	18.9	2.3	31.3
Narwar	21.6	13.9	20.2	2.4	37.2	5.2	0.7	51.1
Karera	23.4	17.0	20.7	3.4	50.2	8.4	1.2	39.3
Kolaras	26.6	19.1	17.3	3.3	30.1	5.0	1.0	54.8
Pichhore	17.7	15.3	14.4	2.6	46.9	7.1	0.8	45.0
Khaniyadhana	15.6	14.6	10.8	1.9	43.9	5.1	0.8	48.3

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Pohari	84.5	10.2	5.3	3.1	2.3	
Shivpuri	75.2	20.9	3.9	2.7	1.2	
Narwar	73.6	23.4	3.0	2.0	1.0	
Karera	79.7	18.8	1.6	1.1	0.5	
Kolaras	49.2	42.9	7.9	5.6	2.3	
Pichhore	84.8	11.2	4.0	2.4	1.5	
Khaniyadhana	79.0	17.7	3.3	1.0	2.3	

SIDHI



Demography	2001
Total Population	1831152
Share of Madhya Pradesh Population	3.0
Urban Population	261031
Population of Scheduled Castes	217026
Population of Scheduled Tribes	547375
Density of Population (per sq km)	174
Decadal Growth Rate (1991–2001)	
Total	33.3
Rural	22.2
Urban	193.8
SC	39.0
ST	30.9

Health	2006
Population per Health Centre	9891
Rural Population Served per PHC	144656
Rural Population Served per SHC	8723
Total Fertility Rate	4.7

Gender	2001	
Gender Ratio	All	932
	Rural	946
	Urban	850
	SC	950
	ST	950
Workers Participation Rate-Female	34.2	
	2004–05	
Female Enrolment Rate (age 6–14)	96.4	

Habitat	2004
Urban Population Residing in Slum	32481
Ground Water Development (%)	25.2
Normal Rainfall (in mm)	815
Average Annual Rainfall (in mm)	749
Per Capita Forest Area (in Ha)	0.24

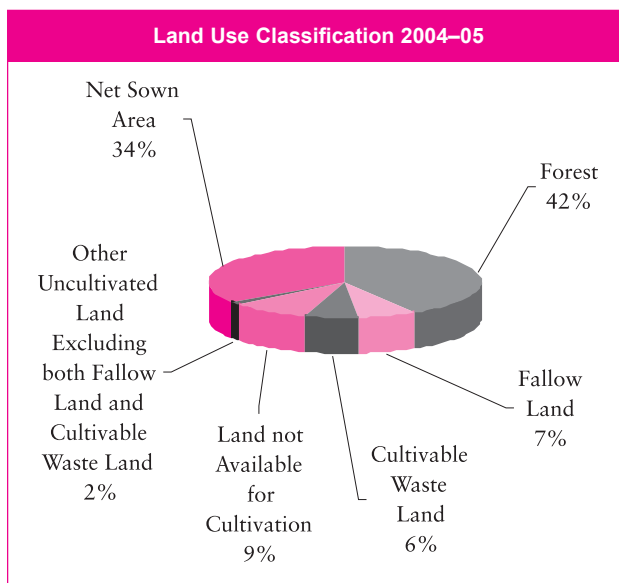
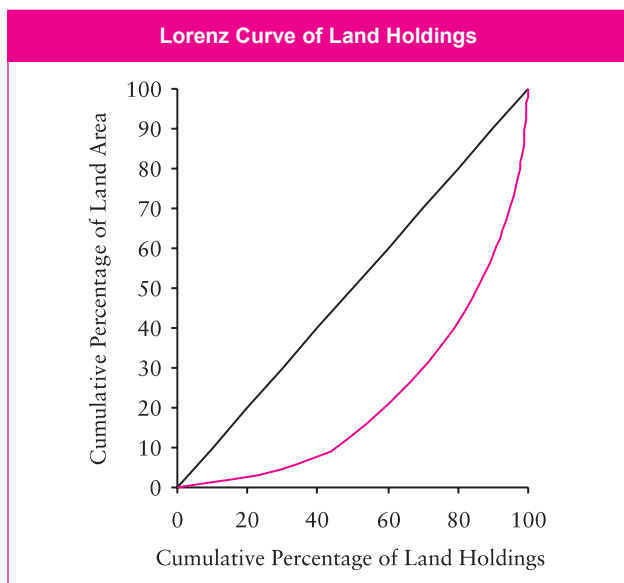
Basic Information	2001
Area (in sq. km)	10526
Total Inhabited Villages	1822
Total Habitations	2116
Forest Villages	12
Major Industrial Areas:	
<i>Baidhan, Rampur Naikin, Sihawal</i>	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	41.7	36.6	52.3
Male	56.4	50.7	67.4
Female	26.2	21.6	36.0
Rural	39.5	36.3	48.8
Urban	54.4	43.5	72.2
Retention Rate (age 6–11) 2004–05			68.0

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	3187	100.0
With Own Building	2744	86.1
With Drinking Water Facility	1155	36.2
With Toilet Facility	152	4.8

Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	29.4	35.9
Households with Electricity	28.8	38.3
Households with Toilet	6.9	9.5
Households with All Three Facilities	6.1	7.5
Households Without Any of the Three Facilities	56.5	44.8
Villages Electrified	98.4	95.9

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	43.1
Rural Roads per Village (in Km)		2.1
Telephone per Lakh Population (BSNL)	Mar–05	906
Population per Post Office		9555
Total Electricity Consumption per Consumer (in Kwh)	2003–04	4946
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	520
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	900
Consumption per Industrial Unit (in Kwh)	2003–04	320745
Number of Registered Vehicles per Lakh Population	Mar–05	2285
Tractors per 10 Villages	2004	112
Average Land Holding Size (in Ha)	2000–01	1.9



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	150.6	168.9
Pulses (in Kgs)	72.8	24.8
Foodgrains (in Kgs)	223.4	193.7
Oilseeds (in Kgs)	6.9	6.7
Yield of Food Grains (in Kgs/Ha)	681.0	851.2

Credit

Households Availing Banking Services (in %)	2001
Total	24.4
Rural	17.5
Urban	64.2

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	34.2
% of Net Irrigated to Net Sown Area	2003-04	17.1
Cropped Area under Food Grains (in '000 Ha)	2003-04	441.3
Fertilizer Consumption (in Kgs/Ha)	2002-03	14.3
Cropping Intensity	2004-05	136.1
Net Area Sown (in '000 Ha)	2004-05	355.7
Gross Cropped Area (in '000 Ha)		484.2
Double Cropped Area to Net Area Sown	2004-05	36.1
Net Irrigated Area (in '000 Ha)	2003-04	61.7
Gross Irrigated Area (in '000 Ha)		61.7

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Chitrangi	36.55	3.22	8.80	7.25	2.68	61.22
Deosar	38.74	1.44	5.71	5.56	4.42	56.90
Kusmi	36.94	3.08	9.11	6.03	3.10	59.82
Majholi	38.32	1.44	7.63	3.32	2.61	54.26
Rampur Naikin	34.74	2.31	9.48	7.54	1.38	56.97
Sidhi	35.57	1.65	6.48	3.62	1.49	52.24
Sihawal	39.06	2.18	7.43	4.84	4.71	59.14
Baidhan	29.95	3.79	12.17	8.65	2.42	60.00

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Chitrangi	66.25	27.50	13.33	37.83	35.24	776
Deosar	69.96	26.69	20.64	31.45	21.99	631
Kusmi	87.67	63.55	13.35	18.11	16.07	715
Majholi	79.52	18.56	14.58	29.05	16.51	720
Rampur Naikin	83.94	21.61	17.82	36.38	27.33	643
Sidhi	80.33	28.72	17.59	23.28	12.63	855
Sihawal	53.27	46.73	8.41	25.23	5.71	800
Baidhan	55.84	43.49	13.33	37.22	24.29	694

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Chitrangi	3.39	33.42	10.84	91.67	95.83	0.00
Deosar	3.22	32.50	12.00	85.86	88.89	4.05
Kusmi	4.95	32.28	23.21	96.61	96.55	31.71
Majholi	3.06	26.90	10.00	81.36	97.48	7.29
Rampur Naikin	2.68	35.00	20.34	95.24	100.00	6.90
Sidhi	6.17	27.02	19.18	80.70	81.03	18.18
Sihawal	5.44	34.86	11.67	90.00	91.67	0.00
Baidhan	2.32	37.82	15.58	98.59	98.59	0.00

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Chitrangi	78	109	86.94	49.38	6.19	103	21.97	324
Deosar	72	99	95.88	45.72	6.51	142	27.27	276
Kusmi	72	99	83.96	58.99	6.11	155	21.61	40
Majholi	74	102	91.69	49.79	6.25	157	22.94	292
Rampur Naikin	70	96	84.73	52.56	5.86	127	28.72	350
Sidhi	92	131	80.1	48.07	5.34	140	21.36	294
Sihawal	74	103	95.48	29.81	6.5	142	23.98	355
Baidhan	70	96	91.2	34.22	6.22	141	23.64	388

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Rampur Naikin	55.4	54.2	73.4	43.0	40.7	80.1	3.6	2.8	16.1
Churhat	64.7	62.6	79.2	65.5	62.2	89.2	7.2	3.8	31.3
Gopadbanas	43.3	30.5	90.3	47.8	38.2	83.2	14.9	1.9	62.7
Sihawal	41.2	41.2	0.0	52.4	52.4	0.0	2.8	2.8	0.0
Chitrangi	16.1	14.0	86.1	26.1	24.2	87.9	4.1	1.7	81.3
Deosar	26.2	26.2	0.0	15.7	15.7	0.0	2.9	2.9	0.0
Majhauri	31.8	31.8	0.0	20.0	20.0	0.0	2.8	2.8	0.0
Kusmi	16.8	16.8	0.0	13.3	13.3	0.0	3.0	3.0	0.0
Singrauli	46.3	22.8	73.4	38.0	13.1	66.6	23.4	1.5	48.6

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)						
Tehsil	All Three Facilities Available			None of the Facilities		
	Total	Rural	Urban	Total	Rural	Urban
Rampur Naikin	1.6	0.8	14.4	26.2	27.4	7.3
Churhat	4.7	1.6	26.9	13.0	14.3	3.4
Gopadbanas	12.7	0.7	56.7	33.8	42.3	2.9
Sihawal	1.3	1.3	0.0	30.2	30.2	0.0
Chitrangi	2.7	0.3	78.4	63.9	65.7	6.5
Deosar	1.3	1.3	0.0	64.0	64.0	0.0
Majhauri	1.0	1.0	0.0	54.6	54.6	0.0
Kusmi	0.4	0.4	0.0	72.4	72.4	0.0
Singrauli	20.7	0.2	44.4	43.0	67.2	15.1

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Rampur Naikin	16.5	24.1	6.0	0.4	34.1	3.2	0.9	57.6
Churhat	27.6	32.9	10.6	0.7	41.8	5.5	1.3	47.7
Gopadbanas	27.7	25.6	16.7	2.3	43.5	8.5	1.3	46.5
Sihawal	19.7	25.2	5.7	0.8	38.5	3.9	0.9	52.6
Chitrangi	14.6	22.4	5.1	1.2	30.4	3.0	0.9	60.0
Deosar	19.5	21.6	3.7	0.8	45.4	2.5	0.6	49.0
Majhauri	14.8	21.8	3.5	0.8	40.0	3.3	0.6	52.8
Kusmi	8.6	18.6	1.4	0.3	38.0	1.6	0.4	56.5
Singrauli	42.2	31.1	25.3	5.2	62.2	16.9	3.0	27.5

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Rampur Naikin	14.5	85.1	0.5	0.5	0.0
Churhat	14.7	84.1	1.2	1.1	0.1
Gopadbanas	15.9	84.0	0.1	0.1	0.0
Sihawal	4.3	95.6	0.2	0.1	0.0
Chitrangi	5.1	92.0	2.9	2.6	0.3
Deosar	3.0	96.4	0.6	0.6	0.1
Majhauri	5.8	93.4	0.8	0.7	0.1
Kusmi	1.4	98.3	0.3	0.3	0.0
Singrauli	30.6	63.9	5.4	4.5	0.9

TIKAMGARH



Demography	2001
Total Population	120298
Share of Madhya Pradesh Population	2.0
Urban Population	212733
Population of Scheduled Castes	292171
Population of Scheduled Tribes	51957
Density of Population (per sq km)	238
Decadal Growth Rate (1991–2001)	
Total	27.9
Rural	26.7
Urban	33.8
SC	36.5
ST	33.7

Health	2006
Population per Health Centre	3961
Rural Population Served per PHC	27183
Rural Population Served per SHC	3690
Total Fertility Rate	4.5

Gender	2001	
Gender Ratio	All	886
	Rural	883
	Urban	899
	SC	876
	ST	947
Workers Participation Rate-Female	41.3	
	2004–05	
Female Enrolment Rate (age 6–14)	92.3	

Habitat	2004
Urban Population Residing in Slum	44470
Ground Water Development (%)	51.4
Normal Rainfall (in mm)	1283
Average Annual Rainfall (in mm)	745
Per Capita Forest Area (in Ha)	0.06

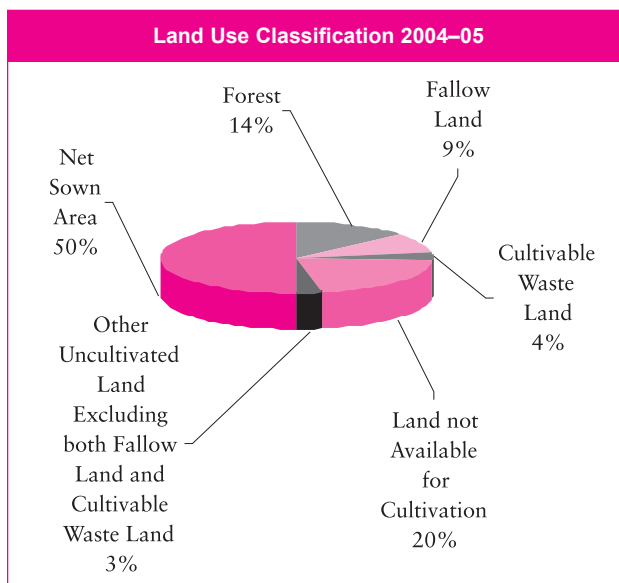
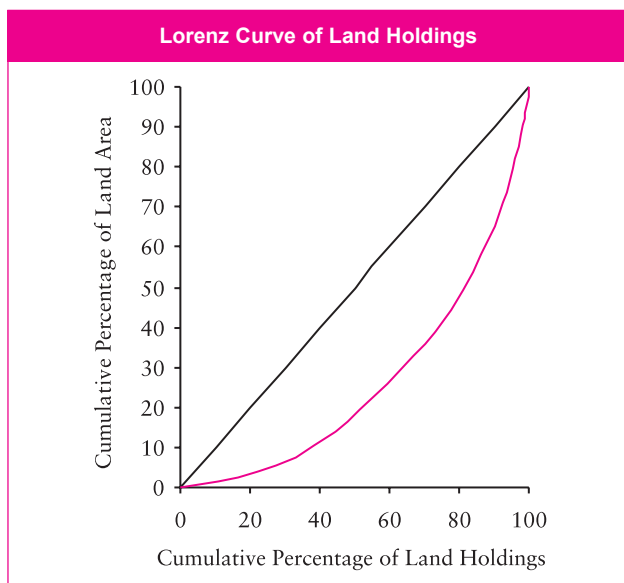
Basic Information	2001
Area (in sq. km)	5048
Total Inhabited Villages	863
Total Habitations	7090
Forest Villages	8
Major Industrial Areas:	
<i>Tikamgarh, Niwari, Prathvipur</i>	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	52.9	35.2	55.7
Male	66.5	45.4	68.7
Female	37.3	24.2	41.0
Rural	50.9	35.1	52.8
Urban	63.8	36.1	69.0
Retention Rate (age 6–11) 2004–05			69.1

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	1786	100.0
With Own Building	1786	100.0
With Drinking Water Facility	1394	78.1
With Toilet Facility	1146	64.2

Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	25.0	35.1
Households with Electricity	30.0	49.3
Households with Toilet	6.2	11.0
Households with All Three Facilities	4.2	7.0
Households Without Any of the Three Facilities	56.2	35.7
Villages Electrified	91.3	88.6

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	28.9
Rural Roads per Village (in Km)		1.1
Telephone per Lakh Population (BSNL)	Mar–05	923
Population per Post Office		7175
Total Electricity Consumption per Consumer (in Kwh)	2003–04	1240
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	509
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	791
Consumption per Industrial Unit (in Kwh)	2003–04	20914
Number of Registered Vehicles per Lakh Population	Mar–05	2353
Tractors per 10 Villages	2004	44.3
Average Land Holding Size (in Ha)	2000–01	1.6



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	253.0	238.9
Pulses (in Kgs)	40.9	65.8
Foodgrains (in Kgs)	293.9	304.7
Oilseeds (in Kgs)	104.5	62.6
Yield of Food Grains (in Kgs/Ha)	1421.0	1334.2

Credit

	2001
Households Availing Banking Services (in %)	2001
Total	26.7
Rural	22.9
Urban	46.5

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	50.1
% of Net Irrigated to Net Sown Area	2003-04	73.4
Cropped Area under Food Grains (in '000 Ha)	2003-04	288.5
Fertilizer Consumption (in Kgs/Ha)	2002-03	39.5
Cropping Intensity	2004-05	154.1
Net Area Sown (in '000 Ha)	2004-05	252.3
Gross Cropped Area (in '000 Ha)		388.9
Double Cropped Area to Net Area Sown	2004-05	54.1
Net Irrigated Area (in '000 Ha)	2003-04	189.4
Gross Irrigated Area (in '000 Ha)		218.0

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Baldeogarh	41.45	2.37	8.83	7.80	1.64	63.08
Jatara	49.09	1.54	7.56	3.09	1.82	63.73
Niwari	49.85	1.66	8.22	2.74	1.12	64.67
Palera	52.62	2.66	8.85	3.86	0.44	68.92
Prithvipur	53.75	2.79	8.51	1.08	1.05	67.71
Tikamgarh	56.59	1.76	9.67	4.73	0.88	75.49

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Baldeogarh	77.88	28.48	18.97	26.98	21.17	826
Jatara	83.08	46.50	20.65	26.54	16.93	857
Niwari	78.35	33.66	19.68	23.10	27.18	862
Palera	85.80	36.07	17.57	14.60	26.22	741
Prithvipur	82.04	15.40	2.35	58.04	25.85	1381
Tikamgarh	87.30	46.50	11.11	20.49	20.99	753

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Baldeogarh	4.34	16.49	32.18	62.03	88.61	37.50
Jatara	4.18	32.56	22.37	80.00	79.63	48.15
Niwari	4.46	21.99	35.90	51.61	77.42	36.67
Palera	4.38	29.69	15.52	75.00	88.64	45.24
Prithvipur	3.05	14.11	38.71	50.00	78.13	51.72
Tikamgarh	5.38	17.12	9.09	58.33	75.00	36.36

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Baldeogarh	91	129	71.9	46.98	4.88	149	30.15	349
Jatara	97	139	72.87	41.87	4.79	145	29.07	535
Niwari	96	137	78.24	39.33	4.04	125	27.03	327
Palera	80	112	78.64	35.48	3.95	144	30.4	235
Prithvipur	114	167	81.77	36.86	4.68	142	29.78	362
Tikamgarh	73	101	77.66	52.22	4.52	136	28.39	334

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Niwari	61.6	59.9	69.6	38.7	34.9	57.0	10.6	5.2	36.1
Prithvipur	48.9	44.0	72.2	27.0	24.2	40.3	6.4	2.8	23.1
Jatara	45.3	42.6	69.4	33.2	31.5	48.6	9.7	6.5	38.6
Palera	32.6	31.0	50.8	25.9	25.5	29.7	6.6	5.6	18.5
Baldeogarh	44.9	42.1	72.5	26.6	25.7	36.2	6.2	3.4	34.9
Tikamgarh	59.3	47.4	86.0	53.5	41.9	79.6	23.0	5.8	61.8

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Niwari	6.9	2.3	28.7	26.0	27.3	20.2	
Prithvipur	3.4	0.7	16.0	38.9	43.0	19.7	
Jatara	4.5	2.0	26.7	37.2	39.0	20.4	
Palera	2.1	1.3	10.4	50.5	51.2	41.9	
Baldeogarh	2.8	1.4	16.8	41.9	44.2	18.7	
Tikamgarh	19.0	2.5	56.2	23.8	31.2	7.3	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/ Transistor	Television	Telephone	Bicycle	Scooter/ Motor Cycle/ Moped	Car/ Jeep/ Van	None of the Specified Assets
Niwari	28.2	26.8	23.9	2.0	53.2	8.7	0.9	35.4
Prithvipur	27.7	22.0	14.7	1.1	58.0	6.3	0.8	35.6
Jatara	25.4	23.8	11.9	1.4	47.1	5.4	1.0	44.0
Palera	27.7	30.0	10.2	0.8	55.5	5.4	1.2	37.2
Baldeogarh	20.3	25.5	8.5	0.8	52.8	4.1	0.6	40.5
Tikamgarh	30.8	24.2	26.4	4.7	60.1	12.2	1.6	32.4

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)						
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha	
Niwari	74.5	25.3	0.2	0.2	0.0	
Prithvipur	80.3	19.6	0.1	0.0	0.0	
Jatara	80.8	18.9	0.3	0.2	0.1	
Palera	69.6	30.4	0.0	0.0	0.0	
Baldeogarh	83.6	16.4	0.0	0.0	0.0	
Tikamgarh	75.6	23.8	0.5	0.5	0.1	

UJJAIN



Demography	2001
Total Population	1710982
Share of Madhya Pradesh Population	2.8
Urban Population	662787
Population of Scheduled Castes	422882
Population of Scheduled Tribes	53230
Density of Population (per sq km)	281
Decadal Growth Rate (1991–2001)	
Total	23.7
Rural	25.3
Urban	21.2
SC	24.5
ST	82.5

Health	2006
Population per Health Centre	10451
Rural Population Served per PHC	65190
Rural Population Served per SHC	7522
Total Fertility Rate	3.5

Gender	2001	
Gender Ratio	All	938
	Rural	946
	Urban	925
	SC	946
	ST	920
Workers Participation Rate-Female	33.9	
	2004–05	
Female Enrolment Rate (age 6–14)	102.9	

Habitat	2004
Urban Population Residing in Slum	16252
Ground Water Development (%)	104.9
Normal Rainfall (in mm)	925
Average Annual Rainfall (in mm)	845
Per Capita Forest Area (in Ha)	0.00

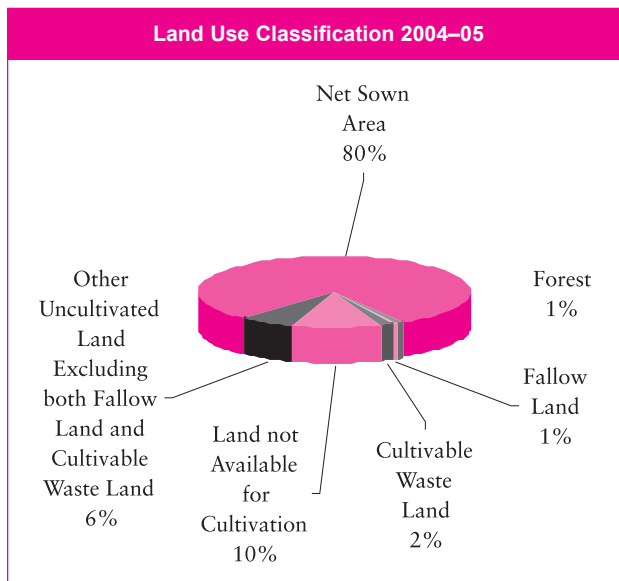
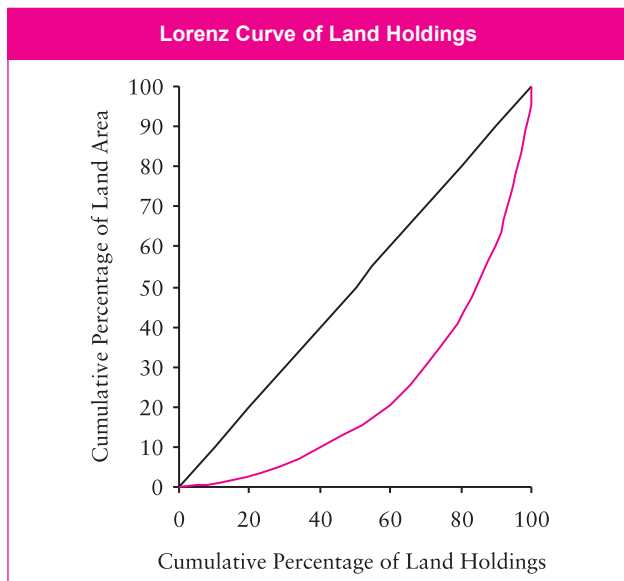
Basic Information	2001
Area (in sq. km)	6091
Total Inhabited Villages	1092
Total Habitations	2017
Forest Villages	0
Major Industrial Areas:	
<i>Ujjain, Mahidpur, Khachrod, Badnagar</i>	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	59.8	55.5	70.9
Male	74.3	66.4	83.0
Female	44.3	43.5	57.9
Rural	56.2	55.8	64.2
Urban	69.5	54.5	80.9
Retention Rate (age 6–11) 2004–05			76.0

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	1453	100.0
With Own Building	1372	94.4
With Drinking Water Facility	747	51.4
With Toilet Facility	528	36.3

Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	81.8	88.5
Households with Electricity	63.3	90.2
Households with Toilet	31.7	37.2
Households with All Three Facilities	27.8	34.3
Households Without Any of the Three Facilities	9.0	1.9
Villages Electrified	92.2	96.2

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	19.1
Rural Roads per Village (in Km)		0.6
Telephone per Lakh Population (BSNL)	Mar–05	3433
Population per Post Office		9457
Total Electricity Consumption per Consumer (in Kwh)	2003–04	2591
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	793
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	993
Consumption per Industrial Unit (in Kwh)	2003–04	41444
Number of Registered Vehicles per Lakh Population	Mar–05	8429
Tractors per 10 Villages	2004	87.0
Average Land Holding Size (in Ha)	2000–01	3.3



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	305.9	181.1
Pulses (in Kgs)	38.7	54.9
Foodgrains (in Kgs)	344.6	236.0
Oilseeds (in Kgs)	350.4	223.1
Yield of Food Grains (in Kgs/Ha)	1817.0	1266.8

Credit

	2001
Households Availing Banking Services (in %)	
Total	37.9
Rural	29.8
Urban	50.6

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	80.3
% of Net Irrigated to Net Sown Area	2003-04	42.0
Cropped Area under Food Grains (in '000 Ha)	2003-04	332.6
Fertilizer Consumption (in Kgs/Ha)	2002-03	42.7
Cropping Intensity	2004-05	158.7
Net Area Sown (in '000 Ha)	2004-05	490.0
Gross Cropped Area (in '000 Ha)		777.6
Double Cropped Area to Net Area Sown	2004-05	58.7
Net Irrigated Area (in '000 Ha)	2003-04	204.9
Gross Irrigated Area (in '000 Ha)		205.3

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Badnagar	23.08	3.80	7.79	8.22	1.19	37.83
Ghatiya	25.83	4.48	8.35	2.42	0.61	34.82
Khachrod	29.00	3.14	8.10	2.87	1.04	35.92
Mahidpur	25.96	4.58	9.34	4.94	1.20	35.98
Tarana	28.26	4.40	8.78	3.00	1.19	33.19
Ujjain	29.57	4.20	7.74	7.25	1.35	30.47

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Badnagar	45.34	47.15	25.2	25.61	17.52	608
Ghatiya	33.48	59.46	22.97	8.60	33.33	571
Khachrod	67.44	39.48	31.83	17.07	16.94	528
Mahidpur	45.81	45.45	34.09	24.19	11.95	522
Tarana	58.14	39.15	29.25	8.33	10.70	568
Ujjain	67.07	31.71	28.05	19.77	18.60	571

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Badnagar	3.78	48.46	30.91	100.00	100.00	1.82
Ghatiya	6.08	43.19	21.28	100.00	100.00	0.00
Khachrod	6.15	43.81	7.58	98.48	96.97	14.06
Mahidpur	7.66	51.69	24.00	100.00	100.00	0.00
Tarana	5.57	49.97	6.67	100.00	98.61	4.29
Ujjain	7.60	41.30	27.03	96.97	100.00	3.03

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Badnagar	75	104	91.25	46.79	5.68	135	29.24	397
Ghatiya	68	93	93.21	41.67	6.16	137	28.59	670
Khachrod	73	101	86.01	48.52	5.78	137	28.68	673
Mahidpur	75	105	88.99	47.37	6.35	134	26.55	670
Tarana	75	104	91.87	39.39	6.25	136	27.3	616
Ujjain	74	102	90.86	34.33	5.88	124	25.68	670

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Khachrod	81.6	77.7	96.6	91.8	90.0	98.6	18.7	7.3	62.7
Nagda	92.4	90.1	94.5	85.9	82.4	89.0	40.8	5.0	72.7
Mahidpur	78.9	76.4	92.0	76.0	72.7	93.4	17.6	7.1	73.4
Ghatiya	91.4	91.4	0.0	88.7	88.7	0.0	13.7	13.7	0.0
Tarana	87.3	86.5	94.9	75.0	72.7	97.3	15.1	10.1	64.9
Ujjain	96.4	93.6	97.3	94.6	91.1	95.6	67.5	18.5	82.4
Badnagar	90.7	89.8	96.1	98.8	98.9	98.5	22.6	13.9	77.0

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Khachrod	17.0	5.5	61.3	2.6	3.2	0.2	
Nagda	36.9	4.5	65.8	1.7	1.9	1.6	
Mahidpur	14.8	4.7	68.1	6.1	7.2	0.5	
Ghatiya	11.5	11.5	0.0	1.6	1.6	0.0	
Tarana	11.8	6.6	63.0	3.4	3.7	0.1	
Ujjain	64.0	16.0	78.5	0.4	1.0	0.2	
Badnagar	21.8	13.2	75.2	0.3	0.3	0.1	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Khachrod	27.9	23.3	40.4	4.9	46.0	15.4	1.4	34.1
Nagda	43.1	24.9	53.3	10.9	56.0	15.3	1.5	25.0
Mahidpur	26.5	20.9	25.4	2.9	37.6	6.4	1.1	45.1
Ghatiya	38.4	17.8	31.9	2.0	34.2	8.6	1.1	45.8
Tarana	37.4	18.8	30.5	2.8	35.4	6.9	0.9	46.8
Ujjain	45.7	29.8	70.2	20.4	60.2	31.3	3.6	16.4
Badnagar	30.7	22.0	46.8	6.2	44.1	15.1	1.6	32.8

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Khachrod	29.5	63.2	7.3	6.4	0.9
Nagda	50.6	47.4	2.0	1.5	0.5
Mahidpur	23.1	75.1	1.9	1.5	0.3
Ghatiya	26.1	71.8	2.2	1.4	0.7
Tarana	29.5	69.9	0.6	0.4	0.2
Ujjain	65.0	32.5	2.5	2.1	0.5
Badnagar	32.0	64.3	3.7	2.8	0.9

UMARIA



Bandhogarh

Demography	2001
Total Population	515963
Share of Madhya Pradesh Population	0.9
Urban Population	83133
Population of Scheduled Castes	35126
Population of Scheduled Tribes	227250
Density of Population (per sq km)	127
Decadal Growth Rate (1991–2001)	
Total	22.6
Rural	23.4
Urban	18.9
SC	1.6
ST	16.6

Health	2006
Population per Health Centre	2662
Rural Population Served per PHC	22892
Rural Population Served per SHC	2828
Total Fertility Rate	4.0

Gender	2001	
Gender Ratio	All	946
	Rural	952
	Urban	916
	SC	950
	ST	972
Workers Participation Rate-Female	33.3	
	2004–05	
Female Enrolment Rate (age 6–14)	102.1	

Habitat	2004
Urban Population Residing in Slum	155582
Ground Water Development (%)	9.4
Normal Rainfall (in mm)	841
Average Annual Rainfall (in mm)	978
Per Capita Forest Area (in Ha)	0.46

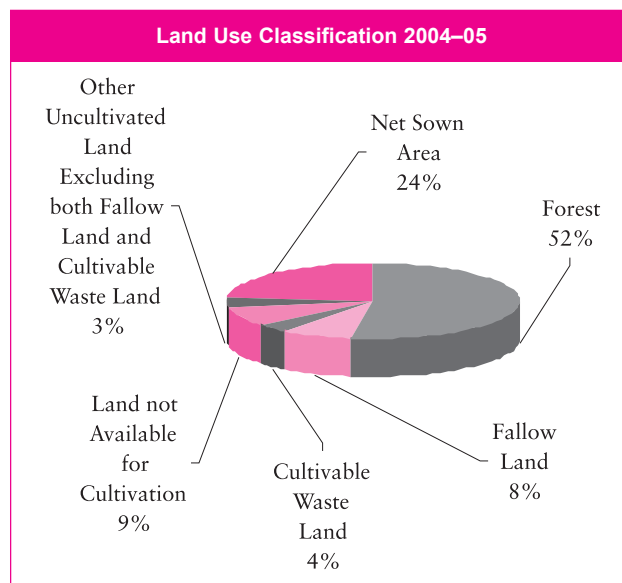
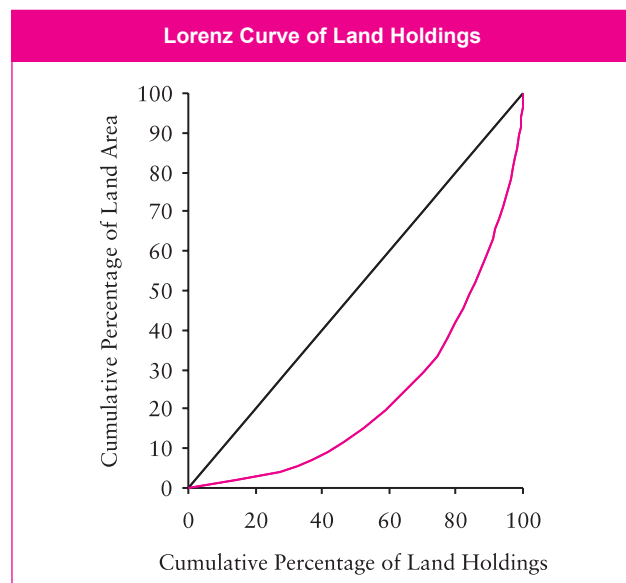
Basic Information	2001
Area (in sq. km)	4076
Total Inhabited Villages	646
Total Habitations	1489
Forest Villages	2
Major Industrial Areas:	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	58.5	44.9	59.1
Male	73.5	58.7	72.9
Female	42.8	30.4	44.5
Rural	56.9	44.6	56.5
Urban	63.9	47.1	72.3
Retention Rate (age 6–11) 2004–05			89.7

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	877	100.0
With Own Building	877	100.0
With Drinking Water Facility	750	85.5
With Toilet Facility	764	87.1

Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	na	41.1
Households with Electricity	na	48.0
Households with Toilet	na	13.6
Households with All Three Facilities	na	9.8
Households Without Any of the Three Facilities	na	33.2
Villages Electrified	na	84.3

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	20.5
Rural Roads per Village (in Km)		0.9
Telephone per Lakh Population (BSNL)	Mar–05	1068
Population per Post Office		9821
Total Electricity Consumption per Consumer (in Kwh)	2003–04	4194
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	544
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	942
Consumption per Industrial Unit (in Kwh)	2003–04	310206
Number of Registered Vehicles per Lakh Population	Mar–05	2340
Tractors per 10 Villages	2004	11.5
Average Land Holding Size (in Ha)	2000–01	1.8



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	141.1	141.6
Pulses (in Kgs)	19.4	17.8
Foodgrains (in Kgs)	160.5	159.4
Oilseeds (in Kgs)	9.1	9.0
Yield of Food Grains (in Kgs/Ha)	632.0	694.8

Credit

	2001
Households Availing Banking Services (in %)	2001
Total	21.2
Rural	15.7
Urban	51.7

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	23.9
% of Net Irrigated to Net Sown Area	2003-04	17.3
Cropped Area under Food Grains (in '000 Ha)	2003-04	123.3
Fertilizer Consumption (in Kgs/Ha)	2002-03	16.2
Cropping Intensity	2004-05	130.2
Net Area Sown (in '000 Ha)	2004-05	107.9
Gross Cropped Area (in '000 Ha)		140.4
Double Cropped Area to Net Area Sown	2004-05	30.2
Net Irrigated Area (in '000 Ha)	2003-04	18.8
Gross Irrigated Area (in '000 Ha)		18.8

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Umaria	26.80	0.77	8.97	4.96	6.44	48.27
Manpur	43.08	0.80	4.94	6.29	0.20	57.38
Pali	46.78	0.92	0.54	3.95	3.71	58.76

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Umaria	90.82	13.48	8.15	35.90	24.18	1027
Manpur	14.69	85.15	7.36	7.75	17.56	814
Pali	83.03	38.15	26.3	13.16	18.96	686

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Umaria	3.76	23.54	17.39	32.35	50.75	3.03
Manpur	3.63	14.23	66.67	90.24	83.33	75.00
Pali	5.46	10.51	50.00	84.62	100.00	65.38

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Umaria	94	135	72.25	60.93	4.86	158	30.58	262
Manpur	74	102	43.47	27.29	5.13	171	33.47	437
Pali	76	106	38.73	37.28	3.68	106	22.18	326

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Bandhogarh	48.0	42.6	78.2	41.1	36.3	68.3	13.6	8.2	43.9

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)						
Tehsil	All Three Facilities Available			None of the Facilities		
	Total	Rural	Urban	Total	Rural	Urban
Bandhogarh	9.8	4.7	38.2	33.2	37.1	11.4

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Bandhogarh	21.2	21.8	13.4	2.3	47.9	6.5	0.9	44.2

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Bandhogarh	19.1	79.4	1.5	1.2	0.3

VIDISHA



Demography	2001
Total Population	1214857
Share of Madhya Pradesh Population	2.0
Urban Population	260367
Population of Scheduled Castes	241131
Population of Scheduled Tribes	59323
Density of Population (per sq km)	165
Decadal Growth Rate (1991–2001)	
Total	25.2
Rural	32.1
Urban	33.5
SC	22.4
ST	39.0

Health	2006
Population per Health Centre	11395
Rural Population Served per PHC	117674
Rural Population Served per SHC	9806
Total Fertility Rate	4.5

Gender	2001	
Gender Ratio	All	875
	Rural	872
	Urban	887
	SC	869
	ST	916
Workers Participation Rate-Female	21.2	
	2004–05	
Female Enrolment Rate (age 6–14)	99.1	

Habitat	2004
Urban Population Residing in Slum	6081
Ground Water Development (%)	47.0
Normal Rainfall (in mm)	1238
Average Annual Rainfall (in mm)	1105
Per Capita Forest Area (in Ha)	0.09

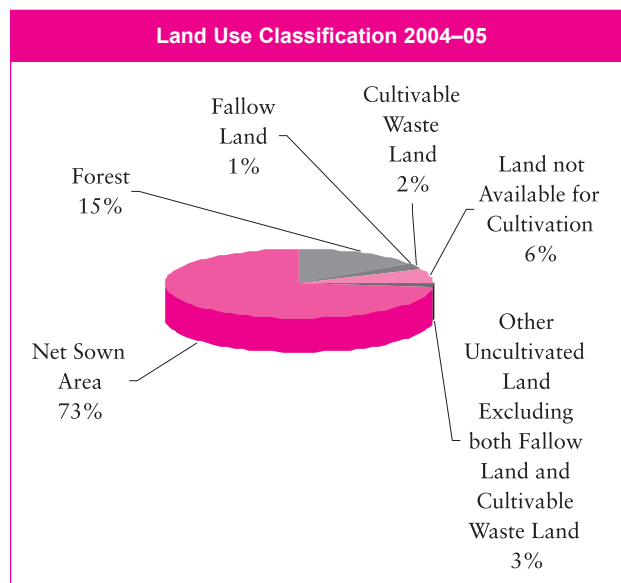
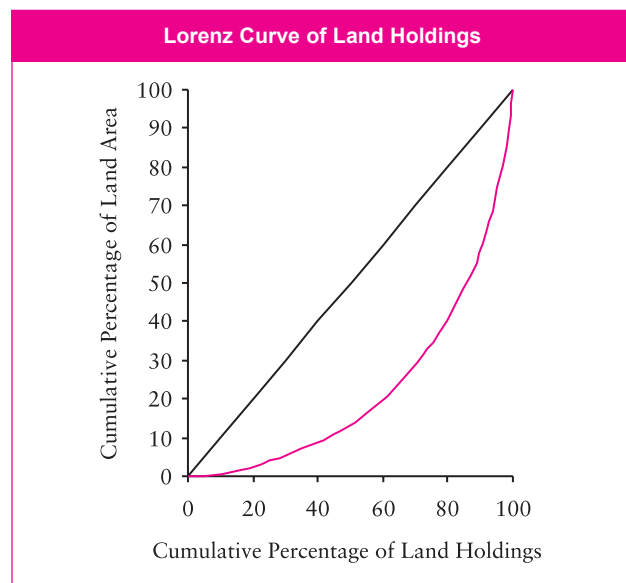
Basic Information	2001
Area (in sq. km)	7371
Total Inhabited Villages	1522
Total Habitations	1914
Forest Villages	1
Major Industrial Areas:	
<i>Vidisha, Basoda</i>	

Literacy and Retention			
Literacy-2001	SC	ST	All
All	51.7	30.1	61.8
Male	64.2	39.7	74.2
Female	36.9	19.4	47.4
Rural	48.9	28.7	57.3
Urban	65.6	52.3	77.6
Retention Rate (age 6–11) 2004–05			78.2

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	1826	100.0
With Own Building	1826	100.0
With Drinking Water Facility	1405	76.9
With Toilet Facility	618	33.8

Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	46.1	74.0
Households with Electricity	37.6	68.4
Households with Toilet	15.0	21.0
Households with All Three Facilities	12.0	17.9
Households Without Any of the Three Facilities	38.9	10.3
Villages Electrified	98.4	91.6

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	16.1
Rural Roads per Village (in Km)		0.3
Telephone per Lakh Population (BSNL)	Mar–05	2006
Population per Post Office		8255
Total Electricity Consumption per Consumer (in Kwh)	2003–04	1712
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	618
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	965
Consumption per Industrial Unit (in Kwh)	2003–04	47176
Number of Registered Vehicles per Lakh Population	Mar–05	5856
Tractors per 10 Villages	2004	89.5
Average Land Holding Size (in Ha)	2000–01	3.8



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	316.9	282.6
Pulses (in Kgs)	74.0	185.8
Foodgrains (in Kgs)	390.9	468.4
Oilseeds (in Kgs)	82.8	86.2
Yield of Food Grains (in Kgs/Ha)	1250.0	1126.8

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	73.0
% of Net Irrigated to Net Sown Area	2003-04	41.5
Cropped Area under Food Grains (in '000 Ha)	2003-04	528.2
Fertilizer Consumption (in Kgs/Ha)	2002-03	34.4
Cropping Intensity	2004-05	127.3
Net Area Sown (in '000 Ha)	2004-05	533.4
Gross Cropped Area (in '000 Ha)		678.7
Double Cropped Area to Net Area Sown	2004-05	27.3
Net Irrigated Area (in '000 Ha)	2003-04	222.2
Gross Irrigated Area (in '000 Ha)		222.2

Credit

Households Availing Banking Services (in %)	2001
Total	25.2
Rural	21.3
Urban	39.5

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Basoda	30.39	0.76	6.75	5.58	6.31	50.12
Gyaraspur	31.37	0.65	6.66	3.30	2.04	44.31
Kurwai	29.13	1.12	7.60	7.56	4.17	50.00
Lateri	27.85	1.47	7.60	8.01	6.04	51.59
Nateran	23.32	0.20	6.66	15.26	0.52	47.40
Sironj	31.03	0.16	4.28	1.97	1.40	39.11
Vidisha	34.31	1.10	6.53	4.92	6.71	54.33

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Basoda	81.40	43.42	18.09	21.07	15.04	546
Gyaraspur	89.94	67.39	11.08	8.19	7.73	775
Kurwai	84.44	19.50	16.1	38.95	10.51	1005
Lateri	92.77	58.04	5.74	67.40	13.38	826
Nateran	54.31	46.02	22.42	46.02	40.41	360
Sironj	92.22	11.31	8.04	76.22	46.23	582
Vidisha	75.53	47.35	24.97	27.46	11.79	552

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Basoda	3.40	23.58	30.99	45.83	56.25	2.22
Gyaraspur	4.69	21.13	20.51	60.00	65.71	20.00
Kurwai	3.33	18.64	25.58	46.15	46.15	5.88
Lateri	4.10	14.55	24.47	37.80	56.10	54.55
Nateran	11.78	13.26	10.26	60.53	39.47	5.26
Sironj	4.20	14.71	1.89	28.26	59.57	24.44
Vidisha	5.56	21.86	24.14	70.18	49.12	12.50

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Basoda	60	81	84.82	47.33	4.79	155	27.21	186
Gyaraspur	75	105	81.15	55.52	5.16	158	27.78	370
Kurwai	105	151	80.1	48.4	5.73	189	31.84	220
Lateri	73	101	83.4	57.18	6.01	185	35.32	382
Nateran	43	55	78.62	67.62	5.62	184	34.14	379
Sironj	54	71	84.94	55.6	4.71	162	30.51	207
Vidisha	68	94	76.29	51.81	4.69	149	26.2	291

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Lateri	60.6	58.0	80.2	57.2	55.2	72.5	11.0	5.3	54.7
Sironj	54.8	46.5	84.7	77.5	72.9	94.0	20.2	6.4	69.9
Kurwai	57.1	53.1	93.3	84.1	83.1	93.3	14.2	9.8	53.9
Basoda	77.7	71.3	94.6	69.7	60.2	95.1	21.8	6.5	62.9
Nateran	59.8	59.8	0.0	57.3	57.3	0.0	7.7	7.7	0.0
Gyaraspur	75.3	75.3	0.0	68.2	68.2	0.0	12.4	12.4	0.0
Vidisha	81.3	69.6	94.8	88.9	82.7	96.0	39.7	12.2	71.1

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)							
Tehsil	All Three Facilities Available			None of the Facilities			
	Total	Rural	Urban	Total	Rural	Urban	
Lateri	6.7	2.3	40.5	17.1	18.4	6.5	
Sironj	16.8	3.8	63.6	13.0	16.2	1.7	
Kurwai	10.3	5.6	52.7	7.3	8.0	1.2	
Basoda	19.8	4.6	60.5	9.6	12.9	0.6	
Nateran	4.8	4.8	0.0	18.8	18.8	0.0	
Gyaraspur	8.3	8.3	0.0	8.4	8.4	0.0	
Vidisha	36.9	9.7	68.1	3.6	6.4	0.5	

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Lateri	22.6	13.8	14.6	1.2	15.9	3.3	0.5	68.2
Sironj	17.3	15.9	22.9	2.0	18.7	5.1	0.7	59.9
Kurwai	38.2	18.3	24.6	2.2	29.9	6.7	1.2	52.9
Basoda	18.6	19.8	32.5	5.7	35.8	10.4	1.2	44.3
Nateran	26.6	15.5	25.1	1.8	17.1	4.6	0.7	60.4
Gyaraspur	31.1	18.1	28.0	3.0	26.9	6.7	1.3	52.9
Vidisha	28.0	20.5	49.0	12.0	35.5	18.6	2.2	36.5

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Lateri	6.4	91.2	2.4	1.4	1.0
Sironj	12.6	84.6	2.8	2.0	0.8
Kurwai	33.0	65.1	1.9	1.4	0.4
Basoda	40.6	58.0	1.4	0.5	0.8
Nateran	12.0	83.8	4.2	2.4	1.8
Gyaraspur	18.6	80.7	0.7	0.3	0.5
Vidisha	44.3	54.1	1.6	0.9	0.8

WEST NIMAR



Demography	2001
Total Population	1529562
Share of Madhya Pradesh Population	2.5
Urban Population	235459
Population of Scheduled Castes	174495
Population of Scheduled Tribes	542762
Density of Population (per sq km)	190
Decadal Growth Rate (1991–2001)	
Total	27.9
Rural	27.3
Urban	31.3
SC	24.3
ST	36.4

Health	2006
Population per Health Centre	10369
Rural Population Served per PHC	73014
Rural Population Served per SHC	10141
Total Fertility Rate	4.3

Gender	2001	
Gender Ratio	All	949
	Rural	954
	Urban	927
	SC	941
	ST	976
Workers Participation Rate-Female	39.5	
	2004–05	
Female Enrolment Rate (age 6–14)	92.6	

Habitat	2004
Urban Population Residing in Slum	52139
Ground Water Development (%)	78.6
Normal Rainfall (in mm)	1093
Average Annual Rainfall (in mm)	707
Per Capita Forest Area (in Ha)	0.05

Basic Information	2001
Area (in sq. km)	8030
Total Inhabited Villages	1170
Total Habitations	2058
Forest Villages	34
Major Industrial Areas:	
<i>Barwaha, Maheshwar</i>	

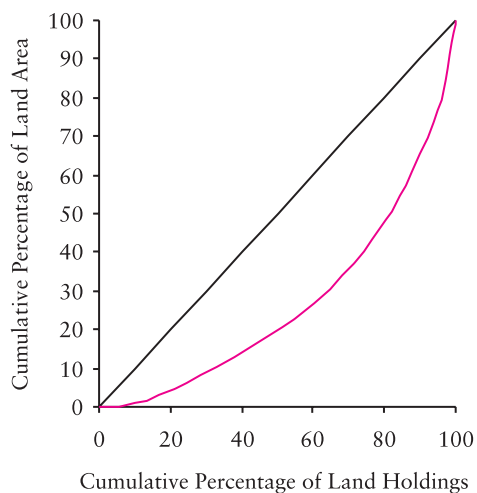
Literacy and Retention			
Literacy-2001	SC	ST	All
All	63.5	42.5	63.0
Male	78.3	52.9	74.8
Female	47.7	31.8	50.6
Rural	62.8	42.0	60.2
Urban	67.7	53.6	78.1
Retention Rate (age 6–11) 2004–05			71.2

Primary School Infrastructure (2004–05)		
	Number	(%)
Number of Primary Schools	2620	100.0
With Own Building	2472	94.4
With Drinking Water Facility	2287	87.3
With Toilet Facility	143	5.5

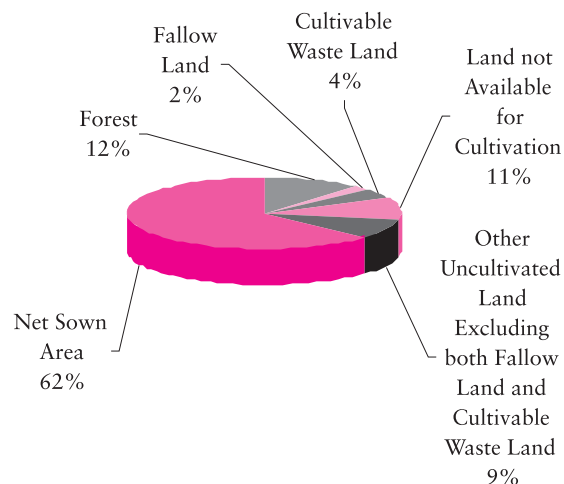
Basic Amenities (in %)	1991	2001
Households with Safe Drinking Water	66.9	83.9
Households with Electricity	53.5	84.4
Households with Toilet	11.6	17.3
Households with All Three Facilities	9.5	15.8
Households Without Any of the Three Facilities	20.5	5.3
Villages Electrified	98.4	79.9

Infrastructure Facilities		
Road Length per 100 sq.km (in Km)	2002–03	24.2
Rural Roads per Village (in Km)		1.3
Telephone per Lakh Population (BSNL)	Mar–05	1633
Population per Post Office		8931
Total Electricity Consumption per Consumer (in Kwh)	2003–04	2904
Domestic Consumption of Electricity per Consumer (in Kwh)	2003–04	648
Non-Domestic Consumption per Consumer (in Kwh)	2003–04	969
Consumption per Industrial Unit (in Kwh)	2003–04	27053
Number of Registered Vehicles per Lakh Population	Mar–05	3475
Tractors per 10 Villages	2004	15.7
Average Land Holding Size (in Ha)	2000–01	2.8

Lorenz Curve of Land Holdings



Land Use Classification 2004-05



Per Capita Agriculture Production

	1998-99	2003-04
Cereals (in Kgs)	181.5	194.0
Pulses (in Kgs)	171.1	12.8
Foodgrains (in Kgs)	352.6	206.8
Oilseeds (in Kgs)	23.6	37.4
Yield of Food Grains (in Kgs/Ha)	1212.0	1628.2

Credit

Households Availing Banking Services (in %)	2001
Total	23.0
Rural	20.1
Urban	38.6

Land Use and Agriculture

% of Net Sown Area to Total Geographical Area	2004-05	62.9
% of Net Irrigated to Net Sown Area	2003-04	41.1
Cropped Area under Food Grains (in '000 Ha)	2003-04	204.1
Fertilizer Consumption (in Kgs/Ha)	2002-03	64.3
Cropping Intensity	2004-05	116.5
Net Area Sown (in '000 Ha)	2004-05	407.7
Gross Cropped Area (in '000 Ha)		474.9
Double Cropped Area to Net Area Sown	2004-05	16.9
Net Irrigated Area (in '000 Ha)	2003-04	168.4
Gross Irrigated Area (in '000 Ha)		168.4

Family Planning—2002

Block	Women sterilized (%)	IUD (%)	Condom (%)	Oral pill (%)	Other methods (%)	Use of family planning method (%)
Khargone	49.47	2.05	6.28	6.89	0.51	66.35
Gogaon	48.74	1.61	6.69	5.11	2.61	66.15
Bhagwanpura	46.07	2.16	6.39	3.24	2.56	61.38
Segaon	40.20	2.48	8.38	8.68	2.41	64.90
Bhikangaon	51.14	2.88	7.71	4.88	0.75	68.28
Jhiranya	50.04	3.48	8.51	5.41	0.73	69.27
Maheshwar	52.82	2.38	5.08	3.22	0.09	64.79
Barwaha	52.18	3.34	4.75	5.44	1.29	68.21
Kasrawad	50.83	0.19	4.22	6.09	0.40	63.08

Maternal Health—2002

Block	Home deliveries (%)	Deliveries by TBA (%)	Deliveries by doctor/nurse (%)	Women without ANC (%)	Women without Tetvac (%)	Maternal mortality ratio
Khargone	91.15	63.70	24.08	5.28	26.41	1539
Gogaon	5.26	82.35	11.76	5.26	5.26	308
Bhagwanpura	12.82	80.49	4.88	36.36	30.91	381
Segaon	11.74	85.67	10	12.97	17.95	349
Bhikangaon	87.39	74.65	17.86	4.59	19.41	671
Jhiranya	91.51	74.49	9.74	13.99	27.79	728
Maheshwar	53.95	52.73	30.91	14.07	16.26	393
Barwaha	58.39	53.72	42.02	4.16	16.12	381
Kasrawad	77.39	49.45	25.86	11.34	6.90	850

Infrastructure and Health Facility—2002

Block	Average distance of villages from SHC (km)	Average distance of villages from CHC (km)	Villages having all weather approach road (%)	Villages having trained TBA (%)	Villages having Aanganwadi Worker (%)	Villages having Village Health Register (%)
Khargone	2.25	16.73	20.51	71.43	73.33	61.54
Gogaon	3.02	27.97	58.62	92.98	91.23	1.75
Bhagwanpura	5.44	35.23	29.73	95.95	98.65	0
Segaon	2.46	19.89	60	89.04	75.34	19.44
Bhikangaon	4.08	19.57	31.58	78.79	72.73	51.72
Jhiranya	4.76	19.32	14.08	81.94	90.28	57.58
Maheshwar	3.44	21.93	23.44	60.78	83.02	72.55
Barwaha	7.74	25.67	27.03	93.75	90.63	79.25
Kasrawad	3.62	18.51	55.1	97.98	95.96	26.97

Health and Gender Indicators—2002

Block	Infant mortality rate	Under 5 mortality rate	Women marrying before 18 yrs (%)	Third and higher order births (%)	Total marital fertility rate	General marital fertility rate	Birth rate	Fertility rate of women 15–19 years of age
Khargone	182	272	46.38	43.62	3.7	112	22.59	145
Gogaon	31	37	95.69	40.68	6.96	238	28.67	470
Bhagwanpura	34	42	95.77	42.7	6.68	138	27.48	424
Segaon	34	41	77.07	32.97	6.48	247	35.33	344
Bhikangaon	73	101	58.69	40.43	4.47	145	28.11	320
Jhiranya	69	95	52.6	53.95	4.75	145	28.01	557
Maheshwar	54	72	67.98	38.38	3.86	109	23.25	432
Barwaha	63	86	67.8	34.47	4.09	129	27.91	283
Kasrawad	105	152	73.15	40.98	4.5	129	26.01	170

Source: Centre for Population Studies, Administration Academy, Bhopal

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part I) (in %)									
Tehsil	Electricity			Safe Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Barwaha	88.6	86.5	95.9	83.4	80.5	93.3	22.4	9.7	66.3
Maheshwar	92.3	92.0	94.0	79.2	76.3	94.9	21.0	13.3	63.3
Kasrawad	88.5	88.0	93.8	91.0	90.6	95.2	13.3	10.3	42.0
Segaon	83.2	83.2	0.0	89.7	89.7	0.0	6.5	6.5	0.0
Bhikangaon	87.1	86.9	89.4	83.0	82.3	89.7	10.1	6.1	51.4
Khargone	91.4	89.6	95.0	93.2	93.0	93.7	29.9	12.3	66.2
Bhagwanpur	61.3	61.3	0.0	76.3	76.3	0.0	3.2	3.2	0.0
Jhiranya	60.5	60.5	0.0	65.1	65.1	0.0	5.7	5.7	0.0

Households with Access to Safe Drinking Water, Electricity and Latrine Facility—2001 (Part II) (in %)						
Tehsil	All Three Facilities Available			None of the Facilities		
	Total	Rural	Urban	Total	Rural	Urban
Barwaha	20.4	8.5	61.5	3.7	4.8	0.2
Maheshwar	19.2	11.6	61.4	3.0	3.2	1.8
Kasrawad	12.7	9.7	41.6	1.8	1.9	0.2
Segaon	6.2	6.2	0.0	3.0	3.0	0.0
Bhikangaon	9.3	5.5	48.2	3.7	3.9	2.1
Khargone	27.6	11.2	61.6	1.1	1.5	0.3
Bhagwanpur	2.7	2.7	0.0	14.2	14.2	0.0
Jhiranya	3.9	3.9	0.0	21.1	21.1	0.0

Households Availing Banking Services and Owning Specified Assets—2001								
Tehsil	% of Households availing Banking Services	Availability of Assets (in %)						
		Radio/Transistor	Television	Telephone	Bicycle	Scooter/Motor Cycle/Moped	Car/Jeep/Van	None of the Specified Assets
Barwaha	28.2	16.8	36.1	5.5	34.1	13.3	1.6	45.1
Maheshwar	23.7	17.4	34.7	5.7	35.5	13.0	1.2	46.2
Kasrawad	23.7	16.0	28.3	4.0	29.6	9.6	1.1	50.1
Segaon	27.8	13.8	15.1	2.1	25.2	6.7	0.8	60.0
Bhikangaon	15.1	12.6	20.6	2.3	26.6	6.6	0.7	58.5
Khargone	24.4	17.5	40.4	7.5	38.9	17.2	2.1	40.8
Bhagwanpur	19.1	13.1	9.0	1.7	18.6	4.7	1.2	68.9
Jhiranya	16.2	13.2	7.5	1.4	13.1	3.0	0.6	73.4

Households Occupying Pucca, Semi-Pucca and Kuchcha Houses—2001 (in %)					
Tehsil	Pucca	Semi-Pucca	Kuchcha	Serviceable Kuchcha	Non-Serviceable Kuchcha
Barwaha	40.8	57.1	2.1	0.9	1.2
Maheshwar	31.4	66.1	2.5	0.8	1.7
Kasrawad	37.6	59.4	3.0	1.1	1.9
Segaon	18.0	78.5	3.5	1.1	2.4
Bhikangaon	22.6	75.5	1.9	0.7	1.2
Khargone	40.9	56.5	2.6	1.3	1.4
Bhagwanpur	9.2	85.9	4.9	0.3	4.6
Jhiranya	9.8	88.8	1.3	0.5	0.8

GL 1: Employment, Literacy, and Gender Ratio of SCs in Madhya Pradesh, 2001

District	Population of SC to Total (%)			SC of All Main Workers (%)			Urbanisation Rate in SCs
	Total	Rural	Urban	Total	Rural	Urban	
Anuppur				Included in Shahdol			
Ashoknagar				Included in Guna			
Balaghat	7.7	7.4	10.0	7.7	7.5	9.5	16.7
Barwani	6.3	5.6	10.9	6.4	5.7	11.8	25.1
Betul	10.6	9.1	17.1	9.2	8.2	15.4	30.0
Bhind	21.5	22.2	19.0	20.8	21.5	17.5	21.0
Bhopal	14.0	20.5	12.4	13.4	19.6	11.7	71.3
Burhanpur				Included in East Nimar			
Chhatarpur	23.3	24.9	17.6	22.7	23.9	17.8	16.6
Chhindwara	11.6	10.6	14.7	10.5	9.7	13.5	31.1
Damoh	19.5	19.5	19.5	20.6	20.2	22.3	18.9
Datia	24.9	26.9	18.1	24.9	26.3	18.6	15.9
Dewas	18.3	19.4	15.2	17.5	18.5	13.9	22.8
Dhar	6.5	6.2	8.0	5.9	5.6	7.6	20.4
Dindori	5.8	5.8	5.7	4.8	4.8	5.5	4.5
East Nimar	11.1	11.4	10.2	10.9	11.2	9.8	24.8
Guna	17.6	18.2	15.3	16.9	17.4	14.9	18.5
Gwalior	18.9	22.0	16.9	18.0	21.0	15.8	53.8
Harda	16.1	16.5	14.5	15.2	15.6	13.5	19.2
Hoshangabad	15.8	15.9	15.5	15.0	15.2	14.5	30.4
Indore	15.8	19.2	14.3	14.7	16.9	13.6	63.6
Jabalpur	12.7	12.6	12.9	12.1	12.5	11.7	57.7
Jhabua	2.8	2.5	6.2	2.6	2.3	5.8	19.2
Katni	11.5	11.5	11.4	10.8	10.8	10.7	21.1
Mandla	4.6	4.1	9.1	4.0	3.6	8.7	20.3
Mandsaur	17.9	19.8	9.9	18.2	19.6	10.2	10.3
Morena	21.1	21.3	20.3	20.0	20.2	18.7	20.8
Narsimhapur	16.1	16.5	14.4	16.2	16.6	13.8	14.2
Neemuch	12.5	12.7	12.1	11.4	11.6	10.6	26.9
Panna	20.0	20.5	16.6	20.8	21.3	16.8	10.5
Raisen	16.4	17.3	12.3	16.2	17.1	12.2	13.8
Rajgarh	17.4	18.5	12.4	16.1	16.7	11.6	12.3
Ratlam	13.4	14.8	10.3	13.5	14.7	9.9	23.3
Rewa	15.6	16.3	11.7	16.1	16.7	12.7	12.2
Sagar	20.5	20.6	20.3	21.6	21.2	22.6	28.9
Satna	16.3	17.0	13.3	16.8	17.5	13.6	16.9
Sehore	20.5	21.8	14.5	19.6	20.6	14.0	12.7
Seoni	10.3	10.2	11.3	9.8	9.8	10.4	11.3
Shahdol	7.4	6.9	8.7	6.6	6.1	8.4	30.0
Shajapur	22.0	24.4	11.3	21.6	23.5	11.0	9.5
Sheopur	16.2	16.4	14.9	15.7	15.8	14.9	14.6
Shivpuri	18.8	19.5	15.4	18.5	19.2	13.3	13.6
Sidhi	11.9	11.8	12.2	11.5	11.5	11.3	14.7
Tikamgarh	24.3	25.0	20.8	24.0	24.6	20.9	15.1
Ujjain	24.7	30.0	16.3	24.3	28.4	15.2	25.6
Umariya	6.8	6.3	9.5	6.9	6.3	10.8	22.5
Vidisha	19.8	21.2	14.8	20.4	21.6	15.0	16.0
West Nimar	11.4	11.7	9.8	11.5	11.6	10.5	13.2
Madhya Pradesh	15.2	15.6	14.0	14.7	15.0	13.5	24.5

Source: Census of India, 2001.

GL 1: Employment, Literacy, and Gender Ratio of SCs in Madhya Pradesh, 2001

District	Gender Ratio			Literacy				
	Total	Rural	Urban	Total	Male	Female	Rural	Urban
Anuppur				Included in Shahdol				
Ashoknagar				Included in Guna				
Balaghat	1038	1046	999	76.9	89.2	65.3	75.5	84.2
Barwani	978	978	979	46.1	58.2	33.7	41.4	59.7
Betul	948	951	939	74.6	85.1	63.6	71.9	80.7
Bhind	812	808	828	64.0	78.6	45.9	64.3	62.9
Bhopal	902	885	909	61.2	72.4	48.8	45.4	67.2
Burhanpur				Included in East Nimar				
Chhatarpur	867	866	873	42.3	54.7	27.7	39.4	56.4
Chhindwara	937	940	932	71.8	82.3	60.6	69.1	77.7
Damoh	882	882	881	52.2	65.8	36.7	48.4	68.3
Datia	848	849	847	67.9	82.3	50.9	67.3	71.3
Dewas	928	926	934	53.5	69.8	35.9	50.0	65.1
Dhar	953	962	921	54.4	71.0	37.0	51.5	65.4
Dindori	944	943	967	64.5	80.7	47.4	63.5	85.5
East Nimar	928	922	946	61.6	76.5	45.4	59.4	68.0
Guna	887	880	915	52.8	68.0	35.4	50.8	61.7
Gwalior	846	830	859	60.1	74.3	43.1	52.2	66.7
Harda	902	904	897	66.3	79.6	51.6	64.3	74.5
Hoshangabad	896	892	906	65.3	77.7	51.3	59.5	77.9
Indore	939	954	931	63.1	76.0	49.5	51.8	69.3
Jabalpur	921	928	916	68.4	79.8	56.0	61.3	73.5
Jhabua	968	976	936	43.4	54.4	32.2	37.0	69.5
Katni	954	960	933	56.0	72.3	38.9	53.1	66.3
Mandla	951	947	964	76.3	88.9	63.0	73.8	85.5
Mandsaur	952	952	949	61.8	78.5	44.4	61.0	69.0
Morena	817	810	846	59.1	76.2	38.0	58.1	62.7
Narsimhapur	908	906	918	73.5	83.3	62.7	73.4	74.1
Neemuch	962	973	934	61.9	80.0	43.2	57.4	73.8
Panna	895	894	900	51.2	62.8	38.0	50.6	56.2
Raisen	871	874	853	67.1	77.2	55.3	66.6	70.3
Rajgarh	934	935	928	46.1	61.4	29.6	44.4	58.1
Ratlam	959	962	951	64.3	79.3	48.8	61.1	74.6
Rewa	939	942	919	45.7	60.2	30.2	44.8	52.2
Sagar	868	861	884	60.4	73.8	44.8	55.6	71.8
Satna	937	941	920	53.2	67.1	38.4	52.4	57.2
Sehore	910	910	912	55.9	70.7	39.5	53.9	69.0
Seoni	956	958	937	70.7	82.5	58.3	69.3	80.9
Shahdol	951	965	919	54.4	68.7	39.4	49.5	65.6
Shajapur	923	924	914	63.3	75.9	49.5	63.0	65.9
Sheopur	869	870	861	45.6	61.6	27.1	44.3	53.1
Shivpuri	854	847	894	54.9	70.5	36.4	53.3	64.6
Sidhi	950	956	915	41.7	56.4	26.2	39.5	54.4
Tikamgarh	876	875	879	52.9	66.5	37.3	50.9	63.8
Ujjain	946	950	934	59.8	74.3	44.3	56.2	69.5
Umaria	950	958	923	58.5	73.5	42.8	56.9	63.9
Vidisha	869	866	883	51.7	64.2	36.9	48.9	65.6
West Nimar	941	939	960	63.5	78.3	47.7	62.8	67.7
Madhya Pradesh	905	905	907	58.6	72.3	43.3	55.4	68.0

Source: Census of India, 2001.

GL 1: Employment, Literacy, and Gender Ratio of SCs in Madhya Pradesh, 2001

District	Worker's Participation Rate					Share of SC in State Population
	Total	Male	Female	Rural	Urban	
Anuppur						
Ashoknagar						
Balaghat	48.1	51.4	44.9	51.6	30.6	1.3
Barwani	47.8	52.4	43.1	50.9	38.6	0.7
Betul	39.1	47.0	30.8	45.1	25.1	1.6
Bhind	38.0	47.3	26.7	41.0	26.9	3.4
Bhopal	34.1	45.4	21.6	43.2	30.4	2.8
Burhanpur						
Chhatarpur	41.7	47.8	34.6	43.2	33.7	3.7
Chhindwara	38.2	47.0	28.8	42.9	27.8	2.3
Damoh	48.5	52.9	43.6	50.4	40.7	2.3
Datia	51.9	55.7	47.5	55.1	35.3	1.7
Dewas	46.1	50.2	41.7	50.3	31.9	2.6
Dhar	44.8	50.4	38.9	47.7	33.3	1.2
Dindori	52.5	54.7	50.1	53.6	28.4	0.4
East Nimar	44.0	50.8	36.6	48.6	29.9	2.1
Guna	41.5	50.5	31.3	43.9	30.6	3.2
Gwalior	34.0	46.8	18.9	39.5	29.3	3.4
Harda	44.5	49.8	38.6	48.0	29.5	0.8
Hoshangabad	35.9	46.2	24.5	39.8	27.1	1.9
Indore	36.9	48.7	24.3	44.0	32.9	4.2
Jabalpur	36.6	47.9	24.3	45.8	29.8	3.0
Jhabua	47.4	52.2	42.4	51.1	31.5	0.4
Katni	41.7	49.4	33.7	45.0	29.7	1.3
Mandla	44.9	51.3	38.2	49.0	29.1	0.5
Mandsaur	51.9	54.9	48.8	53.7	36.7	2.3
Morena	37.0	46.7	25.2	39.7	26.8	3.7
Narsimhapur	44.5	52.2	36.1	46.6	32.2	1.7
Neemuch	47.6	53.4	41.6	53.4	31.9	1.0
Panna	46.0	51.2	40.2	47.5	33.0	1.9
Raisen	39.1	48.7	27.9	40.4	30.9	2.0
Rajgarh	50.0	52.4	47.5	52.5	32.6	2.4
Ratlam	47.0	52.4	41.4	51.6	31.8	1.8
Rewa	46.0	47.8	44.0	47.2	37.0	3.4
Sagar	45.3	51.0	38.8	47.3	40.3	4.5
Satna	42.9	47.0	38.5	44.1	36.6	3.3
Sehore	44.1	48.0	39.8	46.2	29.6	2.4
Seoni	46.6	52.0	40.9	48.8	29.2	1.3
Shahdol	39.9	48.4	30.9	45.4	27.0	1.3
Shajapur	51.4	54.1	48.5	53.0	36.5	3.1
Sheopur	41.5	49.0	32.8	43.6	29.2	1.0
Shivpuri	46.0	51.5	39.5	49.1	26.4	3.0
Sidhi	41.3	46.4	35.9	43.3	29.5	2.4
Tikamgarh	47.1	50.7	43.0	48.8	37.8	3.2
Ujjain	47.1	52.6	41.3	52.4	31.6	4.6
Umaria	41.9	48.7	34.8	44.5	32.9	0.4
Vidisha	40.3	51.1	27.9	42.2	30.3	2.6
West Nimar	47.5	51.0	43.7	49.4	34.9	1.9
Madhya Pradesh	43.1	49.8	35.8	46.8	31.6	

Source: Census of India, 2001.

GL 2: Employment, Literacy, and Gender Ratio of STs in Madhya Pradesh, 2001

District	Population of ST to Total (%)			ST of All Main Workers (%)			Urbanisation
	Total	Rural	Urban	Total	Rural	Urban	Rate in STs
Anuppur				Included in Shahdol			
Ashoknagar				Included in Guna			
Balaghat	21.8	22.8	14.8	21.2	22.1	14.0	8.8
Barwani	67.0	76.0	14.6	68.2	75.7	15.0	3.2
Betul	39.4	46.7	7.3	41.1	47.1	6.8	3.4
Bhind	0.5	0.2	1.4	0.4	0.2	1.5	68.1
Bhopal	3.3	4.5	3.0	3.5	4.9	3.1	73.1
Burhanpur				Included in East Nimar			
Chhatarpur	3.5	4.2	0.9	3.5	4.1	1.2	5.9
Chhindwara	34.7	42.5	10.5	36.7	43.6	10.3	7.4
Damoh	12.6	15.0	2.1	12.8	15.1	1.6	3.2
Datia	1.6	1.7	1.2	1.8	1.8	1.5	17.0
Dewas	16.4	20.4	5.9	17.0	20.0	6.3	9.8
Dhar	54.5	61.8	17.5	55.0	61.6	16.8	5.3
Dindori	64.5	66.6	21.6	68.1	69.5	19.5	1.5
East Nimar	29.7	39.1	3.9	33.2	40.5	4.2	3.5
Guna	12.2	14.8	2.8	13.5	15.9	2.8	4.9
Gwalior	3.5	6.4	1.5	3.9	7.2	1.5	26.6
Harda	26.6	32.6	4.6	28.1	32.8	4.2	3.6
Hoshangabad	15.1	19.7	5.0	15.1	19.2	5.1	10.1
Indore	6.6	15.1	3.1	6.6	14.0	3.0	32.3
Jabalpur	15.0	27.8	5.3	16.0	29.5	4.9	20.3
Jhabua	86.8	92.2	31.0	87.5	92.1	28.4	3.1
Katni	23.1	27.1	8.0	22.8	26.6	8.2	7.3
Mandla	57.2	62.5	11.4	61.2	65.4	11.3	2.0
Mandsaur	3.2	3.6	1.4	3.4	3.7	1.9	8.3
Morena	0.8	0.9	0.4	0.9	1.0	0.5	10.6
Narsimhapur	13.2	14.7	5.1	14.9	16.3	5.4	6.2
Neemuch	8.5	10.4	3.6	9.3	10.7	4.0	11.9
Panna	15.4	17.0	4.3	14.2	15.3	4.9	3.5
Raisen	15.7	18.2	4.9	16.8	19.3	4.9	5.7
Rajgarh	3.8	3.8	3.5	3.6	3.6	3.6	16.0
Ratlam	25.9	35.5	3.7	25.6	32.6	3.9	4.4
Rewa	12.9	14.2	6.2	14.8	16.0	7.3	7.8
Sagar	9.7	13.0	1.7	10.6	14.1	1.8	5.2
Satna	14.3	16.7	5.1	15.9	18.3	6.2	7.4
Sehore	10.8	12.3	3.8	10.1	11.2	3.7	6.3
Seoni	36.8	40.1	7.7	39.2	42.0	7.7	2.2
Shahdol	44.5	54.4	15.2	49.8	58.9	15.4	8.6
Shajapur	2.7	3.0	1.6	2.8	3.0	1.8	11.1
Sheopur	21.5	24.5	5.6	20.4	22.8	5.9	4.1
Shivpuri	11.2	12.9	2.8	10.9	11.8	3.1	4.1
Sidhi	29.9	33.2	10.2	32.0	35.0	10.6	4.9
Tikamgarh	4.3	4.7	2.4	4.3	4.6	2.6	9.8
Ujjain	3.1	3.8	2.1	3.1	3.5	2.3	25.9
Umaria	44.0	48.2	22.2	45.7	49.8	19.9	8.1
Vidisha	4.9	5.9	1.3	5.9	7.0	1.3	5.6
West Nimar	35.5	40.4	8.4	36.0	39.4	9.4	3.7
Madhya Pradesh	20.3	25.8	4.9	21.9	26.9	5.0	6.4

Source: Census of India, 2001.

GL 2: Employment, Literacy, and Gender Ratio of STs in Madhya Pradesh, 2001

District	Gender Ratio			Literacy				
	Total	Rural	Urban	Total	Male	Female	Rural	Urban
Anuppur				Included in Shahdol				
Ashoknagar				Included in Guna				
Balaghat	1050	1053	1019	53.6	66.9	41.1	52.2	67.4
Barwani	982	986	885	28.4	37.0	19.7	27.5	54.1
Betul	994	997	903	46.0	58.1	34.0	45.4	64.2
Bhind	877	893	870	53.5	67.6	37.2	43.9	57.7
Bhopal	901	925	892	59.0	66.7	50.3	29.6	69.0
Burhanpur				Included in East Nimar				
Chhatarpur	919	922	873	29.1	39.0	18.1	27.9	47.6
Chhindwara	989	992	952	48.7	61.2	36.1	47.3	65.8
Damoh	950	950	943	41.4	54.4	27.6	40.7	60.1
Datia	910	928	824	40.4	50.3	29.6	37.3	55.4
Dewas	955	958	923	32.8	45.5	19.5	31.2	47.4
Dhar	981	984	925	36.7	49.0	24.2	36.0	48.5
Dindori	1011	1010	1055	49.3	64.8	34.0	49.0	70.0
East Nimar	959	961	901	36.2	49.5	22.2	35.4	54.9
Guna	925	925	916	31.6	44.2	17.7	30.7	48.6
Gwalior	912	920	889	36.1	46.3	24.8	24.8	64.8
Harda	943	945	886	38.4	51.3	24.7	37.5	60.7
Hoshangabad	932	938	881	47.4	59.5	34.2	44.5	71.3
Indore	918	945	863	38.4	48.9	26.9	31.4	52.5
Jabalpur	958	976	892	51.8	65.1	37.9	47.7	66.9
Jhabua	993	996	906	30.6	41.7	19.4	29.4	65.9
Katni	981	983	953	40.6	55.9	25.0	39.9	50.1
Mandla	1028	1030	946	50.7	66.1	35.7	50.1	76.6
Mandsaur	945	943	965	47.1	60.6	32.8	47.3	45.3
Morena	894	908	784	43.3	56.7	28.1	40.1	69.1
Narsimhapur	955	957	925	64.4	75.0	53.2	64.1	67.6
Neemuch	933	934	928	33.0	46.5	18.5	32.3	37.6
Panna	943	945	892	43.2	54.9	30.7	43.4	38.5
Raisen	932	937	864	54.7	65.1	43.4	54.6	56.0
Rajgarh	928	933	904	46.7	61.2	30.9	43.6	62.7
Ratlam	975	980	855	41.9	55.7	27.7	41.3	55.5
Rewa	924	927	891	35.5	47.6	22.3	35.1	40.5
Sagar	942	945	895	38.7	50.9	25.7	37.5	60.4
Satna	949	950	932	37.1	48.9	24.6	36.6	42.9
Sehore	943	949	870	43.1	55.2	30.2	41.7	63.0
Seoni	1016	1018	959	53.4	67.0	40.1	52.9	76.3
Shahdol	993	997	952	44.6	58.1	31.0	44.0	50.4
Shajapur	918	923	879	60.3	73.1	46.2	59.4	67.8
Sheopur	945	949	842	21.1	32.0	9.4	20.4	37.1
Shivpuri	945	946	921	33.9	47.2	19.7	33.7	38.4
Sidhi	950	955	863	36.6	50.7	21.6	36.3	43.5
Tikamgarh	947	945	964	35.2	45.4	24.2	35.1	36.1
Ujjain	920	933	883	55.5	66.4	43.5	55.8	54.5
Umariya	972	972	968	44.8	58.7	30.4	44.6	47.1
Vidisha	916	921	841	30.1	39.7	19.4	28.7	52.3
West Nimar	976	977	926	42.5	52.9	31.8	42.0	53.6
Madhya Pradesh	975	979	912	41.2	53.5	28.4	40.0	57.2

Source: Census of India, 2001.

GL 2: Employment, Literacy, and Gender Ratio of STs in Madhya Pradesh, 2001

District	Worker's Participation Rate					Share of ST in State Population
	Total	Male	Female	Rural	Urban	
Anuppur						
Ashoknagar						
Balaghat	53.4	55.2	51.6	54.8	38.7	2.7
Barwani	51.3	52.7	49.8	51.8	35.7	5.9
Betul	50.2	52.7	47.7	50.9	29.5	4.5
Bhind	31.5	44.8	16.3	35.6	29.5	0.1
Bhopal	36.2	47.5	23.6	47.0	32.2	0.5
Burhanpur						
Chhatarpur	44.7	49.6	39.3	45.1	36.8	0.4
Chhindwara	48.3	52.5	44.1	49.6	32.0	5.2
Damoh	50.0	53.9	45.8	50.6	32.7	1.1
Datia	53.6	56.4	50.5	56.8	37.5	0.1
Dewas	48.8	50.7	46.8	49.8	39.1	1.8
Dhar	50.1	51.3	48.8	50.8	37.2	7.8
Dindori	59.6	60.2	58.9	60.0	32.6	3.1
East Nimar	51.5	54.1	48.9	52.2	35.1	4.2
Guna	48.6	52.3	44.6	49.4	33.1	1.7
Gwalior	41.0	47.6	33.8	44.7	30.7	0.5
Harda	51.3	53.6	48.9	52.0	32.7	1.0
Hoshangabad	43.3	50.9	35.1	44.6	32.2	1.3
Indore	44.5	50.2	38.3	48.7	35.7	1.3
Jabalpur	48.1	54.0	41.9	51.8	33.7	2.6
Jhabua	54.2	54.4	54.0	54.9	32.7	9.9
Katni	47.4	53.2	41.4	48.3	35.1	2.0
Mandla	56.0	57.0	55.1	56.5	32.9	4.2
Mandsaur	52.7	55.5	49.8	53.4	44.8	0.3
Morena	41.9	47.7	35.4	42.8	34.1	0.1
Narsimhapur	50.4	55.8	44.7	51.4	34.8	1.0
Neemuch	56.6	58.6	54.4	57.9	47.0	0.5
Panna	47.1	51.2	42.8	47.4	40.2	1.1
Raisen	43.8	50.7	36.4	44.3	34.8	1.4
Rajgarh	50.0	53.2	46.7	53.1	33.8	0.4
Ratlam	53.1	53.9	52.3	53.9	36.1	2.6
Rewa	49.9	51.6	48.1	50.6	41.2	2.1
Sagar	49.7	54.7	44.3	50.3	38.1	1.6
Satna	48.3	51.7	44.8	48.9	41.7	2.2
Sehore	45.2	48.6	41.6	46.2	30.3	0.9
Seoni	53.6	55.2	52.0	54.1	31.3	3.5
Shahdol	51.5	56.5	46.5	53.3	32.5	5.7
Shajapur	51.0	54.1	47.8	52.7	37.6	0.3
Sheopur	44.8	48.2	41.2	45.4	31.8	1.0
Shivpuri	48.0	50.2	45.6	48.6	33.2	1.3
Sidhi	47.2	50.9	43.4	47.9	33.9	4.5
Tikamgarh	48.8	51.9	45.6	49.5	42.3	0.4
Ujjain	50.2	54.5	45.5	54.6	37.5	0.4
Umaria	47.0	52.4	41.4	48.1	35.1	1.9
Vidisha	48.1	54.1	41.5	48.7	37.5	0.5
West Nimar	48.4	50.3	46.5	48.9	37.4	4.4
Madhya Pradesh	50.5	53.2	47.6	51.5	34.9	

Source: Census of India, 2001.

GL 3: Road Network in Districts of Madhya Pradesh, 2003

Districts	National Highway (Km.)	State Highway (Km.)	District Main Roads (Km.)	Pucca Roads (Km.)	Kuchcha Roads (Km.)	Pucca Rural Road (Km.)
Anuppur			Included in Shahdol			
Ashoknagar			Included in Guna			
Balaghat	0.0	269.3	412.9	2094.4	563.6	1413.6
Barwani	71.4	60.2	247.0	1241.4	25.6	869.4
Betul	211.2	154.6	277.2	1266.2	214.4	634.2
Bhind	82.0	212.0	295.0	1246.9	185.2	658.2
Bhopal	82.2	79.9	482.4	865.4	0.0	220.9
Burhanpur			Included in East Nimar			
Chhatarpur	204.4	167.0	479.6	1676.5	586.6	859.9
Chhindwara	44.0	378.4	191.3	1496.3	724.4	882.6
Damoh	0.0	345.1	250.0	1460.3	126.3	865.6
Datia	28.8	125.0	70.0	561.1	14.3	337.7
Dewas	188.2	30.4	183.1	1049.2	117.7	647.5
Dhar	178.2	294.0	411.9	1958.4	122.8	1074.3
Dindori	0.0	268.8	153.6	1091.8	278.6	692.2
East Nimar	0.0	266.5	403.5	2330.8	28.8	1660.8
Guna	109.2	291.9	279.9	1396.8	119.3	719.4
Gwalior	161.2	9.0	212.4	1079.3	165.7	696.7
Harda	60.2	46.2	23.2	341.1	41.5	211.5
Hoshangabad	58.0	213.0	39.0	870.1	71.6	560.1
Indore	139.0	76.6	191.8	1267.7	229.7	873.9
Jabalpur	182.0	141.5	198.3	1565.7	133.4	1043.9
Jhabua	47.0	227.5	290.8	1895.3	992.6	1330.0
Katni	92.2	119.0	200.0	840.8	308.7	429.6
Mandla	169.2	286.0	334.2	1634.1	87.0	862.0
Mandsaur	63.0	178.9	194.4	1153.9	156.4	717.6
Morena	34.0	178.8	113.6	905.6	106.2	579.2
Narsimhpur	156.9	151.3	55.2	1074.8	70.6	711.4
Neemuch	37.1	91.5	127.0	705.7	90.4	450.1
Panna	55.0	194.7	331.8	997.4	148.6	419.1
Raisen	237.0	294.9	141.8	971.1	212.4	297.2
Rajgarh	216.4	66.1	245.9	1086.6	21.7	562.4
Ratlam	89.4	0.0	302.7	1116.8	145.9	724.7
Rewa	195.2	119.1	276.4	2116.1	1213.7	1527.7
Sagar	295.0	268.9	582.3	1765.6	192.8	620.1
Satna	178.6	167.5	294.7	2260.6	999.9	1620.2
Sehore	126.0	131.2	236.3	857.5	44.9	364.0
Seoni	176.7	204.5	163.6	1314.9	439.3	775.5
Shahdol	112.4	215.3	223.9	1760.4	864.2	1236.0
Shajapur	29.0	237.3	205.3	1371.6	188.2	905.7
Sheopur	0.0	201.3	49.0	713.6	2.4	463.3
Shivpuri	232.8	185.8	351.4	1281.0	114.0	515.2
Sidhi	173.2	55.3	430.8	2990.2	1548.5	2334.7
Tikamgarh	15.8	187.4	215.6	1334.2	124.4	915.4
Ujjain	17.8	141.9	336.6	1051.1	110.1	554.8
Umaria	96.2	150.6	47.0	740.1	172.4	446.3
Vidisha	62.2	267.1	335.2	1068.6	120.8	404.1
West Nimar	13.8	347.7	161.9	2190.8	178.9	1667.4
Madhya Pradesh	4721.9	8216.9	11051.0	60057.8	12404.5	36356.1

Source: Public Works Department, 2003, Bhopal.

GL 3: Road Network in Districts of Madhya Pradesh, 2003

Districts	Kuchcha Rural Road (Km.)	Total Rural Road (Km.)	Total Road Length (Km.)	Road Length per 100 sq.km.	Rural Roads per Village
Anuppur			Included in Shahdol		
Ashoknagar			Included in Guna		
Balaghat	562.2	1975.8	2658.0	28.8	1.4
Barwani	19.0	888.4	1267.0	34.6	1.2
Betul	203.4	837.6	1480.6	14.7	0.6
Bhind	184.4	842.6	1432.1	32.1	0.9
Bhopal	0.0	220.9	865.4	31.2	0.4
Burhanpur			Included in East Nimar		
Chhatarpur	552.2	1412.1	2263.1	26.1	1.2
Chhindwara	724.4	1607.0	2220.7	18.8	0.8
Damoh	124.9	990.5	1586.6	21.7	0.7
Datia	13.9	351.6	575.4	28.2	0.6
Dewas	117.7	765.2	1166.9	16.6	0.7
Dhar	122.8	1197.1	2081.2	25.5	0.8
Dindori	255.8	948.0	1370.4	27.5	1.0
East Nimar	28.8	1689.6	2359.6	21.9	1.6
Guna	115.7	835.1	1516.1	13.7	0.4
Gwalior	165.7	862.4	1245.0	23.9	1.1
Harda	41.5	253.0	382.6	14.5	0.4
Hoshangabad	71.6	631.7	941.7	12.7	0.6
Indore	216.1	1090.0	1497.4	38.4	1.7
Jabalpur	133.4	1177.3	1699.1	30.1	0.8
Jhabua	992.6	2322.6	2887.9	42.6	1.7
Katni	308.7	738.3	1149.5	25.5	0.8
Mandla	69.7	931.7	1721.1	20.8	0.8
Mandsaur	156.4	874.0	1310.3	22.2	0.9
Morena	106.2	685.4	1011.8	20.5	0.9
Narsimhpur	70.6	782.0	1145.4	22.3	0.7
Neemuch	90.4	540.5	796.1	20.5	0.6
Panna	145.4	564.5	1146.0	16.1	0.5
Raisen	212.4	509.6	1183.5	14.0	0.3
Rajgarh	17.5	579.9	1108.3	18.0	0.3
Ratlam	145.9	870.6	1262.7	26.0	0.8
Rewa	1211.4	2739.1	3329.8	52.7	1.0
Sagar	192.1	812.2	1958.4	19.1	0.4
Satna	999.5	2619.7	3260.5	43.5	1.3
Sehore	44.9	408.9	902.4	13.7	0.4
Seoni	433.9	1209.4	1754.2	20.0	0.7
Shahdol	837.0	2073.0	2624.6	27.4	1.4
Shajapur	182.5	1088.2	1559.8	25.2	1.0
Sheopur	2.4	465.7	716.0	10.8	0.8
Shivpuri	109.8	625.0	1395.0	13.6	0.4
Sidhi	1544.7	3879.4	4538.7	43.1	2.1
Tikamgarh	124.4	1039.8	1458.6	28.9	1.1
Ujjain	110.1	664.9	1161.2	19.1	0.6
Umaria	172.4	618.7	912.5	20.5	0.9
Vidisha	120.8	524.9	1189.4	16.1	0.3
West Nimar	178.9	1846.3	2369.7	24.2	1.3
Madhya Pradesh	12234.1	48590.2	72462.3	23.5	0.9

Source: Public Works Department, 2003, Bhopal.

GL 4: Number of Post Offices in Madhya Pradesh, 2005

District	Head Office			Sub Office			Extra District Sub Office		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	1	0	1	9	14	23	0	0	0
Barwani	0	0	0	8	1	9	0	3	3
Betul	1	0	1	9	13	22	0	0	0
Bhind	1	0	1	13	10	23	1	0	1
Bhopal	3	0	3	59	3	62	2	0	2
Burhanpur				Included in East Nimar					
Chhatarpur	1	0	1	11	10	21	0	1	1
Chhindwara	1	0	1	15	14	29	1	0	1
Damoh	1	0	1	12	6	18	0	1	1
Datia	0	0	0	6	5	11	0	0	0
Dewas	1	0	1	13	3	16	0	1	1
Dhar	1	0	1	17	0	17	0	11	11
Dindori	0	0	0	2	4	6	0	0	0
East Nimar	1	0	1	15	12	27	0	1	1
Guna	1	0	1	16	6	22	0	2	2
Gwalior	2	0	2	39	2	41	1	0	1
Harda	0	0	0	6	0	6	0	3	3
Hoshangabad	1	0	1	20	4	24	0	1	1
Indore	2	0	2	39	0	39	0	0	0
Jabalpur	1	0	1	62	3	65	3	0	3
Jhabua	1	0	1	12	5	17	0	0	0
Katni	1	0	1	13	10	23	1	0	1
Mandla	1	0	1	3	11	14	0	0	0
Mandsaur	1	0	1	15	8	23	1	2	3
Morena	1	0	1	18	4	22	1	0	1
Narsimhapur	1	0	1	7	10	17	0	0	0
Neemuch	1	0	1	11	5	16	2	2	4
Panna	0	0	0	10	4	14	0	1	1
Raisen	1	0	1	8	7	15	2	3	5
Rajgarh	1	0	1	13	2	15	3	1	4
Ratlam	1	0	1	21	5	26	4	3	7
Rewa	1	0	1	23	15	38	0	0	0
Sagar	1	0	1	36	9	45	1	1	2
Satna	1	0	1	14	22	36	2	0	2
Sehore	1	0	1	9	10	19	6	2	8
Seoni	1	0	1	5	13	18	0	0	0
Shahdol	1	0	1	20	6	26	0	0	0
Shajapur	1	0	1	11	10	21	0	1	1
Sheopur	0	0	0	3	2	5	0	0	0
Shivpuri	1	0	1	12	8	20	1	3	4
Sidhi	1	0	1	7	11	18	0	0	0
Tikamgarh	1	0	1	9	10	19	0	0	0
Ujjain	1	0	1	23	11	34	9	0	9
Umaria	0	0	0	4	2	6	0	0	0
Vidisha	1	0	1	12	6	18	0	1	1
West Nimar	1	0	1	10	8	18	0	4	4
Madhya Pradesh	42	0	42	700	324	1024	41	48	89

Source: Head Post Office, Bhopal.

GL 4: Number of Post Offices in Madhya Pradesh, 2005

District	Extra District Branch Office			Total			Population Served per Post Office		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	0	205	205	10	219	229	22779	6083	6787
Barwani	0	106	106	8	110	118	21624	9344	10176
Betul	0	196	196	10	209	219	27667	5811	6809
Bhind	0	231	231	15	241	256	25474	4741	5946
Bhopal	7	58	65	71	61	132	23699	6635	15813
Burhanpur				Included in East Nimar					
Chhatarpur	0	203	203	12	214	226	31362	5842	7188
Chhindwara	6	233	239	23	247	270	21483	5998	7315
Damoh	0	141	141	13	148	161	17210	6385	7259
Datia	2	82	84	8	87	95	19128	6060	7158
Dewas	0	154	154	14	158	172	28765	6552	8357
Dhar	0	188	188	18	199	217	19339	7908	8832
Dindori	0	75	75	2	79	81	14271	6636	7542
East Nimar	2	189	191	18	202	220	27178	6691	8367
Guna	0	94	94	17	182	199	23798	7866	9222
Gwalior	16	138	154	58	140	198	18276	5233	9046
Harda	1	61	62	7	64	71	16071	6338	7296
Hoshangabad	1	150	151	22	155	177	16584	5229	6640
Indore	3	0	3	44	0	44	44443	0	63060
Jabalpur	1	116	117	67	119	186	19812	8398	12510
Jhabua	0	158	158	13	163	176	10127	8498	8618
Katni	1	197	198	16	207	223	14839	4396	5144
Mandla	1	114	115	5	125	130	19841	7428	7267
Mandsaur	1	194	195	18	204	222	12967	5176	5806
Morena	0	185	185	20	189	209	18399	7254	8319
Narsimhapur	3	152	155	11	172	183	15511	5037	5665
Neemuch	1	96	97	15	103	118	14617	5488	6648
Panna	0	141	141	10	146	156	11667	5606	5994
Raisen	0	187	187	11	197	208	22114	5086	5978
Rajgarh	1	146	147	18	149	167	13420	7621	8245
Ratlam	1	152	153	27	160	187	14627	5841	7107
Rewa	2	297	299	26	312	338	13917	5799	6422
Sagar	1	190	191	39	200	239	16446	7765	9182
Satna	4	257	261	21	279	300	20599	5840	6872
Sehore	6	133	139	22	145	167	9721	6744	7136
Seoni	0	182	182	6	195	201	22153	5681	6171
Shahdol	3	210	213	24	216	240	18622	5760	7038
Shajapur	2	152	154	14	163	177	19026	7022	7971
Sheopur	5	9	14	3	61	64	33976	8510	9700
Shivpuri	1	198	199	15	209	224	18243	6292	7089
Sidhi	2	194	196	10	205	215	40171	8299	9555
Tikamgarh	1	164	165	11	174	185	21727	6255	7175
Ujjain	3	150	153	36	161	197	19885	7126	9457
Umaria	1	60	61	5	52	57	17817	9053	9821
Vidisha	0	141	141	13	148	161	22480	7009	8255
West Nimar	1	105	106	12	177	189	21877	8053	8931
Madhya Pradesh	80	6784	6864	858	7346	8204	20758	6555	8028

Source: Head Post Office, Bhopal.

GL 5: Selected People's Institution in Madhya Pradesh, 2002-03

District	Central Co-operative Bank	Citizen's Co-operative Bank	LAMS	Agriculture Co-operative Credit Society	Service Co-operative (Agriculture Credit)	Fruit & Vegetable Marketing Society	Primary Marketing Society	Other Marketing Society
Anuppur				Included in Shahdol				
Ashoknagar				Included in Guna				
Balaghat	1		14	12	100	2	8	
Barwani			52	1		2	1	1
Betul	1	1	80		33	3	10	1
Bhind	1	1		1	152	4	7	
Bhopal	1	8	53			4	1	
Burhanpur				Included in East Nimar				
Chhatarpur	1	1					6	
Chhindwara		2	27			9	5	
Damoh	1	1	13		77		2	
Datia	1	1				1	3	
Dewas	1	2		78	103	18	5	5
Dhar	1	1	78			3	6	
Dindori			44	2		3	1	
East Nimar	1	3	53	4	100	8	14	3
Guna	1	2	8		122		8	
Gwalior	1	3		52	60		4	
Harda			58			3	5	
Hoshangabad	1	1	13				3	
Indore	1	16	9				4	
Jabalpur	1	3	10		48		5	
Jhabua	1	1	72				17	
Katni			13			4	3	
Mandla	1	1	43			4	1	
Mandsaur	1	2	6	89	1	7	4	2
Morena	1	1		1	73	1	6	
Narsimhpur	1		11				5	
Neemuch			5	61		4	3	4
Panna	1		4	84		1	2	
Raisen	1						7	
Rajgarh	1	1				4	7	
Ratlam	1		18			5	3	
Rewa	1		3	12	123	5	4	
Sagar	1		13	1	164	1	6	9
Satna	1	2	12	3	136		10	
Sehore	1	1	5		91		11	
Seoni	1	1	22			5	5	
Shahdol	1		61		2	2	6	
Shajapur	1	3	10	146	18	2	4	
Sheopur			4			2	3	
Shivpuri	1	2	3			4	7	
Sidhi	1		38			2	5	
Tikamgarh	1	1		9	78	2	6	2
Ujjain	1	5		2	162	19	5	3
Umaria			28				2	
Vidisha	1	1					7	
West Nimar	1	3	68			1	9	
Madhya Pradesh	37	71	951	558	1643	135	246	30

Source: Department of Co-operation Registrar, Co-operative Societies, Bhopal.

GL 5: Selected People's Institution in Madhya Pradesh, 2002-03

District	District Wholesale Consumer Store	Primary Consumer Society	District Forest Produce Society	Primary Minor Forest Produce Society	Poultry & Animal Husbandry Society	Resham Society	Milk Production Co-operative Society	Oilseed Production Co-operative Society	Weavers Society
Anuppur									
Ashoknagar									
Balaghat	1	13	2	60		4	52		9
Barwani	1	20	2	4	1		53		1
Betul	1	39	3	44	1		190	97	10
Bhind	1	41			4		171	66	30
Bhopal		518			6		28	44	
Burhanpur									
Chhatarpur		88		89			10		
Chhindwara		90		30	2		97	93	
Damoh	1	34	1	18			17	27	
Datia		20		1	1		77		
Dewas		100	1	29			205	20	
Dhar		5		13			114	42	
Dindori		4	1	17					7
East Nimar	1	131	2	20	13	1	31	14	166
Guna	1	53	2	31	1	1	22	1	10
Gwalior	1	242	1	4	2		28	52	23
Harda		14		8			8	15	
Hoshangabad		61		13			41	32	
Indore		707		35			188		
Jabalpur	1	649	1	25					
Jhabua		17		12	7		110		
Katni		60		32			2		
Mandla		15	2	35		7	1		3
Mandsaur	1	25					139	17	8
Morena	1	100	1	1			197	71	2
Narsimhpur		20		22			100	72	
Neemuch		21		46			43	2	8
Panna	1	4	2	37			2		1
Raisen		37		49			43	55	
Rajgarh		20		4			148	11	
Ratlam		57		20			141	48	
Rewa	1	75	1	22			26		9
Sagar	1	135	2	45	3		32	63	54
Satna	1	133	1	42			12	17	8
Sehore		11	1	15			162	25	20
Seoni		29		44			89	65	
Shahdol	1	68	2	63			29		3
Shajapur	1	23		2	1		335	41	17
Sheopur		9		16			20		
Shivpuri		40		36	7		32	37	
Sidhi		36		126			48	1	
Tikamgarh		39	1	25			4		7
Ujjain	1	178	1	6	2		326	99	9
Umaria		10		31			18		
Vidisha		24		13			26	97	
West Nimar		21		9			78	27	
Madhya Pradesh	18	4036	30	1202	51	13	3495	1251	405

Source: Department of Co-operation Registrar, Co-operative Societies, Bhopal.

GL 5: Selected People's Institution in Madhya Pradesh, 2002-03

District	Other Producers Co-operative	Fisherman's Society	Fisheries Society	Co-operative Sugar Mill	Industrial Co-operative Society	Housing Co-operative
Anuppur			Included in Shahdol			
Ashoknagar			Included in Guna			
Balaghat	1	37	46		11	4
Barwani	2	28	25		3	7
Betul	2	40	37		46	18
Bhind	1	48	3		19	20
Bhopal		27	26		113	675
Burhanpur			Included in East Nimar			
Chhatarpur		82	71		34	8
Chhindwara		60	26		46	45
Damoh		27	18		19	15
Datia		9	5		3	10
Dewas	8	26	13		11	50
Dhar		84	32		14	15
Dindori	2	12	8		12	
East Nimar	1	21	12	4	26	58
Guna			17	1	10	12
Gwalior		10	3		33	183
Harda	44	9	1		7	3
Hoshangabad		76	44		27	27
Indore		29				694
Jabalpur		51	47		126	157
Jhabua		13	32		31	16
Katni		41	24		13	10
Mandla		64	50		3	6
Mandsaur		28	22		13	36
Morena	9	5	4	1	35	22
Narsimhpur		12	10		17	10
Neemuch	3	12	10		7	23
Panna		21	11		2	7
Raisen		47	39		23	12
Rajgarh		15	16		13	12
Ratlam		14			8	91
Rewa	10	28	22		35	12
Sagar	4	36	29		52	38
Satna	1	40	31		17	22
Sehore	2	34	18		21	15
Seoni		77	68		35	17
Shahdol	28	10	15		3	
Shajapur	13	17	11		14	14
Sheopur		20	4		10	4
Shivpuri		5	32		18	20
Sidhi		38	28		17	3
Tikamgarh	33	95	84		9	18
Ujjain	1	25	19	1	29	142
Umaria		37	3			1
Vidisha		24	19		19	27
West Nimar		62	37		1	23
Madhya Pradesh	165	1496	1072	7	1005	2602

Source: Department of Co-operation Registrar, Co-operative Societies, Bhopal.

GL 6: Number of SHGs Formed under Various Schemes, 2004

Districts	Under SGSY		Under SJSRY		Under DWC&D	
	Total SHGs	Women SHGs	Total SHGs	Women SHGs	Total SHGs	Women SHGs
Anuppur			Included in Shahdol			
Ashoknagar			Included in Guna			
Balaghat	4038	1589	77	77	1827	1827
Barwani	3047	1298	10	10	426	426
Betul	3133	2875	14	14	620	620
Bhind	2923	1171	12	12	48	48
Bhopal	1174	716	234	234	604	604
Burhanpur			Included in East Nimar			
Chhatarpur	1852	235	100	100	573	573
Chhindwara	3534	1163	7	7	612	612
Damoh	3062	1148	3	3	155	155
Datia	712	682	21	21	189	189
Dewas	1972	396	75	75	445	445
Dhar	5289	3512	22	22	1938	1938
Dindori	2261	1041	2	2	780	780
East Nimar	4133	2588	39	39	798	798
Guna	2885	835	58	58	1089	1089
Gwalior	1544	944	59	59	1431	1431
Harda	988	781	8	8	225	225
Hoshangabad	2788	1540	67	67	496	496
Indore	2970	628	259	259	468	468
Jabalpur	2827	288	19	19	1284	1284
Jhabua	4912	4091	16	16	412	412
Katni	2060	341	8	8	275	275
Mandla	3483	2047	20	20	1016	1016
Mandsaur	2586	520	20	20	957	957
Morena	2953	694	31	31	404	404
Narsimhapur	1115	450	13	13	364	364
Neemuch	973	475	13	13	176	176
Panna	2230	295	15	15	460	460
Raisen	4295	452	24	24	334	334
Rajgarh	2192	1135	31	31	353	353
Ratlam	3357	1347	54	54	80	80
Rewa	3363	1236	6	6	733	733
Sagar	2550	680	26	26	241	241
Satna	2807	1196	10	10	293	293
Sehore	3072	1015	15	15	331	331
Seoni	2459	1339	14	14	2216	2216
Shahdol	6342	4297	65	65	952	952
Shajapur	4116	1690	24	24	665	665
Sheopur	1120	226	4	4	105	105
Shivpuri	1116	157	25	25	217	217
Sidhi	2795	2003	13	13	242	242
Tikamgarh	2143	362	12	12	127	127
Ujjain	2332	1021	63	63	933	933
Umaria	694	562	17	17	142	142
Vidisha	1943	548	44	44	735	735
West Nimar	3503	881	29	29	785	785
Madhya Pradesh	121643	52490	1698	1698	27556	27556

Source: Women and Child Development Department, M.P.

GL 6: Number of SHGs Formed under Various Schemes, 2004

Districts	Under Watershed		Under Padhna Badhna		Agriculture Department	
	Total SHGs	Women SHGs	Total SHGs	Women SHGs	Total SHGs	Women SHGs
Anuppur			Included in Shahdol			
Ashoknagar			Included in Guna			
Balaghat	956	435	1656	1160	5	5
Barwani	142	101	587	411	12	12
Betul	620	203	1350	945	15	15
Bhind	176	0	310	220	5	5
Bhopal	237	45	90	65	4	4
Burhanpur			Included in East Nimar			
Chhatarpur	323	230	392	275	14	14
Chhindwara	474	297	1151	806	298	298
Damoh	351	91	250	175	15	15
Datia	58	32	740	520	5	5
Dewas	124	46	789	555	12	12
Dhar	631	429	2010	1407	20	20
Dindori	742	102	994	696	20	20
East Nimar	437	182	620	434	16	16
Guna	636	246	539	380	18	18
Gwalior	1431	76	51	40	8	8
Harda	225	20	342	239	2	2
Hoshangabad	496	49	2468	1730	0	0
Indore	160	178	698	488	8	8
Jabalpur	222	297	478	335	259	259
Jhabua	1694	1125	1934	1354	85	38
Katni	275	218	706	495	12	12
Mandla	1016	432	4865	3406	172	172
Mandsaur	180	45	79	55	15	15
Morena	25	25	394	275	0	0
Narsimhapur	364	81	374	262	94	94
Neemuch	16	24	10	7	5	5
Panna	428	106	4782	3350	10	10
Raisen	241	123	2677	1875	140	140
Rajgarh	353	73	1091	765	2	2
Ratlam	376	427	1044	735	75	65
Rewa	258	111	419	295	164	164
Sagar	262	73	5165	3620	25	25
Satna	37	38	1047	735	16	16
Sehore	338	25	3493	2445	12	12
Seoni	2216	311	4500	3150	20	20
Shahdol	619	345	421	295	109	109
Shajapur	71	93	1254	880	15	15
Sheopur	30	9	413	290	2	2
Shivpuri	141	103	1536	1075	9	9
Sidhi	706	200	120	85	16	16
Tikamgarh	228	54	1476	1035	1	1
Ujjain	118	51	911	640	10	10
Umariya	179	119	164	115	6	6
Vidisha	667	134	716	502	15	15
West Nimar	322	123	2098	1469	15	15
Madhya Pradesh	19601	7527	57204	40091	1781	1724

Source: Women and Child Development Department, M.P.

GL 6: Number of SHGs Formed under Various Schemes, 2004

District	Total			
	Total SHGs	Women SHGs	% share of Women SHGs	Population per SHG
Anuppur				
Ashoknagar				
Balaghat	8559	5093	59.5	180
Barwani	4224	2258	53.5	277
Betul	5752	4672	81.2	255
Bhind	3474	1456	41.9	431
Bhopal	2343	1668	71.2	864
Burhanpur				
Chhatarpur	3254	1427	43.9	487
Chhindwara	6076	3183	52.4	320
Damoh	3836	1587	41.4	299
Datia	1725	1449	84.0	386
Dewas	3417	1529	44.7	411
Dhar	9910	7328	73.9	189
Dindori	4799	2641	55.0	126
East Nimar	6043	4057	67.1	299
Guna	5225	2626	50.3	343
Gwalior	4524	2558	56.5	387
Harda	1790	1275	71.2	283
Hoshangabad	6315	3882	61.5	182
Indore	4563	2029	44.5	590
Jabalpur	5089	2482	48.8	448
Jhabua	9053	7036	77.7	164
Katni	3336	1349	40.4	337
Mandla	10572	7093	67.1	88
Mandsaur	3837	1612	42.0	329
Morena	3807	1429	37.5	447
Narsimhapur	2324	1264	54.4	437
Neemuch	1193	700	58.7	645
Panna	7925	4236	53.5	115
Raisen	7711	2948	38.2	157
Rajgarh	4022	2359	58.7	334
Ratlam	4986	2708	54.3	261
Rewa	4943	2545	51.5	429
Sagar	8269	4665	56.4	260
Satna	4210	2288	54.3	478
Sehore	7261	3843	52.9	160
Seoni	11425	7050	61.7	107
Shahdol	8508	6063	71.3	195
Shajapur	6145	3367	54.8	225
Sheopur	1674	636	38.0	361
Shivpuri	3044	1586	52.1	509
Sidhi	3892	2559	65.8	513
Tikamgarh	3987	1591	39.9	325
Ujjain	4367	2718	62.2	418
Umaria	1202	961	80.0	456
Vidisha	4120	1978	48.0	315
West Nimar	6752	3302	48.9	244
Madhya Pradesh	229483	131086	57.1	281

Source: Women and Child Development Department, M.P.

GL 7: Tourist Arrival in Madhya Pradesh

District	Tourist/Pilgrim Centres	2000-01			2002-03		
		Domestic	Foreigner	Total	Domestic	Foreigner	Total
Umaria	Bandhavgarh	11136	2338	13474	16319	2172	18491
Gwalior	Gwalior	117524	13975	131499	94490	4252	98742
Mandla	Kanha	43960	2688	46648	54910	2045	56955
Chhatarpur	Khajuraho	173071	49825	222896	128183	29870	158053
Dhar	Mandu	157283	2457	159740	202216	3489	205705
Tikamgarh	Orchha	573600	22545	596145	42067	14152	56219
Hoshangabad	Pachmarhi	357000	321	357321	354113	214	354327
Shivpuri	Shivpuri	11810	150	11960	16955	246	17201
Raisen	Sanchi	78342	7053	85395	67671	9397	77068
Burhanpur	Burhanpur	na	na	na	39074	57	39131
Anuppur	Amarkantak	1289000	22	1289022	1272100	41	1272141
Jabalpur	Bhedaghat	233484	2440	235924	305955	3045	309000
Satna	Chitrakoot	541304	59	541363	505588	11	505599
West Nimar	Maheshwar	38190	1063	39253	39475	198	39673
East Nimar	Omkareshwar	1444190	5614	1449804	1527406	5637	1533043
Madhya Pradesh	Total	5069894	110550	5180444	4666522	74826	4741348

GL 7: Tourist Arrival in Madhya Pradesh

District	Tourist/Pilgrim Centres	2003-04			2004-05		
		Domestic	Foreigner	Total	Domestic	Foreigner	Total
Umaria	Bandhavgarh	15735	3030	18765	20523	3888	24411
Gwalior	Gwalior	92079	6674	98752	104191	11211	115402
Mandla	Kanha	54850	2481	57331	68210	3899	72108
Chhatarpur	Khajuraho	125375	44364	169739	147541	70405	217946
Dhar	Mandu	254694	5553	260247	260800	7273	268073
Tikamgarh	Orchha	50864	26465	77329	63189	42357	105546
Hoshangabad	Pachmarhi	359057	234	359291	434330	244	434574
Shivpuri	Shivpuri	15158	120	15278	14548	97	14645
Raisen	Sanchi	69619	11959	81578	74001	14829	88830
Burhanpur	Burhanpur	37753	91	37844	39391	119	39510
Anuppur	Amarkantak	1266505	34	1266539	1152000	43	1152043
Jabalpur	Bhedaghat	302782	2652	305434	416970	2415	419385
Satna	Chitrakoot	2052200	81	2052281	3412000	315	3412315
West Nimar	Maheshwar	65755	625	66380	71982	900	72882
East Nimar	Omkareshwar	1530429	5771	1536200	2581130	3880	2585010
Madhya Pradesh	Total	6292855	110134	6402988	8860806	161875	9022680

Source: Madhya Pradesh State Tourism Development Corporation Ltd.

GL 8: Number of Police Stations in Madhya Pradesh, 2004

District	Civil Police	Anusuchit Jaati Kalyan	Mahila	Total Police Station	Total Out Posts	Civil Police Station per 100sq.km	Total Police Station per 100 sq.km	Civil Police Station per Lakh Population	Total Police Station per Lakh Population
Anuppur	9			9	2			NA	
Ashoknagar	9			9	10			NA	
Balaghat	20	1		21	17	0.2	0.2	1.3	1.4
Barwani	13	1		14	6	0.2	0.3	1.1	1.2
Betul	16	1		17	7	0.2	0.2	1.1	1.2
Bhind	25	1		26	15	0.6	0.6	1.7	1.7
Bhopal	31	1	1	33	15	1.1	1.2	1.5	1.6
Burhanpur	8			8	2			NA	
Chhatarpur	33	1		34	20	0.4	0.4	2.1	2.1
Chhindwara	22	1		23	13	0.2	0.2	1.1	1.2
Damoh	18	1		19	9	0.2	0.3	1.6	1.7
Datia	21	1		22	7	0.8	0.8	3.1	3.3
Dewas	16	1		17	9	0.2	0.2	1.1	1.2
Dhar	20	1		21	10	0.2	0.3	1.1	1.1
Dindori	10	1		11	6	0.1	0.1	1.7	1.8
East Nimar	13	1		14	6	0.1	0.1	0.7	0.8
Guna	14	1		15	11	0.1	0.1	0.8	0.8
Gwalior	32	1	1	34	6	0.7	0.7	1.8	1.9
Harda	6	1		7		0.2	0.2	1.2	1.4
Hoshangabad	14	1		15	9	0.2	0.2	1.2	1.3
Indore	37	1	1	39	8	0.9	1.0	1.4	1.4
Jabalpur	28	1	1	30	18	0.5	0.6	1.2	1.3
Jhabua	21	1		22	25	0.3	0.3	1.4	1.5
Katni	12	1		13	5	0.2	0.3	1.1	1.2
Mandla	9	1		10	5	0.2	0.2	1.0	1.1
Mandsaur	14	1		15	3	0.3	0.3	1.1	1.2
Morena	24	1		25	7	0.5	0.5	1.4	1.5
Narsimhapur	11	1		12	10	0.2	0.2	1.1	1.2
Neemuch	9	1		10	4	0.2	0.2	1.2	1.3
Panna	14	1		15	15	0.2	0.2	1.5	1.6
Raisen	19	1		20	9	0.2	0.2	1.6	1.6
Rajgarh	17	1		18	14	0.3	0.3	1.3	1.3
Ratlam	18	1	1	20	16	0.4	0.4	1.4	1.5
Rewa	25	1	1	27	17	0.4	0.4	1.2	1.3
Sagar	29	1	1	31	23	0.3	0.3	1.3	1.4
Satna	20	1	1	22	4	0.3	0.3	1.0	1.1
Sehore	13	1		14	8	0.2	0.2	1.1	1.2
Seoni	15	1		16	4	0.2	0.2	1.2	1.3
Shahdol	8	1		9	1	0.1	0.1	0.5	0.5
Shajapur	16	1		17	9	0.3	0.3	1.2	1.2
Sheopur	16	1		17	5	0.2	0.3	2.6	2.8
Shivpuri	28	1		29	10	0.3	0.3	1.8	1.9
Sidhi	17	1		18	11	0.2	0.2	0.9	0.9
Tikamgarh	18	1		19	11	0.4	0.4	1.4	1.5
Ujjain	24	1	1	26	4	0.4	0.4	1.3	1.4
Umaria	6	1		7	2	0.1	0.2	1.1	1.3
Vidisha	19	1		20	9	0.3	0.3	1.5	1.5
West Nimar	16	1		17	11	0.2	0.2	1.0	1.0
Madhya Pradesh	853	45	9	907	448	0.3	0.3	1.3	1.4

Source: Madhya Pradesh Police, Statistical Data 2004, Statistical Cell (Planning) Police Headquarters, Bhopal.

GL 9: Strength of Civil Police, SAF, Other Units and Police head Quarters in Madhya Pradesh, 2004

District	Inspector/ Town Inspector/ Reserve Inspector	Subedar	Sub Inspector	Assistant Sub Inspector	Head Constable	Constable	Total Police Personnel	Number of Police Personnel per Lakh Population
Anuppur								
Ashoknagar								
Balaghat	8	0	33	54	161	828	1084	72
Barwani	5	1	23	39	92	334	494	46
Betul	9	0	29	36	115	450	639	46
Bhind	15	0	42	71	230	858	1216	85
Bhopal	35	9	142	163	658	2185	3192	173
Burhanpur								
Chhatarapur	15	1	51	81	217	913	1278	87
Chhindwara	13	0	45	61	151	632	902	49
Damoh	10	1	37	50	147	560	805	74
Datia	10	0	27	44	121	504	706	112
Dewas	9	1	34	43	143	540	770	59
Dhar	11	0	38	43	158	665	915	53
Dindori	3	1	12	17	44	160	237	41
Guna	13	1	42	70	204	812	1142	67
Gwalior	27	4	96	118	425	1562	2232	134
Harda	4	1	14	17	44	153	233	14
Hoshangabad	10	1	39	46	137	581	814	171
Indore	32	0	132	159	578	2365	3266	301
Jabalpur	28	8	149	126	422	1673	2406	97
Jhabua	9	0	35	59	182	748	1033	48
Katni	6	1	31	32	87	345	502	36
Khandwa (E. Nimar)	10	3	47	55	189	755	1059	99
Khargoaan (W. Nimar)	11	1	46	50	162	716	986	110
Mandla	8	0	33	42	93	399	575	49
Mandsuar	7	1	34	37	134	500	713	45
Morena	15	1	55	69	206	754	1100	115
Narsimhapur	8	0	28	35	102	392	565	78
Neemuch	6	1	18	32	85	334	476	56
Panna	11	1	24	41	112	484	673	60
Raisen	7	0	33	37	112	491	680	54
Rajgarh	8	0	36	49	156	556	805	66
Ratlam	12	2	46	52	196	735	1043	53
Rewa	15	1	54	66	200	824	1160	57
Sagar	19	3	82	96	277	1117	1594	85
Satna	9	1	47	45	150	559	811	75
Sehore	11	0	31	43	127	519	731	63
Seoni	8	0	28	27	91	381	535	34
Shahdol	11	0	36	42	152	591	832	64
Shajapur	11	0	31	41	143	535	761	136
Sheopuri	4	1	24	33	86	319	467	32
Shivpuri	13	1	41	73	197	755	1080	59
Sidhi	5	0	33	40	116	459	653	54
Tikamgarh	12	0	29	44	146	606	837	49
Ujjain	30	3	82	72	275	1106	1568	304
Umaria	4	1	12	20	41	155	233	19
Vidisha	9	0	35	40	158	599	841	55
Madhya Pradesh	536	51	2016	2510	8022	31509	44644	74

Source: Madhya Pradesh Police, Statistical Data 2004, Statistical Cell (Planning) Police Headquarters, Bhopal.

GL 10: District-wise Fish Production in Madhya Pradesh, 1995 to 2005

(Metric tonnes)

District	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05
Anuppur					Included in Shahdol					
Ashoknagar					Included in Guna					
Balaghat	4652	7730	7705	6884	5830	7525	6406	4915	5337	5406
Barwani	Included in West Nimar			13	170	325	181	161	189	206
Betul	376	350	528	405	733	756	549	913	751	546
Bhind	95	49	46	73	109	261	77	64	58	58
Bhopal	983	469	802	741	796	407	419	40	325	369
Burhanpur				Included in East Nimar						
Chhatarpur	2257	2963	3147	3156	3579	3259	3378	4021	3640	2471
Chhindwara	993	652	876	1063	1058	1033	576	699	729	821
Damoh	200	208	296	201	633	302	358	370	384	1163
Datia	49	72	81	83	93	293	105	112	114	160
Dewas	175	302	219	329	385	280	453	356	364	815
Dhar	1832	1230	2221	1139	884	248	528	682	565	3720
Dindori	Included in Mandla			35	419	583	120	139	267	574
East Nimar	77	96	187	195	306	174	162	171	216	292
Guna	167	122	191	135	114	346	249	192	252	1117
Gwalior	122	245	463	270	205	147	177	184	91	173
Harda	Included in Hoshangabad			3	46	269	119	97	113	227
Hoshangabad	298	268	520	530	924	858	496	467	646	886
Indore	340	326	377	413	324	160	156	343	325	1709
Jabalpur	3001	3649	4178	4406	3538	3477	3139	2477	3653	3669
Jhabua	226	219	329	313	585	384	537	545	518	950
Katni	Included in Jabalpur			62	2900	1345	3060	2582	2316	3043
Mandla	700	1095	1393	1106	758	1053	1244	1516	1425	1468
Mandsaur	3033	1426	1946	2100	1992	1384	725	667	607	962
Morena	318	173	261	285	199	140	187	139	80	193
Narsimhapur	128	124	309	223	148	359	161	263	208	458
Neemuch	Included in Mandsaur			1	85	18	42	47	74	416
Panna	149	90	168	180	166	149	154	112	114	1056
Raisen	498	436	489	450	654	973	511	685	779	1066
Rajgarh	256	35	141	84	124	208	213	227	340	816
Ratlam	282	201	219	254	182	348	246	126	331	718
Rewa	2848	3580	3597	3551	3604	3828	4019	2456	3966	3564
Sagar	459	443	322	382	664	615	563	369	873	851
Satna	2252	2949	2961	2625	2502	2398	2772	2602	3255	3902
Sehore	503	676	904	769	1346	1260	1190	1197	1195	1070
Seoni	2047	1612	2691	2151	2605	2992	3183	2521	2978	2248
Shahdol	4461	5570	5869	2683	4968	4372	4618	4193	5493	5405
Shajajpur	67	101	117	127	149	112	130	141	199	625
Sheopur	Included in Morena			17	59	18	5	64	7	121
Shivpuri	1105	788	1304	562	485	443	553	320	701	1156
Sidhi	469	499	528	605	523	616	798	744	751	1607
Tikamgarh	1507	1839	2072	2285	2632	2767	2745	2334	3804	2803
Ujjain	201	175	204	166	176	81	98	131	246	465
Umaria	Included in Shahdol			3404	1311	1461	1499	1168	1665	1158
Vidisha	80	73	88	145	245	373	225	146	209	622
West Nimar	1397	1058	656	447	467	445	331	470	665	935
Madhya Pradesh	38603	41893	48405	45051	49675	48845	47457	42168	50818	62060

Source: Department of Fisheries, Govt. of Madhya Pradesh.

GL 11: District-wise Total Registered Vehicles in Madhya Pradesh, as on 31 March 2005

District	Goods				Full Buses 30+1 Above			
	Multi Axled Articulated	Medium & Heavy Truck Lorries	L.C.V.		MPRTC		Other Private	
			Four Wheeler	Three Wheeler	Ordinary	Delux	Ordinary	Delux
Anuppur		2	11	8				
Ashoknagar	11	363	190	5	8		130	29
Balaghat	9	160	266	38	13		73	20
Barwani	10	410	181	68	29	1	99	10
Betul		747	279	287	13		66	
Bhind		625	194	77	16		151	9
Bhopal	50	4572	1674	3558	480	7	1126	48
Burhanpur		444	128	162	18	1	108	
Chhatarpur		1066	417	47	21		262	23
Chhindwara		628	598	258	25		119	
Damoh		407	81	12	6		160	
Datia		230	68	30			131	5
Dewas	1	600	473	166	23		284	
Dhar	8	627	423	118	16		186	
Dindori		109	36	8	28		16	
East Nimar		521	149	189	22	3	125	4
Guna	7	188	99	1	5		68	16
Gwalior	37	5589	1406	1377	4087	18	261	108
Harda		250	56	43			33	
Hoshangabad		677	227	119	26		98	10
Indore	755	29088	4688	3658	1650		1194	366
Jabalpur	82	6872	1763	2586	316		296	31
Jhabua	1	532	237	43	11		258	
Katni		908	118	412	7		72	
Mandla		138	82	23	36		25	10
Mandsaur	231	776	287	117	13		300	
Morena	30	4530	370	197	12		278	35
Narsimhpur	26	214	120	33	35		67	3
Neemach	306	652	193	80	13		252	
Panna	10	169	109	12	12		86	2
Raisen		493	83	47			85	
Rajgarh	14	484	128	24	9		121	6
Ratlam	5	769	290	111	5		244	7
Rewa	1039	3194	367	130	13		690	2
Sagar		2129	387	280	17		354	16
Satna	1	3103	164	64	21		366	
Sehore	4	422	382	35	4		111	3
Seoni		380	126	18	35	2	69	30
Shahdol		960	229	120	9		133	3
Shajapur		558	159	15	14		368	1
Sheopur	2	113	75	38			106	
Shivpuri		689	167	32	10		147	
Sidhi	112	1168	538	132			246	
Tikamgarh		204	202	18			218	7
Ujjain		671	638	199	22		639	6
Umaria		123	31	16			5	
Vidisha	1	1087	85	50	11		459	
West Nimar		43	196	146	45	10	159	12
Madhya Pradesh	2752	78684	19170	15207	7156	42	10844	822

Source: Motor Transport Statistics for Madhya Pradesh, 2004-05.

GL 11: District-wise Total Registered Vehicles in Madhya Pradesh, as on 31 March 2005

District	Mini Buses		motor Cabs	Tempo		Auto Rickshaw	Two Wheelers	
	Upto 12+1	12+1 to 31+1		upto 6+1	6+1 above		Moped	Motor Cycle/Scooter
Anuppur	23	2				5	60	2121
Ashoknagar	849	59	103	94	2	394	4374	30090
Balaghat	320	54	159	5		98	8086	31075
Barwani	419	36	18	80	18	85	3237	20992
Betul	566	78	108	37	3	431	6612	45284
Bhind	562	61	67	107	2	78	1571	30660
Bhopal	5535	1098	2667	7	705	9415	68421	279150
Burhanpur	431	39	69	66	41	457	7520	25949
Chhatarpur	1453	25	189	137	5	133	5415	35361
Chhindwara	2028	350	88	61	14	966	15606	59623
Damoh	220	21	29	2	28	135	6040	19910
Datia	130	12	15			207	1562	14702
Dewas	426	224	53	332	45	181	10104	40481
Dhar	542	49	47	157	1	181	6245	51135
Dindori	115	36	15	4		29	1782	4739
East Nimar	505	44	80	76	46	536	8826	30460
Guna	438	31	54	49	1	204	2254	15501
Gwalior	2967	722	2072	750	698	3735	40669	185439
Harda	303	19	4	7	10	110	2446	23688
Hoshangabad	1033	31	137	46	3	674	11410	52127
Indore	13360	2012	2042	86	572	9642	84529	467200
Jabalpur	4681	455	842	81	498	3007	102231	198058
Jhabua	733	46	32	115	2	134	2083	18716
Katni	597	54	9	136	2	733	11500	29556
Mandla	183	57	58	1	7	51	3107	11529
Mandsaur	372	41	12	31	83	434	10287	57723
Morena	611	126	40	7	43	105	3093	33080
Narsimhpur	273	58	86	9	25	224	7411	30657
Neemach	268	24	12	49	40	427	14752	37521
Panna	170	8	34	4		9	1435	10196
Raisen	664	68	58	28		91	1912	28258
Rajgarh	632	82	44	22	38	132	2509	21186
Ratlam	738	64	92	94	245	788	24536	61768
Rewa	1896	156	482	140	159	705	10711	58222
Sagar	2147	55	233	145	221	1558	13628	61882
Satna	2876	147	846	50	20	1133	9661	52789
Sehore	553	44	124	12	13	157	4431	37549
Seoni	594	20	46	10		67	9321	20539
Shahdol	183	48	2	40		367	5918	35456
Shajapur	287	31	23	195	29	147	4177	25986
Sheopur	182	18	11	13	1	88	692	11065
Shivpuri	514	11	97	35	4	423	6047	32261
Sidhi	674	133	297	19	4	47	2408	32436
Tikamgarh	724	18	19	37		246	2415	20739
Ujjain	1609	202	435	319	356	651	35658	83712
Umaria	47	28		19		74	598	10710
Vidisha	714	108	58	9		264	7016	44462
West Nimar	380	21	35	206	7	298	12042	38458
Madhya Pradesh	55527	7126	12043	3929	3991	40056	606348	2570201

Source: Motor Transport Statistics for Madhya Pradesh, 2004-05.

GL 11: District-wise Total Registered Vehicles in Madhya Pradesh, as on 31 March 2005

District	Car	Jeep	Tractors	Trailors	Other Vehicles	Total
Anuppur	45	52	175	194	–	2698
Ashoknagar	1096	277	15252	9534	36	62896
Balaghat	389	167	2095	883	108	44018
Barwani	119	168	2074	1751	58	29863
Betul	1647	726	5020	3697	57	65658
Bhind	696	270	15050	6008	186	56390
Bhopal	31815	2973	10034	3961	680	427976
Burhanpur	543	316	2513	1923	66	40794
Chhatarpur	1004	455	9284	2768	290	58355
Chhindwara	1412	499	3447	1699	156	87577
Damoh	586	375	5686	1457	208	35363
Datia	247	297	6103	2838	56	26633
Dewas	1980	560	8249	6235	24	70441
Dhar	503	450	8942	7214	74	76918
Dindori	81	25	613	410	8	8054
East Nimar	636	369	2950	2256	76	47873
Guna	566	144	7858	4912	20	32416
Gwalior	14429	3864	13871	5434	2337	289870
Harda	509	350	5417	2306	22	35573
Hoshangabad	1915	769	13017	5095	46	87460
Indore	60029	4331	11073	7610	1698	705583
Jabalpur	15872	2040	8925	1981	3213	353830
Jhabua	386	214	1952	1826	38	27359
Katni	1051	368	2801	1837	22	50183
Mandla	235	55	1154	846	24	17621
Mandsaur	1544	623	9972	6292	60	89198
Morena	1223	935	15299	6097	340	66451
Narsimhpur	782	708	7000	640	250	48621
Neemach	1294	490	8790	6187	47	71397
Panna	329	440	3674	1951	88	18738
Raisen	722	495	11243	2664	123	47034
Rajgarh	475	265	6502	2537	19	35229
Ratlam	1991	517	7187	5222	51	104714
Rewa	2798	3184	9603	7264	315	101070
Sagar	2415	1100	16038	3128	991	106724
Satna	3070	2541	11736	7067	263	95918
Sehore	674	350	10351	4435	20	59674
Seoni	431	147	2956	523	92	35406
Shahdol	1114	782	2943	2756	351	51414
Shajapur	520	421	8338	6165	20	47454
Sheopur	229	191	6572	2262	130	21788
Shivpuri	912	566	11050	6931	42	59938
Sidhi	1040	1656	2839	2531	150	46430
Tikamgarh	311	366	4489	1640	110	31763
Ujjain	5011	761	14381	10562	143	155975
Umaria	274	262	843	796	84	13910
Vidisha	1001	544	16873	5549	65	78356
West Nimar	442	246	3391	3107	115	59359
Madhya Pradesh	166393	37704	355625	180981	13372	4187973

Source: Motor Transport Statistics for Madhya Pradesh, 2004–05.

GL 12: Public Sector Telecom Infrastructure, 2005

District	Number of Telephone Connections (Land line only)			Tele-Density		
	Total	Urban	Rural	Total	Urban	Rural
Anuppur			Included in Shahdol			
Ashoknagar			Included in Guna			
Balaghat	17568	11703	5865	1.2	6.0	0.4
Barwani	13142	8548	4594	1.2	5.4	0.5
Betul	27602	18975	8627	2.0	7.3	0.8
Bhind	18038	14626	3412	1.3	4.3	0.3
Bhopal	125513	121534	3979	6.8	8.2	1.1
Burhanpur			Included in East Nimar			
Chhatarpur	19739	16831	2908	1.3	5.2	0.3
Chhindwara	36140	23469	12671	2.0	5.2	0.9
Damoh	13942	10999	2943	1.3	5.4	0.3
Datia	9876	7079	2797	1.6	5.1	0.6
Dewas	30354	22432	7922	2.3	6.3	0.8
Dhar	34186	16857	17329	2.0	5.8	1.2
Dindori	2420	1312	1108	0.4	4.9	0.2
East Nimar	34393	24527	9866	2.0	5.3	0.8
Guna	24548	19604	4944	1.5	5.5	0.4
Gwalior	78874	74680	4194	4.8	7.6	0.6
Harda	12320	6696	5624	2.6	6.6	1.5
Hosngabad	33421	26075	7346	3.1	7.8	1.0
Indore	151732	140683	11049	6.1	8.1	1.5
Jabalpur	84708	77637	7071	3.9	6.3	0.8
Jhabua	15816	9913	5903	1.1	8.2	0.5
Katni	14862	12619	2243	1.4	5.6	0.3
Mandla	9928	6458	3470	1.1	7.0	0.4
Mandsaur	30171	16935	13236	2.5	7.7	1.4
Morena	20131	16953	3178	1.3	4.9	0.3
Narsimhapur	22039	11978	10061	2.3	7.8	1.2
Neemuch	28162	17822	10340	3.9	8.8	2.0
Panna	7715	5368	2347	0.9	5.0	0.3
Raisen	14729	9063	5666	1.3	4.4	0.6
Rajgarh	18235	13059	5176	1.5	6.0	0.5
Ratlam	41831	29432	12399	3.4	8.0	1.5
Rewa	18285	15946	2339	0.9	5.0	0.1
Sagar	34683	29340	5343	1.7	5.0	0.4
Satna	27148	22436	4712	1.5	5.8	0.3
Sehore	16525	9877	6648	1.5	5.1	0.8
Seoni	15418	8837	6581	1.3	7.3	0.6
Shahdol	22598	19597	3001	1.4	4.9	0.3
Shajapur	20676	13585	7091	1.6	5.7	0.7
Sheopur	6400	4057	2343	1.1	4.6	0.5
Shivpuri	20628	14470	6158	1.4	6.0	0.5
Sidhi	16618	13754	2864	0.9	5.2	0.2
Tikamgarh	11119	8684	2435	0.9	4.1	0.2
Ujjain	58785	48218	10567	3.4	7.3	1.0
Umaria	5515	4429	1086	1.1	5.3	0.3
Vidisha	24393	15985	8408	2.0	6.1	0.9
West Nimar	25001	15714	9287	1.6	6.7	0.7
Madhya Pradesh	1315927	1038796	277131	2.2	6.5	0.6

Source: BSNL, Bhopal, M.P.

HA 1: District-wise Extent of Forest Cover in Madhya Pradesh, 2001

(area in sq. km.)

District	Geographical Area	Recorded Forest Area	Forest Cover			Forest Cover (as a %age of Recorded Forest Area)			Recorded Forest Area as a %age of Total Geographical Area
			Dense	Open	Total	Dense	Open	Total	
Anuppur									
Ashoknagar									
Balaghat	9229	4052	3977	900	4877	98.2	22.2	120.4	43.9
Barwani	5422	–	315	626	941				
Betul	10043	3939	2957	677	3634	75.1	17.2	92.3	39.2
Bhind	4459	91	23	73	96	25.2	79.8	105.0	2.1
Bhopal	2772	430	2004	188	392	466.1	43.7	91.2	15.5
Burhanpur									
Chhatarpur	8687	1993	971	723	1694	48.7	36.3	85.0	22.9
Chhindwara	11815	4336	2681	1864	4545	61.8	43.0	104.8	36.7
Damoh	7306	3047	831	1895	2726	27.3	62.2	89.5	41.7
Datia	2691	267	90	76	166	33.7	28.4	62.1	9.9
Dewas	7020	2500	1157	560	1717	46.3	22.4	68.7	35.6
Dhar	8153	1370	162	469	631	11.8	34.2	46.1	16.8
Dindori	7470	–	2284	596	2880				
East Nimar	10776	4677	2394	1122	3516	51.2	24.0	75.2	43.4
Guna	11064	4253	867	1346	2213	20.4	31.7	52.0	38.4
Gwalior	4560	1397	500	840	1340	35.8	60.1	95.9	30.6
Harda	3330	–	908	149	1057				
Hoshangabad	6707	3402	1969	359	2328	57.9	10.6	68.4	33.9
Indore	3898	852	253	237	490	29.7	27.8	57.5	21.9
Jabalpur	5211	2190	661	411	1072	30.2	18.8	49.0	21.5
Jhabua	6782	1882	249	601	850	13.2	31.9	45.2	27.8
Katni	4950	–	611	545	1156				
Mandla	5800	6666	1990	779	2769	29.9	11.7	41.5	47.8
Mandsaur	5535	2242	87	175	262	3.9	7.8	11.7	22.9
Morena	4989	4899	228	646	874	4.7	13.2	17.8	42.2
Narsimhapur	5133	1241	812	500	1312	65.4	40.3	105.7	24.2
Neemach	4256	–	298	601	899				
Panna	7135	4012	905	1817	2722	22.6	45.3	67.8	56.2
Raisen	8466	3353	1589	1107	2696	47.4	33.0	80.4	39.6
Rajgarh	6153	284	197	71	268	69.3	25.0	94.3	4.6
Ratlam	4861	1181	7	177	184	0.6	15.0	15.6	24.3
Rewa	6314	1052	283	360	643	26.9	34.2	61.1	16.7
Sagar	10252	2763	1292	1525	2817	46.8	55.2	102.0	27.0
Satna	7502	2230	666	998	1664	29.9	44.8	74.6	29.7
Sehore	6578	1731	739	698	1437	42.7	40.3	83.0	26.3
Seoni	8758	2841	2237	910	3147	78.7	32.0	110.8	32.4
Shahdol	9952	5493	1005	1521	2526	18.3	27.7	46.0	39.2
Shajapur	6195	58	148	2	150	256.4	3.5	259.8	0.9
Sheopur	6606	–	2070	1679	3749				
Shivpuri	10277	3249	1054	1492	2546	32.4	45.9	78.4	31.6
Sidhi	10526	4373	2470	1624	4094	56.5	37.1	93.6	41.5
Tikamgarh	5048	773	127	227	354	16.4	29.4	45.8	15.3
Ujjain	6091	104	32	5	37	30.8	4.8	35.6	1.7
Umaria	4076	–	1100	699	1799				
Vidisha	7371	1167	437	441	878	37.5	37.8	75.3	15.8
West Nimar	8030	4830	541	545	1086	11.2	11.3	22.5	37.1
Madhya Pradesh	308245	95222	44384	32881	77265	46.6	34.5	81.1	30.9

Source: Forest Survey of India—State of Forest Report, 2001.

HA 2: Information on Urban Slums, 2004

Districts	Total no. of Slum Pockets	Slum Population	Number of Slum Dwellers per Slum
Anuppur		Included in Shahdol	
Ashoknagar		Included in Guna	
Balaghat	67	32698	488
Barwani	69	21033	305
Betul	136	27582	203
Bhind	96	42358	441
Bhopal	282	318831	1131
Burhanpur		Included in East Nimar	
Chhatarpur	107	29135	272
Chhindwara	180	56010	311
Damoh	67	38391	573
Datia	37	19343	523
Dewas	116	49309	425
Dhar	54	23819	441
Dindori	22	NA	NA
East Nimar	186	104077	560
Guna	74	56367	762
Gwalior	254	229998	906
Harda	49	14546	297
Hoshangabad	135	61172	453
Indore	445	331220	744
Jabalpur	399	252519	633
Jhabua	41	13363	326
Katni	148	16627	112
Mandla	69	20364	295
Mandsaur	88	28727	326
Morena	32	66201	2069
Narsimhapur	45	21168	470
Neemuch	85	27138	319
Panna	87	12753	147
Raisen	89	20998	236
Rajgarh	119	22470	189
Ratlam	162	75540	466
Rewa	452	38694	86
Sagar	313	111684	357
Satna	202	56015	277
Sehore	103	31625	307
Seoni	66	21487	326
Shahdol	165	42791	259
Shajapur	112	29295	262
Sheopur	35	11714	335
Shivpuri	61	32481	532
Sidhi	56	44470	794
Tikamgarh	45	16252	361
Ujjain	277	155582	562
Umaria	47	6081	129
Vidisha	81	52139	644
West Nimar	69	35828	519
Madhya Pradesh	5824	2719895	467

Source: Department of Urban Development, 2004, Bhopal.

HA 3: Ownership Status and Size of Households in Madhya Pradesh, 2001

District	Owned Houses			Rented Houses		
	Total	Rural	Urban	Total	Rural	Urban
Anuppur			Included in Shahdol			
Ashoknagar			Included in Guna			
Balaghat	90.8%	94.5%	64.7%	5.9%	2.7%	28.2%
Barwani	91.7%	95.1%	73.3%	5.7%	2.8%	21.8%
Betul	83.0%	92.6%	43.4%	8.7%	3.3%	31.1%
Bhind	96.0%	98.7%	86.9%	3.1%	0.7%	11.1%
Bhopal	68.3%	92.6%	62.7%	26.9%	2.3%	32.6%
Burhanpur			Included in East Nimar			
Chhatarpur	94.3%	98.1%	79.2%	4.6%	1.2%	18.1%
Chhindwara	83.3%	90.4%	61.6%	8.5%	4.2%	21.6%
Damoh	92.9%	95.5%	80.4%	4.7%	2.3%	16.8%
Datia	95.0%	98.3%	81.9%	3.6%	0.9%	14.1%
Dewas	89.7%	95.4%	75.1%	7.6%	2.1%	21.9%
Dhar	89.1%	95.0%	61.5%	8.2%	3.4%	31.0%
Dindori	95.0%	96.3%	68.6%	3.9%	2.7%	28.8%
East Nimar	87.5%	92.3%	73.0%	8.0%	3.7%	20.8%
Guna	92.2%	97.3%	74.1%	6.0%	1.4%	22.5%
Gwalior	82.5%	96.8%	73.2%	14.5%	2.0%	22.6%
Harda	87.8%	93.5%	67.0%	6.7%	1.8%	24.4%
Hoshangabad	82.6%	93.1%	59.3%	12.7%	3.3%	33.7%
Indore	74.1%	90.7%	67.3%	21.3%	4.8%	28.1%
Jabalpur	80.6%	94.0%	68.4%	15.3%	2.3%	27.1%
Jhabua	93.9%	97.3%	61.4%	4.8%	1.9%	32.0%
Katni	91.0%	96.7%	67.1%	7.4%	2.1%	29.7%
Mandla	92.3%	94.5%	70.5%	5.1%	3.2%	24.0%
Mandsaur	90.7%	95.1%	71.0%	7.8%	3.8%	25.7%
Morena	94.7%	98.5%	80.7%	4.2%	0.8%	16.7%
Narsimhapur	91.2%	94.3%	74.2%	4.9%	2.1%	20.3%
Neemuch	88.1%	93.6%	72.6%	9.8%	4.9%	23.6%
Panna	95.3%	97.4%	79.7%	3.5%	1.5%	18.1%
Raisen	89.3%	93.9%	68.6%	6.8%	2.8%	25.2%
Rajgarh	93.3%	97.0%	75.5%	5.2%	1.9%	20.7%
Ratlam	88.9%	96.5%	70.5%	9.1%	2.3%	25.7%
Rewa	95.8%	98.3%	81.3%	2.8%	0.7%	14.9%
Sagar	89.5%	95.1%	73.6%	6.9%	2.1%	20.4%
Satna	92.9%	97.4%	74.6%	5.4%	1.4%	22.0%
Sehore	92.0%	95.9%	74.0%	5.4%	1.7%	22.2%
Seoni	90.2%	92.9%	66.6%	5.7%	3.2%	28.1%
Shahdol	86.6%	96.7%	53.7%	6.7%	1.6%	23.2%
Shajapur	93.2%	97.1%	75.6%	5.0%	1.6%	20.1%
Sheopur	94.1%	97.4%	76.2%	5.0%	1.8%	22.2%
Shivpuri	94.2%	97.8%	75.6%	4.6%	1.4%	21.4%
Sidhi	91.3%	98.1%	52.8%	6.5%	1.2%	36.8%
Tikamgarh	96.8%	98.8%	86.7%	2.5%	0.8%	11.4%
Ujjain	86.3%	96.8%	69.7%	10.8%	1.6%	25.4%
Umaria	89.6%	93.9%	65.4%	3.2%	1.4%	13.4%
Vidisha	91.1%	95.7%	74.3%	6.1%	1.8%	22.0%
West Nimar	89.2%	92.5%	71.6%	7.4%	4.5%	23.3%
Madhya Pradesh	88.9%	95.6%	69.3%	8.0%	2.3%	24.7%

Source: Census of India, 2001.

HA 4: Households Occupying Pucca, Semi-pucca and Kuchcha Houses, 2001

District	Pucca (in %)			Semi-Pucca (in %)		
	Total	Rural	Urban	Total	Rural	Urban
Anuppur			Included in Shahdol			
Ashoknagar			Included in Guna			
Balaghat	10.3	5.0	47.2	87.7	92.7	52.0
Barwani	27.1	21.7	56.2	69.5	74.7	41.3
Betul	29.1	20.6	64.1	68.9	77.6	33.2
Bhind	66.6	61.1	84.8	20.2	22.8	11.7
Bhopal	67.0	21.3	77.6	26.9	75.5	15.7
Burhanpur			Included in East Nimar			
Chhatarpur	42.2	35.4	68.8	57.3	64.1	30.9
Chhindwara	25.0	14.0	58.6	72.3	83.1	39.7
Damoh	61.3	59.8	68.7	37.8	39.4	29.7
Datia	66.0	62.7	78.5	33.4	36.7	20.8
Dewas	42.8	33.1	68.0	54.1	63.4	29.9
Dhar	40.3	34.5	67.7	57.9	63.8	30.0
Dindori	38.2	37.1	59.5	59.9	60.9	39.4
East Nimar	32.2	24.3	55.9	62.7	70.1	40.2
Guna	29.9	21.5	60.1	66.4	74.1	38.6
Gwalior	77.4	57.3	90.5	17.0	30.3	8.3
Harda	49.0	43.8	68.1	44.4	48.5	29.3
Hoshangabad	57.6	47.1	81.2	38.8	48.9	16.1
Indore	66.7	36.5	79.1	31.1	60.1	19.1
Jabalpur	51.3	29.5	71.1	47.4	69.0	27.8
Jhabua	35.8	32.4	69.2	63.4	66.9	29.3
Katni	27.4	16.7	72.3	71.4	82.0	26.9
Mandla	22.9	19.3	57.7	75.4	78.9	41.4
Mandsaur	38.8	32.0	69.4	59.1	66.2	27.9
Morena	79.5	75.6	93.9	9.4	10.9	3.7
Narsimhapur	36.7	31.1	67.2	61.9	67.6	31.0
Neemuch	63.2	57.4	79.7	34.9	40.6	18.7
Panna	21.7	17.2	55.3	76.9	81.4	43.6
Raisen	35.5	29.1	64.4	62.3	68.7	33.2
Rajgarh	40.9	36.0	64.2	57.7	62.5	34.5
Ratlam	33.6	17.8	72.0	64.1	79.9	25.8
Rewa	21.9	15.6	58.7	77.1	83.4	40.1
Sagar	50.2	41.6	74.6	48.4	56.9	24.2
Satna	31.3	23.2	64.4	68.0	76.1	34.6
Sehore	47.7	44.0	65.0	48.8	52.2	33.5
Seoni	23.7	18.8	67.7	75.2	80.0	31.5
Shahdol	23.2	11.4	61.4	75.8	87.6	37.9
Shajapur	39.2	33.7	63.4	59.5	64.8	35.8
Sheopur	62.3	60.2	73.9	29.6	31.0	22.0
Shivpuri	73.5	71.9	82.2	22.1	23.4	15.8
Sidhi	13.2	4.8	61.5	84.8	93.9	33.3
Tikamgarh	77.6	77.8	76.9	22.1	22.0	22.9
Ujjain	43.2	23.6	74.0	54.2	73.6	23.7
Umaria	19.1	12.0	59.5	79.4	86.4	40.0
Vidisha	27.5	16.7	66.9	70.4	81.0	31.8
West Nimar	30.7	25.1	61.8	66.7	72.4	35.7
Madhya Pradesh	41.5	31.2	71.6	55.8	65.9	26.2

Source: Census of India, 2001.

HA 4: Households Occupying Pucca, Semi-pucca and Kuchcha Houses, 2001

District	Kuchcha (in %)			Serviceable Kuchcha (in %)			Non-Serviceable Kuchcha (in %)		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	2.1	2.3	0.8	1.3	1.4	0.5	0.8	0.9	0.3
Barwani	3.5	3.7	2.5	1.3	1.4	0.8	2.1	2.2	1.8
Betul	2.0	1.8	2.7	0.9	0.8	1.5	1.0	1.0	1.2
Bhind	13.1	16.1	3.5	12.2	15.0	3.0	0.9	1.1	0.5
Bhopal	6.1	3.2	6.8	4.3	1.8	4.9	1.8	1.4	1.8
Burhanpur				Included in East Nimar					
Chhatarpur	0.5	0.5	0.3	0.4	0.4	0.2	0.1	0.1	0.1
Chhindwara	2.6	2.9	1.7	1.8	2.1	1.2	0.8	0.9	0.6
Damoh	0.9	0.8	1.6	0.5	0.4	1.3	0.4	0.4	0.2
Datia	0.6	0.6	0.7	0.4	0.4	0.6	0.2	0.2	0.1
Dewas	3.1	3.5	2.1	0.9	1.0	0.7	2.2	2.6	1.3
Dhar	1.8	1.7	2.3	1.1	1.0	1.3	0.7	0.7	1.0
Dindori	2.0	2.0	1.2	1.3	1.4	0.4	0.6	0.6	0.7
East Nimar	5.2	5.6	3.9	2.0	1.8	2.7	3.2	3.8	1.2
Guna	3.7	4.4	1.3	2.3	2.7	0.8	1.4	1.6	0.5
Gwalior	5.6	12.4	1.1	5.0	11.2	1.0	0.5	1.1	0.2
Harda	6.6	7.7	2.5	1.3	1.5	0.4	5.3	6.1	2.1
Hoshangabad	3.6	4.0	2.6	1.4	1.4	1.4	2.2	2.6	1.2
Indore	2.2	3.5	1.7	1.1	1.6	1.0	1.1	1.9	0.7
Jabalpur	1.3	1.5	1.1	0.7	0.8	0.7	0.6	0.7	0.4
Jhabua	0.8	0.7	1.5	0.5	0.4	1.4	0.3	0.4	0.2
Katni	1.2	1.3	0.9	1.0	1.0	0.8	0.2	0.2	0.1
Mandla	1.7	1.8	0.9	1.3	1.4	0.7	0.4	0.4	0.2
Mandsaur	2.0	1.9	2.7	1.7	1.6	2.3	0.3	0.3	0.4
Morena	11.2	13.5	2.4	9.9	12.0	2.0	1.3	1.5	0.4
Narsimhapur	1.4	1.4	1.8	0.6	0.6	0.6	0.8	0.8	1.3
Neemuch	1.9	1.9	1.7	1.5	1.6	1.2	0.3	0.3	0.5
Panna	1.3	1.4	1.1	1.1	1.1	0.8	0.2	0.2	0.3
Raisen	2.2	2.1	2.4	1.1	1.0	1.4	1.1	1.1	1.0
Rajgarh	1.4	1.4	1.2	0.8	0.8	0.8	0.5	0.6	0.4
Ratlam	2.2	2.3	2.2	1.8	1.7	1.8	0.5	0.5	0.4
Rewa	1.0	1.0	1.1	0.7	0.6	0.8	0.3	0.3	0.3
Sagar	1.4	1.5	1.2	0.8	0.8	0.7	0.7	0.7	0.5
Satna	0.8	0.7	1.0	0.6	0.5	0.9	0.2	0.2	0.2
Sehore	3.5	3.9	1.5	1.1	1.2	0.6	2.4	2.7	0.9
Seoni	1.1	1.1	0.7	0.8	0.9	0.4	0.3	0.3	0.4
Shahdol	0.9	1.0	0.8	0.7	0.8	0.5	0.2	0.2	0.2
Shajapur	1.3	1.4	0.8	0.9	1.0	0.6	0.4	0.4	0.2
Sheopur	8.1	8.8	4.1	4.9	5.2	3.6	3.2	3.6	0.5
Shivpuri	4.3	4.8	2.0	2.7	3.0	1.4	1.6	1.8	0.6
Sidhi	1.9	1.3	5.3	1.7	1.2	4.3	0.3	0.1	1.0
Tikamgarh	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0
Ujjain	2.7	2.8	2.4	2.1	2.3	1.9	0.5	0.6	0.5
Umariya	1.5	1.6	0.5	1.2	1.3	0.5	0.3	0.4	0.0
Vidisha	2.1	2.3	1.3	1.2	1.3	0.9	0.9	1.0	0.4
West Nimar	2.6	2.6	2.5	0.9	0.8	1.5	1.7	1.8	1.0
Madhya Pradesh	2.7	2.8	2.2	1.8	1.9	1.5	0.9	1.0	0.7

Source: Census of India, 2001.

HA 5: Scheduled Castes Households Occupying Pucca, Semi-pucca and Kuchcha Houses, 2001

District	Pucca (in %)			Semi-Pucca (in %)			Kuchcha (in %)		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	14.0	8.2	48.2	84.7	90.4	51.0	1.3	1.4	0.7
Barwani	25.0	22.1	34.7	71.2	74.0	61.4	3.9	3.9	3.9
Betul	31.7	23.3	54.4	66.1	75.2	41.5	2.2	1.5	4.0
Bhind	47.9	41.5	72.7	31.5	34.7	18.9	20.6	23.7	8.4
Bhopal	44.0	14.0	55.9	43.0	81.5	27.8	12.9	4.5	16.2
Burhanpur				Included in East Nimar					
Chhatarpur	32.6	29.3	51.7	67.1	70.3	48.1	0.3	0.4	0.3
Chhindwara	27.6	16.2	54.9	70.3	81.7	43.1	2.1	2.1	2.0
Damoh	51.2	51.1	51.7	48.0	48.4	45.9	0.9	0.6	2.5
Datia	53.3	51.3	66.0	45.9	48.1	32.3	0.8	0.7	1.6
Dewas	26.4	21.0	45.9	70.1	75.6	50.2	3.5	3.4	3.9
Dhar	32.0	27.0	54.0	65.0	69.9	43.4	3.0	3.1	2.6
Dindori	53.3	52.9	63.1	44.4	44.8	34.6	2.3	2.3	2.3
East Nimar	27.9	23.4	43.9	67.9	72.3	52.2	4.2	4.3	3.8
Guna	18.0	12.7	42.2	79.2	84.4	56.0	2.7	3.0	1.8
Gwalior	66.2	46.2	83.2	27.2	41.8	14.7	6.6	12.0	2.1
Harda	38.0	35.0	51.7	55.9	58.4	44.4	6.1	6.6	3.8
Hoshangabad	47.9	37.4	72.6	48.1	58.7	23.2	4.0	3.9	4.2
Indore	48.9	25.0	61.6	48.0	71.6	35.4	3.1	3.4	3.0
Jabalpur	39.8	25.1	52.6	58.3	73.2	45.3	1.9	1.7	2.0
Jhabua	41.2	37.4	57.0	57.5	61.2	42.0	1.3	1.4	1.0
Katni	19.3	13.5	45.3	79.4	85.3	53.2	1.2	1.2	1.5
Mandla	24.5	19.6	52.1	73.9	78.7	46.9	1.6	1.7	1.0
Mandsaur	22.5	19.8	48.2	74.9	77.6	49.1	2.6	2.6	2.7
Morena	71.9	68.7	86.8	11.9	12.9	7.4	16.2	18.5	5.8
Narsimhapur	24.3	21.4	43.5	73.9	77.0	53.6	1.7	1.6	2.9
Neemuch	56.2	49.9	75.9	41.6	47.6	22.7	2.2	2.4	1.4
Panna	13.6	11.6	31.5	84.6	86.5	67.7	1.8	1.9	0.8
Raisen	25.2	21.5	49.1	72.4	76.5	46.6	2.4	2.1	4.4
Rajgarh	25.2	21.6	47.6	71.9	75.4	49.6	2.9	2.9	2.8
Ratlam	20.6	9.6	59.5	75.9	86.9	37.0	3.5	3.6	3.5
Rewa	8.4	6.3	24.9	90.6	92.8	73.1	1.0	0.8	2.0
Sagar	42.9	35.2	64.6	55.4	63.4	33.1	1.7	1.5	2.3
Satna	18.0	14.7	33.6	81.1	84.6	64.3	0.9	0.7	2.1
Sehore	35.0	33.1	48.2	61.2	63.1	48.1	3.8	3.8	3.6
Seoni	27.1	22.8	63.2	71.9	76.1	36.0	1.0	1.0	0.8
Shahdol	19.6	9.3	46.8	79.6	90.1	52.3	0.7	0.7	0.9
Shajapur	20.0	17.3	45.8	77.7	80.4	52.9	2.3	2.4	1.3
Sheopur	57.4	57.0	59.8	37.4	38.1	33.4	5.2	4.9	6.9
Shivpuri	68.8	68.3	72.3	28.6	29.2	25.1	2.6	2.6	2.5
Sidhi	9.6	2.9	47.7	88.0	95.7	44.3	2.4	1.5	8.0
Tikamgarh	73.7	74.2	70.6	26.0	25.6	29.2	0.2	0.2	0.2
Ujjain	24.1	12.0	57.4	72.0	83.8	39.4	3.9	4.2	3.2
Umaria	22.2	13.1	57.7	76.7	85.7	41.4	1.1	1.2	0.8
Vidisha	17.2	11.5	48.0	80.5	86.2	49.4	2.3	2.3	2.7
West Nimar	28.5	26.0	46.8	69.3	72.1	48.6	2.2	1.8	4.6
Madhya Pradesh	34.8	27.9	57.4	61.5	68.6	38.6	3.6	3.5	4.0

Source: Census of India, 2001.

HA 5: Scheduled Castes Households Occupying Pucca, Semi-pucca and Kuchcha Houses, 2001

District	Serviceable Kuchcha (in %)			Non-Serviceable Kuchcha (in %)		
	Total	Rural	Urban	Total	Rural	Urban
Anuppur			Included in Shahdol			
Ashoknagar			Included in Guna			
Balaghat	0.9	1.0	0.4	0.4	0.5	0.3
Barwani	1.8	2.0	1.0	2.1	1.9	2.9
Betul	1.2	0.8	2.4	1.0	0.7	1.7
Bhind	18.9	21.8	7.2	1.8	1.9	1.2
Bhopal	9.7	2.5	12.5	3.2	1.9	3.7
Burhanpur			Included in East Nimar			
Chhatarpur	0.2	0.2	0.2	0.1	0.1	0.1
Chhindwara	1.4	1.4	1.4	0.7	0.7	0.6
Damoh	0.6	0.3	2.0	0.3	0.3	0.5
Datia	0.6	0.5	1.2	0.2	0.2	0.5
Dewas	1.0	0.9	1.0	2.6	2.4	3.0
Dhar	1.7	1.9	0.9	1.3	1.2	1.7
Dindori	1.2	1.2	0.0	1.1	1.0	2.3
East Nimar	1.7	1.6	2.2	2.5	2.7	1.6
Guna	1.9	2.1	1.1	0.8	0.9	0.6
Gwalior	6.1	11.2	1.7	0.5	0.8	0.3
Harda	1.5	1.8	0.5	4.6	4.9	3.3
Hoshangabad	1.4	1.0	2.2	2.7	3.0	2.0
Indore	1.4	1.7	1.3	1.7	1.7	1.7
Jabalpur	1.0	0.7	1.2	0.9	1.0	0.9
Jhabua	0.4	0.4	0.6	0.9	1.0	0.4
Katni	1.1	1.0	1.3	0.2	0.2	0.2
Mandla	0.9	1.0	0.6	0.7	0.8	0.4
Mandsaur	1.9	1.9	2.2	0.6	0.7	0.5
Morena	14.3	16.3	5.0	2.0	2.2	0.8
Narsimhapur	0.7	0.7	0.8	1.1	0.9	2.1
Neemuch	1.7	2.0	1.0	0.4	0.4	0.4
Panna	1.5	1.6	0.4	0.3	0.3	0.4
Raisen	1.1	0.9	2.5	1.2	1.1	1.8
Rajgarh	1.7	1.7	1.7	1.2	1.2	1.1
Ratlam	2.8	2.8	2.8	0.7	0.7	0.6
Rewa	0.6	0.5	1.2	0.4	0.3	0.8
Sagar	0.8	0.7	1.1	0.9	0.7	1.2
Satna	0.7	0.5	2.0	0.2	0.2	0.1
Sehore	1.0	1.1	0.9	2.8	2.8	2.7
Seoni	0.7	0.7	0.5	0.3	0.3	0.3
Shahdol	0.4	0.3	0.5	0.4	0.4	0.4
Shajapur	1.4	1.4	1.0	0.9	0.9	0.3
Sheopur	3.4	2.9	6.2	1.8	2.0	0.6
Shivpuri	1.7	1.6	2.1	0.9	1.0	0.4
Sidhi	2.1	1.3	6.8	0.3	0.2	1.1
Tikamgarh	0.2	0.2	0.1	0.0	0.0	0.1
Ujjain	2.9	3.2	2.1	1.0	0.9	1.1
Umaria	0.7	0.7	0.7	0.4	0.5	0.1
Vidisha	1.4	1.4	1.5	0.9	0.9	1.1
West Nimar	0.7	0.5	2.1	1.4	1.3	2.4
Madhya Pradesh	2.5	2.5	2.7	1.1	1.0	1.3

Source: Census of India, 2001.

HA 6: Kuchcha Pucca Dwellings among STs in Madhya Pradesh, 2001

District	Pucca			Semi-Pucca			Kuchcha					
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban			
Anuppur				Included in Shahdol								
Ashoknagar				Included in Guna								
Balaghat	4.1%	2.0%	26.3%	90.5%	92.3%	72.1%	5.3%	5.7%	1.6%			
Barwani	16.9%	16.1%	35.6%	79.7%	80.6%	59.1%	3.4%	3.3%	5.3%			
Betul	10.2%	8.9%	39.7%	87.4%	89.0%	51.9%	2.4%	2.1%	8.4%			
Bhind	53.4%	39.2%	69.8%	25.5%	28.9%	21.6%	21.1%	31.9%	8.6%			
Bhopal	54.0%	26.1%	60.7%	29.4%	59.3%	22.2%	16.5%	14.4%	17.1%			
Burhanpur				Included in East Nimar								
Chhatarpur	32.0%	30.9%	49.2%	65.5%	66.7%	46.0%	2.5%	2.4%	4.8%			
Chhindwara	7.3%	4.5%	39.3%	88.2%	90.9%	56.9%	4.5%	4.6%	3.7%			
Damoh	54.2%	54.5%	47.0%	43.3%	43.2%	47.2%	2.4%	2.3%	5.8%			
Datia	48.9%	47.1%	59.7%	46.0%	47.5%	36.3%	5.1%	5.3%	4.0%			
Dewas	17.5%	14.6%	39.3%	72.5%	75.3%	51.0%	10.0%	10.1%	9.6%			
Dhar	29.1%	28.4%	41.2%	69.0%	69.9%	52.9%	1.9%	1.6%	5.9%			
Dindori	34.4%	34.2%	47.8%	63.4%	63.6%	50.5%	2.2%	2.2%	1.7%			
East Nimar	10.6%	9.6%	36.5%	79.3%	80.4%	51.4%	10.1%	10.0%	12.1%			
Guna	21.3%	20.3%	40.4%	62.6%	63.2%	51.0%	16.1%	16.4%	8.5%			
Gwalior	41.7%	28.4%	74.9%	22.8%	25.5%	16.2%	35.5%	46.1%	8.9%			
Harda	18.6%	17.2%	45.7%	65.9%	67.1%	43.4%	15.5%	15.7%	10.9%			
Hoshangabad	27.8%	22.6%	68.2%	63.1%	68.2%	22.6%	9.2%	9.2%	9.2%			
Indore	39.4%	20.6%	60.6%	52.2%	69.7%	32.6%	8.3%	9.7%	6.7%			
Jabalpur	23.8%	16.4%	47.9%	74.1%	81.6%	49.6%	2.1%	2.0%	2.4%			
Jhabua	31.0%	30.3%	52.6%	68.2%	69.0%	45.8%	0.8%	0.7%	1.5%			
Katni	7.6%	5.7%	29.4%	90.9%	92.8%	69.6%	1.5%	1.5%	1.0%			
Mandla	18.1%	17.6%	44.3%	80.0%	80.6%	53.7%	1.9%	1.9%	1.9%			
Mandsaur	25.6%	23.1%	49.3%	68.2%	70.6%	44.7%	6.3%	6.3%	6.0%			
Morena	65.1%	59.6%	84.4%	15.4%	18.6%	4.4%	19.5%	21.8%	11.2%			
Narsimhapur	18.1%	15.8%	49.5%	79.0%	81.4%	48.0%	2.8%	2.9%	2.5%			
Neemuch	59.6%	60.4%	55.2%	37.0%	36.9%	37.4%	3.4%	2.7%	7.5%			
Panna	13.4%	13.4%	13.7%	85.5%	85.5%	85.6%	1.1%	1.1%	0.7%			
Raisen	23.2%	21.6%	46.8%	71.4%	73.0%	47.1%	5.4%	5.4%	6.1%			
Rajgarh	23.7%	21.0%	51.0%	73.4%	76.0%	47.5%	2.9%	3.0%	1.5%			
Ratlam	11.7%	9.0%	55.6%	85.7%	88.7%	37.0%	2.6%	2.3%	7.4%			
Rewa	4.9%	4.0%	17.2%	93.1%	94.0%	81.8%	2.0%	2.0%	1.0%			
Sagar	32.2%	31.0%	53.7%	63.0%	64.2%	41.2%	4.8%	4.8%	5.1%			
Satna	10.9%	10.6%	14.9%	88.0%	88.4%	81.9%	1.1%	1.0%	3.3%			
Sehore	19.8%	18.2%	43.7%	65.5%	66.5%	50.6%	14.7%	15.4%	5.7%			
Seoni	16.7%	15.8%	55.1%	81.6%	82.5%	43.5%	1.7%	1.7%	1.4%			
Shahdol	9.9%	8.0%	30.3%	88.9%	90.9%	67.8%	1.2%	1.1%	1.9%			
Shajapur	20.9%	17.1%	56.7%	76.5%	80.3%	41.3%	2.6%	2.6%	1.9%			
Sheopur	57.9%	58.8%	29.9%	22.1%	21.6%	39.8%	20.0%	19.7%	30.2%			
Shivpuri	45.3%	45.2%	48.9%	33.2%	33.4%	27.8%	21.5%	21.4%	23.3%			
Sidhi	2.4%	0.9%	27.3%	95.2%	97.6%	54.2%	2.4%	1.4%	18.5%			
Tikamgarh	38.5%	39.1%	33.1%	61.0%	60.5%	65.3%	0.5%	0.4%	1.6%			
Ujjain	29.5%	14.8%	57.8%	62.9%	77.1%	35.4%	7.7%	8.1%	6.8%			
Umaria	6.7%	4.4%	31.9%	91.5%	93.7%	67.1%	1.8%	1.8%	1.0%			
Vidisha	17.7%	15.3%	50.5%	68.3%	70.1%	43.6%	14.1%	14.6%	5.9%			
West Nimar	11.8%	10.4%	45.8%	83.8%	85.3%	47.4%	4.4%	4.3%	6.8%			
Madhya Pradesh	19.4%	17.3%	45.0%	76.3%	78.6%	48.5%	4.3%	4.1%	6.5%			

Source: Census of India, 2001.

HA 6: Kuchcha Pucca Dwellings among STs in Madhya Pradesh, 2001

District	Serviceable Kuchcha			Non-Serviceable Kuchcha		
	Total	Rural	Urban	Total	Rural	Urban
Anuppur			Included in Shahdol			
Ashoknagar			Included in Guna			
Balaghat	2.7%	2.9%	1.1%	2.6%	2.8%	0.5%
Barwani	0.8%	0.8%	1.0%	2.5%	2.5%	4.3%
Betul	1.2%	1.1%	4.9%	1.2%	1.1%	3.5%
Bhind	20.7%	31.5%	8.3%	0.4%	0.4%	0.3%
Bhopal	10.0%	7.1%	10.7%	6.5%	7.3%	6.4%
Burhanpur			Included in East Nimar			
Chhatarpur	1.4%	1.5%	0.0%	1.1%	0.9%	4.8%
Chhindwara	3.2%	3.3%	2.5%	1.3%	1.3%	1.2%
Damoh	1.1%	0.9%	5.6%	1.3%	1.4%	0.2%
Datia	3.5%	3.5%	3.7%	1.7%	1.9%	0.3%
Dewas	2.5%	2.5%	1.9%	7.6%	7.5%	7.7%
Dhar	1.1%	0.9%	3.3%	0.8%	0.7%	2.5%
Dindori	1.5%	1.5%	1.1%	0.7%	0.7%	0.6%
East Nimar	2.7%	2.6%	5.1%	7.4%	7.4%	7.0%
Guna	9.3%	9.6%	3.5%	6.7%	6.8%	5.0%
Gwalior	31.1%	40.3%	8.1%	4.4%	5.8%	0.8%
Harda	2.5%	2.6%	1.5%	13.0%	13.2%	9.4%
Hoshangabad	4.3%	4.0%	6.3%	4.9%	5.1%	2.9%
Indore	2.6%	3.1%	2.1%	5.7%	6.7%	4.6%
Jabalpur	1.1%	1.0%	1.2%	1.0%	0.9%	1.2%
Jhabua	0.4%	0.4%	1.2%	0.4%	0.4%	0.3%
Katni	1.2%	1.2%	0.9%	0.3%	0.3%	0.1%
Mandla	1.5%	1.5%	1.3%	0.3%	0.3%	0.6%
Mandsaur	4.5%	4.4%	5.5%	1.7%	1.9%	0.5%
Morena	11.4%	11.7%	10.1%	8.1%	10.1%	1.1%
Narsimhapur	1.2%	1.2%	1.1%	1.6%	1.6%	1.4%
Neemuch	2.1%	1.6%	4.8%	1.3%	1.1%	2.7%
Panna	0.8%	0.8%	0.6%	0.3%	0.3%	0.1%
Raisen	2.9%	2.8%	3.8%	2.6%	2.6%	2.3%
Rajgarh	1.6%	1.6%	1.4%	1.3%	1.4%	0.1%
Ratlam	1.8%	1.6%	5.0%	0.8%	0.7%	2.4%
Rewa	1.2%	1.3%	0.6%	0.7%	0.8%	0.3%
Sagar	2.4%	2.4%	2.8%	2.4%	2.4%	2.3%
Satna	0.8%	0.7%	2.6%	0.3%	0.3%	0.6%
Sehore	4.0%	4.1%	2.0%	10.8%	11.3%	3.7%
Seoni	1.3%	1.3%	0.6%	0.4%	0.3%	0.8%
Shahdol	0.9%	0.9%	1.4%	0.3%	0.2%	0.5%
Shajapur	1.6%	1.7%	0.3%	1.0%	1.0%	1.5%
Sheopur	11.7%	11.3%	24.5%	8.3%	8.4%	5.7%
Shivpuri	13.2%	13.1%	16.4%	8.2%	8.3%	6.9%
Sidhi	2.0%	1.2%	14.9%	0.4%	0.2%	3.5%
Tikamgarh	0.5%	0.4%	1.6%	0.0%	0.0%	0.1%
Ujjain	5.3%	5.9%	4.3%	2.3%	2.3%	2.4%
Umaria	1.4%	1.4%	0.9%	0.4%	0.4%	0.1%
Vidisha	6.5%	6.8%	2.8%	7.5%	7.8%	3.1%
West Nimar	1.1%	1.0%	2.2%	3.4%	3.3%	4.6%
Madhya Pradesh	2.2%	2.1%	3.8%	2.0%	2.0%	2.7%

Source: Census of India, 2001.

HA 7: Households with access to Electricity, Safe Drinking Water, and Latrine Facilities, 2001

District	Electricity			Drinking Water			Latrine		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	58.3%	54.8%	82.8%	54.4%	52.7%	65.8%	13.2%	7.7%	52.3%
Barwani	65.6%	60.6%	93.2%	78.2%	75.0%	95.3%	14.1%	6.3%	56.2%
Betul	74.8%	70.0%	94.6%	72.9%	67.9%	93.5%	20.2%	10.3%	61.3%
Bhind	43.2%	32.5%	78.8%	54.9%	45.9%	84.6%	21.9%	10.5%	59.4%
Bhopal	96.3%	87.0%	98.5%	95.1%	84.9%	97.4%	65.8%	14.9%	77.5%
Burhanpur				Included in East Nimar					
Chhatarpur	46.6%	37.5%	82.0%	38.1%	34.0%	54.3%	15.3%	5.8%	52.6%
Chhindwara	84.6%	82.3%	91.7%	73.3%	69.6%	84.6%	20.8%	8.6%	57.9%
Damoh	64.7%	59.6%	90.2%	55.7%	52.5%	71.6%	13.9%	6.0%	53.3%
Datia	67.4%	62.4%	86.9%	68.1%	64.1%	83.5%	21.4%	10.9%	62.2%
Dewas	89.1%	86.5%	95.9%	79.1%	74.9%	89.9%	28.3%	12.6%	68.9%
Dhar	82.8%	80.4%	94.3%	81.8%	80.2%	89.4%	23.0%	13.6%	67.2%
Dindori	37.3%	34.9%	86.7%	47.5%	45.9%	79.0%	5.8%	3.9%	45.5%
East Nimar	82.6%	79.3%	92.3%	85.3%	81.8%	95.9%	23.0%	10.4%	60.9%
Guna	69.2%	63.4%	90.1%	73.9%	69.4%	89.8%	17.7%	6.4%	58.3%
Gwalior	86.0%	71.6%	95.3%	82.7%	61.4%	96.5%	54.4%	13.1%	81.2%
Harda	88.8%	87.0%	95.4%	70.1%	65.0%	88.7%	30.0%	20.1%	66.4%
Hoshangabad	81.5%	75.6%	94.5%	78.6%	71.5%	94.5%	37.1%	20.4%	74.5%
Indore	95.2%	89.8%	97.4%	94.2%	92.1%	95.0%	67.1%	25.1%	84.5%
Jabalpur	82.4%	70.0%	93.6%	88.9%	83.8%	93.5%	45.1%	13.5%	73.7%
Jhabua	49.1%	44.7%	91.5%	79.2%	77.4%	96.7%	12.7%	6.4%	73.1%
Katni	63.2%	57.2%	88.5%	67.8%	62.1%	92.1%	17.1%	6.8%	60.5%
Mandla	49.4%	45.2%	90.4%	55.2%	51.7%	89.3%	11.5%	5.8%	67.0%
Mandsaur	86.8%	84.6%	96.5%	62.4%	58.5%	79.6%	18.8%	9.5%	60.2%
Morena	54.6%	45.1%	90.0%	56.1%	46.9%	90.3%	19.7%	7.2%	66.7%
Narsimhapur	74.6%	72.0%	89.0%	93.1%	92.2%	98.1%	28.4%	21.6%	65.5%
Neemuch	90.4%	88.4%	96.3%	71.8%	66.5%	86.8%	21.1%	8.4%	57.3%
Panna	34.6%	28.6%	78.6%	49.2%	46.9%	65.5%	11.1%	5.5%	52.0%
Raisen	74.5%	70.8%	91.3%	80.6%	77.8%	93.2%	25.9%	16.5%	68.1%
Rajgarh	85.2%	83.4%	94.0%	72.7%	70.5%	83.3%	16.3%	7.6%	58.0%
Ratlam	81.4%	75.4%	95.9%	86.3%	81.6%	97.6%	29.4%	9.2%	78.4%
Rewa	52.0%	46.4%	84.6%	45.9%	41.0%	74.8%	11.0%	4.3%	50.0%
Sagar	69.2%	61.5%	90.8%	57.6%	50.2%	78.4%	21.3%	7.4%	60.7%
Satna	62.6%	56.9%	86.1%	54.6%	48.3%	80.5%	14.2%	4.9%	52.3%
Sehore	84.9%	82.7%	94.7%	73.6%	70.1%	89.9%	26.9%	16.6%	74.1%
Seoni	66.7%	64.3%	88.9%	66.4%	63.7%	90.5%	14.6%	8.8%	66.6%
Shahdol	44.1%	31.6%	84.3%	38.6%	28.5%	71.2%	16.3%	4.0%	56.1%
Shajapur	90.3%	89.3%	94.8%	78.4%	75.7%	90.5%	18.4%	9.0%	60.4%
Sheopur	64.8%	59.9%	91.7%	82.9%	80.8%	94.3%	11.9%	4.9%	49.7%
Shivpuri	61.0%	55.1%	91.6%	58.6%	53.3%	86.4%	15.8%	6.8%	62.8%
Sidhi	38.3%	31.5%	77.0%	35.9%	29.6%	71.7%	9.5%	2.4%	50.0%
Tikamgarh	49.3%	44.4%	75.2%	35.1%	30.7%	58.1%	11.0%	5.0%	42.8%
Ujjain	90.2%	86.2%	96.4%	88.5%	84.6%	94.6%	37.2%	10.9%	78.5%
Umaria	48.0%	42.6%	78.2%	41.1%	36.3%	68.3%	13.6%	8.2%	43.9%
Vidisha	68.4%	61.9%	92.3%	74.0%	68.6%	94.1%	21.0%	8.5%	67.1%
West Nimar	84.4%	82.5%	94.7%	83.9%	82.1%	93.6%	17.3%	9.1%	62.8%
Madhya Pradesh	70.0%	62.3%	92.3%	68.4%	61.5%	88.6%	24.0%	8.9%	67.7%

Source: Census of India, 2001.

HA 7: Households with access to Electricity, Safe Drinking Water, and Latrine Facilities, 2001

District	All Three Facilities			None of the Three Facilities		
	Total	Rural	Urban	Total	Rural	Urban
Anuppur			Included in Shahdol			
Ashoknagar			Included in Guna			
Balaghat	6.9%	2.9%	35.5%	17.8%	19.4%	6.1%
Barwani	12.9%	5.3%	53.9%	13.6%	15.9%	0.8%
Betul	17.2%	7.1%	58.7%	9.1%	11.0%	1.2%
Bhind	14.0%	3.0%	50.2%	28.1%	35.0%	5.3%
Bhopal	63.6%	12.6%	75.4%	0.5%	2.1%	0.1%
Burhanpur			Included in East Nimar			
Chhatarpur	8.3%	1.6%	34.7%	34.6%	40.6%	11.0%
Chhindwara	17.6%	6.9%	50.3%	6.9%	8.5%	1.8%
Damoh	9.9%	3.9%	39.7%	18.8%	22.0%	2.9%
Datia	16.3%	5.9%	57.0%	12.3%	14.2%	4.8%
Dewas	24.5%	9.2%	64.3%	2.9%	3.7%	0.7%
Dhar	20.9%	12.3%	61.5%	5.2%	6.0%	1.3%
Dindori	3.7%	1.9%	41.2%	37.2%	38.7%	5.9%
East Nimar	20.9%	8.4%	58.3%	4.2%	5.3%	0.9%
Guna	15.1%	4.2%	54.3%	10.5%	12.9%	1.9%
Gwalior	50.6%	8.2%	78.1%	4.7%	11.3%	0.4%
Harda	19.6%	8.9%	58.9%	2.6%	3.2%	0.4%
Hoshangabad	30.4%	12.6%	70.3%	4.1%	5.8%	0.5%
Indore	62.9%	22.0%	79.8%	0.4%	0.7%	0.2%
Jabalpur	40.6%	10.5%	67.9%	3.2%	6.2%	0.5%
Jhabua	10.9%	4.7%	70.5%	13.5%	14.8%	0.8%
Katni	14.3%	4.0%	57.5%	12.3%	14.9%	1.7%
Mandla	9.1%	3.6%	61.0%	28.5%	31.2%	2.3%
Mandsaur	14.0%	6.0%	49.4%	6.0%	7.2%	0.9%
Morena	15.6%	3.2%	62.2%	23.3%	28.9%	2.4%
Narsimhapur	25.6%	18.6%	63.3%	2.3%	2.6%	0.4%
Neemuch	17.8%	6.4%	50.3%	3.8%	4.9%	0.8%
Panna	6.8%	2.4%	39.7%	34.8%	38.1%	10.3%
Raisen	21.7%	12.7%	62.9%	7.0%	8.3%	1.3%
Rajgarh	12.6%	4.7%	50.8%	4.0%	4.4%	1.9%
Ratlam	27.7%	7.8%	76.0%	4.7%	6.5%	0.3%
Rewa	7.9%	1.6%	44.6%	27.5%	31.0%	6.6%
Sagar	16.7%	4.2%	52.0%	16.2%	21.0%	2.8%
Satna	10.9%	2.4%	45.7%	18.7%	22.2%	4.1%
Sehore	21.1%	11.0%	67.6%	4.6%	5.5%	0.7%
Seoni	11.0%	5.5%	60.5%	12.4%	13.7%	1.3%
Shahdol	11.9%	1.3%	45.9%	38.7%	48.4%	7.3%
Shajapur	16.1%	7.0%	56.6%	2.9%	3.3%	1.1%
Sheopur	10.2%	3.2%	48.0%	6.1%	7.0%	1.3%
Shivpuri	12.3%	3.5%	57.7%	19.0%	22.1%	2.9%
Sidhi	7.5%	0.8%	45.5%	44.8%	50.6%	11.8%
Tikamgarh	7.0%	1.8%	34.5%	35.7%	39.3%	16.6%
Ujjain	34.3%	8.9%	74.3%	1.9%	2.8%	0.5%
Umaria	9.8%	4.7%	38.2%	33.2%	37.1%	11.4%
Vidisha	17.9%	5.6%	63.3%	10.3%	12.8%	1.0%
West Nimar	15.8%	8.0%	59.0%	5.3%	6.1%	0.6%
Madhya Pradesh	20.3%	5.9%	62.2%	14.0%	18.0%	2.2%

Source: Census of India, 2001.

HA 8: Availability of Electricity and Toilet Facility per 1000 Population, 2001

District	Electricity Availability per 1000 Population			Toilet Facility Availability per 1000 Population		
	Total	Rural	Urban	Total	Rural	Urban
Anuppur			Included in Shahdol			
Ashoknagar			Included in Guna			
Balaghat	601	568	839	135	80	531
Barwani	636	587	941	132	59	583
Betul	751	707	948	195	101	615
Bhind	433	330	795	221	112	606
Bhopal	963	876	985	662	159	786
Burhanpur			Included in East Nimar			
Chhatarpur	484	395	827	157	62	525
Chhindwara	853	828	927	211	84	596
Damoh	666	612	910	154	64	550
Datia	686	636	879	226	122	628
Dewas	896	873	960	282	138	682
Dhar	818	794	947	221	136	668
Dindori	377	353	883	59	40	478
East Nimar	832	797	932	242	107	629
Guna	705	653	907	174	67	581
Gwalior	861	724	955	536	140	809
Harda	890	872	959	313	219	672
Hoshangabad	822	767	950	375	213	750
Indore	954	907	975	669	267	847
Jabalpur	837	707	940	478	142	745
Jhabua	466	429	906	108	56	716
Katni	653	590	901	183	69	628
Mandla	504	458	908	122	59	681
Mandsaur	877	856	970	195	101	613
Morena	549	458	903	196	75	666
Narsimhapur	756	729	900	297	228	666
Neemuch	912	891	969	223	89	585
Panna	361	298	805	117	58	532
Raisen	750	714	918	263	173	691
Rajgarh	859	841	946	166	79	582
Ratlam	818	757	963	302	99	790
Rewa	547	493	855	113	44	506
Sagar	717	636	920	230	76	613
Satna	651	597	873	147	52	540
Sehore	859	839	952	277	175	754
Seoni	681	657	897	147	90	676
Shahdol	471	341	861	176	42	577
Shajapur	909	900	952	191	100	603
Sheopur	658	610	922	123	53	505
Shivpuri	624	568	921	162	72	632
Sidhi	402	341	777	90	25	483
Tikamgarh	513	461	768	117	52	432
Ujjain	908	871	967	378	122	793
Umaria	500	446	803	139	82	455
Vidisha	697	637	925	213	89	680
West Nimar	839	820	952	172	92	637
Madhya Pradesh	709	634	927	243	93	683

Source: Census of India, 2001.

HA 9: Household by Sources of Drinking Water, 2001

District	Location of Water Sources in Households					
	Water Resources Within Premises			Water Resources Outside Premises		
	Total	Rural	Urban	Total	Rural	Urban
Anuppur			Included in Shahdol			
Ashoknagar			Included in Guna			
Balaghat	23.9%	20.8%	45.8%	76.1%	79.2%	54.2%
Barwani	16.9%	12.5%	40.6%	83.1%	87.5%	59.4%
Betul	18.6%	10.9%	50.1%	81.4%	89.1%	49.9%
Bhind	17.8%	6.5%	55.4%	82.2%	93.5%	44.6%
Bhopal	48.7%	10.0%	57.5%	51.3%	90.0%	42.5%
Burhanpur			Included in East Nimar			
Chhatarpur	13.0%	5.8%	41.0%	87.0%	94.2%	59.0%
Chhindwara	22.4%	14.9%	45.5%	77.6%	85.1%	54.5%
Damoh	12.3%	7.7%	34.8%	87.7%	92.3%	65.2%
Datia	22.4%	12.3%	61.9%	77.6%	87.7%	38.1%
Dewas	22.1%	12.9%	45.9%	77.9%	87.1%	54.1%
Dhar	19.7%	14.3%	45.3%	80.3%	85.7%	54.7%
Dindori	5.6%	4.1%	35.7%	94.4%	95.9%	64.3%
East Nimar	27.4%	19.4%	51.4%	72.6%	80.6%	48.6%
Guna	19.5%	9.5%	55.2%	80.5%	90.5%	44.8%
Gwalior	50.4%	13.4%	74.4%	49.6%	86.6%	25.6%
Harda	33.5%	25.9%	61.7%	66.5%	74.1%	38.3%
Hoshangabad	37.5%	25.3%	64.8%	62.5%	74.7%	35.2%
Indore	47.8%	13.9%	61.7%	52.2%	86.1%	38.3%
Jabalpur	32.1%	10.6%	51.7%	67.9%	89.4%	48.3%
Jhabua	9.2%	4.7%	53.3%	90.8%	95.3%	46.7%
Katni	17.3%	8.3%	55.1%	82.7%	91.7%	44.9%
Mandla	11.8%	7.2%	56.3%	88.2%	92.8%	43.7%
Mandsaur	22.3%	14.9%	55.3%	77.7%	85.1%	44.7%
Morena	21.0%	8.0%	69.6%	79.0%	92.0%	30.4%
Narsimhapur	28.2%	22.5%	59.5%	71.8%	77.5%	40.5%
Neemuch	28.5%	19.3%	54.6%	71.5%	80.7%	45.4%
Panna	11.2%	6.7%	44.6%	88.8%	93.3%	55.4%
Raisen	22.4%	17.0%	46.8%	77.6%	83.0%	53.2%
Rajgarh	11.8%	5.2%	43.1%	88.2%	94.8%	56.9%
Ratlam	24.1%	8.7%	61.4%	75.9%	91.3%	38.6%
Rewa	29.6%	26.2%	49.6%	70.4%	73.8%	50.4%
Sagar	20.2%	11.2%	45.7%	79.8%	88.8%	54.3%
Satna	24.9%	19.6%	47.1%	75.1%	80.4%	52.9%
Sehore	19.5%	12.0%	53.6%	80.5%	88.0%	46.4%
Seoni	18.5%	15.0%	50.3%	81.5%	85.0%	49.7%
Shahdol	37.9%	30.4%	61.8%	62.1%	69.6%	38.2%
Shajapur	17.4%	9.6%	52.7%	82.6%	90.4%	47.3%
Sheopur	18.6%	10.6%	61.8%	81.4%	89.4%	38.2%
Shivpuri	13.6%	6.0%	52.9%	86.4%	94.0%	47.1%
Sidhi	26.7%	21.2%	57.6%	73.3%	78.8%	42.4%
Tikamgarh	9.1%	4.1%	35.7%	90.9%	95.9%	64.3%
Ujjain	29.6%	7.6%	64.3%	70.4%	92.4%	35.7%
Umariya	24.2%	19.7%	49.2%	75.8%	80.3%	50.8%
Vidisha	25.0%	14.6%	63.3%	75.0%	85.4%	36.7%
West Nimar	32.8%	29.5%	50.9%	67.2%	70.5%	49.1%
Madhya Pradesh	24.6%	14.0%	55.2%	75.4%	86.0%	44.8%

Source: Census of India, 2001.

HA 9: Household by Sources of Drinking Water, 2001

District	Well			Tap			Hand Pump/Tubewell		
	Share of Total Households			Share of Total Households			Share of Total Households		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	44.4%	45.9%	33.8%	9.2%	4.2%	45.0%	45.1%	48.6%	20.8%
Barwani	13.3%	15.2%	3.5%	30.4%	19.5%	89.1%	47.8%	55.5%	6.3%
Betul	25.6%	30.3%	5.8%	24.9%	12.3%	76.7%	48.0%	55.6%	16.9%
Bhind	44.9%	53.9%	15.0%	17.8%	4.3%	62.3%	37.1%	41.6%	22.2%
Bhopal	3.7%	14.0%	1.3%	68.3%	7.1%	82.4%	26.8%	77.8%	15.0%
Burhanpur				Included in East Nimar					
Chhatarpur	60.9%	64.9%	45.5%	8.4%	2.5%	31.7%	29.7%	31.5%	22.6%
Chhindwara	23.7%	26.9%	13.9%	38.2%	25.7%	76.3%	35.1%	43.8%	8.3%
Damoh	37.7%	40.1%	25.9%	14.2%	9.1%	39.6%	41.5%	43.4%	32.0%
Datia	31.4%	35.7%	14.7%	20.9%	9.8%	64.5%	47.1%	54.3%	19.0%
Dewas	18.9%	23.6%	6.9%	21.7%	7.3%	59.2%	57.3%	67.6%	30.7%
Dhar	13.7%	15.4%	5.5%	28.4%	20.5%	65.4%	53.5%	59.7%	24.0%
Dindori	39.6%	40.7%	17.4%	5.7%	3.0%	62.2%	41.8%	43.0%	16.8%
East Nimar	13.0%	16.3%	3.2%	46.8%	32.1%	91.0%	38.6%	49.7%	4.9%
Guna	24.8%	29.0%	9.3%	17.0%	5.8%	57.4%	56.8%	63.6%	32.4%
Gwalior	16.6%	38.2%	2.5%	49.9%	9.2%	76.3%	32.8%	52.2%	20.2%
Harda	28.3%	33.3%	9.9%	20.5%	7.8%	67.1%	49.6%	57.2%	21.6%
Hoshangabad	20.2%	26.9%	5.0%	31.4%	12.3%	74.2%	47.2%	59.2%	20.3%
Indore	3.7%	6.6%	2.5%	54.4%	15.0%	70.7%	39.8%	77.1%	24.4%
Jabalpur	9.3%	13.5%	5.4%	44.8%	13.7%	72.9%	44.1%	70.0%	20.6%
Jhabua	13.8%	15.0%	2.5%	11.3%	4.4%	78.4%	67.8%	73.0%	18.3%
Katni	31.2%	36.8%	7.5%	18.6%	8.4%	61.5%	49.2%	53.7%	30.6%
Mandla	36.0%	39.2%	5.1%	14.4%	8.7%	69.4%	40.9%	43.0%	19.9%
Mandsaur	36.9%	41.0%	18.6%	31.0%	22.3%	69.8%	31.4%	36.2%	9.8%
Morena	43.1%	52.4%	8.3%	17.1%	5.7%	59.4%	39.0%	41.2%	30.8%
Narsimhapur	5.2%	6.0%	0.8%	25.0%	16.0%	73.6%	68.1%	76.1%	24.5%
Neemuch	26.9%	32.6%	10.8%	43.7%	31.0%	79.6%	28.1%	35.5%	7.2%
Panna	44.3%	45.8%	33.1%	9.2%	4.1%	47.2%	39.9%	42.8%	18.3%
Raisen	17.2%	19.9%	5.1%	20.6%	12.7%	56.4%	60.0%	65.1%	36.9%
Rajgarh	26.4%	28.6%	15.4%	15.3%	5.0%	64.6%	57.4%	65.5%	18.7%
Ratlam	11.8%	16.1%	1.4%	34.8%	15.4%	81.7%	51.5%	66.2%	15.9%
Rewa	51.8%	56.7%	23.0%	7.5%	2.0%	40.2%	38.3%	39.0%	34.5%
Sagar	41.0%	48.5%	19.9%	19.2%	8.2%	50.5%	38.3%	42.0%	27.9%
Satna	43.6%	49.7%	18.5%	13.8%	4.8%	50.8%	40.9%	43.6%	29.7%
Sehore	24.3%	27.7%	8.4%	18.2%	8.2%	63.9%	55.4%	61.8%	26.0%
Seoni	31.6%	34.2%	8.3%	19.8%	13.8%	73.7%	46.6%	49.9%	16.9%
Shahdol	56.0%	65.1%	26.4%	15.2%	1.6%	59.0%	23.4%	26.9%	12.1%
Shajapur	20.6%	23.4%	8.3%	24.0%	12.4%	75.8%	54.5%	63.4%	14.7%
Sheopur	15.1%	17.3%	3.2%	11.8%	3.9%	53.8%	71.2%	76.8%	40.5%
Shivpuri	40.5%	46.0%	12.2%	14.7%	4.5%	67.6%	43.9%	48.7%	18.8%
Sidhi	57.9%	63.6%	25.9%	8.6%	1.9%	46.9%	27.3%	27.7%	24.8%
Tikamgarh	64.7%	69.1%	41.5%	7.4%	2.2%	34.7%	27.7%	28.5%	23.4%
Ujjain	10.6%	14.5%	4.6%	36.3%	6.9%	82.7%	52.2%	77.7%	11.9%
Umaria	53.7%	58.2%	28.1%	13.8%	5.8%	58.7%	27.3%	30.5%	9.5%
Vidisha	24.8%	30.3%	4.6%	16.8%	6.3%	55.2%	57.3%	62.3%	38.9%
West Nimar	12.5%	13.9%	4.7%	48.3%	42.0%	83.1%	35.5%	40.1%	10.5%
Madhya Pradesh	29.0%	35.6%	9.9%	25.3%	10.7%	67.9%	43.1%	50.9%	20.6%

Source: Census of India, 2001.

HA 9: Household by Sources of Drinking Water, 2001

District	River/Canal			Tank/Pond/Lake			Other Sources		
	Share of Total Households			Share of Total Households			Share of Total Households		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	0.5%	0.5%	0.1%	0.2%	0.2%	0.0%	0.6%	0.7%	0.3%
Barwani	5.0%	5.9%	0.0%	0.5%	0.6%	0.3%	3.0%	3.4%	0.9%
Betul	0.9%	1.1%	0.0%	0.1%	0.2%	0.0%	0.5%	0.5%	0.6%
Bhind	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	0.4%
Bhopal	0.1%	0.3%	0.0%	0.4%	0.2%	0.4%	0.8%	0.7%	0.8%
Burhanpur				Included in East Nimar					
Chhatarpur	0.5%	0.7%	0.0%	0.1%	0.1%	0.0%	0.3%	0.4%	0.2%
Chhindwara	1.4%	1.7%	0.4%	0.2%	0.1%	0.5%	1.4%	1.6%	0.6%
Damoh	5.2%	6.2%	0.6%	0.1%	0.1%	0.1%	1.2%	1.1%	1.7%
Datia	0.2%	0.1%	0.3%	0.0%	0.0%	0.0%	0.4%	0.1%	1.5%
Dewas	0.8%	1.1%	0.0%	0.4%	0.3%	0.9%	0.8%	0.2%	2.3%
Dhar	2.3%	2.7%	0.1%	1.1%	1.0%	1.5%	1.1%	0.7%	3.4%
Dindori	6.0%	6.1%	3.2%	0.7%	0.7%	0.1%	6.2%	6.5%	0.4%
East Nimar	1.0%	1.2%	0.2%	0.3%	0.3%	0.1%	0.4%	0.4%	0.6%
Guna	0.8%	1.0%	0.1%	0.1%	0.1%	0.0%	0.5%	0.4%	0.8%
Gwalior	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.6%	0.1%	1.0%
Harda	1.2%	1.5%	0.0%	0.1%	0.1%	0.0%	0.4%	0.1%	1.4%
Hoshangabad	0.8%	1.1%	0.0%	0.0%	0.0%	0.0%	0.4%	0.5%	0.4%
Indore	0.1%	0.2%	0.0%	0.7%	0.6%	0.8%	1.3%	0.5%	1.6%
Jabalpur	1.0%	1.9%	0.1%	0.2%	0.3%	0.1%	0.7%	0.6%	0.8%
Jhabua	4.8%	5.3%	0.5%	0.9%	1.0%	0.2%	1.2%	1.3%	0.2%
Katni	0.7%	0.9%	0.1%	0.1%	0.1%	0.0%	0.2%	0.1%	0.3%
Mandla	4.2%	4.2%	4.5%	0.6%	0.7%	0.0%	3.9%	4.2%	1.1%
Mandsaur	0.2%	0.2%	0.0%	0.2%	0.1%	0.5%	0.4%	0.2%	1.2%
Morena	0.3%	0.4%	0.1%	0.0%	0.0%	0.0%	0.5%	0.2%	1.4%
Narsimhapur	0.9%	1.1%	0.0%	0.0%	0.0%	0.0%	0.8%	0.7%	1.1%
Neemuch	0.1%	0.1%	0.0%	0.5%	0.4%	0.7%	0.7%	0.4%	1.6%
Panna	5.1%	5.7%	1.1%	0.2%	0.2%	0.0%	1.3%	1.4%	0.2%
Raisen	1.2%	1.4%	0.2%	0.3%	0.3%	0.6%	0.6%	0.6%	0.8%
Rajgarh	0.6%	0.6%	0.4%	0.1%	0.1%	0.4%	0.2%	0.2%	0.6%
Ratlam	1.2%	1.7%	0.0%	0.3%	0.3%	0.4%	0.4%	0.2%	0.6%
Rewa	1.0%	1.0%	0.9%	0.2%	0.2%	0.2%	1.2%	1.2%	1.3%
Sagar	0.8%	0.9%	0.4%	0.1%	0.0%	0.2%	0.6%	0.4%	1.1%
Satna	0.7%	0.6%	0.7%	0.3%	0.4%	0.0%	0.8%	0.9%	0.3%
Sehore	1.4%	1.7%	0.2%	0.2%	0.2%	0.1%	0.5%	0.3%	1.4%
Seoni	0.9%	1.0%	0.0%	0.2%	0.2%	0.3%	0.9%	0.9%	0.8%
Shahdol	2.0%	2.4%	0.5%	1.5%	1.7%	1.0%	2.0%	2.3%	0.9%
Shajapur	0.4%	0.4%	0.0%	0.3%	0.3%	0.1%	0.3%	0.1%	1.1%
Sheopur	1.5%	1.6%	0.8%	0.1%	0.1%	0.0%	0.4%	0.1%	1.7%
Shivpuri	0.5%	0.6%	0.0%	0.1%	0.0%	0.3%	0.3%	0.1%	1.1%
Sidhi	3.5%	3.9%	1.0%	0.4%	0.4%	0.8%	2.3%	2.5%	0.6%
Tikamgarh	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.3%
Ujjain	0.2%	0.4%	0.0%	0.2%	0.2%	0.1%	0.4%	0.3%	0.6%
Umariya	3.2%	3.3%	3.0%	1.0%	1.1%	0.2%	1.0%	1.1%	0.4%
Vidisha	0.6%	0.8%	0.2%	0.1%	0.1%	0.0%	0.4%	0.3%	1.1%
West Nimar	2.4%	2.7%	0.5%	0.3%	0.2%	0.4%	1.0%	1.0%	0.8%
Madhya Pradesh	1.3%	1.7%	0.2%	0.3%	0.3%	0.3%	0.9%	0.9%	1.0%

Source: Census of India, 2001.

HA 10: Status of Drinking Water in Habitations, 2005

	Total Habitations	Habitations Fully Covered	Share of Habitations Fully Covered	Habitations Partially Covered	Share of Habitations Partially Covered	Habitations Not Covered
Anuppur	2307	1370	59.4	376	16.3	561
Ashoknagar	1391	1062	76.3	315	22.6	14
Barwani	5382	3758	69.8	1017	18.9	607
Balaghat	3770	3157	83.7	344	9.1	269
Betul	2546	1456	57.2	704	27.7	386
Bhind	1887	1452	76.9	325	17.2	110
Bhopal	747	503	67.3	242	32.4	2
Burhanpur	417	285	68.3	105	25.2	27
Chhatarpur	1964	1484	75.6	293	14.9	187
Chhindwara	4482	3302	73.7	811	18.1	369
Damoh	1450	1189	82.0	179	12.3	82
Datia	1079	592	54.9	151	14.0	336
Dewas	1513	776	51.3	558	36.9	179
Dhar	6322	4273	67.6	1307	20.7	742
Dindori	3818	2151	56.3	1106	29.0	561
Guna	2589	1698	65.6	608	23.5	283
Gwalior	1192	766	64.3	406	34.1	20
Harda	889	675	75.9	153	17.2	61
Hoshangabad	1347	1293	96.0	19	1.4	35
Indore	1073	483	45.0	580	54.1	10
Jabalpur	1685	1277	75.8	328	19.5	80
Jhabua	9372	6105	65.1	1913	20.4	1354
Katni	1510	1092	72.3	284	18.8	134
Khandwa (E. Nimar)	1052	550	52.3	484	46.0	18
Khargone (W. Nimar)	4046	2618	64.7	765	18.9	663
Mandla	3860	2586	67.0	767	19.9	507
Mandsour	1236	513	41.5	608	49.2	115
Morena	3958	2831	71.5	455	11.5	672
Narsimhapur	2151	1718	79.9	69	3.2	364
Neemuch	1189	396	33.3	650	54.7	143
Panna	1758	1064	60.5	466	26.5	228
Raisen	1969	1211	61.5	688	34.9	70
Rajgarh	2418	1163	48.1	1031	42.6	224
Ratlam	1638	536	32.7	1023	62.5	79
Rewa	8531	6668	78.2	562	6.6	1301
Sagar	2230	1053	47.2	985	44.2	192
Satna	5044	3201	63.5	1377	27.3	466
Sehore	1271	1023	80.5	184	14.5	64
Seoni	2586	1874	72.5	633	24.5	79
Shahdol	3810	3288	86.3	128	3.4	394
Shajapur	1092	304	27.8	750	68.7	38
Sheopur	917	562	61.3	276	30.1	79
Shivpuri	2116	1473	69.6	485	22.9	158
Sidhi	7090	4599	64.9	1909	26.9	582
Tikamgarh	2017	1281	63.5	322	16.0	414
Ujjain	1489	645	43.3	715	48.0	129
Umaria	1914	1241	64.8	83	4.3	590
Vidisha	2058	1291	62.7	710	34.5	57
Madhya Pradesh	126172	83888	66.5	28249	22.4	14035

Source: Census of India, 2001 and Public Health Engineering Department, Government of Madhya Pradesh.

HA 10: Status of Drinking Water in Habitations, 2005

District	Total number of Handpumps	Handpumps per Habitation	Source of Water: Hand Pump/Tubewell Share of Total Households-2001		
			Total	Rural	Urban
Anuppur	4651	2.0		Included in Shahdol	
Ashoknagar	4269	3.1		Included in Guna	
Barwani	9400	1.7	45.1%	48.6%	20.8%
Balaghat	11536	3.1	47.8%	55.5%	6.3%
Betul	8202	3.2	48.0%	55.6%	16.9%
Bhind	7647	4.1	37.1%	41.6%	22.2%
Bhopal	3378	4.5	26.8%	77.8%	15.0%
Burhanpur	1777	4.3		Included in East Nimar	
Chhatarpur	6724	3.4	29.7%	31.5%	22.6%
Chhindwara	10926	2.4	35.1%	43.8%	8.3%
Damoh	6783	4.7	41.5%	43.4%	32.0%
Datia	3459	3.2	47.1%	54.3%	19.0%
Dewas	7407	4.9	57.3%	67.6%	30.7%
Dhar	12724	2.0	53.5%	59.7%	24.0%
Dindori	5641	1.5	41.8%	43.0%	16.8%
Guna	6234	2.4	38.6%	49.7%	4.9%
Gwalior	5407	4.5	56.8%	63.6%	32.4%
Harda	2831	3.2	32.8%	52.2%	20.2%
Hoshangabad	5641	4.2	49.6%	57.2%	21.6%
Indore	6502	6.1	47.2%	59.2%	20.3%
Jabalpur	8147	4.8	39.8%	77.1%	24.4%
Jhabua	14952	1.6	44.1%	70.0%	20.6%
Katni	5968	4.0	67.8%	73.0%	18.3%
Khandwa (E. Nimar)	5559	5.3	49.2%	53.7%	30.6%
Khargone (W. Nimar)	9164	2.3	40.9%	43.0%	19.9%
Mandla	7030	1.8	31.4%	36.2%	9.8%
Mandsour	4572	3.7	39.0%	41.2%	30.8%
Morena	9703	2.5	68.1%	76.1%	24.5%
Narsimhapur	8520	4.0	28.1%	35.5%	7.2%
Neemuch	12450	10.5	39.9%	42.8%	18.3%
Panna	6054	3.4	60.0%	65.1%	36.9%
Raisen	7681	3.9	57.4%	65.5%	18.7%
Rajgarh	7650	3.2	51.5%	66.2%	15.9%
Ratlam	8344	5.1	38.3%	39.0%	34.5%
Rewa	14515	1.7	38.3%	42.0%	27.9%
Sagar	7415	3.3	40.9%	43.6%	29.7%
Satna	12090	2.4	55.4%	61.8%	26.0%
Sehore	5895	4.6	46.6%	49.9%	16.9%
Seoni	9132	3.5	23.4%	26.9%	12.1%
Shahdol	7126	1.9	54.5%	63.4%	14.7%
Shajapur	6826	6.3	71.2%	76.8%	40.5%
Sheopur	3653	4.0	43.9%	48.7%	18.8%
Shivpuri	8304	3.9	27.3%	27.7%	24.8%
Sidhi	15008	2.1	27.7%	28.5%	23.4%
Tikamgarh	6890	3.4	52.2%	77.7%	11.9%
Ujjain	7766	5.2	27.3%	30.5%	9.5%
Umaria	4420	2.3	57.3%	62.3%	38.9%
Vidisha	7355	3.6	35.5%	40.1%	10.5%
Madhya Pradesh	363328	2.9	43.1%	50.9%	20.6%

Source: Public Health Engineering Department, Government of Madhya Pradesh.

HA 11: District-wise Information on Status of Ground Water in Madhya Pradesh

District	Net Available Ground Water Resources (in Ham)	Current Total Draft for Irrigation (in Ham)	Allocation for Domestic and Industrial use for next 25 Years (upto Jan 2029 in Ham)	Balance of Ground Water for Future Irrigation Use (in Ham)	Future Irrigation Potential in (in Hectares)
Anuppur	44207.3	2400.0	2204.2	39603.1	99007.7
Ashoknagar	47275.3	13887.5	1724.6	31663.2	79157.9
Balaghat	110109.8	11344.2	4306.3	94459.3	236148.3
Barwani	46689.6	25092.8	3410.9	18185.9	45464.9
Betul	74772.4	16353.5	3380.7	55038.2	137595.4
Bhind	32557.0	22514.5	1234.9	8807.6	22019.1
Bhopal	85467.5	46401.9	3492.2	35573.4	88933.6
Burhanpur	25698.7	16777.1	1901.1	7020.5	17551.3
Chhatterpur	94848.1	51774.6	2935.1	40138.3	100345.9
Chindwara	110123.0	52931.5	6106.2	51085.3	127713.1
Damoh	38164.2	20035.9	5411.2	12717.2	31792.9
Datia	41827.9	17478.6	661.5	23687.8	59219.5
Dewas	88067.5	56172.1	2864.1	29031.4	72578.4
Dhar	104955.0	101295.6	5562.2	-1903.0	-
Dindori	41194.1	1765.5	3174.0	36254.6	90636.5
East Nimar	69561.3	38485.0	4174.7	26901.6	67253.9
Guna	61163.1	31544.8	2295.8	27322.5	68306.3
Gwalior	60247.9	17077.4	2505.7	40664.8	106612.0
Harda	47282.6	15005.0	8531.9	23745.7	59364.3
Hoshangabad	210889.5	19964.8	14719.1	176205.6	440513.9
Indore	56902.4	55514.6	5946.5	-4558.7	-
Jabalpur	51422.2	19177.3	4341.3	27903.5	69758.8
Jhabua	50970.1	11140.5	8315.0	31514.6	78786.5
Katni	56399.5	18874.3	2190.1	35335.1	88337.8
Mandla	60336.0	1343.6	3353.3	55639.1	139097.7
Mandsaur	70867.9	74090.9	3321.8	-6455.9	-
Morena	88469.6	21473.8	3858.4	63137.5	157843.7
Narsimhpur	107889.9	69799.5	2699.4	35391.0	88477.6
Neemuch	36426.8	32110.5	5855.2	-1538.9	-
Panna	48694.7	10111.1	2042.2	36541.5	91353.6
Raisen	127147.7	43485.1	9160.9	74501.8	186254.5
Rajgarh	89005.1	66584.8	4713.4	17706.9	44267.2
Ratlam	60419.0	75453.4	4209.3	-19243.7	-
Rewa	49992.2	18075.7	6868.0	25048.6	62621.4
Sagar	115612.3	51040.3	4137.7	60434.3	151085.8
Satna	61474.7	38610.5	7509.9	15354.4	38385.9
Sehore	75254.5	44843.8	11612.1	18798.7	46996.6
Seoni	95899.0	18676.9	4548.6	72673.5	181683.8
Shahdol	86591.0	4038.0	3251.7	79302.0	198255.1
Shajapur	55458.6	56907.5	3577.7	-5026.6	-
Sheopur	102440.4	18104.3	1553.1	82783.0	206957.5
Shivpuri	99679.5	65548.7	4003.0	30127.8	75319.6
Sidhi	83017.4	17082.3	6543.3	59391.9	148479.9
Tikamgarh	76614.3	37351.3	3766.0	35497.1	88742.7
Ujjain	79281.4	78980.1	7126.0	-6824.7	-
Umaria	67103.3	5380.8	1556.9	60165.7	150414.2
Vidisha	65802.6	27726.8	3514.5	34561.4	86403.6
West Nimar	67822.9	50815.2	4154.0	12853.7	32134.3
Madhya Pradesh	3522096.8	1610643.3	214325.7	1697217.5	4361872.5

Source: Ministry of Water Resources, Central Ground Water Board, North Central Region, Bhopal, Ground Water Estimation Committee, 1997.

HA 11: District-wise Information on Status of Ground Water in Madhya Pradesh

District	Total Annual Resource (Ham)	Unaccounted Natural Discharge (Ham)	Net Available Ground Water Resources (Ham)	Total Draft (Ham)	Existing Stage of Ground Water Development (in%)
Anuppur	46534.0	2326.7	44207.3	3615.7	8.2
Ashoknagar	49763.5	2488.2	47275.3	15230.4	32.2
Balaghat	115905.1	5795.3	110109.8	14651.5	13.3
Barwani	49147.0	2457.3	46689.6	26978.9	57.8
Betul	78707.8	3935.4	74772.4	18719.7	25.0
Bhind	34270.6	1713.5	32557.0	23221.0	71.3
Bhopal	89965.8	4498.3	85467.5	48719.9	57.0
Burhanpur	27051.2	1352.6	25698.7	18177.5	70.7
Chhattarpur	99840.1	4992.0	94848.1	54284.2	57.2
Chhindwara	115918.9	5795.9	110123.0	55896.3	50.8
Damoh	40172.9	2008.6	38164.2	21997.4	57.6
Datia	44029.4	2201.5	41827.9	18524.6	44.3
Dewas	92702.7	4635.1	88067.5	58468.5	66.4
Dhar	110478.9	5523.9	104955.0	104327.5	99.4
Dindori	43362.2	2168.1	41194.1	3220.1	7.8
East Nimar	73222.4	3661.1	69561.3	40875.8	58.8
Guna	64382.2	3219.1	61163.1	33266.2	54.4
Gwalior	63418.8	3170.9	60247.9	19314.0	32.1
Harda	49771.2	2488.6	47282.6	15720.1	33.3
Hoshangabad	221988.9	11099.4	210889.5	21492.8	10.2
Indore	59897.3	2994.9	56902.4	60450.4	106.2
Jabalpur	54128.6	2706.4	51422.2	21475.0	41.8
Jhabua	53652.7	2682.6	50970.1	15085.5	29.6
Katni	59367.9	2968.4	56399.5	20628.5	36.6
Mandla	63511.6	3175.6	60336.0	3327.6	5.5
Mandsaur	74597.7	3729.9	70867.9	77573.2	109.5
Morena	93125.9	4656.3	88469.6	23902.6	27.0
Narsimhapur	113568.3	5678.4	107889.9	72032.1	66.8
Neemuch	38344.0	1917.2	36426.8	33407.3	91.7
Panna	51257.6	2562.9	48694.7	11907.5	24.5
Raisen	133839.7	6692.0	127147.7	45482.8	35.8
Rajgarh	93689.5	4684.5	89005.1	69140.6	77.7
Ratlam	63598.9	3179.9	60419.0	78456.0	129.9
Rewa	52623.4	2631.2	49992.2	21197.7	42.4
Sagar	121697.2	6084.9	115612.4	53925.0	46.6
Satna	64710.2	3235.5	61474.7	42240.2	68.7
Sehore	79215.3	3960.8	75254.5	46979.8	62.4
Seoni	100946.3	5047.3	95899.0	20972.8	21.9
Shahdol	91149.2	4557.5	86591.7	5751.6	6.6
Shajapur	58377.5	2918.9	55458.6	59439.4	107.2
Sheopur	107832.0	5391.6	102440.4	19632.6	19.2
Shivpuri	104925.8	5246.3	99679.5	67998.4	68.2
Sidhi	87386.8	4369.3	83017.4	20875.0	25.2
Tikamgarh	80646.7	4032.3	76614.3	39373.2	51.4
Ujjain	83454.1	4172.7	79281.4	83155.9	104.9
Umaria	70635.1	3531.8	67103.3	6273.2	9.4
Vidisha	69265.9	3463.3	65802.6	30922.0	47.0
West Nimar	71392.6	3569.6	67823.0	53314.7	78.6
Madhya Pradesh	3707471.2	185373.3	3522097.7	1721622.3	48.6

Source: Ministry of Water Resources, Central Ground Water Board, North Central Region, Bhopal, Ground Water Estimation Committee, 1997.

HA 12: Households Availing Banking Services and having Specified Assets, 2001

District	HHs Availing Banking services			Owning Radio, Transistor			Owning Television			Owning Telephone		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Anuppur												
Ashoknagar												
Balaghat	18.1%	14.4%	43.9%	17.9%	16.2%	29.6%	14.7%	9.3%	52.8%	2.7%	1.3%	12.9%
Barwani	19.5%	16.2%	37.3%	14.6%	12.9%	23.9%	18.7%	11.4%	58.0%	3.6%	1.8%	13.4%
Betul	33.3%	26.7%	60.2%	15.9%	14.0%	23.7%	25.6%	15.0%	69.2%	4.4%	1.9%	14.7%
Bhind	23.9%	18.7%	41.3%	22.7%	21.8%	25.9%	24.7%	16.5%	51.7%	3.0%	1.2%	8.9%
Bhopal	42.5%	23.1%	47.0%	31.9%	14.2%	36.0%	66.9%	31.8%	74.9%	21.9%	4.0%	26.1%
Burhanpur												
Chhatarpur	26.2%	20.9%	47.0%	24.8%	22.9%	32.3%	17.0%	8.4%	50.9%	2.9%	0.7%	11.5%
Chhindwara	32.3%	25.2%	54.1%	19.6%	17.7%	25.6%	26.9%	16.6%	58.2%	4.5%	2.2%	11.5%
Damoh	22.8%	19.3%	40.2%	17.4%	15.5%	26.5%	19.9%	12.5%	56.5%	2.7%	1.1%	10.8%
Datia	28.3%	23.2%	48.4%	19.2%	17.1%	27.5%	32.2%	24.2%	63.4%	5.2%	1.9%	17.9%
Dewas	30.4%	23.9%	47.3%	20.6%	15.9%	32.8%	41.6%	30.4%	70.6%	7.3%	3.2%	18.0%
Dhar	31.7%	30.0%	39.6%	18.3%	15.9%	29.5%	28.0%	21.1%	60.7%	5.7%	3.9%	14.4%
Dindori	11.3%	9.9%	40.2%	17.6%	17.1%	27.6%	5.6%	3.7%	43.9%	0.9%	0.7%	5.1%
East Nimar	29.7%	25.9%	41.2%	16.0%	13.6%	23.2%	30.3%	19.3%	63.5%	6.0%	2.6%	16.1%
Guna	22.2%	16.9%	41.4%	18.5%	16.7%	25.1%	29.0%	19.0%	65.2%	4.6%	1.5%	16.0%
Gwalior	41.3%	24.5%	52.2%	23.9%	16.2%	28.9%	59.2%	31.4%	77.3%	17.9%	2.7%	27.7%
Harda	33.9%	30.6%	46.3%	14.5%	13.0%	20.3%	34.5%	25.7%	66.6%	6.7%	4.0%	16.7%
Hoshangabad	33.8%	25.9%	51.5%	17.5%	13.3%	27.0%	40.5%	26.6%	71.6%	6.6%	3.0%	14.7%
Indore	44.7%	30.8%	50.4%	37.5%	22.9%	43.5%	72.2%	49.5%	81.6%	22.4%	6.5%	29.0%
Jabalpur	32.4%	15.6%	47.6%	23.8%	13.7%	33.0%	46.5%	18.1%	72.3%	11.0%	2.0%	19.1%
Jhabua	27.2%	23.9%	59.0%	12.3%	9.9%	35.0%	10.7%	5.0%	65.7%	3.0%	1.4%	18.5%
Katni	23.6%	17.3%	50.1%	18.8%	17.4%	24.6%	21.5%	11.2%	64.6%	3.7%	1.3%	13.4%
Mandla	17.1%	13.9%	47.9%	15.7%	14.5%	27.1%	12.4%	7.5%	59.3%	1.9%	1.0%	11.1%
Mandsaur	29.9%	26.6%	44.6%	22.6%	21.0%	29.8%	38.6%	31.2%	71.5%	6.5%	3.4%	20.5%
Morena	16.4%	11.2%	35.5%	17.0%	15.0%	24.4%	25.0%	15.4%	60.8%	3.8%	1.4%	12.9%
Narsimhapur	22.9%	19.9%	39.5%	15.0%	13.5%	23.4%	26.0%	19.8%	59.3%	5.3%	3.1%	17.1%
Neemuch	30.3%	25.4%	44.0%	25.7%	24.5%	29.2%	41.7%	31.6%	70.4%	10.1%	5.1%	24.4%
Panna	19.8%	16.1%	47.6%	21.9%	20.6%	31.4%	10.5%	5.4%	47.9%	2.1%	1.0%	10.7%
Raisen	20.1%	15.7%	40.2%	16.6%	14.7%	25.4%	28.6%	22.1%	57.7%	3.9%	2.5%	10.5%
Rajgarh	28.4%	24.9%	45.2%	17.2%	15.7%	24.6%	26.8%	19.8%	60.3%	3.6%	1.8%	12.3%
Ratlam	31.0%	23.8%	48.6%	21.3%	17.7%	30.1%	40.7%	25.8%	76.9%	10.1%	3.4%	26.2%
Rewa	26.3%	22.4%	49.1%	27.8%	26.3%	36.6%	17.3%	11.7%	50.6%	2.8%	1.0%	13.5%
Sagar	23.9%	17.1%	43.0%	16.8%	12.8%	28.2%	27.9%	15.9%	62.0%	4.1%	1.1%	12.5%
Satna	29.4%	24.8%	48.6%	24.8%	23.6%	29.6%	19.4%	11.6%	51.5%	3.8%	1.3%	14.2%
Sehore	29.4%	25.3%	48.0%	17.6%	14.7%	30.7%	36.5%	29.8%	67.2%	5.6%	3.0%	17.7%
Seoni	18.6%	15.5%	46.3%	16.3%	15.4%	24.7%	14.7%	9.9%	58.4%	2.8%	1.5%	14.0%
Shahdol	25.9%	14.1%	63.9%	21.9%	18.7%	32.5%	17.9%	5.8%	57.0%	2.9%	0.8%	9.8%
Shajapur	40.5%	39.5%	45.2%	20.8%	19.1%	28.6%	33.3%	26.6%	63.4%	4.4%	2.4%	13.1%
Sheopur	15.2%	11.0%	38.1%	14.3%	12.6%	23.4%	20.0%	12.8%	58.9%	2.5%	1.4%	8.3%
Shivpuri	22.3%	18.4%	42.5%	16.9%	15.4%	24.4%	21.1%	12.5%	65.6%	4.8%	2.0%	19.8%
Sidhi	24.4%	17.5%	64.2%	25.5%	23.4%	37.5%	11.2%	4.4%	49.5%	2.0%	0.6%	9.7%
Tikamgarh	26.7%	22.9%	46.5%	25.2%	23.4%	34.8%	16.2%	10.3%	47.5%	1.9%	0.7%	8.6%
Ujjain	37.9%	29.8%	50.6%	24.2%	19.6%	31.4%	48.9%	32.0%	75.6%	10.2%	2.5%	22.3%
Umaria	21.2%	15.7%	51.7%	21.8%	20.3%	30.4%	13.4%	7.9%	44.4%	2.3%	1.3%	7.8%
Vidisha	25.2%	21.3%	39.5%	17.9%	16.4%	23.6%	30.7%	22.0%	62.8%	5.0%	1.8%	16.5%
West Nimar	23.0%	20.1%	38.6%	15.7%	13.8%	25.9%	28.2%	22.0%	62.3%	4.6%	2.6%	15.4%
Madhya Pradesh	27.9%	21.1%	47.7%	20.9%	17.4%	31.1%	29.6%	16.9%	66.8%	6.2%	1.9%	18.5%

Source: Census of India, 2001.

HA 12: Households Availing Banking Services and having Specified Assets, 2001

District	Bicycle			Scooter, Motorcycle, Moped			Car, Jeep, Van			None of the specified assets		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Anuppur	Included in Shahdol											
Ashoknagar	Included in Guna											
Balaghat	53.6%	52.3%	63.0%	6.9%	4.3%	25.8%	0.9%	0.7%	2.5%	40.4%	42.7%	24.1%
Barwani	27.1%	24.2%	42.9%	8.0%	5.4%	21.9%	1.2%	0.8%	3.4%	59.0%	64.6%	28.7%
Betul	38.3%	32.2%	63.4%	10.8%	5.6%	32.1%	1.4%	0.8%	3.6%	49.0%	56.9%	16.5%
Bhind	54.0%	52.2%	60.1%	7.7%	5.4%	15.4%	1.2%	0.9%	2.1%	35.8%	39.5%	23.5%
Bhopal	37.8%	26.3%	40.5%	34.5%	9.0%	40.3%	6.4%	1.5%	7.5%	21.9%	52.5%	14.9%
Burhanpur	Included in East Nimar											
Chhatarpur	56.5%	53.8%	67.0%	7.4%	3.7%	22.0%	1.1%	0.6%	2.9%	35.6%	39.8%	19.2%
Chhindwara	33.1%	28.8%	46.1%	9.9%	5.5%	23.3%	1.3%	0.8%	2.8%	50.4%	58.0%	27.1%
Damoh	37.2%	32.3%	61.4%	6.1%	3.3%	19.7%	0.8%	0.5%	2.2%	53.0%	58.9%	23.7%
Datia	44.9%	42.5%	54.1%	8.8%	5.6%	21.0%	1.1%	0.8%	2.2%	40.2%	44.8%	22.3%
Dewas	43.8%	36.2%	63.6%	13.7%	8.6%	26.9%	1.7%	1.1%	3.3%	38.5%	47.4%	15.6%
Dhar	35.8%	34.4%	42.6%	12.7%	10.5%	23.1%	1.8%	1.5%	3.6%	46.1%	50.6%	25.0%
Dindori	12.5%	11.6%	29.6%	2.9%	2.1%	18.8%	0.6%	0.5%	2.1%	73.5%	75.2%	38.3%
East Nimar	29.0%	21.7%	51.1%	9.9%	5.6%	23.0%	1.3%	0.9%	2.6%	52.2%	61.6%	24.1%
Guna	33.2%	28.8%	49.2%	8.0%	4.4%	21.2%	1.4%	1.0%	3.0%	49.4%	56.9%	22.4%
Gwalior	58.3%	47.1%	65.6%	24.5%	7.9%	35.4%	3.3%	1.1%	4.8%	21.9%	39.8%	10.3%
Harda	32.1%	26.5%	52.9%	10.8%	7.7%	21.9%	1.4%	1.1%	2.6%	47.4%	54.4%	21.5%
Hoshangabad	44.4%	37.0%	61.0%	15.3%	8.8%	29.9%	1.6%	1.1%	2.8%	38.9%	48.7%	17.0%
Indore	58.2%	49.7%	61.7%	35.6%	19.5%	42.3%	7.0%	2.4%	8.8%	14.4%	29.8%	8.1%
Jabalpur	53.9%	38.2%	68.1%	23.5%	6.5%	38.8%	3.1%	0.9%	5.1%	31.7%	52.2%	13.1%
Jhabua	23.1%	21.8%	35.7%	5.2%	3.0%	26.5%	0.9%	0.7%	3.4%	66.2%	70.7%	22.3%
Katni	47.1%	43.8%	60.8%	8.1%	3.8%	26.0%	1.0%	0.5%	3.0%	43.3%	49.0%	19.4%
Mandla	26.0%	23.2%	53.0%	5.6%	3.4%	26.9%	0.9%	0.6%	3.5%	63.2%	67.3%	23.7%
Mandsaur	51.8%	50.8%	56.3%	14.3%	11.1%	28.4%	1.3%	1.0%	2.8%	31.8%	35.1%	16.7%
Morena	47.5%	45.7%	54.2%	7.1%	4.5%	16.8%	1.2%	0.8%	2.8%	41.3%	46.4%	22.3%
Narsimhapur	35.5%	33.2%	47.8%	10.4%	7.6%	25.5%	1.4%	1.0%	3.6%	50.6%	55.1%	26.5%
Neemuch	59.5%	58.3%	63.0%	17.9%	13.5%	30.4%	1.7%	1.0%	3.8%	26.2%	30.4%	14.1%
Panna	45.6%	43.3%	62.4%	5.3%	3.5%	18.8%	0.9%	0.6%	2.8%	46.6%	49.8%	23.0%
Raisen	27.8%	25.9%	36.8%	8.6%	6.4%	18.7%	1.6%	1.3%	2.8%	52.1%	57.4%	28.2%
Rajgarh	33.6%	33.2%	35.6%	7.5%	5.3%	18.0%	1.3%	1.0%	2.7%	48.0%	52.2%	27.4%
Ratlam	48.3%	42.5%	62.1%	17.1%	10.3%	33.5%	1.5%	0.8%	3.3%	35.1%	44.5%	12.3%
Rewa	58.7%	58.1%	62.1%	9.1%	6.2%	26.7%	1.7%	1.2%	4.6%	33.6%	35.6%	21.6%
Sagar	34.6%	29.1%	50.0%	9.2%	4.3%	22.9%	1.5%	0.8%	3.5%	50.6%	59.9%	24.2%
Satna	55.3%	54.0%	60.8%	9.2%	5.7%	23.5%	1.4%	0.9%	3.6%	35.8%	39.3%	21.2%
Sehore	35.3%	31.5%	52.7%	10.1%	6.7%	25.8%	1.6%	1.4%	2.7%	44.4%	50.0%	19.0%
Seoni	41.2%	39.7%	54.7%	7.3%	5.0%	27.3%	0.8%	0.6%	2.7%	49.8%	52.6%	24.5%
Shahdol	51.7%	46.9%	67.3%	8.9%	3.7%	25.6%	1.0%	0.5%	2.6%	40.7%	47.5%	18.6%
Shajapur	41.4%	40.1%	47.4%	8.6%	6.1%	19.7%	1.2%	0.9%	2.4%	40.3%	44.2%	22.5%
Sheopur	23.9%	21.9%	34.5%	5.8%	4.2%	14.6%	1.0%	0.9%	1.7%	59.1%	64.9%	28.2%
Shivpuri	42.0%	39.7%	53.7%	8.4%	4.9%	27.0%	1.2%	0.9%	2.6%	45.9%	51.0%	19.3%
Sidhi	44.3%	40.9%	63.6%	7.0%	3.1%	29.3%	1.4%	0.7%	5.1%	47.0%	51.9%	18.8%
Tikamgarh	54.2%	52.8%	61.9%	7.1%	4.6%	20.8%	1.0%	0.7%	2.6%	37.7%	40.4%	23.1%
Ujjain	48.5%	40.8%	60.6%	17.8%	9.4%	31.0%	2.0%	1.1%	3.6%	30.8%	41.7%	13.5%
Umaria	47.9%	45.7%	59.9%	6.5%	4.7%	16.2%	0.9%	0.7%	1.9%	44.2%	47.3%	27.1%
Vidisha	27.4%	23.2%	42.9%	9.2%	5.3%	23.6%	1.2%	0.8%	2.6%	51.0%	58.1%	25.1%
West Nimar	30.2%	27.0%	47.8%	10.9%	8.1%	26.0%	1.3%	0.9%	3.4%	51.7%	56.6%	25.0%
Madhya Pradesh	42.8%	38.3%	56.0%	12.1%	6.0%	29.7%	1.8%	0.9%	4.4%	42.2%	50.5%	18.0%

Source: Census of India, 2001.

HA 13: SC Households by Assets, 2001

District	Households availing Banking Services (%)			Radio (%)			Television (%)			Telephone (%)		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Anuppur												
Ashoknagar												
Balaghat	19.4	15.3	43.5	20.1	18.1	31.6	18.9	12.8	54.5	2.3	1.3	7.9
Barwani	13.0	10.2	22.7	13.7	12.9	16.6	20.2	13.8	42.2	1.7	1.1	4.1
Betul	37.2	29.9	57.1	17.0	14.8	22.8	30.1	16.7	66.4	3.4	1.6	8.2
Bhind	14.9	12.4	24.7	15.3	14.9	16.9	13.9	9.4	31.3	1.1	0.8	2.5
Bhopal	27.0	17.2	30.8	22.1	10.5	26.7	54.5	23.0	66.9	7.2	1.8	9.3
Burhanpur												
Chhatarpur	17.7	15.8	29.0	20.5	19.6	25.4	8.7	5.2	29.2	0.8	0.5	2.6
Chhindwara	35.1	28.0	52.1	19.4	18.6	21.5	29.8	19.7	53.9	2.8	1.6	5.4
Damoh	14.4	12.3	25.8	12.6	11.6	17.6	11.8	6.9	37.5	0.8	0.5	2.9
Datia	18.7	16.2	34.1	14.8	14.1	19.1	21.0	16.4	49.9	1.7	0.9	6.9
Dewas	17.6	14.5	28.5	14.2	11.2	24.7	29.1	21.2	57.4	2.6	1.4	6.7
Dhar	23.7	22.4	29.4	16.1	14.3	23.7	28.4	23.2	51.4	3.4	2.5	7.5
Dindori	12.1	10.8	44.2	19.5	19.0	31.3	5.7	4.0	45.1	0.9	0.9	1.4
East Nimar	22.3	19.9	31.3	13.9	12.5	19.0	26.5	18.8	54.3	2.6	1.7	6.2
Guna	14.7	12.6	23.9	14.7	14.0	17.9	18.8	11.9	49.8	1.8	0.9	5.6
Gwalior	26.3	20.6	31.1	17.3	13.8	20.3	47.1	26.7	64.6	7.0	1.4	11.7
Harda	24.0	22.2	32.2	11.1	10.0	16.3	24.7	18.8	51.8	1.6	1.2	3.9
Hoshangabad	23.2	16.7	38.4	13.8	9.6	23.5	31.6	18.2	62.8	2.7	1.2	6.2
Indore	27.0	17.8	31.8	26.8	16.7	32.2	61.1	39.2	72.8	8.2	2.4	11.3
Jabalpur	21.8	12.0	30.4	19.5	12.1	26.0	38.3	14.1	59.4	4.3	1.3	6.8
Jhabua	29.8	25.0	50.0	17.9	14.1	34.2	19.6	11.1	55.9	3.6	2.3	8.9
Katni	16.4	13.4	30.0	16.0	15.2	19.2	14.9	7.7	47.2	1.1	0.8	2.4
Mandla	24.4	20.3	47.5	18.3	16.7	27.4	19.3	12.6	56.5	2.2	1.4	6.4
Mandsaur	20.3	19.6	26.8	17.4	17.1	20.4	23.7	20.0	58.7	1.9	1.3	6.9
Morena	9.3	7.3	18.3	12.0	10.6	18.4	14.9	9.6	40.0	1.6	0.8	4.9
Narsimhapur	14.2	12.8	23.3	10.8	9.9	17.1	15.8	12.3	39.0	1.6	1.1	4.9
Neemuch	22.3	19.5	31.2	22.2	21.8	23.2	35.5	26.5	64.1	4.8	2.5	11.9
Panna	12.3	10.8	26.5	16.9	16.4	22.3	4.4	2.5	22.4	0.8	0.6	2.6
Raisen	12.4	9.8	29.5	13.2	11.7	22.4	19.2	14.5	49.0	1.6	1.2	4.0
Rajgarh	19.1	17.9	26.3	13.9	13.6	16.0	18.6	14.2	46.3	1.5	1.1	4.1
Ratlam	24.3	20.3	38.9	19.3	17.6	25.6	33.4	23.4	68.6	3.9	1.5	12.6
Rewa	12.0	10.9	21.0	16.8	16.4	19.9	4.9	3.1	19.5	0.6	0.5	1.9
Sagar	16.3	12.5	26.9	13.2	9.7	23.0	19.9	10.5	46.6	1.9	0.7	5.3
Satna	16.8	15.4	23.9	17.5	16.9	20.3	8.0	5.0	22.0	0.9	0.6	2.2
Sehore	18.6	16.3	34.5	12.9	11.2	25.1	24.8	20.5	55.2	2.0	1.3	6.8
Seoni	19.8	17.7	38.1	16.9	16.3	22.1	16.3	12.2	50.5	2.2	1.6	7.2
Shahdol	25.8	15.3	53.1	20.0	17.6	26.3	15.6	5.1	43.2	1.3	0.7	2.7
Shajapur	27.9	27.3	33.6	14.8	14.1	21.3	18.9	15.9	48.0	1.3	0.9	4.6
Sheopur	10.7	7.7	28.2	12.3	9.7	28.0	13.5	8.0	46.3	0.9	0.8	1.9
Shivpuri	17.3	15.6	28.7	13.4	12.7	18.0	14.5	8.4	54.2	1.9	1.1	6.6
Sidhi	18.3	12.8	49.5	21.2	19.8	29.4	7.0	2.0	35.6	0.8	0.4	2.9
Tikamgarh	21.1	18.8	37.0	21.9	21.0	27.9	10.8	7.4	34.1	0.8	0.6	2.4
Ujjain	22.6	18.7	33.2	16.7	14.7	22.0	31.8	20.3	63.4	2.7	0.9	7.5
Umaria	21.7	14.6	49.1	20.1	18.8	24.8	14.0	7.1	41.1	1.1	1.0	1.9
Vidisha	14.6	13.1	22.6	12.8	12.1	16.5	17.9	12.1	49.0	1.3	0.7	4.6
West Nimar	13.6	12.0	25.6	11.5	10.4	19.1	23.5	19.8	50.3	1.9	1.4	5.9
Madhya Pradesh	19.7	15.9	32.0	16.7	14.5	23.7	22.9	13.3	54.4	2.4	1.1	6.9

Source: Census of India, 2001.

HA 13: SC Households by Assets, 2001

District	Bicycle (%)			Scooter, Motor (%)			Car, Jeep (%)			None of the (%)		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Anuppur												
Ashoknagar												
Balaghat	53.5	51.9	62.7	7.5	4.6	24.2	0.8	0.7	1.2	39.5	42.0	24.8
Barwani	25.2	23.8	30.3	5.6	3.8	11.8	0.8	0.6	1.4	59.6	63.8	45.0
Betul	39.8	31.0	63.7	10.2	5.0	24.2	1.1	0.6	2.2	46.8	57.2	18.7
Bhind	49.3	48.3	53.1	3.2	2.5	5.8	0.5	0.5	0.5	44.0	46.2	35.6
Bhopal	38.3	23.9	44.0	16.3	3.8	21.3	1.6	0.7	2.0	32.0	60.3	20.8
Burhanpur												
Chhatarpur	51.3	50.2	57.9	2.6	1.6	8.6	0.4	0.3	0.8	42.8	44.6	32.3
Chhindwara	35.7	32.5	43.2	7.9	4.8	15.3	0.7	0.5	1.2	46.5	53.0	31.0
Damoh	30.7	27.6	47.5	2.2	1.2	7.4	0.3	0.2	0.9	61.4	65.5	39.6
Datia	41.3	40.1	48.5	3.6	2.5	10.5	0.5	0.5	1.0	48.7	51.4	32.2
Dewas	36.3	30.5	57.4	5.3	3.4	12.4	0.7	0.5	1.1	49.9	56.9	24.5
Dhar	36.3	35.5	40.3	8.1	6.6	14.7	1.6	1.4	2.5	46.5	49.8	31.9
Dindori	18.7	18.2	30.4	3.1	2.4	21.1	0.5	0.5	0.6	67.7	69.1	33.8
East Nimar	27.5	23.0	43.8	5.3	3.6	11.3	0.7	0.6	1.1	55.2	61.8	31.2
Guna	28.1	25.4	40.0	2.8	1.5	8.6	0.6	0.5	1.1	58.7	63.6	36.1
Gwalior	56.0	47.3	63.3	11.5	4.1	17.7	1.2	0.5	1.8	29.2	42.4	17.9
Harda	31.3	27.7	47.8	3.6	2.5	8.4	0.6	0.5	0.8	55.2	60.2	32.4
Hoshangabad	41.0	33.4	58.7	7.4	3.1	17.5	0.8	0.6	1.2	46.9	56.7	23.8
Indore	56.7	46.8	61.9	17.6	8.4	22.4	2.2	0.7	2.9	21.6	37.0	13.4
Jabalpur	52.7	39.5	64.3	12.7	3.9	20.5	1.5	0.7	2.1	35.5	52.8	20.4
Jhabua	24.3	23.1	29.1	7.1	4.4	18.8	1.5	1.4	1.9	58.3	65.0	29.8
Katni	45.4	43.3	54.7	3.4	2.1	9.0	0.5	0.5	0.5	47.4	50.8	32.0
Mandla	34.5	31.0	54.1	7.9	5.4	22.5	1.4	1.2	2.8	53.1	58.1	25.0
Mandsaur	44.5	44.2	46.8	5.2	4.5	11.8	0.5	0.5	0.5	43.1	44.8	26.8
Morena	44.6	44.6	44.7	3.0	2.1	7.0	0.6	0.5	1.3	47.9	50.1	37.4
Narsimhapur	32.4	31.7	36.7	3.6	2.5	11.0	0.5	0.4	1.5	58.6	60.8	43.8
Neemuch	55.5	53.4	62.3	9.7	7.0	18.3	0.8	0.6	1.2	31.5	35.8	17.7
Panna	40.7	39.6	50.1	2.1	1.6	6.0	0.4	0.4	0.6	53.4	54.8	40.0
Raisen	25.2	23.7	34.8	3.2	2.1	10.0	0.6	0.6	0.7	60.9	64.7	36.4
Rajgarh	27.7	27.9	26.1	3.4	2.6	8.4	0.8	0.8	1.3	57.3	59.8	41.9
Ratlam	47.7	43.9	61.2	8.7	5.3	21.0	0.7	0.5	1.4	37.4	43.2	17.0
Rewa	52.7	53.2	49.0	2.2	1.7	5.8	0.4	0.3	1.0	42.7	42.8	42.3
Sagar	31.9	27.6	44.0	4.1	1.5	11.3	1.1	0.3	3.1	57.5	64.8	37.0
Satna	53.1	53.0	53.5	2.8	2.2	5.8	0.4	0.4	0.7	41.3	42.5	35.3
Sehore	31.1	28.5	49.0	3.7	2.3	14.0	0.5	0.5	0.9	54.8	58.6	28.4
Seoni	42.7	41.9	50.0	7.2	5.6	21.3	0.8	0.6	1.8	47.8	49.8	31.3
Shahdol	56.5	53.7	64.1	5.9	2.9	13.8	0.6	0.5	0.9	37.3	41.6	26.0
Shajapur	33.0	32.4	37.9	2.6	1.9	9.3	0.5	0.5	1.2	53.7	55.5	36.1
Sheopur	21.2	18.3	38.7	2.0	1.4	5.8	0.6	0.6	0.5	67.1	72.5	35.4
Shivpuri	38.3	36.8	48.1	3.8	2.4	12.9	0.7	0.7	0.9	52.4	56.0	28.9
Sidhi	43.1	40.1	60.4	3.5	1.4	15.2	0.4	0.3	1.4	49.8	53.9	27.1
Tikamgarh	50.5	49.9	54.8	3.8	2.7	11.1	0.4	0.4	0.9	42.5	43.9	32.7
Ujjain	40.7	35.0	56.6	6.2	3.1	15.0	0.6	0.4	1.2	44.2	52.2	22.1
Umaria	50.8	48.6	59.8	5.0	4.1	8.7	0.8	0.7	1.1	42.0	44.9	30.8
Vidisha	21.9	19.6	34.2	2.6	1.4	9.1	0.5	0.4	0.6	63.4	68.1	38.2
West Nimar	28.0	26.6	38.3	5.6	4.4	14.6	0.8	0.8	1.4	57.4	60.3	36.5
Madhya Pradesh	40.9	37.3	52.6	5.8	2.9	15.2	0.8	0.5	1.6	47.1	53.4	26.6

Source: Census of India, 2001.

HA 14: ST Households by Assets, 2001

District	Households availing Banking Services (%)			Radio (%)			Television (%)			Telephone (%)		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Anuppur												
Ashoknagar												
Balaghat	10.7	8.5	32.7	14.9	14.2	22.1	6.6	4.0	32.6	1.0	0.8	3.5
Barwani	13.8	13.6	17.8	11.2	11.0	17.5	5.2	4.2	29.7	0.8	0.7	3.4
Betul	15.8	14.5	45.5	11.2	10.9	18.1	5.8	3.9	49.7	0.8	0.7	4.1
Bhind	22.4	15.9	29.9	15.8	10.2	22.4	26.1	10.9	43.8	2.3	1.3	3.5
Bhopal	30.1	8.6	35.2	25.8	9.7	29.7	55.5	18.9	64.4	9.7	1.6	11.7
Burhanpur												
Chhatarpur	13.0	12.1	29.4	16.0	15.5	24.9	3.5	2.0	29.0	0.5	0.3	4.1
Chhindwara	16.9	14.8	40.8	13.5	13.0	19.1	8.1	5.3	39.9	1.0	0.8	3.9
Damoh	9.9	9.4	26.5	8.7	8.3	20.1	4.1	3.1	32.5	0.5	0.4	4.3
Datia	14.9	10.9	40.0	13.6	13.0	17.3	15.0	10.5	43.3	1.5	0.5	7.7
Dewas	11.1	9.2	25.3	13.1	11.6	25.0	12.9	9.4	39.8	1.2	0.6	5.9
Dhar	22.0	22.0	20.9	12.3	11.9	18.8	7.4	6.0	32.2	1.0	0.8	3.3
Dindori	8.7	8.2	34.7	15.6	15.4	23.0	2.4	2.0	29.1	0.5	0.5	1.9
East Nimar	16.1	15.8	24.7	10.5	10.1	18.7	7.3	5.9	42.1	1.0	0.9	4.9
Guna	7.2	6.4	23.1	11.9	11.5	20.5	6.6	4.8	40.8	0.8	0.4	7.1
Gwalior	15.0	7.1	34.4	13.3	9.4	23.0	25.3	10.2	63.0	4.6	0.8	14.0
Harda	16.6	16.3	22.4	9.5	9.2	16.1	8.1	6.2	44.3	0.8	0.6	3.4
Hoshangabad	14.9	11.4	42.4	12.4	11.0	23.6	15.3	9.6	60.0	1.5	1.0	6.0
Indore	19.5	10.0	30.1	22.6	14.2	31.9	43.3	23.3	65.8	5.6	1.4	10.3
Jabalpur	11.9	6.9	28.1	12.9	9.1	25.1	16.9	6.2	51.5	2.0	0.6	6.3
Jhabua	22.0	21.4	40.5	8.7	8.1	26.7	3.1	1.9	40.2	0.7	0.6	4.3
Katni	9.8	8.7	22.4	12.2	11.9	15.2	5.6	3.5	29.1	0.6	0.5	1.7
Mandla	9.6	9.0	40.7	12.8	12.5	27.7	3.8	3.0	44.4	0.7	0.6	5.7
Mandsaur	13.5	11.9	29.5	17.5	17.0	23.2	19.9	16.4	53.5	1.9	1.1	9.3
Morena	13.0	7.5	32.2	13.0	9.3	25.6	15.6	6.3	47.9	2.5	0.8	8.4
Narsimhapur	12.2	11.3	24.1	9.3	8.4	19.9	7.7	5.6	35.9	1.1	0.8	4.6
Neemuch	8.7	7.0	19.2	18.0	17.7	19.9	13.6	9.1	41.7	2.0	0.9	9.4
Panna	6.6	6.4	12.2	12.1	12.1	12.5	1.7	1.3	9.9	0.5	0.5	1.4
Raisen	8.4	7.3	25.2	10.4	9.8	19.9	10.0	8.0	40.2	1.1	0.9	3.6
Rajgarh	21.9	20.5	35.9	14.5	14.3	16.4	17.7	14.5	49.0	1.5	1.2	4.0
Ratlam	11.2	9.8	33.6	9.7	8.8	24.6	9.0	6.1	55.4	1.2	0.7	10.0
Rewa	8.3	7.6	17.5	14.1	13.9	16.5	3.0	2.1	14.8	0.4	0.3	1.6
Sagar	10.1	8.7	33.6	8.1	7.2	23.8	6.0	4.1	38.2	0.8	0.4	7.0
Satna	10.3	10.1	12.8	13.7	13.5	17.0	3.0	2.3	12.9	0.4	0.3	1.2
Sehore	11.7	10.0	37.5	10.7	9.9	22.0	13.0	10.4	51.8	1.4	1.1	6.1
Seoni	10.3	9.6	40.0	12.4	12.2	22.4	4.3	3.3	43.5	0.7	0.6	5.3
Shahdol	10.6	7.8	41.0	15.6	15.0	22.0	4.1	1.8	28.5	0.5	0.4	1.3
Shajapur	24.1	22.4	39.8	16.1	14.8	29.0	21.8	18.5	52.6	1.4	1.0	5.9
Sheopur	2.9	2.4	18.4	9.9	9.6	17.7	3.1	2.2	31.5	0.3	0.3	1.1
Shivpuri	6.9	6.6	14.1	10.5	10.4	13.0	3.6	2.6	28.8	0.7	0.6	3.7
Sidhi	8.7	7.3	32.6	15.2	14.7	24.9	2.0	0.9	20.5	0.4	0.3	2.5
Tikamgarh	10.6	9.7	19.0	14.9	14.0	23.6	5.3	3.7	20.1	0.5	0.3	2.2
Ujjain	23.2	16.5	36.0	18.0	14.7	24.2	33.1	18.9	60.3	3.8	1.2	8.9
Umaria	10.8	9.3	27.8	16.1	15.8	19.8	3.4	2.1	17.1	0.4	0.4	1.1
Vidisha	9.9	8.5	28.8	12.2	11.4	22.5	11.1	8.1	51.6	1.1	0.6	8.4
West Nimar	14.6	14.3	22.2	11.4	11.1	16.7	8.3	7.0	39.8	1.1	0.9	4.5
Madhya Pradesh	13.5	12.1	31.0	12.7	11.8	23.2	7.3	4.4	43.1	1.0	0.6	5.7

Source: Census of India, 2001.

HA 14: ST Households by Assets, 2001

District	Bicycle (%)			Scooter, Motor (%)			Car, Jeep (%)			None of the (%)		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Anuppur												
Ashoknagar												
Balaghat	36.7	35.5	48.8	3.0	2.0	12.8	0.5	0.5	0.7	57.1	58.7	40.3
Barwani	21.5	21.2	30.2	3.0	2.6	11.0	0.6	0.5	1.7	70.2	71.0	52.5
Betul	23.5	22.2	55.4	2.3	1.9	13.6	0.5	0.5	1.0	68.8	70.5	28.5
Bhind	49.2	39.2	60.9	6.8	4.4	9.6	0.8	0.6	1.2	40.8	53.6	25.9
Bhopal	37.5	17.3	42.4	21.9	3.4	26.4	2.4	0.5	2.8	31.5	67.5	22.8
Burhanpur												
Chhatarpur	34.4	33.6	47.9	1.4	0.9	9.6	0.4	0.4	0.9	59.1	60.2	40.0
Chhindwara	19.5	18.0	37.1	2.2	1.4	11.2	0.4	0.4	0.8	69.9	72.4	42.4
Damoh	19.8	19.0	44.8	0.9	0.7	8.5	0.3	0.3	1.6	74.7	75.8	43.8
Datia	38.6	37.9	42.7	2.5	1.7	8.0	0.6	0.6	0.3	53.3	55.3	40.7
Dewas	27.6	24.9	48.5	2.7	1.6	11.1	0.5	0.4	1.3	62.3	65.7	36.7
Dhar	28.7	28.6	30.6	4.1	3.8	9.8	0.7	0.7	1.1	61.9	62.7	48.9
Dindori	9.0	8.8	21.7	1.5	1.3	13.9	0.4	0.4	0.8	78.4	78.8	53.8
East Nimar	14.6	13.6	39.7	1.9	1.6	10.0	0.6	0.5	0.9	74.8	76.2	39.2
Guna	18.5	17.8	33.2	1.4	0.9	10.6	0.6	0.5	1.9	72.0	73.4	44.7
Gwalior	31.5	20.0	59.9	6.5	1.1	20.1	0.9	0.3	2.5	56.5	71.1	20.3
Harda	19.4	18.6	35.8	1.4	1.0	8.0	0.4	0.3	0.7	71.2	72.8	41.5
Hoshangabad	32.8	29.5	59.0	3.9	1.8	20.4	0.6	0.5	0.9	58.5	62.5	26.9
Indore	44.7	31.7	59.3	11.4	3.5	20.2	1.3	0.5	2.1	37.4	54.3	18.4
Jabalpur	32.1	24.2	57.7	5.8	1.7	19.0	0.8	0.4	2.1	59.8	69.6	28.1
Jhabua	21.1	20.8	30.5	2.1	1.7	12.8	0.5	0.5	1.1	72.8	73.8	41.0
Katni	31.7	30.9	41.0	1.5	1.1	5.8	0.3	0.3	0.5	62.3	63.5	49.1
Mandla	18.4	17.9	43.6	1.9	1.5	18.5	0.5	0.4	2.9	73.3	74.1	34.4
Mandsaur	38.3	37.5	45.8	5.2	4.0	16.8	0.7	0.7	0.8	48.3	50.4	27.8
Morena	24.4	16.9	50.2	4.3	1.6	13.5	0.9	0.6	1.7	66.1	76.2	31.1
Narsimhapur	20.2	19.3	32.8	2.3	1.6	11.1	0.4	0.3	1.0	72.1	74.0	47.0
Neemuch	38.9	37.6	47.0	3.5	2.0	13.3	0.4	0.3	1.3	50.0	52.5	34.3
Panna	26.4	26.1	32.3	1.2	1.1	3.6	0.3	0.3	1.0	67.7	68.0	60.8
Raisen	17.8	17.0	30.5	1.8	1.4	8.3	0.5	0.5	0.7	71.2	73.1	43.3
Rajgarh	25.1	25.0	25.8	3.0	2.3	10.2	0.8	0.8	1.4	59.5	61.7	38.0
Ratlam	27.0	25.3	54.6	3.2	2.3	18.2	0.3	0.3	1.1	65.5	68.0	25.2
Rewa	39.3	39.5	37.0	1.3	1.1	4.7	0.3	0.2	0.8	55.9	56.1	52.8
Sagar	15.8	14.5	38.4	1.7	0.9	14.7	0.7	0.5	4.0	77.2	79.0	45.8
Satna	32.0	32.0	32.3	1.2	1.1	2.9	0.2	0.2	0.4	62.1	62.4	58.0
Sehore	21.6	19.8	47.9	2.4	1.5	15.0	0.5	0.5	0.5	67.2	69.5	32.9
Seoni	28.5	28.1	45.9	2.0	1.6	19.4	0.3	0.3	1.4	65.0	65.6	36.8
Shahdol	39.1	38.0	51.3	2.0	1.3	8.6	0.3	0.3	0.4	55.1	56.6	39.5
Shajapur	32.8	32.0	40.1	3.2	2.2	13.2	0.4	0.4	0.5	52.1	54.4	30.9
Sheopur	21.0	20.9	25.6	0.7	0.6	3.2	0.3	0.3	0.3	71.9	72.5	51.4
Shivpuri	18.3	17.9	28.3	1.2	0.9	7.0	0.5	0.4	1.5	74.1	74.9	53.7
Sidhi	28.3	27.4	43.8	1.4	0.9	10.1	0.3	0.3	0.8	65.5	66.6	45.0
Tikamgarh	28.5	27.4	39.2	1.7	1.1	6.7	0.3	0.2	0.9	63.7	65.4	46.9
Ujjain	40.2	33.1	54.0	7.4	3.4	15.1	0.6	0.3	1.2	44.2	54.6	24.2
Umaria	37.5	36.8	45.6	1.6	1.4	3.8	0.3	0.3	0.4	56.4	57.0	48.6
Vidisha	12.3	10.9	32.1	2.2	1.3	14.4	0.4	0.3	1.1	73.5	76.3	35.6
West Nimar	20.9	20.3	35.8	3.4	3.0	13.3	0.7	0.7	0.8	69.1	70.0	46.9
Madhya Pradesh	25.9	24.3	45.2	2.7	1.8	14.2	0.5	0.4	1.4	65.7	68.1	36.2

Source: Census of India, 2001.

HA 15: Distribution of Households by Separate Kitchen and Type of Fuels Used, 2001

District	Availability of Separate Kitchen			Firewood			Crop Residue			Cowdung Cake		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Anuppur												
Ashoknagar												
Balaghat	73.7	72.1	85.0	90.4%	95.5%	54.2%	0.9%	0.9%	1.2%	0.1%	0.1%	0.1%
Barwani	57.3	54.0	75.3	53.4%	56.9%	34.3%	31.8%	36.2%	8.1%	1.9%	2.1%	0.7%
Betul	88.6	88.5	88.9	79.5%	91.3%	31.1%	1.0%	1.0%	0.8%	3.4%	4.2%	0.2%
Bhind	39.5	36.2	50.3	55.0%	53.3%	60.6%	15.0%	17.7%	5.8%	22.5%	27.8%	5.1%
Bhopal	67.0	52.2	70.5	24.2%	80.7%	11.2%	1.1%	2.3%	0.9%	2.6%	11.5%	0.6%
Burhanpur												
Chhatarpur	54.5	53.9	56.9	81.6%	87.3%	58.9%	2.3%	2.5%	1.3%	7.3%	8.9%	1.1%
Chhindwara	64.0	60.5	74.6	76.5%	90.5%	33.8%	1.4%	1.4%	1.2%	1.2%	1.4%	0.4%
Damoh	53.7	52.9	57.5	81.6%	86.1%	59.3%	2.5%	2.5%	2.1%	7.8%	9.3%	0.6%
Datia	44.1	42.0	52.4	47.3%	47.9%	44.7%	3.2%	3.4%	2.4%	38.8%	46.5%	8.4%
Dewas	69.5	68.5	72.1	67.5%	78.8%	38.1%	2.3%	2.4%	1.8%	9.9%	13.5%	0.6%
Dhar	57.6	54.9	70.8	49.3%	53.2%	31.2%	21.7%	25.8%	2.4%	10.5%	12.2%	2.5%
Dindori	85.5	85.4	87.2	96.2%	97.8%	63.1%	1.2%	1.2%	0.9%	0.3%	0.3%	0.1%
East Nimar	56.4	53.3	65.6	63.4%	72.3%	36.8%	14.2%	18.1%	2.2%	1.8%	2.2%	0.6%
Guna	57.3	57.1	58.2	64.3%	69.8%	44.3%	2.7%	2.9%	1.9%	19.9%	25.0%	1.8%
Gwalior	52.3	36.1	62.9	30.1%	41.8%	22.6%	2.7%	4.6%	1.4%	21.9%	49.0%	4.3%
Harda	64.3	61.8	73.7	80.5%	90.7%	42.9%	2.1%	2.3%	1.0%	0.3%	0.3%	0.1%
Hoshangabad	56.6	46.8	78.8	66.3%	81.2%	32.8%	2.3%	2.8%	1.1%	7.4%	10.6%	0.3%
Indore	78.0	71.3	80.8	20.0%	42.5%	10.7%	1.3%	2.5%	0.9%	10.2%	33.5%	0.6%
Jabalpur	61.2	48.0	73.2	56.9%	90.5%	26.5%	2.2%	3.0%	1.5%	1.4%	2.5%	0.4%
Jhabua	20.4	15.6	66.6	75.0%	80.1%	26.5%	11.5%	12.5%	2.1%	3.5%	3.7%	1.5%
Katni	57.3	56.0	63.0	83.6%	94.6%	37.8%	1.9%	1.9%	1.8%	0.8%	0.9%	0.6%
Mandla	79.5	78.8	86.3	91.2%	95.7%	47.2%	1.3%	1.3%	1.4%	0.2%	0.2%	0.1%
Mandsaur	49.8	48.3	56.9	69.4%	77.7%	32.5%	10.0%	11.7%	2.4%	2.1%	2.5%	0.4%
Morena	39.7	34.9	57.7	51.5%	52.5%	47.5%	28.2%	34.3%	5.5%	9.8%	11.7%	2.7%
Narsimhapur	51.4	48.6	66.5	75.8%	83.9%	31.9%	3.0%	3.3%	1.6%	6.7%	7.9%	0.5%
Neemuch	50.6	47.5	59.2	64.0%	73.6%	36.9%	12.1%	15.7%	2.0%	1.2%	1.1%	1.5%
Panna	60.5	60.9	57.1	75.7%	77.3%	64.1%	2.0%	2.1%	1.6%	16.4%	18.5%	1.4%
Raisen	62.5	62.6	62.3	74.2%	80.3%	46.9%	3.4%	3.8%	1.6%	9.6%	11.7%	0.3%
Rajgarh	49.0	46.9	58.8	69.9%	75.1%	44.7%	3.3%	3.6%	1.8%	15.2%	18.0%	1.6%
Ratlam	42.1	29.7	72.0	59.0%	73.3%	24.0%	11.3%	15.3%	1.5%	4.1%	5.5%	0.6%
Rewa	87.9	89.8	76.8	37.9%	36.6%	45.6%	2.2%	2.3%	1.7%	52.1%	59.3%	10.0%
Sagar	50.3	44.4	67.0	75.5%	84.9%	48.7%	1.9%	2.2%	1.1%	8.2%	10.6%	1.3%
Satna	80.5	84.6	63.8	64.8%	68.9%	47.8%	1.5%	1.6%	1.4%	22.3%	26.8%	4.0%
Sehore	72.0	72.8	68.2	77.5%	85.8%	39.5%	2.0%	2.2%	1.1%	6.9%	8.3%	0.5%
Seoni	77.8	76.9	86.4	86.5%	91.5%	42.4%	0.9%	1.0%	0.7%	3.5%	3.9%	0.7%
Shahdol	82.2	82.4	81.3	78.7%	94.3%	28.3%	0.9%	0.9%	0.8%	0.9%	1.0%	0.7%
Shajapur	56.0	53.6	67.0	82.2%	89.9%	47.5%	2.4%	2.6%	1.8%	3.5%	4.1%	1.2%
Sheopur	23.6	20.4	40.8	64.8%	68.8%	43.4%	8.9%	9.6%	4.8%	17.5%	19.7%	5.8%
Shivpuri	39.9	37.1	54.3	70.2%	76.0%	40.0%	2.8%	3.0%	2.0%	16.0%	18.9%	1.1%
Sidhi	87.8	89.2	79.4	81.4%	89.4%	35.3%	2.4%	2.6%	1.5%	6.4%	6.8%	4.0%
Tikamgarh	50.3	48.8	58.0	84.3%	88.4%	62.2%	2.3%	2.3%	2.0%	6.8%	7.7%	2.4%
Ujjain	62.7	57.0	71.6	51.6%	71.8%	19.8%	2.3%	2.9%	1.3%	12.3%	19.7%	0.7%
Umaria	74.1	74.9	69.7	87.4%	94.2%	49.0%	1.2%	1.2%	1.1%	0.3%	0.3%	0.1%
Vidisha	56.3	56.0	57.5	47.6%	51.5%	33.1%	1.5%	1.5%	1.7%	35.8%	44.3%	4.7%
West Nimar	56.8	55.5	64.3	40.2%	41.2%	34.7%	43.9%	50.7%	6.5%	0.6%	0.6%	0.5%
Madhya Pradesh	61.7	59.0	69.6	64.6%	75.9%	32.0%	5.9%	7.4%	1.7%	9.8%	12.7%	1.5%

Source: Census of India, 2001.

HA 15: Distribution of Households by Separate Kitchen and Type of Fuels Used, 2001

District	Coal/Lignite/Charcoal			Kerosene			LPG		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	0.1%	0.0%	0.2%	2.8%	0.8%	17.2%	3.6%	0.6%	25.4%
Barwani	0.2%	0.1%	0.8%	2.4%	1.2%	8.7%	9.6%	2.8%	46.3%
Betul	3.3%	0.1%	16.1%	3.7%	1.3%	13.6%	8.4%	1.4%	37.1%
Bhind	0.0%	0.0%	0.1%	1.1%	0.3%	3.6%	6.0%	0.6%	24.0%
Bhopal	0.3%	0.0%	0.4%	25.8%	1.3%	31.4%	44.9%	3.1%	54.5%
Burhanpur				Included in East Nimar					
Chhatarpur	0.0%	0.0%	0.1%	1.9%	0.2%	8.8%	6.5%	0.7%	28.9%
Chhindwara	5.8%	2.0%	17.2%	5.2%	1.7%	15.7%	9.0%	2.0%	30.4%
Damoh	0.1%	0.0%	0.2%	1.3%	0.3%	6.5%	6.2%	1.3%	30.6%
Datia	0.0%	0.0%	0.0%	2.3%	0.4%	9.9%	7.9%	1.2%	33.9%
Dewas	0.2%	0.0%	0.7%	4.3%	0.8%	13.5%	14.5%	3.0%	44.3%
Dhar	0.0%	0.0%	0.1%	5.1%	1.7%	21.2%	12.0%	5.7%	41.6%
Dindori	0.2%	0.0%	4.9%	1.0%	0.3%	15.2%	0.8%	0.1%	14.4%
East Nimar	0.0%	0.0%	0.1%	3.5%	1.3%	10.1%	15.8%	4.7%	49.5%
Guna	0.1%	0.0%	0.3%	3.8%	0.8%	14.7%	8.6%	0.9%	36.2%
Gwalior	0.1%	0.0%	0.1%	9.6%	1.2%	15.1%	34.7%	2.5%	55.6%
Harda	0.0%	0.0%	0.1%	3.0%	0.6%	11.9%	11.5%	2.9%	43.1%
Hoshangabad	0.1%	0.0%	0.1%	4.2%	0.6%	12.1%	18.7%	3.5%	52.8%
Indore	0.7%	0.1%	0.9%	11.1%	3.7%	14.2%	55.4%	16.3%	71.6%
Jabalpur	0.1%	0.0%	0.2%	8.6%	0.8%	15.7%	30.0%	2.6%	54.8%
Jhabua	0.1%	0.0%	0.2%	2.7%	1.4%	15.5%	6.8%	2.0%	53.1%
Katni	0.5%	0.1%	2.3%	3.9%	1.1%	15.9%	8.6%	1.0%	40.6%
Mandla	0.5%	0.4%	1.2%	2.3%	0.8%	16.2%	4.1%	1.1%	33.1%
Mandsaur	0.1%	0.1%	0.4%	3.5%	1.7%	11.2%	13.6%	5.1%	51.8%
Morena	0.0%	0.0%	0.1%	1.5%	0.1%	6.7%	8.5%	1.0%	36.6%
Narsimhapur	0.1%	0.1%	0.2%	5.5%	1.4%	27.4%	7.4%	2.0%	37.1%
Neemuch	0.1%	0.0%	0.2%	4.2%	1.8%	11.0%	17.3%	6.7%	47.5%
Panna	0.0%	0.0%	0.1%	0.9%	0.4%	4.2%	4.2%	1.0%	27.9%
Raisen	0.0%	0.0%	0.1%	3.9%	1.3%	16.1%	7.9%	2.1%	34.5%
Rajgarh	0.0%	0.0%	0.1%	4.8%	1.7%	20.0%	6.1%	1.0%	30.9%
Ratlam	0.3%	0.1%	1.0%	3.5%	1.1%	9.3%	21.1%	4.1%	62.6%
Rewa	0.1%	0.0%	0.1%	1.8%	0.5%	9.2%	5.3%	0.7%	32.2%
Sagar	0.3%	0.0%	0.9%	2.7%	0.4%	9.4%	10.6%	1.1%	37.6%
Satna	0.1%	0.1%	0.2%	2.7%	0.6%	11.2%	8.0%	1.5%	34.6%
Sehore	0.0%	0.0%	0.1%	3.3%	0.6%	15.5%	9.5%	2.3%	42.5%
Seoni	0.0%	0.0%	0.1%	2.1%	0.7%	14.3%	5.3%	1.3%	40.7%
Shahdol	10.9%	2.5%	37.8%	1.6%	0.4%	5.5%	6.5%	0.6%	25.7%
Shajapur	0.1%	0.1%	0.1%	3.5%	1.1%	14.1%	7.5%	1.6%	34.0%
Sheopur	0.0%	0.0%	0.0%	1.5%	0.2%	8.8%	6.5%	0.9%	36.5%
Shivpuri	0.0%	0.0%	0.1%	3.2%	0.6%	16.5%	7.2%	1.0%	39.3%
Sidhi	1.1%	0.0%	6.9%	1.4%	0.3%	7.6%	6.9%	0.6%	42.7%
Tikamgarh	0.0%	0.0%	0.1%	0.8%	0.1%	4.1%	5.4%	1.1%	28.6%
Ujjain	0.5%	0.1%	1.3%	4.9%	0.8%	11.5%	27.4%	3.9%	64.4%
Umariya	4.7%	1.0%	25.7%	1.3%	0.4%	6.1%	4.7%	2.5%	16.5%
Vidisha	0.1%	0.1%	0.1%	3.7%	0.6%	15.0%	10.7%	1.5%	44.6%
West Nimar	0.0%	0.0%	0.1%	3.1%	1.8%	10.3%	10.6%	3.9%	46.9%
Madhya Pradesh	0.8%	0.2%	2.5%	4.4%	0.9%	14.5%	13.6%	2.2%	46.8%

Source: Census of India, 2001.

HA 15: Distribution of Households by Separate Kitchen and Type of Fuels Used, 2001

District	Electricity			Biogas			Any other			No cooking		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Anuppur												
Ashoknagar												
Balaghat	0.0%	0.0%	0.1%	1.9%	2.0%	1.2%	0.0%	0.0%	0.0%	0.1%	0.1%	0.5%
Barwani	0.1%	0.1%	0.1%	0.4%	0.4%	0.3%	0.0%	0.0%	0.1%	0.2%	0.1%	0.6%
Betul	0.1%	0.1%	0.1%	0.4%	0.4%	0.3%	0.1%	0.1%	0.0%	0.2%	0.1%	0.5%
Bhind	0.2%	0.1%	0.4%	0.2%	0.1%	0.3%	0.0%	0.0%	0.0%	0.1%	0.1%	0.2%
Bhopal	0.2%	0.1%	0.2%	0.2%	0.5%	0.2%	0.2%	0.4%	0.1%	0.4%	0.1%	0.5%
Burhanpur												
Chhatarpur	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%	0.0%	0.0%	0.1%	0.2%	0.1%	0.5%
Chhindwara	0.1%	0.1%	0.0%	0.6%	0.6%	0.6%	0.1%	0.0%	0.2%	0.3%	0.2%	0.5%
Damoh	0.1%	0.1%	0.1%	0.3%	0.3%	0.2%	0.1%	0.1%	0.0%	0.2%	0.1%	0.4%
Datia	0.1%	0.0%	0.2%	0.2%	0.2%	0.1%	0.2%	0.3%	0.0%	0.2%	0.1%	0.3%
Dewas	0.1%	0.1%	0.1%	1.0%	1.3%	0.4%	0.0%	0.0%	0.0%	0.2%	0.1%	0.5%
Dhar	0.1%	0.1%	0.3%	0.8%	0.8%	0.3%	0.2%	0.2%	0.1%	0.2%	0.2%	0.4%
Dindori	0.2%	0.2%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.1%	0.0%	0.9%
East Nimar	0.0%	0.1%	0.0%	0.9%	1.1%	0.2%	0.1%	0.1%	0.0%	0.2%	0.1%	0.4%
Guna	0.1%	0.1%	0.2%	0.2%	0.2%	0.2%	0.1%	0.2%	0.0%	0.2%	0.1%	0.4%
Gwalior	0.3%	0.1%	0.4%	0.3%	0.4%	0.2%	0.1%	0.1%	0.0%	0.3%	0.1%	0.4%
Harda	0.1%	0.0%	0.1%	2.3%	2.9%	0.2%	0.0%	0.0%	0.0%	0.2%	0.1%	0.6%
Hoshangabad	0.1%	0.1%	0.1%	0.7%	0.9%	0.2%	0.0%	0.0%	0.0%	0.3%	0.2%	0.5%
Indore	0.0%	0.1%	0.0%	0.5%	0.8%	0.4%	0.2%	0.4%	0.1%	0.5%	0.2%	0.6%
Jabalpur	0.1%	0.1%	0.0%	0.2%	0.2%	0.3%	0.2%	0.1%	0.2%	0.3%	0.1%	0.5%
Jhabua	0.0%	0.0%	0.1%	0.2%	0.2%	0.4%	0.0%	0.0%	0.0%	0.1%	0.1%	0.8%
Katni	0.2%	0.1%	0.3%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.2%	0.1%	0.6%
Mandla	0.1%	0.1%	0.0%	0.2%	0.2%	0.3%	0.0%	0.0%	0.0%	0.1%	0.1%	0.4%
Mandsaur	0.1%	0.1%	0.0%	0.8%	0.9%	0.3%	0.1%	0.1%	0.1%	0.3%	0.2%	0.9%
Morena	0.1%	0.1%	0.3%	0.2%	0.2%	0.4%	0.0%	0.0%	0.0%	0.1%	0.1%	0.3%
Narsimhapur	0.1%	0.1%	0.0%	1.1%	1.2%	0.3%	0.1%	0.0%	0.2%	0.3%	0.2%	0.7%
Neemuch	0.1%	0.1%	0.0%	0.6%	0.7%	0.3%	0.2%	0.2%	0.2%	0.3%	0.2%	0.5%
Panna	0.1%	0.1%	0.1%	0.2%	0.2%	0.1%	0.3%	0.3%	0.0%	0.2%	0.1%	0.6%
Raisen	0.1%	0.1%	0.1%	0.6%	0.7%	0.1%	0.1%	0.1%	0.0%	0.2%	0.1%	0.3%
Rajgarh	0.1%	0.0%	0.1%	0.3%	0.3%	0.3%	0.1%	0.1%	0.0%	0.2%	0.1%	0.6%
Ratlam	0.1%	0.1%	0.0%	0.3%	0.3%	0.3%	0.1%	0.1%	0.0%	0.3%	0.1%	0.6%
Rewa	0.1%	0.1%	0.3%	0.2%	0.2%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.4%
Sagar	0.1%	0.1%	0.1%	0.4%	0.4%	0.4%	0.1%	0.1%	0.0%	0.2%	0.1%	0.4%
Satna	0.1%	0.1%	0.1%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.2%	0.1%	0.5%
Sehore	0.1%	0.1%	0.1%	0.5%	0.5%	0.2%	0.0%	0.0%	0.1%	0.2%	0.1%	0.5%
Seoni	0.1%	0.1%	0.0%	1.2%	1.3%	0.4%	0.1%	0.1%	0.1%	0.2%	0.1%	0.6%
Shahdol	0.1%	0.0%	0.2%	0.2%	0.2%	0.4%	0.0%	0.0%	0.1%	0.2%	0.1%	0.6%
Shajapur	0.1%	0.1%	0.1%	0.4%	0.4%	0.5%	0.0%	0.0%	0.0%	0.3%	0.2%	0.7%
Sheopur	0.1%	0.1%	0.2%	0.2%	0.2%	0.0%	0.4%	0.5%	0.0%	0.1%	0.1%	0.4%
Shivpuri	0.1%	0.1%	0.1%	0.2%	0.1%	0.4%	0.1%	0.1%	0.0%	0.1%	0.1%	0.4%
Sidhi	0.2%	0.1%	1.2%	0.1%	0.1%	0.2%	0.0%	0.0%	0.1%	0.2%	0.2%	0.5%
Tikamgarh	0.1%	0.1%	0.0%	0.2%	0.1%	0.3%	0.0%	0.0%	0.0%	0.1%	0.1%	0.3%
Ujjain	0.1%	0.1%	0.1%	0.4%	0.5%	0.3%	0.1%	0.1%	0.0%	0.4%	0.2%	0.7%
Umaria	0.2%	0.2%	0.1%	0.1%	0.1%	0.5%	0.1%	0.0%	0.3%	0.2%	0.1%	0.7%
Vidisha	0.0%	0.0%	0.1%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.2%	0.1%	0.6%
West Nimar	0.1%	0.1%	0.1%	1.2%	1.3%	0.5%	0.1%	0.1%	0.0%	0.2%	0.2%	0.5%
Madhya Pradesh	0.1%	0.1%	0.1%	0.5%	0.5%	0.3%	0.1%	0.1%	0.1%	0.2%	0.1%	0.5%

Source: Census of India, 2001.

HA 16: Electricity Consumers and Consumption: Rural, Urban, and Villages Electrified, 2003–04

District	Per Capita Domestic Consumption per Consumer (Kwh)			Per Capita Non-Domestic Consumption per Consumer (Kwh)			Consumption per Industrial Unit (Kwh)		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	548	446	888	859	609	1038	96761	125047	23787
Barwani	557	392	846	839	680	907	11559	10144	13302
Betul	514	337	932	1100	695	1345	140851	24190	416818
Bhind	607	302	929	1157	534	1276	69513	166985	8853
Bhopal	1291	425	1344	2117	1429	2138	74837	8158	84321
Burhanpur				Included in East Nimar					
Chhattarpur	682	350	1027	1089	455	1221	192320	376209	13663
Chhindwara	527	411	928	902	689	1030	89206	46090	236071
Damoh	464	308	617	712	431	785	85478	75896	96350
Datia	533	363	854	834	619	885	130792	121482	140781
Dewas	743	569	1086	866	528	1058	74261	7235	169944
Dhar	593	480	782	902	682	1028	140663	42022	247867
Dindori	401	352	803	677	489	1062	29004	31108	6909
East Nimar	772	472	1066	1132	795	1218	50524	177753	18739
Guna	636	495	833	815	606	866	18219	27396	9601
Gwalior	1112	443	1234	1949	1184	1978	44865	4982	51774
Harda	715	539	984	928	648	1015	79602	11647	130248
Hoshangabad	714	480	918	1243	935	1301	108761	37583	181873
Indore	1216	586	1295	1650	948	1671	43507	4432	45857
Jabalpur	847	403	998	1375	1195	1390	50114	22785	60006
Jhabua	483	361	810	782	509	970	48832	62705	12310
Katni	559	313	892	987	693	1054	73061	21544	140379
Mandla	492	396	926	839	707	979	9773	7978	16297
Mandsaur	534	379	991	640	445	787	40753	8757	98117
Morena	716	298	1033	884	502	927	62681	62832	62611
Narsimhpur	549	402	750	919	632	1003	9755	10000	9445
Neemuch	662	414	1096	750	513	879	206644	175139	239764
Panna	540	376	820	967	616	1098	13280	3686	27359
Raisen	578	459	792	1113	826	1177	172782	12445	276519
Rajgarh	505	331	798	787	584	882	15112	12049	19379
Ratlam	754	465	1050	892	775	931	50166	23064	78968
Rewa	617	465	753	1155	536	1290	114166	4208	210119
Sagar	519	296	669	1044	663	1090	64790	13525	87878
Satna	624	408	850	965	809	990	114072	70289	150579
Sehore	589	432	931	938	632	1044	53539	2864	153961
Seoni	488	366	820	801	676	901	5663	4414	11242
Shahdol	595	396	936	986	757	1039	275516	62175	484193
Shajapur	626	543	845	723	529	846	28031	8708	92440
Sheopur	522	367	849	712	428	956	3236	2293	4906
Shivpuri	668	438	944	818	610	923	7147	7812	6112
Sidhi	520	365	720	900	575	1012	320745	62516	646872
Tikamgarh	509	323	632	791	422	846	20914	35289	9142
Ujjain	793	477	1069	993	521	1082	41444	3265	58462
Umariya	544	354	1181	942	773	1043	310206	47026	919950
Vidisha	618	416	940	965	734	1004	47176	2971	77886
West Nimar	648	529	917	969	708	1133	27053	21445	39712
Madhya Pradesh	713	423	1013	1179	657	1305	98342	41614	91259

Source: Compendium of Power Statistics 2003–04, MP State Electricity Board.

HA 16: Electricity Consumers and Consumption: Rural, Urban, and Villages Electrified, 2003–4

District	Consumption per Agriculture Unit (Kwh)			Households with Domestic connections (in %)		
	Total	Rural	Urban	Total	Rural	Urban
Anuppur			Included in Shahdol			
Ashoknagar			Included in Guna			
Balaghat	2464	2465	2455	36.7	32.2	68.5
Barwani	7169	6624	10560	43.5	32.8	101.3
Betul	3417	3431	3089	40.1	34.9	61.3
Bhind	6819	6927	6098	29.9	20.0	62.7
Bhopal	6208	6329	5637	65.7	20.6	76.1
Burhanpur			Included in East Nimar			
Chhattarpur	2865	2746	3534	17.7	11.3	42.7
Chhindwara	3692	3707	2856	59.8	61.5	54.5
Damoh	3109	3212	2814	35.2	21.0	105.8
Datia	11049	11259	7301	40.1	33.0	68.0
Dewas	5083	4955	8317	57.7	53.0	69.8
Dhar	7675	7788	7076	52.6	39.8	112.4
Dindori	821	759	2154	19.4	18.1	45.5
East Nimar	6430	6167	8522	43.1	28.4	87.3
Guna	4768	4828	3783	41.6	31.0	79.8
Gwalior	6749	6233	9265	61.0	23.8	85.2
Harda	5267	5362	4400	39.4	30.3	72.8
Hoshangabad	5577	5396	7698	45.3	30.5	78.3
Indore	7006	7150	6878	81.7	31.4	102.5
Jabalpur	15830	16002	15142	61.7	33.0	87.7
Jhabua	2662	2594	2992	36.2	29.1	104.8
Katni	3200	3212	3126	39.7	28.3	87.9
Mandla	970	941	1775	34.0	30.8	65.1
Mandsaur	2188	2221	1018	58.6	53.5	81.1
Morena	6504	6435	7027	26.8	14.6	72.2
Narsimhpur	3827	3911	3495	40.4	27.6	109.9
Neemuch	4313	4367	2436	38.2	32.9	53.4
Panna	3150	3212	2989	21.3	15.3	66.2
Raisen	5186	5046	6549	40.3	31.6	79.5
Rajgarh	3621	3619	3642	29.0	21.9	63.0
Ratlam	6737	6923	5518	55.6	39.8	94.0
Rewa	5822	5045	6757	29.3	16.2	106.0
Sagar	2933	2938	2922	46.8	25.5	107.2
Satna	5002	4647	5776	33.2	21.1	82.9
Sehore	5404	5336	7628	45.2	37.7	79.4
Seoni	4257	4308	3541	23.7	27.5	90.0
Shahdol	2097	2071	2230	32.2	26.7	50.1
Shajapur	4400	4414	4162	43.6	38.6	66.2
Sheopur	604	609	0	18.3	14.8	37.7
Shivpuri	9532	9183	15654	23.7	15.4	66.3
Sidhi	2407	2191	2843	18.4	12.2	54.0
Tikamgarh	1629	1699	1513	27.5	13.1	104.1
Ujjain	6258	5628	14625	65.8	50.0	90.6
Umaria	3047	2781	4668	24.0	21.8	36.3
Vidisha	6123	6105	6330	38.4	30.0	69.1
West Nimar	4903	4773	8016	48.0	39.3	96.0
Madhya Pradesh	4866	4756	5603	42.5	29.0	81.7

Source: Compendium of Power Statistics 2003–04, MP State Electricity Board.

HA 16: Electricity Consumers and Consumption: Rural, Urban, and Villages Electrified, 2003–04

District	Households with Access to electricity: Census 2001 (in %)			Villages Electrified		
	Total	Rural	Urban	Total Villages: Census 2001	Electrified Villages	Share of electrified villages
Anuppur			Included in Shahdol			
Ashoknagar			Included in Guna			
Balaghat	58.3	54.8	82.8	1388	1173	84.5
Barwani	65.6	60.6	93.2	740	637	86.1
Betul	74.8	70.0	94.6	1406	1322	94.0
Bhind	43.2	32.5	78.8	933	872	93.5
Bhopal	96.3	87.0	98.5	542	511	94.3
Burhanpur			Included in East Nimar			
Chhattarpur	46.6	37.5	82.0	1192	1063	89.2
Chhindwara	84.6	82.3	91.7	1984	1897	95.6
Damoh	64.7	59.6	90.2	1399	1129	80.7
Datia	67.4	62.4	86.9	602	571	94.9
Dewas	89.1	86.5	95.9	1134	1053	92.9
Dhar	82.8	80.4	94.3	1571	1479	94.1
Dindori	37.3	34.9	86.7	930	845	90.9
East Nimar	82.6	79.3	92.3	1068	1056	98.9
Guna	69.2	63.4	90.1	2265	2040	90.1
Gwalior	86.0	71.6	95.3	776	559	72.0
Harda	88.8	87.0	95.4	571	446	78.1
Hoshangabad	81.5	75.6	94.5	983	882	89.7
Indore	95.2	89.8	97.4	645	620	96.1
Jabalpur	82.4	70.0	93.6	1449	1345	92.8
Jhabua	49.1	44.7	91.5	1357	1292	95.2
Katni	63.2	57.2	88.5	955	849	88.9
Mandla	49.4	45.2	90.4	1234	1156	93.7
Mandsaur	86.8	84.6	96.5	943	899	95.3
Morena	54.6	45.1	90.0	799	755	94.5
Narsimhpur	74.6	72.0	89.0	1081	1038	96.0
Neemuch	90.4	88.4	96.3	880	674	76.6
Panna	34.6	28.6	78.6	1048	923	88.1
Raisen	74.5	70.8	91.3	1509	1360	90.1
Rajgarh	85.2	83.4	94.0	1736	1664	95.9
Ratlam	81.4	75.4	95.9	1077	1051	97.6
Rewa	52.0	46.4	84.6	2725	2195	80.6
Sagar	69.2	61.5	90.8	2081	1801	86.5
Satna	62.6	56.9	86.1	2040	1681	82.4
Sehore	84.9	82.7	94.7	1072	1008	94.0
Seoni	66.7	64.3	88.9	1613	1558	96.6
Shahdol	44.1	31.6	84.3	1444	1300	90.0
Shajapur	90.3	89.3	94.8	1124	1065	94.8
Sheopur	64.8	59.9	91.7	607	487	80.2
Shivpuri	61.0	55.1	91.6	1459	1271	87.1
Sidhi	38.3	31.5	77.0	1882	1805	95.9
Tikamgarh	49.3	44.4	75.2	973	862	88.6
Ujjain	90.2	86.2	96.4	1135	1092	96.2
Umaria	48.0	42.6	78.2	662	558	84.3
Vidisha	68.4	61.9	92.3	1624	1487	91.6
West Nimar	84.4	82.5	94.7	1431	1143	79.9
Madhya Pradesh	70.0	62.3	92.3	56069	50474	90.0

Source: Compendium of Power Statistics 2003–04, MP State Electricity Board.

HA 17: Distribution of Households by Source of Lighting, 2001

District	Electricity (%)			Kerosene (%)			Solar Energy (%)		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	58.3	54.8	82.8	41.4	44.9	16.7	0.1	0.1	0.1
Barwani	65.6	60.6	93.2	33.6	38.6	6.2	0.2	0.2	0.2
Betul	74.8	70.0	94.6	24.9	29.7	5.1	0.1	0.1	0.1
Bhind	43.2	32.5	78.8	56.1	67.0	20.4	0.3	0.3	0.2
Bhopal	96.3	87.0	98.5	3.3	12.6	1.2	0.1	0.1	0.1
Burhanpur				Included in East Nimar					
Chhatarpur	46.6	37.5	82.0	53.1	62.2	17.3	0.1	0.1	0.2
Chhindwara	84.6	82.3	91.7	14.9	17.2	7.7	0.1	0.1	0.2
Damoh	64.7	59.6	90.2	34.8	40.0	8.9	0.2	0.2	0.3
Datia	67.4	62.4	86.9	31.8	36.9	11.6	0.2	0.3	0.1
Dewas	89.1	86.5	95.9	10.5	13.2	3.4	0.1	0.1	0.1
Dhar	82.8	80.4	94.3	16.6	19.0	5.1	0.1	0.1	0.2
Dindori	37.3	34.9	86.7	62.3	64.7	12.2	0.2	0.2	0.2
East Nimar	82.6	79.3	92.3	16.8	20.1	6.9	0.1	0.1	0.2
Guna	69.2	63.4	90.1	30.2	36.0	9.2	0.1	0.1	0.2
Gwalior	86.0	71.6	95.3	13.3	27.9	3.8	0.1	0.1	0.1
Harda	88.8	87.0	95.4	10.9	12.7	4.0	0.1	0.1	0.2
Hoshangabad	81.5	75.6	94.5	18.0	23.8	5.0	0.2	0.1	0.2
Indore	95.2	89.8	97.4	4.2	9.5	2.0	0.2	0.2	0.2
Jabalpur	82.4	70.0	93.6	17.0	29.6	5.6	0.2	0.1	0.3
Jhabua	49.1	44.7	91.5	50.7	55.1	8.0	0.1	0.1	0.3
Katni	63.2	57.2	88.5	36.5	42.5	10.9	0.1	0.1	0.3
Mandla	49.4	45.2	90.4	50.0	54.3	9.2	0.2	0.2	0.2
Mandsaur	86.8	84.6	96.5	12.8	15.0	3.0	0.1	0.1	0.2
Morena	54.6	45.1	90.0	44.9	54.4	9.3	0.1	0.1	0.1
Narsimhapur	74.6	72.0	89.0	24.7	27.4	9.8	0.2	0.2	0.2
Neemuch	90.4	88.4	96.3	9.2	11.2	3.4	0.1	0.1	0.1
Panna	34.6	28.6	78.6	64.9	70.9	20.9	0.2	0.2	0.2
Raisen	74.5	70.8	91.3	25.0	28.7	8.2	0.2	0.2	0.1
Rajgarh	85.2	83.4	94.0	14.3	16.2	5.1	0.1	0.1	0.2
Ratlam	81.4	75.4	95.9	18.3	24.4	3.6	0.1	0.1	0.2
Rewa	52.0	46.4	84.6	47.5	53.1	14.8	0.2	0.2	0.1
Sagar	69.2	61.5	90.8	30.6	38.3	8.8	0.1	0.1	0.2
Satna	62.6	56.9	86.1	37.1	42.8	13.5	0.1	0.1	0.1
Sehore	84.9	82.7	94.7	14.5	16.6	4.6	0.1	0.1	0.1
Seoni	66.7	64.3	88.9	32.8	35.3	10.4	0.2	0.2	0.3
Shahdol	44.1	31.6	84.3	55.6	68.1	15.2	0.1	0.1	0.1
Shajapur	90.3	89.3	94.8	9.3	10.3	4.7	0.1	0.1	0.1
Sheopur	64.8	59.9	91.7	34.4	39.3	7.9	0.2	0.2	0.0
Shivpuri	61.0	55.1	91.6	38.5	44.4	7.9	0.1	0.1	0.1
Sidhi	38.3	31.5	77.0	60.7	67.4	22.3	0.1	0.1	0.1
Tikamgarh	49.3	44.4	75.2	50.3	55.3	24.3	0.1	0.1	0.1
Ujjain	90.2	86.2	96.4	9.5	13.6	3.1	0.1	0.1	0.1
Umaria	48.0	42.6	78.2	51.5	56.8	21.5	0.1	0.1	0.1
Vidisha	68.4	61.9	92.3	31.2	37.8	7.2	0.1	0.1	0.1
West Nimar	84.4	82.5	94.7	15.1	16.9	4.9	0.1	0.1	0.1
Madhya Pradesh	70.0	62.3	92.3	29.5	37.2	7.1	0.1	0.1	0.2

Source: Census of India, 2001.

HA 17: Distribution of Households by Source of Lighting, 2001

District	Other oil (%)			Any other (%)			No lighting (%)		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.2
Barwani	0.0	0.0	0.0	0.1	0.1	0.2	0.4	0.5	0.2
Betul	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Bhind	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.4
Bhopal	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1
Burhanpur				Included in East Nimar					
Chhatarpur	0.1	0.1	0.2	0.1	0.0	0.2	0.1	0.0	0.2
Chhindwara	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Damoh	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.4
Datia	0.1	0.1	0.1	0.1	0.1	0.4	0.3	0.1	1.0
Dewas	0.1	0.1	0.1	0.0	0.1	0.0	0.2	0.1	0.5
Dhar	0.1	0.1	0.1	0.0	0.0	0.1	0.3	0.4	0.2
Dindori	0.1	0.1	0.3	0.1	0.1	0.2	0.0	0.0	0.4
East Nimar	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.3	0.4
Guna	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.4
Gwalior	0.1	0.2	0.1	0.2	0.0	0.3	0.4	0.3	0.4
Harda	0.1	0.1	0.1	0.0	0.0	0.2	0.1	0.1	0.1
Hoshangabad	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.2
Indore	0.0	0.0	0.0	0.1	0.2	0.1	0.3	0.3	0.3
Jabalpur	0.1	0.0	0.1	0.1	0.0	0.1	0.3	0.3	0.3
Jhabua	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Katni	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Mandla	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Mandsaur	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.2	0.1
Morena	0.2	0.3	0.1	0.0	0.0	0.1	0.2	0.1	0.4
Narsimhapur	0.1	0.1	0.0	0.1	0.1	0.1	0.3	0.2	0.8
Neemuch	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.2	0.1
Panna	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.1
Raisen	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.2	0.2
Rajgarh	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2
Ratlam	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.2
Rewa	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Sagar	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Satna	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Sehore	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3
Seoni	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Shahdol	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Shajapur	0.1	0.1	0.0	0.1	0.1	0.0	0.2	0.1	0.2
Sheopur	0.1	0.1	0.0	0.3	0.4	0.0	0.2	0.2	0.3
Shivpuri	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3
Sidhi	0.2	0.2	0.1	0.2	0.2	0.3	0.6	0.6	0.2
Tikamgarh	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2
Ujjain	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.3
Umaria	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.0
Vidisha	0.1	0.1	0.0	0.1	0.0	0.2	0.1	0.1	0.2
West Nimar	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2
Madhya Pradesh	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2

Source: Census of India, 2001.

ED 1: Crude Literacy Rate, 2001

District	Total			Rural			Urban			Gender Ratio among Literates	
	All	Male	Female	All	Male	Female	All	Male	Female		
Anuppur				Included in Shahdol							
Ashoknagar				Included in Guna							
Balaghat	68.7	80.6	57.2	66.7	79.1	54.7	82.1	90.1	74.0	732	
Barwani	41.5	51.0	31.8	35.4	44.7	25.8	74.5	83.8	64.7	607	
Betul	66.4	76.8	55.6	62.0	73.2	50.5	84.5	91.1	77.4	698	
Bhind	70.5	83.2	55.2	69.1	82.4	53.0	75.0	85.7	62.3	550	
Bhopal	74.6	81.9	66.4	52.7	66.9	36.5	79.6	85.4	73.1	721	
Burhanpur				Included in East Nimar							
Chhatarpur	53.3	65.3	39.3	47.4	60.3	32.3	73.2	82.2	62.8	516	
Chhindwara	65.8	76.4	54.6	60.5	72.3	48.3	81.3	88.5	73.4	679	
Damoh	61.8	74.7	47.3	57.1	71.1	41.4	80.9	89.4	71.5	566	
Datia	71.8	84.3	57.2	70.0	83.5	54.1	78.3	87.2	68.0	580	
Dewas	60.9	75.7	45.0	54.6	71.3	36.8	77.1	87.0	66.3	553	
Dhar	52.5	65.7	38.6	47.8	61.6	33.6	75.0	84.5	64.0	561	
Dindori	54.2	70.0	38.2	52.8	68.9	36.6	81.0	90.6	70.8	542	
East Nimar	61.8	73.7	48.9	55.8	69.6	41.0	77.2	84.5	69.4	621	
Guna	59.5	74.1	42.9	55.3	71.0	37.2	74.7	85.4	62.8	506	
Gwalior	69.4	80.4	56.4	53.4	69.2	34.4	79.4	87.5	69.9	594	
Harda	66.5	77.9	54.1	61.7	74.1	48.1	83.4	91.0	74.9	636	
Hoshangabad	70.0	80.8	57.8	63.0	75.6	48.8	84.8	91.9	76.9	637	
Indore	75.2	84.6	64.8	57.5	74.2	39.8	82.3	88.7	75.2	700	
Jabalpur	75.7	84.6	65.9	63.8	76.8	49.7	84.2	90.0	77.6	705	
Jhabua	36.9	48.0	25.7	32.3	43.5	21.1	80.5	88.8	71.6	531	
Katni	63.6	77.9	48.2	58.5	74.7	41.3	81.5	89.2	73.0	581	
Mandla	59.6	73.7	45.5	56.5	71.4	41.7	85.2	92.1	77.9	617	
Mandsaur	70.3	85.2	54.7	67.8	84.0	50.9	81.1	90.5	71.1	615	
Morena	64.7	79.9	46.2	61.6	77.9	41.6	75.6	86.9	62.3	474	
Narsimhapur	77.7	86.1	68.5	76.4	85.2	66.7	84.4	90.7	77.5	721	
Neemuch	66.2	82.5	49.0	61.1	79.8	41.8	78.7	89.3	67.4	566	
Panna	61.4	73.3	48.0	59.1	71.6	45.1	76.4	84.9	66.7	585	
Raisen	72.2	81.6	61.3	70.8	80.6	59.6	77.9	85.8	68.7	652	
Rajgarh	53.7	69.1	37.1	49.7	66.0	32.3	72.3	83.8	59.7	499	
Ratlam	67.2	79.5	54.3	60.8	75.1	45.9	80.9	88.9	72.5	654	
Rewa	62.0	75.6	47.6	59.2	73.5	44.2	76.0	85.7	64.9	594	
Sagar	67.7	79.4	54.4	61.3	74.7	45.9	82.5	90.3	73.6	598	
Satna	64.6	77.1	51.0	61.0	74.5	46.7	77.9	86.7	67.8	611	
Sehore	63.1	77.3	47.4	59.8	75.4	42.6	77.4	85.6	68.2	555	
Seoni	65.6	77.2	53.8	63.2	75.3	50.8	85.8	92.2	79.0	685	
Shahdol	58.7	71.8	45.0	52.2	66.4	37.7	77.0	86.3	66.7	598	
Shajapur	70.9	83.3	57.4	69.1	82.1	55.1	78.2	88.4	67.2	638	
Sheopur	46.4	61.8	29.1	42.6	58.6	24.6	66.1	78.2	52.2	417	
Shivpuri	58.9	74.1	40.8	55.4	71.8	36.0	75.2	85.2	63.7	466	
Sidhi	52.3	67.4	36.0	48.8	64.4	32.2	72.2	83.6	58.6	495	
Tikamgarh	55.7	68.7	41.0	52.8	66.4	37.3	69.0	79.3	57.6	525	
Ujjain	70.9	83.0	57.9	64.2	79.1	48.4	80.9	88.9	72.3	654	
Umaria	59.1	72.9	44.5	56.5	70.7	41.4	72.3	83.3	60.2	576	
Vidisha	61.8	74.2	47.4	57.3	71.0	41.3	77.6	85.7	68.3	549	
West Nimar	63.0	74.8	50.6	60.2	72.5	47.2	78.1	86.9	68.7	641	
Madhya Pradesh	63.7	76.1	50.3	57.8	71.7	42.8	79.4	87.4	70.5	606	

Source: Census of India, 2001.

ED 2: Education Status of Population Aged 19 Years and Above

District	Illiteracy			Literacy without Education Level			Literacy Below Primary		
	All	Male	Female	All	Male	Female	All	Male	Female
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	40.3	23.6	56.3	1.5	1.6	1.3	14.7	18.3	11.2
Barwani	64.2	52.3	76.3	4.1	4.9	3.3	7.7	10.5	4.9
Betul	42.9	28.6	57.6	4.4	4.4	4.4	14.1	18.3	9.8
Bhind	40.0	22.4	59.8	2.8	2.5	3.1	8.1	8.3	8.0
Bhopal	30.2	20.1	41.5	1.5	1.6	1.4	4.8	5.4	4.1
Burhanpur				Included in East Nimar					
Chhatarpur	57.9	42.8	75.0	2.7	3.5	1.8	5.6	7.9	3.0
Chhindwara	42.6	28.4	57.4	4.2	4.2	4.3	13.9	17.3	10.3
Damoh	48.5	31.0	67.2	1.9	2.0	1.7	11.1	14.7	7.3
Datia	36.3	19.3	55.1	7.6	5.6	9.9	11.0	11.9	9.9
Dewas	47.2	28.0	67.2	2.4	2.4	2.3	10.4	13.2	7.5
Dhar	53.9	37.5	70.6	4.3	4.9	3.8	9.1	11.8	6.3
Dindori	54.7	34.9	74.1	4.4	4.9	3.9	11.8	17.3	6.3
East Nimar	44.2	28.6	60.4	2.4	2.5	2.2	16.9	21.2	12.5
Guna	47.9	29.7	68.1	7.3	8.0	6.5	11.8	15.3	7.9
Gwalior	37.2	22.4	54.0	1.3	1.4	1.1	5.3	6.5	3.9
Harda	40.2	25.2	56.1	3.2	3.1	3.3	18.0	20.6	15.2
Hoshangabad	38.0	23.3	54.1	2.6	2.5	2.7	11.2	13.1	9.2
Indore	29.1	16.8	42.4	1.5	1.6	1.3	6.7	7.2	6.0
Jabalpur	30.1	17.9	43.5	1.5	1.5	1.5	8.0	9.1	6.8
Jhabua	68.8	56.5	80.8	7.7	9.9	5.6	5.6	8.1	3.2
Katni	44.9	26.1	64.6	1.8	1.9	1.6	10.9	14.8	6.9
Mandla	49.8	31.7	67.3	3.6	3.8	3.3	12.6	17.3	8.0
Mandsaur	36.8	17.5	56.5	4.0	2.8	5.2	18.4	20.7	16.0
Morena	46.7	26.1	70.1	2.1	2.3	1.8	7.1	8.8	5.2
Narsimhapur	28.4	17.1	40.5	6.4	5.1	7.9	19.0	19.6	18.3
Neemuch	41.1	20.2	62.7	2.1	1.8	2.3	13.6	16.9	10.1
Panna	47.0	31.6	63.7	11.4	11.5	11.3	9.3	11.7	6.6
Raisen	35.7	22.6	50.4	7.2	6.3	8.2	15.4	16.2	14.6
Rajgarh	56.2	38.0	75.3	4.4	4.8	4.0	10.2	13.6	6.6
Ratlam	37.9	22.5	53.6	9.0	8.3	9.7	13.6	16.0	11.1
Rewa	50.1	32.0	68.5	1.8	2.0	1.5	4.3	5.5	3.1
Sagar	40.8	24.5	58.9	1.8	1.9	1.8	10.9	13.5	7.9
Satna	46.3	29.4	64.2	3.1	3.2	3.1	6.6	8.2	5.0
Sehore	47.3	28.4	67.5	3.8	3.6	3.9	11.1	13.8	8.2
Seoni	44.8	28.8	60.7	3.3	3.4	3.2	14.5	18.6	10.4
Shahdol	52.5	35.3	70.3	4.2	4.9	3.6	8.4	11.6	5.0
Shajapur	36.6	20.9	53.1	10.3	6.5	14.3	18.4	21.2	15.4
Sheopur	62.6	44.3	82.9	3.2	4.1	2.3	7.8	11.5	3.6
Shivpuri	49.3	30.6	70.6	7.1	7.3	6.9	11.9	16.1	7.2
Sidhi	59.0	41.0	77.9	4.2	4.9	3.4	7.7	11.2	4.0
Tikamgarh	55.8	39.6	73.6	4.4	4.6	4.3	4.8	6.3	3.1
Ujjain	34.4	19.2	50.3	7.1	5.3	8.9	13.1	15.3	10.9
Umaria	51.7	33.9	70.3	5.2	5.3	5.1	9.3	12.8	5.7
Vidisha	47.6	30.6	66.7	2.2	2.5	1.9	11.6	14.7	8.1
West Nimar	43.0	27.4	58.9	7.4	6.3	8.5	14.7	17.8	11.4
Madhya Pradesh	44.3	28.2	61.3	4.0	3.9	4.0	10.5	13.0	7.9

Source: Census of India, 2001.

ED 2: Education Status of Population Aged 19 Years and Above

District	Primary			Middle			Matriculation/ Secondary			Higher Secondary/ Intermediate/Pre- University/Senior School		
	All	Male	Female	All	Male	Female	All	Male	Female	All	Male	Female
Anuppur	Included in Shahdol											
Ashoknagar	Included in Guna											
Balaghat	17.3	20.6	14.0	10.5	13.0	8.1	7.0	9.8	4.3	4.3	6.1	2.6
Barwani	9.3	12.2	6.3	5.1	6.7	3.5	3.4	4.6	2.2	3.1	4.4	1.8
Betul	13.1	16.0	10.1	8.4	9.8	6.9	7.3	9.4	5.1	4.6	6.0	3.2
Bhind	14.4	15.7	13.0	14.8	20.1	8.8	8.7	13.7	3.1	6.6	10.1	2.7
Bhopal	11.5	12.4	10.4	10.9	12.9	8.7	10.0	11.9	7.8	11.0	12.3	9.4
Burhanpur	Included in East Nimar											
Chhatarpur	12.2	15.8	8.2	8.3	11.4	4.8	4.3	6.2	2.2	4.5	6.3	2.5
Chhindwara	13.4	16.3	10.4	8.1	10.0	6.1	7.6	9.9	5.2	5.0	6.6	3.3
Damoh	15.2	19.2	10.9	9.9	13.8	5.7	5.8	8.4	3.0	3.7	5.3	2.0
Datia	17.4	22.6	11.7	12.3	17.9	6.1	5.9	9.0	2.5	4.9	7.1	2.6
Dewas	14.4	18.9	9.6	9.6	14.0	4.9	6.1	9.2	2.8	5.4	7.9	2.8
Dhar	12.0	16.0	7.9	7.5	10.7	4.2	4.7	6.9	2.4	4.7	6.6	2.7
Dindori	12.3	17.4	7.4	7.5	10.7	4.4	3.9	6.0	1.8	3.1	5.0	1.3
East Nimar	15.1	19.4	10.7	7.2	9.6	4.8	5.7	7.5	3.8	3.9	5.1	2.6
Guna	13.8	19.7	7.2	7.3	10.9	3.3	3.8	5.5	1.9	3.8	5.1	2.3
Gwalior	12.2	14.1	10.0	11.9	14.9	8.4	9.1	12.0	5.7	9.3	11.6	6.7
Harda	16.0	19.0	12.7	8.3	11.5	4.9	5.8	8.3	3.2	3.8	5.4	2.2
Hoshangabad	14.8	16.8	12.6	10.4	13.4	7.1	8.9	12.2	5.2	5.8	7.6	3.9
Indore	13.8	15.4	12.2	12.3	14.8	9.6	10.8	13.4	7.9	9.4	11.2	7.5
Jabalpur	14.5	15.5	13.4	12.4	14.6	9.9	12.9	16.5	9.0	8.0	9.9	5.9
Jhabua	6.0	8.5	3.6	3.9	5.6	2.2	2.6	3.7	1.5	2.7	3.8	1.6
Katni	14.4	18.1	10.5	10.2	13.6	6.6	7.4	10.7	3.9	5.4	7.9	2.9
Mandla	12.8	16.7	9.0	7.9	10.9	5.0	5.6	8.4	2.9	3.8	5.4	2.3
Mandsaur	17.8	24.7	10.8	9.5	14.3	4.5	5.2	7.8	2.5	4.3	6.3	2.3
Morena	13.0	16.0	9.7	12.5	17.7	6.6	8.2	12.9	2.7	5.8	9.0	2.1
Narsimhapur	17.1	18.5	15.6	10.7	13.4	7.7	8.2	11.9	4.3	5.3	7.6	2.9
Neemuch	16.6	22.4	10.5	9.8	14.3	5.0	6.2	9.0	3.2	5.2	7.4	2.9
Panna	11.9	15.4	8.1	8.3	11.8	4.6	4.3	6.6	1.9	4.4	6.5	2.1
Raisen	16.4	19.3	13.2	10.2	14.1	5.7	5.8	8.6	2.7	4.6	6.5	2.5
Rajgarh	11.6	16.8	6.2	6.7	10.3	2.9	3.9	6.1	1.6	3.5	5.2	1.8
Ratlam	14.7	19.5	9.9	8.8	12.5	5.0	5.2	7.1	3.2	5.0	6.5	3.5
Rewa	8.7	9.6	7.9	10.5	12.8	8.1	8.4	12.8	4.0	9.6	14.9	4.3
Sagar	17.0	20.6	13.0	11.1	14.7	7.1	7.1	9.7	4.2	5.0	6.6	3.2
Satna	12.5	14.4	10.6	11.1	14.3	7.7	7.4	10.9	3.6	7.1	10.6	3.3
Sehore	15.0	20.2	9.5	9.3	14.0	4.3	4.9	7.6	2.2	4.3	6.3	2.2
Seoni	15.6	18.9	12.3	8.2	10.6	5.8	5.7	8.1	3.4	3.7	5.3	2.1
Shahdol	11.2	14.5	7.8	8.3	11.1	5.3	5.1	7.3	2.8	5.4	8.0	2.8
Shajapur	15.9	22.9	8.6	7.9	12.3	3.4	4.0	6.2	1.7	3.5	5.1	1.8
Sheopur	10.4	15.4	4.8	6.5	9.9	2.7	3.4	5.2	1.4	3.4	5.3	1.4
Shivpuri	12.6	18.4	6.1	7.6	11.4	3.3	3.7	5.5	1.6	3.9	5.5	2.2
Sidhi	8.7	11.7	5.5	7.1	10.2	3.8	4.6	7.2	2.0	4.9	7.7	1.9
Tikamgarh	12.2	15.9	8.1	9.5	13.9	4.7	4.8	7.3	2.1	5.3	7.8	2.5
Ujjain	15.9	21.0	10.6	9.6	13.4	5.7	6.2	8.4	3.9	5.9	7.4	4.3
Umaria	12.0	16.0	7.9	8.3	11.7	4.8	4.7	7.1	2.2	4.8	7.3	2.2
Vidisha	16.3	21.1	10.9	8.5	12.2	4.2	4.4	6.2	2.3	4.0	5.2	2.6
West Nimar	14.7	19.6	9.7	7.5	10.3	4.7	4.6	6.6	2.4	4.2	6.1	2.3
Madhya Pradesh	13.6	17.0	9.9	9.4	12.7	5.9	6.5	9.1	3.7	5.5	7.6	3.3

Source: Census of India, 2001.

ED 2: Education Status of Population Aged 19 Years and Above

District	Non Technical Diploma or Certified not equal to a Degree			Technical Diploma or Certified not equal to a Degree			Graduate and above Level		
	All	Male	Female	All	Male	Female	All	Male	Female
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	0.01	0.02	0.01	0.22	0.40	0.04	4.3	6.5	2.1
Barwani	0.00	0.01	0.00	0.09	0.15	0.02	2.9	4.2	1.6
Betul	0.01	0.01	0.00	0.23	0.41	0.04	5.0	7.0	3.0
Bhind	0.01	0.01	0.00	0.07	0.11	0.02	4.5	7.1	1.6
Bhopal	0.14	0.21	0.05	0.79	1.35	0.17	19.2	21.8	16.3
Burhanpur				Included in East Nimar					
Chhatarpur	0.01	0.02	0.00	0.15	0.25	0.03	4.2	5.8	2.3
Chhindwara	0.01	0.02	0.01	0.20	0.36	0.04	5.0	6.9	3.1
Damoh	0.01	0.02	0.00	0.13	0.23	0.02	3.8	5.2	2.2
Datia	0.01	0.01	0.00	0.08	0.15	0.01	4.5	6.6	2.2
Dewas	0.02	0.03	0.01	0.25	0.46	0.04	4.3	5.9	2.8
Dhar	0.01	0.02	0.00	0.15	0.28	0.02	3.7	5.3	2.1
Dindori	0.00	0.01	0.00	0.05	0.10	0.00	2.2	3.6	0.8
East Nimar	0.02	0.04	0.01	0.32	0.54	0.10	4.3	5.7	2.8
Guna	0.01	0.02	0.00	0.12	0.21	0.02	4.3	5.6	2.8
Gwalior	0.04	0.06	0.02	0.44	0.74	0.11	13.3	16.2	10.0
Harda	0.02	0.03	0.00	0.19	0.35	0.03	4.6	6.5	2.5
Hoshangabad	0.02	0.03	0.01	0.27	0.48	0.05	8.0	10.7	5.1
Indore	0.06	0.09	0.03	0.42	0.70	0.12	16.0	18.8	12.9
Jabalpur	0.07	0.11	0.02	0.44	0.75	0.10	12.1	14.1	9.9
Jhabua	0.01	0.01	0.00	0.08	0.14	0.03	2.7	3.8	1.5
Katni	0.01	0.02	0.00	0.17	0.30	0.03	4.8	6.5	3.0
Mandla	0.01	0.01	0.00	0.10	0.18	0.03	3.8	5.6	2.1
Mandsaur	0.01	0.01	0.00	0.10	0.19	0.02	4.0	5.7	2.2
Morena	0.01	0.01	0.00	0.09	0.17	0.01	4.5	6.9	1.6
Narsimhapur	0.01	0.02	0.00	0.11	0.19	0.02	4.7	6.6	2.7
Neemuch	0.01	0.02	0.01	0.20	0.37	0.02	5.3	7.5	3.1
Panna	0.01	0.02	0.01	0.07	0.12	0.01	3.2	4.7	1.5
Raisen	0.01	0.02	0.01	0.08	0.13	0.02	4.5	6.2	2.6
Rajgarh	0.01	0.01	0.00	0.07	0.13	0.01	3.3	4.9	1.6
Ratlam	0.01	0.02	0.00	0.18	0.31	0.04	5.5	7.2	3.9
Rewa	0.01	0.02	0.00	0.24	0.44	0.03	6.3	10.0	2.5
Sagar	0.01	0.02	0.00	0.16	0.26	0.04	6.1	8.2	3.9
Satna	0.01	0.02	0.00	0.20	0.36	0.03	5.6	8.5	2.5
Sehore	0.02	0.02	0.02	0.07	0.12	0.01	4.1	6.0	2.2
Seoni	0.01	0.02	0.00	0.13	0.24	0.02	4.0	5.9	2.1
Shahdol	0.02	0.03	0.00	0.25	0.46	0.03	4.7	6.9	2.3
Shajapur	0.01	0.01	0.00	0.07	0.13	0.01	3.2	4.8	1.6
Sheopur	0.01	0.01	0.00	0.06	0.10	0.01	2.7	4.2	1.1
Shivpuri	0.01	0.02	0.00	0.12	0.18	0.05	3.6	5.0	2.0
Sidhi	0.02	0.03	0.00	0.27	0.51	0.03	3.5	5.5	1.4
Tikamgarh	0.01	0.01	0.00	0.09	0.16	0.02	3.1	4.4	1.6
Ujjain	0.02	0.03	0.01	0.26	0.45	0.05	7.5	9.6	5.4
Umaria	0.01	0.02	0.00	0.21	0.39	0.02	3.6	5.5	1.7
Vidisha	0.02	0.03	0.01	0.12	0.20	0.02	5.3	7.1	3.2
West Nimar	0.01	0.02	0.01	0.16	0.30	0.02	3.7	5.4	2.0
Madhya Pradesh	0.02	0.03	0.01	0.21	0.37	0.04	6.0	8.1	3.9

Source: Census of India, 2001.

ED 3: Persons Educationally Deprived in Madhya Pradesh, 2001

District	Percentage of Educationally Deprived in Age Groups 7 and above											
	Total			Rural			Urban					
	Persons	Male	Female	Persons	Male	Female	Persons	Male	Female			
Anuppur				Included in Shahdol								
Ashoknagar				Included in Guna								
Balaghat	31.7%	19.8%	43.3%	33.8%	21.3%	45.8%	18.3%	10.5%	26.3%			
Barwani	59.2%	49.8%	68.9%	65.3%	55.9%	74.9%	26.7%	17.4%	36.5%			
Betul	34.5%	24.2%	45.3%	39.1%	27.9%	50.5%	15.9%	9.4%	23.0%			
Bhind	29.8%	17.0%	45.3%	31.3%	17.8%	47.7%	25.2%	14.5%	37.8%			
Bhopal	25.6%	18.3%	33.8%	47.4%	33.0%	63.8%	20.6%	14.9%	27.0%			
Burhanpur				Included in East Nimar								
Chhatarpur	46.6%	34.6%	60.6%	52.4%	39.4%	67.6%	26.9%	18.0%	37.1%			
Chhindwara	34.9%	24.2%	46.1%	40.3%	28.5%	52.5%	19.2%	12.0%	26.9%			
Damoh	39.0%	25.8%	53.7%	43.7%	29.4%	59.6%	19.9%	11.4%	29.4%			
Datia	28.6%	15.9%	43.4%	30.5%	16.8%	46.7%	21.9%	12.9%	32.2%			
Dewas	39.4%	24.3%	55.6%	45.7%	28.6%	64.0%	23.2%	13.1%	34.1%			
Dhar	48.3%	34.9%	62.3%	53.0%	39.0%	67.3%	25.7%	16.2%	36.7%			
Dindori	46.8%	31.1%	62.7%	48.2%	32.2%	64.3%	19.8%	10.3%	29.9%			
East Nimar	39.4%	27.4%	52.3%	45.5%	31.6%	60.4%	23.8%	16.5%	31.4%			
Guna	41.1%	26.4%	58.0%	45.5%	29.5%	63.8%	25.8%	15.2%	37.8%			
Gwalior	30.7%	19.7%	43.7%	46.6%	30.7%	65.8%	20.8%	12.7%	30.2%			
Harda	34.6%	22.9%	47.2%	39.6%	26.8%	53.4%	17.1%	9.5%	25.6%			
Hoshangabad	30.4%	19.4%	42.8%	37.5%	24.6%	52.0%	15.4%	8.3%	23.2%			
Indore	25.1%	15.7%	35.5%	42.7%	25.8%	60.8%	18.0%	11.6%	25.1%			
Jabalpur	25.2%	16.2%	35.1%	37.1%	23.9%	51.5%	16.7%	10.9%	23.2%			
Jhabua	63.7%	52.6%	74.9%	68.3%	57.1%	79.5%	20.1%	11.9%	29.0%			
Katni	37.2%	22.6%	52.7%	42.4%	25.9%	59.8%	19.0%	11.4%	27.4%			
Mandla	41.2%	27.0%	55.3%	44.3%	29.3%	59.2%	15.3%	8.3%	22.6%			
Mandsaur	31.2%	15.8%	47.3%	34.0%	17.1%	51.5%	19.8%	10.3%	29.9%			
Morena	35.9%	20.6%	54.5%	39.0%	22.6%	59.3%	24.8%	13.6%	38.0%			
Narsimhapur	23.7%	14.9%	33.3%	25.1%	15.8%	35.3%	16.3%	10.0%	23.2%			
Neemuch	35.1%	18.4%	52.6%	40.3%	21.2%	60.1%	21.9%	11.3%	33.4%			
Panna	39.3%	27.2%	52.9%	41.6%	29.0%	55.8%	24.1%	15.6%	33.6%			
Raisen	28.9%	19.1%	40.1%	30.4%	20.2%	42.0%	22.4%	14.6%	31.6%			
Rajgarh	46.8%	31.1%	63.8%	50.9%	34.3%	68.7%	27.9%	16.4%	40.5%			
Ratlam	34.2%	21.5%	47.4%	40.8%	26.0%	56.2%	19.8%	11.8%	28.2%			
Rewa	37.6%	24.0%	52.1%	40.4%	26.0%	55.4%	24.0%	14.4%	35.0%			
Sagar	33.1%	21.1%	46.7%	39.5%	25.8%	55.4%	18.3%	10.4%	27.2%			
Satna	35.6%	23.0%	49.3%	39.2%	25.6%	53.7%	22.6%	13.8%	32.6%			
Sehore	37.4%	22.9%	53.4%	40.7%	24.8%	58.3%	22.9%	14.8%	32.1%			
Seoni	35.3%	23.6%	47.1%	37.8%	25.5%	50.2%	14.7%	8.4%	21.5%			
Shahdol	41.9%	28.8%	55.7%	48.6%	34.3%	63.2%	23.2%	14.0%	33.5%			
Shajapur	30.7%	17.6%	44.8%	32.6%	19.0%	47.4%	22.4%	12.1%	33.7%			
Sheopur	53.6%	38.2%	70.9%	57.3%	41.4%	75.3%	34.2%	22.2%	47.9%			
Shivpuri	41.6%	26.3%	59.8%	45.1%	28.6%	64.7%	25.3%	15.3%	36.8%			
Sidhi	47.8%	32.7%	64.1%	51.3%	35.7%	67.8%	28.0%	16.7%	41.5%			
Tikamgarh	44.6%	31.5%	59.4%	47.5%	33.8%	63.2%	31.1%	20.9%	42.6%			
Ujjain	30.4%	17.8%	43.9%	37.6%	22.0%	54.1%	19.7%	11.7%	28.3%			
Umaria	41.7%	27.8%	56.5%	44.4%	30.0%	59.6%	28.4%	17.2%	40.6%			
Vidisha	38.4%	25.8%	53.0%	42.8%	28.8%	59.1%	22.9%	14.9%	32.1%			
West Nimar	38.7%	26.7%	51.2%	41.6%	29.1%	54.8%	23.1%	14.4%	32.6%			
Madhya Pradesh	36.9%	24.4%	50.5%	42.9%	28.8%	58.2%	21.1%	13.1%	29.9%			

Source: Census of India, 2001.

ED 3: Persons Educationally Deprived in Madhya Pradesh, 2001

District	Illiterates in Population 15 Years and above (%)								
	Total			Rural			Urban		
	All	Male	Female	All	Male	Female	All	Male	Female
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	36.5	21.6	50.7	39.1	23.5	53.8	20.3	10.4	30.4
Barwani	62.2	50.7	73.9	69.2	57.8	80.7	27.8	16.5	39.8
Betul	39.1	26.3	52.5	44.3	30.5	58.4	18.5	10.0	27.8
Bhind	36.2	19.9	55.6	38.2	21.2	58.8	29.7	16.0	45.7
Bhopal	28.0	19.0	38.2	54.8	37.2	74.8	22.4	15.2	30.5
Burhanpur				Including in East Nimar					
Chhatarpur	54.2	39.6	71.2	61.5	45.9	79.8	30.2	18.9	43.2
Chhindwara	39.2	26.2	52.8	45.5	31.2	60.3	21.7	12.5	31.7
Damoh	45.1	28.9	63.1	50.8	33.4	70.3	22.0	11.2	34.2
Datia	33.4	17.6	51.7	35.9	18.9	55.8	24.9	13.4	37.9
Dewas	44.1	26.1	63.3	51.3	31.1	72.7	26.1	13.7	39.5
Dhar	51.3	35.8	67.4	56.7	40.6	72.9	27.0	15.6	40.3
Dindori	51.3	32.7	69.9	52.8	33.9	71.6	21.5	9.9	34.4
East Nimar	41.8	27.3	57.1	48.5	31.9	66.1	25.1	15.9	34.9
Guna	45.2	27.9	65.0	50.0	31.5	71.3	28.6	15.2	43.5
Gwalior	34.5	21.0	50.3	54.0	34.5	77.4	23.1	13.0	34.8
Harda	37.4	23.5	52.5	42.9	27.9	59.2	18.8	9.2	29.5
Hoshangabad	34.7	21.4	49.8	43.1	27.6	60.7	17.5	8.6	27.5
Indore	27.1	15.8	39.5	48.2	28.0	69.6	19.0	11.3	27.7
Jabalpur	27.5	16.6	39.7	42.5	26.3	60.1	17.4	10.1	25.6
Jhabua	66.7	54.5	78.7	71.9	59.7	83.8	21.3	11.2	32.1
Katni	41.7	24.2	60.3	48.1	28.3	68.8	20.4	10.9	31.0
Mandla	46.3	29.4	63.0	50.0	32.1	67.5	16.9	8.2	26.0
Mandsaur	34.2	16.3	52.8	37.4	17.9	57.4	21.4	9.8	33.7
Morena	42.8	23.6	66.0	46.8	26.1	72.0	29.0	14.5	45.9
Narsimhapur	26.0	15.6	37.5	27.7	16.8	39.7	17.8	9.9	26.4
Neemuch	38.5	19.0	58.7	44.4	22.3	67.0	23.9	10.9	37.8
Panna	43.7	29.2	60.0	46.4	31.3	63.2	26.9	16.1	39.2
Raisen	32.5	20.5	46.5	34.2	21.8	48.6	25.3	15.1	37.4
Rajgarh	53.0	35.2	72.0	57.7	39.1	77.2	31.6	17.4	47.1
Ratlam	35.8	21.3	50.7	42.9	26.2	59.9	21.3	11.5	31.6
Rewa	45.3	28.4	63.1	49.1	31.2	67.4	27.5	15.5	41.3
Sagar	37.4	22.6	54.5	45.3	28.3	65.1	20.0	9.9	31.4
Satna	42.3	26.6	59.3	46.9	30.0	64.8	25.8	14.6	38.7
Sehore	43.5	25.7	62.9	47.4	28.1	68.5	26.7	16.0	38.7
Seoni	40.9	26.4	55.6	44.0	28.8	59.3	16.6	8.4	25.4
Shahdol	48.3	32.2	65.1	55.6	38.4	73.2	27.2	15.4	40.7
Shajapur	34.0	19.1	49.9	36.1	20.6	52.5	25.1	12.5	38.8
Sheopur	59.7	41.6	79.9	64.1	45.4	84.8	37.9	22.7	55.0
Shivpuri	46.7	28.7	67.8	50.7	31.5	73.4	27.9	15.3	42.3
Sidhi	55.3	37.6	74.3	59.3	41.2	78.3	32.7	18.5	50.1
Tikamgarh	52.1	36.4	69.9	56.0	39.6	74.6	34.9	22.2	49.1
Ujjain	32.3	17.9	47.4	39.9	22.5	58.1	21.3	11.5	31.7
Umaria	47.8	31.0	65.6	51.1	33.8	69.3	31.8	17.9	47.4
Vidisha	44.2	28.5	62.7	49.8	32.4	70.4	25.6	15.2	37.4
West Nimar	40.5	26.1	55.6	43.7	28.6	59.5	24.2	13.5	35.8
Madhya Pradesh	41.2	26.2	57.4	48.3	31.5	66.5	23.1	13.2	34.2

Source: Census of India, 2001.

ED 3: Persons Educationally Deprived in Madhya Pradesh, 2001

District	Share of Persons Attending Educational Institution in Age Group 7–14 Years (in %)									
	Total			Rural			Urban			
	All	Male	Female	All	Male	Female	All	Male	Female	
Anuppur				Included in Shahdol						
Ashoknagar				Included in Guna						
Balaghat	84.3	86.1	82.4	83.6	85.7	81.6	88.9	89.1	88.6	
Barwani	48.1	52.5	43.5	43.8	48.4	39.0	77.1	79.5	74.4	
Betul	78.7	81.9	75.4	75.7	79.5	71.8	92.3	92.4	92.2	
Bhind	88.0	91.1	84.1	88.1	91.6	83.7	87.7	89.6	85.3	
Bhopal	82.6	84.1	81.0	71.8	77.9	64.9	85.8	86.0	85.6	
Burhanpur				Including in East Nimar						
Chhatarpur	73.9	79.0	68.0	71.5	77.5	64.5	82.9	84.6	80.9	
Chhindwara	77.8	81.5	73.9	74.4	79.2	69.4	89.6	89.8	89.4	
Damoh	79.1	83.3	74.4	77.3	82.3	71.7	87.1	88.1	86.1	
Datia	85.7	89.2	81.6	85.4	89.3	80.6	87.1	88.6	85.3	
Dewas	74.4	81.0	67.1	70.2	78.3	61.3	85.9	88.5	83.1	
Dhar	60.4	67.8	52.6	57.2	65.3	48.6	78.7	81.7	75.4	
Dindori	67.6	73.9	61.2	66.7	73.2	60.0	86.1	88.2	84.1	
East Nimar	67.5	72.4	62.1	62.9	69.3	55.9	80.8	81.5	80.1	
Guna	70.1	77.8	61.1	66.8	75.9	56.3	82.2	85.0	79.1	
Gwalior	80.7	84.1	76.6	72.6	79.0	64.7	87.0	88.2	85.5	
Harda	73.6	78.9	67.8	69.7	76.1	62.8	88.4	89.7	87.0	
Hoshangabad	82.8	86.7	78.6	78.9	84.2	73.2	92.2	92.7	91.7	
Indore	82.1	85.0	78.9	73.9	81.0	66.2	86.2	87.0	85.3	
Jabalpur	83.2	85.1	81.1	79.9	84.1	75.5	85.9	86.0	85.9	
Jhabua	43.3	51.6	34.5	40.0	48.6	30.7	83.8	86.3	81.1	
Katni	77.4	82.5	71.9	75.2	81.4	68.5	86.2	87.1	85.3	
Mandla	75.2	80.4	69.8	73.6	79.2	67.7	90.7	91.4	90.0	
Mandsaur	78.8	86.0	71.1	77.1	85.5	68.2	86.3	88.0	84.4	
Morena	82.0	86.9	75.9	80.7	86.4	73.6	86.9	88.8	84.6	
Narsimhapur	84.2	87.7	80.4	83.4	87.4	79.0	89.0	89.5	88.5	
Neemuch	76.4	83.7	68.7	73.2	82.3	63.5	85.1	87.3	82.7	
Panna	73.2	78.6	67.3	71.6	77.5	65.0	84.4	85.7	82.9	
Raisen	81.4	84.9	77.5	80.3	84.4	75.8	86.3	87.0	85.4	
Rajgarh	71.9	81.2	61.5	69.4	80.0	57.6	83.3	86.5	79.7	
Ratlam	70.9	77.9	63.3	65.1	74.4	55.0	85.7	86.9	84.3	
Rewa	83.4	87.8	78.6	82.8	87.7	77.6	86.7	88.8	84.4	
Sagar	79.7	83.4	75.6	76.8	81.5	71.4	87.3	88.2	86.3	
Satna	83.5	87.1	79.5	82.5	86.8	77.9	87.2	88.4	85.8	
Sehore	79.5	85.0	73.4	77.6	84.1	70.3	88.3	88.9	87.7	
Seoni	81.8	84.8	78.8	80.7	84.0	77.4	92.2	91.9	92.5	
Shahdol	77.8	81.8	73.6	73.7	78.6	68.6	88.9	90.3	87.3	
Shajapur	79.5	86.7	71.5	78.0	86.1	68.9	86.2	89.1	82.9	
Sheopur	61.5	70.1	51.7	59.0	68.4	48.2	75.7	79.4	71.5	
Shivpuri	72.0	80.0	62.4	70.0	79.1	58.9	82.3	84.8	79.6	
Sidhi	70.6	79.3	61.3	68.4	77.7	58.2	83.9	88.1	79.2	
Tikamgarh	76.9	82.2	70.8	76.2	82.0	69.5	80.2	83.1	76.9	
Ujjain	75.6	82.6	67.9	69.5	79.7	58.4	86.2	87.7	84.7	
Umaria	76.5	81.7	70.9	75.3	81.1	69.1	82.5	85.0	79.9	
Vidisha	77.8	82.0	73.1	75.9	80.9	70.3	85.2	86.2	84.1	
West Nimar	66.5	71.4	61.3	64.2	69.5	58.5	80.5	82.7	78.0	
Madhya Pradesh	75.8	80.8	70.2	72.4	78.7	65.5	85.9	87.2	84.5	

Source: Census of India, 2001.

ED 4: Illiteracy and Number of Illiterates in Different Age Groups, 2001

District	Illiterates in Age Group 15–34 Years			Illiteracy in Age Group 15–34 Years			Illiterates in Age Group 35–49 Years		
	All	Male	Female	All	Male	Female	All	Male	Female
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	112236	33074	79162	22.5	13.5	31.2	107586	31700	75886
Barwani	186973	76436	110537	56.5	45.7	67.5	95635	40568	55067
Betul	116933	38536	78397	25.9	16.8	35.2	95376	32915	62461
Bhind	109423	27428	81995	24.0	10.9	40.5	81193	22415	58778
Bhopal	140182	50974	89208	20.6	14.2	27.8	97683	35641	62042
Burhanpur				Included in East Nimar					
Chhatarpur	200609	70507	130102	43.4	28.2	61.2	122242	49269	72973
Chhindwara	156972	50879	106093	25.7	16.1	36.0	125198	43777	81421
Damoh	126347	42110	84237	35.1	21.7	50.9	81337	27998	53339
Datia	46642	12155	34487	22.5	10.7	37.0	31797	8825	22972
Dewas	145640	40892	104748	34.0	18.4	50.8	98217	31466	66751
Dhar	235842	78082	157760	41.7	27.0	57.0	149675	56660	93015
Dindori	75995	21623	54372	39.9	22.8	56.8	56381	19272	37109
East Nimar	189391	65589	123802	34.3	22.8	46.8	120642	41755	78887
Guna	198548	58176	140372	37.2	20.6	55.8	113898	38308	75590
Gwalior	157326	52361	104965	27.4	16.6	40.5	98225	32484	65741
Harda	42059	13761	28298	27.8	17.4	39.4	28927	9759	19168
Hoshangabad	86408	27577	58831	23.7	14.0	35.2	66630	21751	44879
Indore	183135	55435	127700	20.3	11.8	29.7	129222	42519	86703
Jabalpur	147007	48319	98688	18.8	11.6	27.2	116476	37803	78673
Jhabua	240012	90351	149661	58.9	45.1	72.3	143845	61811	82034
Katni	113886	30699	83187	32.0	16.8	47.9	79849	25385	54464
Mandla	100055	28547	71508	34.4	19.7	48.9	80635	27640	52995
Mandsaur	98100	21022	77078	24.3	10.2	38.9	69113	16946	52167
Morena	169870	42500	127370	32.9	14.8	55.5	105134	30875	74259
Narsimhapur	50091	15534	34557	15.5	9.0	22.9	40399	12774	27625
Neemuch	74935	17357	57578	29.6	13.5	46.2	49219	12400	36819
Panna	88892	28278	60614	32.6	19.5	47.3	59666	21238	38428
Raisen	76578	24305	52273	21.0	12.2	31.6	56595	18372	38223
Rajgarh	166804	48124	118680	42.0	23.7	61.0	109176	39639	69537
Ratlam	108635	32015	76620	26.9	15.6	38.6	74526	23295	51231
Rewa	193253	49610	143643	30.9	15.5	47.2	148450	49276	99174
Sagar	184004	57400	126604	27.2	15.5	41.3	122648	39782	82866
Satna	183307	50927	132380	30.2	16.2	45.3	133795	45595	88200
Sehore	105806	27592	78214	30.9	15.3	48.3	74744	23430	51314
Seoni	106224	32880	73344	27.8	17.0	38.9	88849	30070	58779
Shahdol	187440	55841	131599	36.0	21.1	51.2	148147	52895	95252
Shajapur	88808	21501	67307	21.3	9.9	33.6	65830	18885	46945
Sheopur	95507	32631	62876	53.2	34.5	74.0	49078	19106	29972
Shivpuri	178261	54054	124207	38.5	21.4	59.0	99395	33514	65881
Sidhi	249726	73502	176224	44.9	25.9	64.8	160964	61487	99477
Tikamgarh	161929	51391	110538	41.0	24.6	59.5	98610	38525	60085
Ujjain	132934	36404	96530	23.3	12.4	35.1	91878	27041	64837
Umaria	61693	17665	44028	36.5	20.6	52.9	43012	15240	27772
Vidisha	133161	44486	88675	34.3	20.9	50.4	83112	28999	54113
West Nimar	156141	52666	103475	31.6	20.6	43.5	97753	32929	64824
Madhya Pradesh	6163720	1901196	4262524	31.0	18.3	45.0	4190762	1432034	2758728

Source: Census of India, 2001.

ED 4: Illiteracy and Number of Illiterates in Different Age Groups, 2001

District	Illiteracy in Age Group 35-49 Years			Illiterates in Age Group 50+ Years			Illiteracy in Age Group 50+ Years		
	All	Male	Female	All	Male	Female	All	Male	Female
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	42.0	24.6	59.5	135867	38263	97604	61.8	37.1	83.8
Barwani	64.4	52.5	77.3	84631	34187	50444	76.2	63.5	88.1
Betul	43.4	28.7	59.5	124564	43614	80950	66.0	46.6	85.2
Bhind	39.1	20.3	60.6	121921	43931	77990	60.5	40.9	82.8
Bhopal	32.1	21.6	44.5	97736	34081	63655	45.7	30.7	62.0
Burhanpur				Included in East Nimar					
Chhatarpur	59.0	44.2	76.4	144880	64202	80678	74.9	62.4	89.2
Chhindwara	42.6	28.3	58.4	171158	60472	110686	67.8	49.6	84.7
Damoh	49.0	31.4	69.3	91245	31230	60015	66.4	46.7	85.0
Datia	33.8	17.2	53.7	50025	15491	34534	60.1	37.5	82.4
Dewas	48.1	28.9	70.0	107371	34939	72432	65.3	43.5	86.1
Dhar	56.1	40.4	73.5	144662	53369	91293	72.5	55.8	87.7
Dindori	57.5	37.9	78.6	56442	19229	37213	71.2	50.4	90.5
East Nimar	43.8	28.8	60.5	125893	39459	86434	58.2	37.6	77.7
Guna	46.6	28.6	68.5	129378	48545	80833	65.0	46.6	85.2
Gwalior	37.4	22.8	54.5	100992	32506	68486	51.5	32.4	71.4
Harda	39.2	24.7	55.9	36216	11656	24560	58.5	38.0	78.8
Hoshangabad	37.9	23.2	54.8	84522	28231	56291	58.2	38.8	77.8
Indore	30.2	18.5	43.6	132025	37650	94375	42.7	24.2	61.6
Jabalpur	31.1	19.0	44.7	132781	39779	93002	46.8	27.9	65.9
Jhabua	70.4	59.0	82.5	119211	51811	67400	83.5	74.8	91.7
Katni	46.7	28.0	67.8	83164	26621	56543	61.1	39.2	82.9
Mandla	52.6	34.9	71.5	80228	25982	54246	67.4	46.5	85.8
Mandsaur	36.1	16.9	57.4	92149	24982	67167	56.8	31.5	81.0
Morena	47.2	25.8	72.0	123110	46468	76642	64.3	45.2	86.4
Narsimhapur	25.0	14.8	36.8	70290	22469	47821	52.6	33.9	70.9
Neemuch	41.2	19.7	65.1	57172	15859	41313	57.9	32.5	82.8
Panna	47.1	31.4	65.0	72675	28691	43984	68.3	51.9	86.1
Raisen	33.6	20.2	49.4	85447	31499	53948	61.5	44.1	79.8
Rajgarh	56.6	38.5	77.5	129845	51060	78785	74.2	57.9	90.7
Ratlam	37.0	22.1	53.6	88304	26801	61503	57.4	36.0	77.4
Rewa	53.9	35.0	73.5	188092	70825	117267	70.1	51.8	89.2
Sagar	40.5	24.2	60.1	153604	52027	101577	61.4	41.9	80.6
Satna	48.3	31.2	67.3	159467	58813	100654	65.6	47.2	85.1
Sehore	47.5	27.8	70.3	98344	35481	62863	69.5	50.2	88.7
Seoni	46.5	30.3	64.0	102865	33778	69087	66.6	46.2	85.0
Shahdol	55.2	37.6	74.6	141805	54187	87618	71.0	53.5	89.0
Shajapur	33.3	18.0	50.6	116388	38196	78192	63.7	42.2	84.6
Sheopur	63.0	45.1	84.1	44770	18050	26720	75.1	59.0	92.1
Shivpuri	48.5	29.9	70.8	115451	42825	72626	66.3	47.3	86.8
Sidhi	60.3	43.1	80.1	160724	66579	94145	76.3	61.0	92.8
Tikamgarh	57.0	41.0	75.9	114227	48997	65230	75.8	62.5	90.1
Ujjain	32.7	18.2	48.9	124601	36413	88188	53.6	32.0	74.3
Umaria	53.6	35.7	74.0	44591	16835	27756	71.1	52.9	89.8
Vidisha	47.3	30.1	68.2	101134	37025	64109	65.7	46.8	85.6
West Nimar	41.2	26.4	57.8	116714	36793	79921	63.2	41.6	83.0
Madhya Pradesh	44.7	28.8	62.7	4856681	1709901	3146780	63.2	44.4	82.1

Source: Census of India, 2001.

ED 5: Education Infrastructure, Students, and Teachers in Madhya Pradesh, 2005–06

District	Primary					Middle	
	No of Institutions	Total Enrolment	Boys	Girls	Teachers	No. of Institutions	Total Enrolment
Anuppur	1183	124528	66579	57949	1981	290	50993
Ashoknagar	1070	136342	70639	65703	2083	322	33564
Balaghat	2081	256026	131457	124569	4450	614	131668
Barwani	2142	207109	107482	99627	3216	469	42329
Betul	1984	241123	123438	117685	4523	746	95531
Bhind	1744	268220	145436	122784	4049	729	114619
Bhopal	824	308458	157834	150624	3624	319	138823
Burhanpur	539	87209	46295	40914	1300	173	28310
Chhatarpur	1897	291399	154140	137259	4837	567	93426
Chhindwara	2651	318474	167116	151358	5861	737	131817
Damoh	1424	227607	120108	107499	3343	510	94551
Datia	841	117897	63972	53925	1956	337	41004
Dewas	1488	216008	113646	102362	3381	454	79173
Dhar	3212	364096	195442	168654	6185	681	108018
Dindori	1376	118665	60204	58461	2273	288	47958
East Nimar	1078	183134	98152	84982	2837	360	58666
Guna	1599	214105	113145	100960	3009	463	55036
Gwalior	1422	279802	151822	127980	2989	535	135385
Harda	540	92009	47364	44645	1131	267	32094
Hoshangabad	1169	167997	87096	80901	2192	460	68930
Indore	1178	346231	187536	158695	2757	585	148890
Jabalpur	1574	316533	167428	149105	3646	608	153687
Jhabua	3690	305399	167050	138349	5939	561	93936
Katni	1362	205112	111551	93561	2784	472	80429
Mandla	2049	172282	87559	84723	3618	496	65354
Mandsaur	1249	200161	104894	95267	2901	401	70171
Morena	1737	397089	219942	177147	3951	390	148859
Narsinghpur	1221	153109	80573	72536	2753	399	58623
Neemuch	862	110439	58581	51858	1904	332	37487
Panna	1644	153541	80635	72906	2927	570	71665
Raisen	1801	222251	118037	104214	4778	553	83797
Rajgarh	1870	235386	123512	111874	4023	641	83713
Ratlam	1641	233481	126558	106923	3774	455	68890
Rewa	3220	423975	222419	201556	6148	598	203037
Sagar	2127	352097	184402	167695	4808	713	145808
Satna	2610	339801	178152	161649	5033	756	134262
Sehore	1385	221372	115612	105760	3449	485	91773
Seoni	2190	214914	108618	106296	4447	597	80328
Shahdol	1601	153394	79350	74044	2806	363	54474
Shajapur	1525	253941	136309	117632	3540	633	96681
Sheopur	776	109920	57871	52049	1480	168	27388
Shivpuri	2167	307261	164375	142886	4634	610	101343
Sidhi	3187	397098	209938	187160	6034	988	125687
Tikamgarh	1786	212803	112478	100325	4086	496	80472
Ujjain	1418	394332	192911	201421	3878	541	155201
Umariya	770	101536	53000	48536	1208	344	45983
Vidisha	1826	238682	125580	113102	3763	496	74044
West Nimar	2605	281723	146197	135526	4731	721	89392
Madhya Pradesh	81335	11274071	5942435	5331636	171020	24293	4253269

Source: Rajiv Gandhi Shiksha Mission and Department of Public Instructions, Bhopal.

ED 5: Education Infrastructure, Students, and Teachers in Madhya Pradesh, 2005–06

District	Middle			No of Institutions	Total Enrolment	High School		
	Boys	Girls	Teachers			Boys	Girls	Teachers
Anuppur	26346	24647	655	69	18364	10399	7965	666
Ashoknagar	20792	12772	758	13	15532	10370	5162	82
Balaghat	67008	64660	1742	124	34069	20305	13764	1236
Barwani	23464	18865	1220	48	13502	8049	5453	465
Betul	50377	45154	2104	116	40746	22859	17887	813
Bhind	64630	49989	1813	151	34897	23479	11418	1125
Bhopal	71083	67740	1241	178	53076	30344	22732	2405
Burhanpur	15629	12681	497	30	9482	5278	4204	133
Chhatarpur	54781	38645	1914	96	31734	22320	9414	1013
Chhindwara	69614	62203	2237	147	54502	32020	22482	529
Damoh	52049	42502	1405	53	25355	18331	7024	456
Datia	24667	16337	862	54	11266	7631	3635	279
Dewas	45097	34076	1544	83	32713	21120	11593	858
Dhar	61157	46861	2194	126	28100	18875	9225	1399
Dindori	26026	21932	918	42	13364	8554	4810	189
East Nimar	34324	24342	1062	48	32139	17685	14454	521
Guna	35079	19957	1107	55	19667	13010	6657	610
Gwalior	74777	60608	1374	183	55775	33523	22252	1255
Harda	18761	13333	418	29	8845	6262	2583	177
Hoshangabad	37566	31364	1027	86	24547	13929	10618	464
Indore	81720	67170	3333	232	67492	37937	29555	1365
Jabalpur	81263	72424	1724	121	62233	37203	25030	972
Jhabua	53280	40656	2058	73	15333	9912	5421	1014
Katni	44961	35468	1142	60	26703	17992	8711	389
Mandla	36623	28731	1310	61	19283	11345	7938	584
Mandsaur	41273	28898	1175	112	18020	13481	4539	384
Morena	86552	62307	1401	104	44380	30186	14194	615
Narsimhapur	32590	26033	1196	63	23572	14877	8695	293
Neemuch	21690	15797	1007	53	12174	7532	4642	325
Panna	38687	32978	1156	43	20800	13895	6905	474
Raisen	44977	38820	2265	90	23702	15839	7863	1107
Rajgarh	49461	34252	1743	104	34541	23607	10934	739
Ratlam	40789	28101	1612	78	23971	16714	7257	501
Rewa	108027	95010	2712	182	63476	39568	23908	1964
Sagar	79982	65826	2119	132	46277	30728	15549	1099
Satna	73221	61041	2639	168	51528	30727	20801	1323
Sehore	50343	41430	1611	86	26610	17935	8675	424
Seoni	42164	38164	1920	84	28113	16953	11160	589
Shahdol	29814	24660	859	58	23820	14572	9248	407
Shajapur	58451	38230	1628	99	21215	16057	5158	441
Sheopur	17253	10135	502	11	14048	11666	2382	57
Shivpuri	60534	40809	1475	70	24130	17425	6705	374
Sidhi	71969	53718	2728	115	59499	39276	20223	1854
Tikamgarh	47596	32876	1222	56	25643	18484	7159	596
Ujjain	80639	74562	2017	109	26315	17431	8884	1161
Umaria	24589	21394	750	32	15129	9546	5583	149
Vidisha	43930	30114	1181	96	21820	14524	7296	554
West Nimar	49049	40343	2411	92	26018	15848	10170	599
Madhya Pradesh	2364654	1888615	72988	4315	1423520	905603	517917	35028

Source: Rajiv Gandhi Shiksha Mission and Department of Public Instructions, Bhopal.

ED 5: Education Infrastructure, Students, and Teachers in Madhya Pradesh, 2005–06

District	Higher Secondary					Total Enrolment in School		
	No of Institutions	Total Enrolment	Boys	Girls	Teachers	Total Enrolment	Boys	Girls
Anuppur	52	7416	4454	2962	584	201301	107778	93523
Ashoknagar	22	4059	2767	1292	97	189497	104568	84929
Balaghat	120	18061	11059	7002	2098	439824	229829	209995
Barwani	43	6166	3585	2581	1260	269106	142580	126526
Betul	104	19458	10602	8856	1356	396858	207276	189582
Bhind	109	22839	15720	7119	1119	440575	249265	191310
Bhopal	251	34936	19269	15667	4089	535293	278530	256763
Burhanpur	28	3481	2021	1460	340	128482	69223	59259
Chhatarpur	90	13739	9619	4120	1676	430298	240860	189438
Chhindwara	201	49891	29125	20766	1668	554684	297875	256809
Damoh	48	11093	8306	2787	760	358606	198794	159812
Datia	39	5834	3673	2161	355	176001	99943	76058
Dewas	73	14486	10581	3905	1508	342380	190444	151936
Dhar	86	12505	8543	3962	2162	512719	284017	228702
Dindori	36	2442	1671	771	208	182429	96455	85974
East Nimar	43	10178	6117	4061	656	284117	156278	127839
Guna	54	8735	5882	2853	665	297543	167116	130427
Gwalior	167	35863	20741	15122	1998	506825	280863	225962
Harda	22	3424	2334	1090	222	136372	74721	61651
Hoshangabad	96	20746	11236	9510	690	282220	149827	132393
Indore	306	43670	27666	16004	2723	606283	334859	271424
Jabalpur	173	41006	23800	17206	4392	573459	309694	263765
Jhabua	61	8027	5516	2511	1115	422695	235758	186937
Katni	76	8161	4991	3170	679	320405	179495	140910
Mandla	64	13435	8855	4580	619	270354	144382	125972
Mandsaur	69	8045	5970	2075	519	296397	165618	130779
Morena	127	27990	18853	9137	1367	618318	355533	262785
Narsimhapur	63	8863	5006	3857	575	244167	133046	111121
Neemuch	55	6509	4172	2337	524	166609	91975	74634
Panna	51	8245	5809	2436	854	254251	139026	115225
Raisen	57	10409	7603	2806	1303	340159	186456	153703
Rajgarh	64	13922	10695	3227	400	367562	207275	160287
Ratlam	77	10668	7463	3205	1283	337010	191524	145486
Rewa	249	64078	40384	23694	3895	754566	410398	344168
Sagar	108	24031	13843	10188	1559	568213	308955	259258
Satna	127	23989	15247	8742	1842	549580	297347	252233
Sehore	60	12724	8296	4428	622	352479	192186	160293
Seoni	77	14193	8657	5536	907	337548	176392	161156
Shahdol	85	9400	5432	3968	1095	241088	129168	111920
Shajapur	54	9072	6558	2514	805	380909	217375	163534
Sheopur	19	4094	3248	846	307	155450	90038	65412
Shivpuri	65	9918	6998	2920	835	442652	249332	193320
Sidhi	119	24281	16493	7788	2203	606565	337676	268889
Tikamgarh	43	8724	5647	3077	721	327642	184205	143437
Ujjain	92	27678	16638	11040	1622	603526	307619	295907
Umariya	25	2745	1797	948	301	165393	88932	76461
Vidisha	54	9857	6614	3243	589	344403	190648	153755
West Nimar	83	12393	7846	4547	1044	409526	218940	190586
Madhya Pradesh	4187	771479	487402	284077	58211	17722339	9700094	8022245

Source: Rajiv Gandhi Shiksha Mission and Department of Public Instructions, Bhopal.

ED 5: Education Infrastructure, Students, and Teachers in Madhya Pradesh, 2005–06

District	Student Teacher Ratio					Institutions per 10 Sq Kms					Children (6–19 years) per institution
	Primary	Middle	High	Higher	Total	Primary	Middle	High	Higher	Total	
	Anuppur	62.9	77.9	381.8	1.3	51.8	5.35	0.78	0.19	0.14	
Ashoknagar	65.5	44.3	1599.4	0.8	62.7	4.46	0.69	0.03	0.05	3.05	133
Balaghat	57.5	75.6	27.6	8.6	46.2	4.82	0.67	0.13	0.13	3.18	150
Barwani	64.4	34.7	29.0	4.9	43.7	5.93	0.86	0.09	0.08	4.98	100
Betul	53.3	45.4	50.1	14.3	45.1	4.50	0.74	0.12	0.10	2.94	135
Bhind	66.2	63.2	31.0	20.4	54.4	9.08	1.63	0.34	0.24	6.13	161
Bhopal	85.1	111.9	22.1	8.5	47.1	13.07	1.15	0.64	0.91	5.67	341
Burhanpur	67.1	57.0	521.0	1.3	56.6	2.48	0.33	0.06	0.05	1.47	167
Chhatarpur	60.2	48.8	31.3	8.2	45.6	5.57	0.65	0.11	0.10	3.05	162
Chhindwara	54.3	58.9	103.0	29.9	53.9	4.96	0.62	0.12	0.17	3.16	148
Damoh	68.1	67.3	55.6	14.6	60.1	4.58	0.70	0.07	0.07	2.79	176
Datia	60.3	47.6	40.4	16.4	51.0	7.27	1.25	0.20	0.14	4.72	138
Dewas	63.9	51.3	38.1	9.6	47.0	4.82	0.65	0.12	0.10	2.99	163
Dhar	58.9	49.2	20.1	5.8	42.9	7.59	0.84	0.15	0.11	5.03	125
Dindori	52.2	52.2	70.7	11.7	50.8	3.04	0.39	0.06	0.05	2.33	105
East Nimar	64.6	55.2	61.7	15.5	56.0	4.57	0.58	0.08	0.07	2.46	186
Guna	71.2	49.7	32.2	13.1	55.2	4.77	0.73	0.09	0.09	3.44	137
Gwalior	93.6	98.5	44.4	17.9	66.5	6.55	1.17	0.40	0.37	5.06	220
Harda	81.4	76.8	50.0	15.4	70.0	3.40	0.80	0.09	0.07	2.58	159
Hoshangabad	76.6	67.1	52.9	30.1	64.5	3.27	0.69	0.13	0.14	2.70	156
Indore	125.6	44.7	49.4	16.0	59.6	7.07	1.50	0.60	0.79	5.90	263
Jabalpur	86.8	89.1	64.0	9.3	53.4	7.00	1.17	0.23	0.33	4.75	232
Jhabua	51.4	45.6	15.1	7.2	41.7	8.76	0.83	0.11	0.09	6.47	96
Katni	73.7	70.4	68.6	12.0	64.2	5.62	0.95	0.12	0.15	3.98	163
Mandla	47.6	49.9	33.0	21.7	44.1	6.24	0.86	0.11	0.11	4.60	101
Mandsaur	69.0	59.7	46.9	15.5	59.5	5.24	0.72	0.20	0.12	3.31	162
Morena	100.5	106.3	72.2	20.5	84.3	7.92	0.78	0.21	0.25	4.73	262
Narsimhapur	55.6	49.0	80.5	15.4	50.7	5.36	0.78	0.12	0.12	3.40	140
Neemuch	58.0	37.2	37.5	12.4	44.3	4.47	0.78	0.12	0.13	3.06	128
Panna	52.5	62.0	43.9	9.7	47.0	4.10	0.80	0.06	0.07	3.23	110
Raisen	46.5	37.0	21.4	8.0	36.0	5.64	0.65	0.11	0.07	2.95	136
Rajgarh	58.5	48.0	46.7	34.8	53.2	6.54	1.04	0.17	0.10	4.35	137
Ratlam	61.9	42.7	47.8	8.3	47.0	7.76	0.94	0.16	0.16	4.63	150
Rewa	69.0	74.9	32.3	16.5	51.3	9.74	0.95	0.29	0.39	6.73	178
Sagar	73.2	68.8	42.1	15.4	59.3	4.69	0.70	0.13	0.11	3.00	184
Satna	67.5	50.9	38.9	13.0	50.7	6.71	1.01	0.22	0.17	4.88	150
Sehore	64.2	57.0	62.8	20.5	57.7	5.24	0.74	0.13	0.09	3.06	175
Seoni	48.3	41.8	47.7	15.6	42.9	5.08	0.68	0.10	0.09	3.37	115
Shahdol	54.7	63.4	58.5	8.6	46.7	4.95	0.64	0.10	0.15	3.72	114
Shajapur	71.7	59.4	48.1	11.3	59.4	5.71	1.02	0.16	0.09	3.73	165
Sheopur	74.3	54.6	246.5	13.3	66.3	2.24	0.25	0.02	0.03	1.47	160
Shivpuri	66.3	68.7	64.5	11.9	60.5	4.51	0.59	0.07	0.06	2.83	152
Sidhi	65.8	46.1	32.1	11.0	47.3	5.73	0.94	0.11	0.11	4.19	138
Tikamgarh	52.1	65.9	43.0	12.1	49.5	8.09	0.98	0.11	0.09	4.72	138
Ujjain	101.7	76.9	22.7	17.1	69.5	6.37	0.89	0.18	0.15	3.55	279
Umaria	84.1	61.3	101.5	9.1	68.7	2.96	0.84	0.08	0.06	2.87	141
Vidisha	63.4	62.7	39.4	16.7	56.6	5.11	0.67	0.13	0.07	3.35	139
West Nimar	59.5	37.1	43.4	11.9	46.6	5.89	0.90	0.11	0.10	4.36	117
Madhya Pradesh	65.9	58.3	40.6	13.3	52.6	5.55	0.79	0.14	0.14	3.70	155

Source: Rajiv Gandhi Shiksha Mission and Department of Public Instructions, Bhopal.

ED 6: Trained and Untrained Teachers at Primary and Upper Primary Levels, 2004–05

District	Primary Teachers						
	Working Teachers	Professionally Trained Teachers	Percentage of Professionally Trained Teachers	Untrained Percentage		Total	Percentage
				Those who have received 60 days training	Those who have not received 60 days training		
Anuppur	2011	661	32.9	1218	132	1350	67.1
Ashoknagar	2125	1019	48.0	865	241	1106	52.0
Balaghat	4781	3147	65.8	1506	128	1634	34.2
Barwani	3216	965	30.0	1801	450	2251	70.0
Betul	4665	2893	62.0	1414	353	1767	37.9
Bhind	4651	2175	46.8	0	2476	2476	53.2
Bhopal	2626	902	34.3	1724	0	1724	65.7
Burhanpur	1315	846	64.3	376	93	469	35.7
Chhatarpur	4837	2107	43.6	678	2052	2730	56.4
Chhindwara	4866	3836	78.8	1030	0	1030	21.2
Damoh	3205	2519	78.6	549	137	686	21.4
Datia	1794	989	55.1	245	560	805	44.9
Dewas	3176	1471	46.3	1364	341	1705	53.7
Dhar	6468	2062	31.9	1812	2594	4406	68.1
Dindori	2224	331	14.9	1514	379	1893	85.1
East Nimar	2739	1812	66.2	613	313	926	33.8
Guna	3020	1292	42.8	1495	233	1728	57.2
Gwalior	3086	1672	54.2	1133	281	1414	45.8
Harda	1038	482	46.4	445	111	556	53.6
Hoshangabad	2448	1652	67.5	474	322	796	32.5
Indore	2295	1868	81.4	227	200	427	18.6
Jabalpur	3717	1711	46.0	1202	804	2006	54.0
Jhabua	5962	1004	16.8	3565	1393	4958	83.2
Katni	2961	1588	53.6	1113	260	1373	46.4
Mandla	2777	1485	53.5	951	341	1292	46.5
Mandsaur	2767	1516	54.8	763	488	1251	45.2
Morena	4342	2890	66.6	1016	436	1452	33.4
Narsimhapur	2874	1701	59.2	84	1089	1173	40.8
Neemuch	1875	975	52.0	720	180	900	48.0
Panna	3000	2703	90.1	108	189	297	9.9
Raisen	4322	4102	94.9	176	44	220	5.1
Rajgarh	4588	2158	47.0	1944	486	2430	53.0
Ratlam	3491	1161	33.3	869	1460	2329	66.7
Rewa	6148	2470	40.2	0	3685	3685	59.9
Sagar	4791	4177	87.2	200	414	614	12.8
Satna	5191	2121	40.9	1053	2017	3070	59.1
Sehore	3265	2042	62.5	978	245	1223	37.5
Seoni	4516	2118	46.9	1918	480	2398	53.1
Shahdol	2710	757	27.9	1250	703	1953	72.1
Shajapur	3908	1910	48.9	1598	400	1998	51.1
Sheopur	1427	407	28.5	88	932	1020	71.5
Shivpuri	4473	2279	51.0	1875	319	2194	49.0
Sidhi	6143	865	14.1	2594	2684	5278	85.9
Tikamgarh	3465	1012	29.2	1962	491	2453	70.8
Ujjain	3786	2576	68.0	968	242	1210	32.0
Umaria	1315	671	51.0	221	423	644	49.0
Vidisha	3821	2432	63.6	29	1360	1389	36.4
West Nimar	4668	1416	30.3	986	2266	3252	69.7
Madhya Pradesh	168889	84948	50.3	47601	34967	83941	49.7

Source: Rajiv Gandhi Shiksha Mission, Madhya Pradesh, Bhopal.

ED 6: Trained and Untrained Teachers at Primary and Upper Primary Levels, 2004–05

District	Upper Primary Teachers						Total	Percentage
	Working Teachers	Professionally Trained Teachers	Percentage of Professionally Trained Teachers	Those who have received 60 days training	Untrained Those who have not received 60 days training			
Anuppur	730	382	52.3	244	104	348	47.7	
Ashoknagar	807	460	57.0	133	214	347	43.0	
Balaghat	2001	1564	78.2	352	85	437	21.8	
Barwani	1220	463	38.0	681	76	757	62.0	
Betul	1936	561	29.0	1238	137	1375	71.0	
Bhind	2643	1247	47.2	0	1396	1396	52.8	
Bhopal	1241	596	48.0	423	222	645	52.0	
Burhanpur	521	334	64.1	112	75	187	35.9	
Chhatarpur	1914	414	21.6	124	1376	1500	78.4	
Chhindwara	2438	792	32.5	1646	0	1646	67.5	
Damoh	1405	1114	79.3	262	29	291	20.7	
Datia	921	570	61.9	134	217	351	38.1	
Dewas	1684	1024	60.8	640	20	660	39.2	
Dhar	2194	648	29.5	376	1170	1546	70.5	
Dindori	1004	265	26.4	665	74	739	73.6	
East Nimar	1079	833	77.2	189	56	245	22.8	
Guna	1183	573	48.4	196	414	610	51.6	
Gwalior	1346	853	63.4	136	357	493	36.6	
Harda	475	183	38.5	69	223	292	61.5	
Hoshangabad	1150	885	77.0	107	158	265	23.0	
Indore	3254	2671	82.1	311	272	583	17.9	
Jabalpur	1869	1088	58.2	469	312	781	41.8	
Jhabua	2021	489	24.2	1425	107	1532	75.8	
Katni	1290	807	62.6	236	247	483	37.4	
Mandla	1311	596	45.5	294	420	714	54.5	
Mandsaur	1197	796	66.5	305	96	401	33.5	
Morena	1343	879	65.5	227	237	464	34.6	
Narsimhapur	1381	933	67.6	0	448	448	32.4	
Neemuch	1026	640	62.4	347	39	386	37.6	
Panna	1380	1237	89.6	37	106	143	10.4	
Raisen	2265	2065	91.2	180	20	200	8.8	
Rajgarh	2717	1250	46.0	1320	147	1467	54.0	
Ratlam	1611	622	38.6	286	702	988	61.4	
Rewa	2712	1942	71.6	0	769	769	28.4	
Sagar	1995	1593	79.8	0	402	402	20.2	
Satna	2841	1709	60.2	654	478	1132	39.8	
Sehore	1478	790	53.5	619	69	688	46.5	
Seoni	1971	1209	61.3	686	76	762	38.7	
Shahdol	1202	595	49.5	51	556	607	50.5	
Shajapur	1668	801	48.0	867	0	867	52.0	
Sheopur	403	139	34.5	55	209	264	65.5	
Shivpuri	1516	933	61.5	0	583	583	38.5	
Sidhi	2841	1616	56.9	897	328	1225	43.1	
Tikamgarh	1822	330	18.1	475	1017	1492	81.9	
Ujjain	2017	1166	57.8	0	851	851	42.2	
Umaria	816	409	50.1	129	278	407	49.9	
Vidisha	1394	842	60.4	0	552	552	39.6	
West Nimar	2243	938	41.8	546	759	1305	58.2	
Madhya Pradesh	77476	42846	55.3	18143	16236	34626	43.7	

Source: Rajiv Gandhi Shiksha Mission, Madhya Pradesh, Bhopal.

ED 7: Children not Attending School by Reason in the Age Group (6–14), 2004–05 (in %)

District	Working in Fields, Agricultural Labour or Other Labour Work	Sibling Care	Cattle Grazing	Weak Financial Condition	Lack of Educational Facilities (Middle School)	Social belief due to which Parents are Reluctant to Educate Children	Handicapped or Prolonged Illness	School Environment not Conducive	Migration
Anuppur	23.1	22.7	22.4	12.6	7.9	5.6	3.0	1.0	1.8
Ashoknagar	32.4	10.9	18.9	6.8	11.2	8.4	2.6	0.0	8.8
Balaghat	17.6	19.1	10.7	21.0	4.1	3.8	4.0	2.0	17.8
Barwani	22.5	23.2	21.5	9.2	15.5	2.8	0.4	0.1	4.8
Betul	28.7	11.9	35.1	14.2	2.9	2.6	1.2	0.4	3.0
Bhind	32.6	13.8	10.0	14.6	3.6	15.4	2.9	1.6	5.6
Bhopal	17.5	14.5	13.0	13.2	10.2	8.7	8.1	7.6	7.2
Burhanpur	24.5	26.8	16.4	11.3	7.6	3.2	1.2	0.6	8.3
Chhatarpur	19.3	17.9	14.8	9.6	6.5	4.4	1.9	1.7	24.0
Chhindwara	38.8	26.1	17.6	9.7	4.5	2.3	0.7	0.1	0.1
Damoh	21.7	13.3	12.0	18.1	14.1	8.5	2.6	1.7	7.9
Datia	23.6	21.5	21.9	9.5	6.6	9.7	2.6	0.4	4.1
Dewas	24.9	20.8	17.7	12.9	10.2	5.2	2.2	0.9	5.2
Dhar	52.9	16.4	8.4	10.5	0.5	2.1	0.4	0.1	8.6
Dindori	46.1	20.8	13.3	11.4	4.4	1.5	0.3	0.2	1.9
East Nimar	22.2	28.7	18.9	8.0	6.5	5.0	3.0	2.1	5.6
Guna	32.0	7.6	4.2	20.0	10.0	4.1	0.4	0.1	21.5
Gwalior	19.2	18.2	12.1	14.1	4.0	11.1	2.0	3.0	16.2
Harda	26.0	18.2	14.2	9.0	5.5	13.0	5.1	0.2	8.8
Hoshangabad	30.5	9.0	9.0	20.0	6.0	10.0	3.0	0.5	12.0
Indore	12.8	18.0	6.2	5.8	6.0	10.2	1.8	1.5	37.7
Jabalpur	18.2	8.9	14.4	23.0	11.0	6.1	4.3	6.4	7.5
Jhabua	14.7	14.6	9.8	8.4	2.3	7.8	2.3	11.0	29.1
Katni	20.1	13.7	7.7	23.5	8.7	13.8	1.5	0.7	10.3
Mandla	29.4	16.6	19.4	7.0	4.4	4.3	6.3	2.5	10.1
Mandsaur	41.4	18.4	13.1	7.7	7.3	4.7	2.3	0.0	5.1
Morena	17.4	16.6	15.2	13.7	12.9	9.1	6.8	5.6	2.9
Narsinmhapur	32.3	21.9	12.9	15.6	11.3	4.4	0.6	1.0	0.0
Neemuch	33.5	21.7	23.1	4.7	4.1	4.4	1.5	0.2	6.7
Panna	12.6	12.3	18.6	13.0	0.0	11.2	10.2	0.0	22.1
Raisen	22.0	13.5	19.9	18.6	5.6	6.8	3.4	0.9	9.3
Rajgarh	15.6	32.5	29.9	5.3	4.8	2.3	8.9	0.2	0.5
Ratlam	36.7	38.7	8.0	2.3	0.4	4.6	0.1	0.0	9.2
Rewa	26.5	22.7	18.1	15.7	0.9	0.0	14.3	0.4	1.3
Sagar	14.2	9.4	9.9	25.8	12.1	8.6	3.8	3.6	12.7
Satna	30.7	21.9	15.3	16.8	3.7	4.4	2.7	0.8	3.7
Sehore	27.7	23.6	14.8	9.6	6.3	4.6	3.8	4.0	5.6
Seoni	25.1	21.8	22.6	19.2	4.2	1.6	3.2	0.5	1.8
Shahdol	24.8	21.4	18.5	12.0	6.2	4.2	3.1	1.5	8.3
Shajapur	31.6	19.6	16.7	3.8	0.9	10.3	0.3	0.3	16.6
Sheopur	73.9	9.4	6.9	1.5	4.7	1.7	0.1	0.1	1.6
Shivpuri	22.6	13.8	13.2	11.7	0.0	14.6	13.5	0.0	10.7
Sidhi	23.0	28.8	25.3	11.3	5.0	2.9	1.4	1.0	1.3
Tikamgarh	41.9	14.4	11.4	9.2	6.1	5.2	3.4	4.1	4.4
Ujjain	14.9	12.1	13.9	11.6	10.0	9.5	8.3	7.8	11.9
Umaria	26.5	22.7	18.1	15.7	0.9	0.0	14.3	0.4	1.3
Vidisha	52.8	4.7	4.1	4.1	27.1	1.2	0.5	0.7	4.8
West Nimar	45.7	15.4	13.6	5.3	5.1	1.2	0.8	0.3	12.6
Madhya Pradesh	25.1	18.5	14.9	11.2	6.0	5.9	3.0	2.8	12.6

Source: Rajiv Gandhi Shiksha Mission, Madhya Pradesh, Bhopal.

HE 1: Health Infrastructure in Madhya Pradesh, 2006

District	District Hospital	Urban Civil Hospital	Community Health Centres (CHC)	Urban Civil Dispensary	Primary Health Centre (PHC)	Sub Health Centre (SHC)	Other Hospitals
Anuppur				Included in Shahdol			
Ashoknagar				Included in Guna			
Balaghat	1	1	5	1	31	240	
Barwani	1	1	8		33	286	
Betul	1	0	9		31	271	
Bhind	1	0	7	1	19	183	
Bhopal	1	2	2	18	10	63	1
Burhanpur				Included in East Nimar			
Chhatarpur	1	0	7	1	38	189	1
Chhindwara	1	2	13	1	66	317	4
Damoh	1	0	6		10	162	
Datia	1	2	1	2	11	87	
Dewas	1	2	4		23	192	
Dhar	1	0	12	3	48	400	1
Dindori	1	0	6		22	159	
East Nimar	2	0	9	1	25	214	
Guna	2	0	5	15	25	198	6
Gwalior	0	5	2		7	61	
Harda	1	0	6		15	143	
Hoshangabad	1	2	3	13	26	111	8
Indore	1	4	5	9	16	193	3
Jabalpur	1	3	10	1	32	346	
Jhabua	1	1	4		19	162	
Katni	1	1	6		30	176	
Mandla	1	0	8	2	51	297	1
Mandsaur	1	2	8		30	239	
Morena	1	1	2		44	153	
Narsinghpur	1	1	6	3	17	196	
Neemuch	1	2	5		20	144	
Panna	1	0	1		18	105	
Raisen	1	0	5		14	140	
Rajgarh	1	2	6		22	175	
Ratlam	1	3	4	2	31	166	1
Rewa	1	0	4	1	25	166	
Sagar	1	1	9	2	30	268	
Satna	1	1	10	7	28	245	2
Sehore	1	1	7	1	44	258	
Seoni	1	0	5	2	17	152	
Shahdol	2	0	12	0	46	462	
Shajapur	1	5	6		30	175	
Sheopur	1	0	6		20	173	
Shivpuri	1	0	3		7	89	
Sidhi	1	1	7		12	199	
Tikamgarh	1	0	8		41	302	
Ujjain	1	6	5		18	156	
Umaria	1	0	2	7	21	170	4
Vidisha	1	2	2		9	108	
West Nimar	1	2	4		20	144	
Madhya Pradesh	47	56	265	93	1152	8835	32

Source: Department of Public Health and Family Welfare, GoMP.

HE 1: Health Infrastructure in Madhya Pradesh, 2006

District	Population per Health Centre	Rural Population Served per PHC	PHC per Lakh Rural Population	Rural Population Served per SHC	Average Area (in 100 sq km) Serviced per Health Institution	PHC per 100 sq km: Rural Area
	Total	Rural	Urban	Total	Rural	Urban
Anuppur			Included in Shahdol			
Ashoknagar			Included in Guna			
Balaghat	5695	43204	2.3	5581	3.0	0.34
Barwani	3846	31993	3.1	3691	6.1	0.61
Betul	4941	39834	2.5	4557	3.1	0.31
Bhind	7482	60849	1.6	6318	4.7	0.43
Bhopal	28474	41654	2.4	6612	2.8	0.36
Burhanpur			Included in East Nimar			
Chhatarpur	7255	33590	3.0	6753	2.7	0.44
Chhindwara	5116	22780	4.4	4743	3.4	0.56
Damoh	6779	96211	1.0	5939	2.5	0.14
Datia	6936	48801	2.0	6170	3.8	0.41
Dewas	6787	45985	2.2	5509	3.2	0.33
Dhar	4363	33452	3.0	4014	5.7	0.59
Dindori	3333	23505	4.3	3252	2.5	0.29
East Nimar	7632	55094	1.8	6436	2.3	0.23
Guna	8372	58528	1.7	7390	2.1	0.23
Gwalior	25019	107886	0.9	12380	1.6	0.15
Harda	3281	27610	3.6	2896	5.0	0.45
Hoshangabad	8556	31782	3.1	7444	2.1	0.39
Indore	13440	52612	1.9	4362	5.6	0.41
Jabalpur	6173	31851	3.1	2946	7.5	0.61
Jhabua	8459	74448	1.3	8732	2.8	0.28
Katni	5566	30959	3.2	5277	4.3	0.61
Mandla	2720	18884	5.3	3243	6.2	0.88
Mandsaur	4803	36017	2.8	4521	5.1	0.54
Morena	9038	31892	3.1	9171	4.0	0.88
Narsinghpur	4880	51910	1.9	4502	4.3	0.33
Neemuch	4741	28815	3.5	4002	4.0	0.47
Panna	7816	46496	2.2	7971	1.8	0.25
Raisen	8169	73142	1.4	7314	1.9	0.17
Rajgarh	7004	52799	1.9	6638	3.3	0.36
Ratlam	6780	30900	3.2	5770	4.2	0.64
Rewa	11615	74026	1.4	11148	3.1	0.40
Sagar	7399	52840	1.9	5915	3.0	0.29
Satna	7596	59565	1.7	6807	3.8	0.37
Sehore	4027	22785	4.4	3886	4.7	0.67
Seoni	7308	66104	1.5	7393	2.0	0.19
Shahdol	3351	27427	3.6	2731	3.7	0.33
Shajapur	6797	38973	2.6	6681	3.5	0.48
Sheopur	3269	26595	3.8	3075	3.0	0.30
Shivpuri	16664	192118	0.5	15110	1.0	0.07
Sidhi	9891	144656	0.7	8723	2.1	0.11
Tikamgarh	3961	27183	3.7	3690	7.0	0.81
Ujjain	10451	65190	1.5	7522	3.1	0.30
Umariya	3006	22892	4.4	2828	4.8	0.52
Vidisha	11395	117674	0.8	9806	1.7	0.12
West Nimar	10369	73014	1.4	10141	2.1	0.25
Madhya Pradesh	6645	42665	2.3	5563	3.4	0.37

Source: Department of Public Health and Family Welfare, GoMP.

HE 2: District-wise Status of Malnutrition in MP: Balsanjeevani Abhiyan (7th Round, 15 October—14 November 2005)

District	Number of non-malnourished Children	Malnourished Children				Sub-Total
		I class	II class	III class	IV class	
Anuppur	34453	25276	11617	660	109	37662
Ashoknagar	42540	26500	14293	1829	443	43065
Balaghat	78773	57075	24121	1617	194	83007
Barwani	79630	55049	33646	1426	226	90347
Betul	65855	54771	24332	1235	140	80478
Bhind	111089	63359	24136	804	147	88446
Bhopal	130085	62502	17479	712	117	80810
Burhanpur	43487	28292	14837	812	146	44087
Chhatarpur	113987	71948	38725	3209	621	114503
Chhindwara	102168	61437	24099	1359	154	87049
Damoh	56225	44987	24142	1676	305	71110
Datia	47820	28017	14078	1033	198	43326
Dewas	76171	34856	16592	719	52	52219
Dhar	92534	77986	51855	4331	795	134967
Dindori	34156	27946	15005	540	53	43544
East Nimar	60028	45556	26655	1800	479	74490
Guna	69892	41488	25432	2039	584	69543
Gwalior	86462	51434	21840	1013	126	74413
Harda	23290	18144	10955	1160	241	30500
Hoshangabad	63425	34689	14889	974	193	50745
Indore	120214	65092	28774	1313	131	95310
Jabalpur	102190	71496	32112	1449	216	105273
Jhabua	138392	83122	48128	3611	552	135413
Katni	62146	46546	30251	2152	390	79339
Mandla	56244	38470	21861	1502	158	61991
Mandsaur	53990	40964	20945	1057	101	63067
Morena	100962	67046	28165	1571	375	97157
Narsimhapur	58893	29373	12036	944	69	42422
Neemuch	44391	23002	12322	837	143	36304
Panna	43576	35215	24351	1925	393	61884
Raisen	99283	57214	24133	675	112	82134
Rajgarh	85296	52777	21345	1109	187	75418
Ratlam	91698	45377	22840	2188	529	70934
Rewa	148757	92415	52053	4225	703	149396
Sagar	123686	76379	38113	2185	504	117181
Satna	125880	85602	44980	3876	726	135184
Sehore	78219	49064	21986	1562	198	72810
Seoni	68583	45213	16567	600	79	62459
Shahdol	46508	40621	26260	1221	218	68320
Shajapur	80422	50369	20236	909	112	71626
Sheopur	31206	25894	16293	1747	298	44232
Shivpuri	89052	63674	33139	3547	984	101344
Sidhi	124051	92865	64280	8967	2999	169111
Tikamgarh	66528	47568	25316	1905	297	75086
Ujjain	130592	70383	30981	2448	331	104143
Umaria	32834	24905	15255	1097	226	41483
Vidisha	90326	50603	19226	1213	247	71289
West Nimar	78016	68972	41785	2147	386	113290
Madhya Pradesh	3784005	2451533	1242461	86930	16987	3797911

Source: Department of Women and Child Development, Bal Sanjeevani Abhiyan, Bhopal.

**HE 2: District-wise Status of Malnutrition in MP: Balsanjeevani Abhiyan
(7th Round, 15 October—14 November 2005)**

District	Total Number of Children	Percentage of Malnourished Children	Total number of Severely Malnourished Children	Percentage of Severely Malnourished Children	Number of Children Provided with Vit-A doses	Percentage of Children Provided with Vit-A doses
Anuppur	72115	52.22	769	1.07	48475	67.22
Ashoknagar	85605	50.31	2272	2.65	45042	52.62
Balaghat	161780	51.31	1811	1.12	83775	51.78
Barwani	169977	53.15	1652	0.97	115948	68.21
Betul	146333	55	1375	0.94	88012	60.15
Bhind	199535	44.33	951	0.48	100876	50.56
Bhopal	210895	38.32	829	0.39	150812	71.51
Burhanpur	87574	50.34	958	1.09	63965	73.04
Chhatarpur	228490	50.11	3830	1.68	155373	68
Chhindwara	189217	46	1513	0.8	85033	44.94
Damoh	127335	55.84	1981	1.56	95518	75.01
Datia	91146	47.53	1231	1.35	66570	73.01
Dewas	128390	40.67	771	0.6	71234	55.48
Dhar	227501	59.33	5126	2.25	120307	52.88
Dindori	77700	56.04	593	0.76	53954	69.44
East Nimar	134518	55.38	2279	1.69	81657	60.7
Guna	139435	49.87	2623	1.88	64315	46.13
Gwalior	160875	46.26	1139	0.71	94353	58.65
Harda	53790	56.7	1401	2.6	39230	72.93
Hoshangabad	114170	44.45	1167	1.02	73428	64.31
Indore	215524	44.22	1444	0.67	140892	65.37
Jabalpur	207463	50.74	1665	0.8	132547	63.89
Jhabua	273805	49.46	4163	1.52	132564	48.42
Katni	141485	56.08	2542	1.8	95840	67.74
Mandla	118235	52.43	1660	1.4	92968	78.63
Mandsaur	117057	53.88	1158	0.99	65030	55.55
Morena	198119	49.04	1946	0.98	50314	25.4
Narsimhapur	101315	41.87	1013	1.0	74955	73.98
Neemuch	80695	44.99	980	1.21	53819	66.69
Panna	105460	58.68	2318	2.2	87851	83.3
Raisen	181417	45.27	787	0.43	113935	62.2
Rajgarh	160714	46.93	1296	0.81	102913	64.3
Ratlam	162632	43.62	2717	1.67	120024	73.8
Rewa	298153	50.11	4928	1.65	220410	73.93
Sagar	240867	48.65	2689	1.12	157453	65.37
Satna	261064	51.78	4602	1.76	144688	55.42
Sehore	151029	48.21	1760	1.17	104265	69.04
Seoni	131042	47.66	679	0.52	76981	58.75
Shahdol	114828	59.5	1439	1.25	73204	63.75
Shajapur	152048	47.11	1021	0.67	95612	62.88
Sheopur	75438	58.63	2045	2.71	59540	78.93
Shivpuri	190396	53.23	4531	2.38	134343	70.56
Sidhi	293162	57.69	11966	4.08	236110	80.54
Tikamgarh	141614	53.02	2202	1.55	87507	61.79
Ujjain	234735	44.37	2779	1.18	174188	74.21
Umaria	74317	55.82	1323	1.78	44603	60.02
Vidisha	161615	44.44	1460	0.9	106557	65.93
West Nimar	191306	59.22	2533	1.32	108630	56.78
Madhya Pradesh	7581916	50.09	103917	1.37	4785620	63.12

Source: Department of Women and Child Development, Bal Sanjeevani Abhiyan, Bhopal.

HE 3: Status of Severe and Total Malnutrition in Madhya Pradesh

District	% of Child Population Suffering from Severe Malnutrition				
	2001	2002	2003	2004	May-05
Anuppur		Included in Shahdol		NA	1.19
Ashoknagar		Included in Guna		3.35	2.67
Balaghat	4.35	2.34	2.10	1.48	0.98
Barwani	7.04	3.82	2.46	1.79	1.05
Betul	4.22	2.18	1.63	1.22	0.87
Bhind	2.60	1.39	1.33	0.95	0.48
Bhopal	2.41	1.14	1.60	0.77	0.48
Burhanpur		Included in East Nimar		1.68	1.32
Chhatarpur	8.92	4.17	2.35	1.22	1.30
Chhindwara	3.48	1.04	2.56	1.21	0.85
Damoh	4.94	2.26	5.19	1.97	1.39
Datia	5.33	3.64	1.66	2.29	1.58
Dewas	5.50	2.15	1.41	1.09	0.40
Dhar	8.83	4.69	0.71	2.61	2.27
Dindori	3.78	1.82	0.41	1.14	0.52
East Nimar	5.85	3.59	1.80	2.46	1.82
Guna	5.49	4.28	2.60	1.75	1.34
Gwalior	3.84	1.73	1.36	1.11	0.60
Harda	7.62	4.31	2.78	2.93	1.92
Hoshangabad	5.44	3.10	1.88	0.98	0.72
Indore	1.92	0.96	1.46	0.81	0.59
Jabalpur	3.50	1.73	2.02	0.80	0.70
Jhabua	5.50	3.25	2.17	2.01	1.24
Katni	7.12	3.83	3.64	2.79	1.37
Mandla	5.34	2.65	1.90	1.82	1.13
Mandsaur	3.12	1.12	3.27	0.62	0.74
Morena	5.43	2.14	3.75	1.04	1.02
Narsimhapur	1.94	0.64	2.72	1.06	0.73
Neemuch	5.02	1.80	3.02	1.73	1.23
Panna	6.14	3.31	2.51	1.71	1.59
Raisen	5.48	3.06	3.50	0.74	0.58
Rajgarh	5.76	2.38	1.18	1.27	0.71
Ratlam	5.77	4.34	2.06	2.26	2.16
Rewa	7.48	3.24	0.96	2.20	1.83
Sagar	4.44	1.99	0.96	1.71	0.98
Satna	4.87	3.17	1.00	1.97	1.38
Sehore	6.06	3.84	2.83	2.03	1.18
Seoni	4.16	1.41	1.16	0.81	0.43
Shahdol	7.50	2.84	1.23	1.34	1.26
Shajapur	1.34	0.61	0.66	0.83	0.58
Sheopur	7.68	5.53	3.46	2.84	2.98
Shivpuri	7.19	4.47	2.86	3.22	1.56
Sidhi	7.57	6.03	1.79	3.54	3.06
Tikamgarh	7.67	4.71	1.13	2.67	1.42
Ujjain	5.25	2.60	0.56	1.50	1.45
Umaria	8.71	6.07	0.82	3.01	1.88
Vidisha	6.91	2.64	1.67	1.14	0.77
West Nimar	6.85	2.31	0.91	1.28	0.91
Madhya Pradesh	5.49	2.92	2.05	1.68	1.22

Source: Department of Women and Child Development, Bhopal.

HE 3: Status of Severe and Total Malnutrition in Madhya Pradesh

District	% of Child Population Suffering from Total Malnutrition				
	2001	2002	2003	2004	May-05
Anuppur		Included in Shahdol		NA	52.56
Ashoknagar		Included in Guna		63.05	56.46
Balaghat	65.10	60.05	59.11	60.30	51.57
Barwani	61.86	60.50	54.97	59.25	54.58
Betul	61.47	59.15	54.12	59.24	54.08
Bhind	46.88	46.21	58.58	45.98	41.72
Bhopal	53.54	51.34	49.74	50.05	39.93
Burhanpur		Included in East Nimar		55.26	51.82
Chhatarpur	61.97	56.31	54.96	52.10	50.97
Chhindwara	53.61	52.71	55.96	51.88	47.24
Damoh	57.59	57.38	60.18	60.42	55.10
Datia	55.15	53.38	57.80	54.76	49.52
Dewas	54.60	52.67	50.26	52.04	35.60
Dhar	65.00	61.71	52.99	60.26	56.17
Dindori	58.34	57.46	51.50	56.06	54.62
East Nimar	59.10	57.15	54.44	58.48	55.26
Guna	60.05	57.07	59.48	55.65	52.51
Gwalior	48.30	46.41	56.68	47.42	43.89
Harda	62.18	59.68	53.18	61.43	55.28
Hoshangabad	55.27	52.03	53.27	49.69	44.45
Indore	46.05	44.31	49.74	48.20	44.97
Jabalpur	57.21	55.34	53.33	54.68	51.34
Jhabua	60.78	61.72	54.42	58.80	51.08
Katni	57.42	61.74	58.33	59.69	52.97
Mandla	61.35	58.24	58.61	59.20	55.21
Mandsaur	58.40	59.76	53.12	58.66	54.34
Morena	50.10	54.46	57.84	51.39	47.03
Narsimhapur	52.74	53.62	53.69	53.84	49.66
Neemuch	56.93	52.58	59.12	56.12	48.65
Panna	60.99	60.28	56.96	60.68	56.36
Raisen	55.41	51.98	61.36	49.39	46.92
Rajgarh	58.55	55.48	44.08	57.15	46.50
Ratlam	53.71	55.04	58.63	49.20	47.36
Rewa	53.30	53.51	59.17	52.44	51.27
Sagar	53.81	51.26	47.13	60.68	47.15
Satna	58.72	58.51	58.40	55.22	52.56
Sehore	58.62	57.77	59.42	54.85	48.60
Seoni	60.42	57.04	51.75	56.37	47.75
Shahdol	61.75	59.73	49.95	64.62	60.96
Shajapur	57.96	56.01	55.37	54.45	47.42
Sheopur	63.72	61.30	71.20	60.54	57.69
Shivpuri	60.95	60.24	59.38	56.96	50.86
Sidhi	57.78	60.25	51.74	61.07	58.77
Tikamgarh	57.97	58.59	51.30	55.28	52.36
Ujjain	56.35	56.06	47.15	48.69	47.81
Umariya	59.73	58.28	50.30	55.70	52.53
Vidisha	58.47	56.42	60.38	56.04	48.32
West Nimar	65.98	63.15	54.11	59.93	57.90
Madhya Pradesh	57.57	56.40	55.18	55.24	50.38

Source: Department of Women and Child Development, Bhopal.

HE 4: District-wise Details of Family Planning in Madhya Pradesh

District	Sterilisation				I.U.D.			
	Service Need	Achievement		% Achievement	Service Need	Achievement		% Achievement
		2006-07	2005-06			2006-07	2006-07	
Anuppur	6383	3543	3698	57.9	6050	4338	5140	85.0
Ashoknagar	4694	5069	4848	103.3	5214	5399	5327	102.2
Balaghat	10647	11748	8816	82.8	2750	1730	2113	76.8
Barwani	11158	7450	6904	61.9	7700	5495	5308	68.9
Betul	12404	10463	9399	75.8	7700	5061	5451	70.8
Bhind	13297	6453	7618	57.3	26400	21311	19772	74.9
Bhopal	19870	11562	11538	58.1	14850	8180	8177	55.1
Burhanpur	4041	3032	2207	54.6	4267	3615	3324	77.9
Chhatarpur	14150	7857	8801	62.2	24200	15089	13798	57.0
Chhindwara	16393	12699	12959	79.1	16335	7908	10585	64.8
Damoh	9776	4929	6845	70.0	14520	10613	12056	83.0
Datia	5875	2155	2753	46.9	6710	2854	3340	49.8
Dewas	12247	9301	8575	70.0	9537	6931	7523	78.9
Dhar	16376	12890	11886	72.6	17775	11776	11351	63.9
Dindori	4383	4821	4798	109.5	8547	3943	3164	37.0
East Nimar	11806	4949	5554	47.0	7405	4566	5727	77.3
Guna	10953	6569	6637	60.6	12166	6205	7103	58.4
Gwalior	14464	8082	7662	53.0	22000	10532	10179	46.3
Harda	4330	1803	2989	69.0	4180	3822	3683	88.1
Hoshangabad	9423	7533	6362	67.5	8096	5765	6323	78.1
Indore	25482	14509	13841	54.3	34007	26114	24944	73.3
Jabalpur	21671	17165	17151	79.1	46701	30513	27561	59.0
Jhabua	12606	7442	8299	65.8	24191	13848	13116	54.2
Katni	10243	7211	7084	69.2	15400	11564	10518	68.3
Mandla	6941	7016	7441	107.2	3420	2211	2147	62.8
Mandsaur	12371	9530	7889	63.8	7381	5880	6109	82.8
Morena	15571	7436	8098	52.0	22000	14220	17066	77.6
Narsimhapur	8583	7069	7221	84.1	6145	4489	4902	79.8
Neemuch	7041	4085	4477	63.6	6292	5699	5803	92.2
Panna	8248	4723	5015	60.8	9900	6381	7752	78.3
Raisen	10906	5621	5050	46.3	18700	12860	12606	67.4
Rajgarh	12953	7189	6801	52.5	26275	14273	13630	51.9
Ratlam	12900	5432	6665	51.7	9625	7769	8132	84.5
Rewa	21313	9417	10687	50.1	30800	26943	26816	87.1
Sagar	18567	12886	13215	71.2	13530	10296	9891	73.1
Satna	19671	8389	10585	53.8	12542	9690	10363	82.6
Sehore	9718	6530	5988	61.6	19800	14433	14515	73.3
Seoni	9100	8921	9112	100.1	15840	11640	10529	66.5
Shahdol	9923	5029	5293	53.3	8250	4738	7850	95.2
Shajapur	13614	8579	8768	64.4	21852	17868	18955	86.7
Sheopur	5716	2818	3114	54.5	6848	4837	4340	63.4
Shivpuri	14398	8169	8210	57.0	13075	10030	9737	74.5
Sidhi	20936	9944	9768	46.7	12100	6904	9153	75.6
Tikamgarh	10971	7015	6717	61.2	14531	9422	9769	67.2
Ujjain	17365	11290	8589	49.5	9900	7320	7006	70.8
Umaria	5606	3350	4224	75.3	8800	5644	6188	70.3
Vidisha	12418	6941	6455	52.0	8800	5589	5628	64.0
West Nimar	15440	10851	10236	66.3	9988	6953	6794	68.1
Madhya Pradesh	582942	367465	366842	62.9	663095	453311	461264	69.6

Source: Department of Public Health and Family Welfare, Bhopal.

HE 4: District-wise Details of Family Planning in Madhya Pradesh

District	Spacing Method-Oral Pill User				Spacing Method- Condom User			
	Service Need	Achievement		% Achievement	Service Need	Achievement		% Achievement
		2006-07	2005-06			2006-07	2006-07	
Anuppur	5357	4292	4562	85.2	26640	14934	8767	32.9
Ashoknagar	5495	7892	7209	131.2	14940	18924	6515	43.6
Balaghat	11000	8099	8130	73.9	14400	16759	17028	118.2
Barwani	11000	10463	9862	89.7	24000	24786	30210	125.9
Betul	12815	12671	13946	101.0	27300	33189	40955	150.0
Bhind	25850	31375	32729	126.6	84000	69964	66500	79.2
Bhopal	16500	11071	9952	60.3	54600	27557	26259	48.1
Burhanpur	5018	4503	4247	84.6	10687	11318	11160	104.4
Chhatarpur	20130	10836	14620	72.6	49176	38917	31943	65.0
Chhindwara	27940	20836	19707	70.5	48000	39676	40854	85.1
Damoh	11880	9887	9841	82.8	44640	35991	30915	69.3
Datia	8800	13585	7192	81.7	21600	16368	14577	67.5
Dewas	9812	9401	10069	102.6	28490	26779	26508	93.0
Dhar	17775	15751	16602	93.4	41400	33291	31770	76.7
Dindori	8140	3644	6133	75.3	23976	10888	13428	56.0
East Nimar	9660	8425	8198	84.9	21430	19847	20801	97.1
Guna	12821	14518	16894	131.8	34860	22866	37743	108.3
Gwalior	33000	15959	10212	30.9	60000	21855	15563	25.9
Harda	6105	5970	7052	115.5	18000	13077	16879	92.7
Hoshangabad	10560	9121	9122	86.4	42030	38247	34575	82.3
Indore	49016	20250	23464	47.9	90348	53517	46300	51.2
Jabalpur	28600	22163	22422	78.4	70788	63257	58678	82.9
Jhabua	20732	17135	11061	53.4	44168	34525	22518	51.0
Katni	17600	1312	1687	9.6	24000	19919	23747	98.9
Mandla	7150	5240	4050	56.6	10620	8703	8358	78.7
Mandsaur	10481	9258	8656	82.6	29138	38579	40299	138.3
Morena	27500	19311	21998	80.0	66000	45414	65340	99.0
Narsimhapur	8230	3762	3539	43.0	17184	11448	12281	71.5
Neemuch	6270	3955	5658	90.2	18000	20015	15345	85.3
Panna	8800	6107	6970	79.2	39600	31369	34540	87.2
Raisen	24200	14603	16040	66.3	32400	15751	21152	65.3
Rajgarh	27060	16944	21176	78.3	58332	48708	52658	90.3
Ratlam	10153	8620	7954	78.3	18600	14057	15510	83.4
Rewa	33000	19221	21401	64.9	53712	37657	34548	64.3
Sagar	16500	11833	12509	75.8	36000	30416	33356	92.7
Satna	22006	14240	9782	44.5	45780	27184	23380	51.1
Sehore	29700	19471	21393	72.0	46800	46571	53580	114.5
Seoni	23760	14343	17962	75.6	34560	17637	26224	75.9
Shahdol	11803	6737	9066	76.8	35760	21543	25855	72.3
Shajapur	15970	14592	12822	80.3	45468	38384	33165	72.9
Sheopur	9900	7008	8072	81.5	18600	2159	11183	60.1
Shivpuri	13328	8712	7790	58.4	29622	19857	16876	57.0
Sidhi	26400	15706	10142	38.4	57600	2720	9505	16.5
Tikamgarh	11603	8023	10017	86.3	29866	30157	28902	96.8
Ujjain	15180	12584	10957	72.2	43800	35226	32587	74.4
Umaria	6380	4239	5106	80.0	15600	13148	26436	69.5
Vidisha	16500	12238	13545	82.1	42000	35010	35056	83.5
West Nimar	9360	8299	8218	87.8	30612	28219	27825	90.9
Madhya Pradesh	776840	554204	558736	71.9	1775127	1316275	1357963	76.5

Source: Department of Public Health and Family Welfare, Bhopal.

HE 4: District-wise Details of Family Planning in Madhya Pradesh

District	Sterilisation By Method (April 2006–March 2007)						Sterilisation by Number of Living Children (April 2006–March 2007)				
	Male Sterilisation			Female Sterilisation			% age of Sterilisation acceptors				
	VT	NSVT	Total	TT	LTT	Total	Total	Upto 2 Children	With 3 Children	With more than 3 Children	Total Steril- isation
Anuppur	0	97	97	28	3573	3601	3698	40.5	34.7	24.7	3698
Ashoknagar	1	80	81	229	4538	4767	4848	22.4	44.1	33.5	4848
Balaghat	0	494	494	1684	6638	8322	8816	42.4	36.4	21.3	8816
Barwani	25	36	61	43	6800	6843	6904	19.0	35.1	45.9	6904
Betul	0	177	177	317	8905	9222	9399	33.7	32.9	33.4	9399
Bhind	0	283	283	5	7330	7335	7618	26.3	50.0	33.0	7618
Bhopal	33	172	205	2575	8758	11333	11538	35.3	49.0	15.7	11538
Burhanpur	0	9	9	1077	1121	2198	2207	0.7	29.0	70.2	2207
Chhatarpur	2	20	22	146	8633	8779	8801	24.1	42.4	33.5	8801
Chhindwara	10	76	86	662	12211	12873	12959	70.5	27.5	2.1	12959
Damoh	1	5	6	124	6715	6839	6845	29.3	46.7	24.0	6845
Datia	0	16	16	131	2606	2737	2753	56.8	22.0	21.1	2753
Dewas	0	287	287	1479	6809	8288	8575	37.2	33.8	29.0	8575
Dhar	7	18	25	1291	10570	11861	11886	69.7	19.6	10.7	11886
Dindori	0	42	42	0	4756	4756	4798	30.8	45.1	24.1	4798
East Nimar	0	200	200	261	5093	5354	5554	0.3	31.7	68.0	5554
Guna	0	37	37	774	5826	6600	6637	29.5	36.9	33.6	6637
Gwalior	3	354	357	349	6956	7305	7662	4.3	17.1	78.6	7662
Harda	7	0	7	22	2960	2982	2989	37.7	32.2	30.1	2989
Hoshangabad	0	864	864	952	4546	5498	6362	41.7	32.2	26.1	6362
Indore	121	584	705	5796	7340	13136	13841	52.4.5	34.5	13.1	13841
Jabalpur	0	227	227	4428	12496	16924	17151	66.6	30.8	2.6	17151
Jhabua	5	73	78	500	7721	8221	8299	15.0	28.9	56.2	8299
Katni	0	103	103	198	6783	6981	7084	49.7	29.1	21.2	7084
Mandla	0	301	301	102	7038	7140	7441	47.5	45.6	6.0	7441
Mandsaur	0	1443	1443	6206	240	6446	7889	65.1	24.4	10.5	7889
Morena	1	63	64	265	7769	8034	8098	25.8	37.1	37.0	8098
Narsimhapur	0	46	46	707	6468	7175	7221	45.1	33.1	21.8	7221
Neemuch	2	1096	1098	3330	49	3379	4477	53.6	28.8	17.6	4477
Panna	0	15	15	76	4924	5000	5015	1.8	43.0	55.2	5015
Raisen	0	0	0	4	5046	5050	5050	4.5	41.8	53.7	5050
Rajgarh	3	42	45	1294	5462	6756	6801	33.8	32.8	33.4	6801
Ratlam	0	126	126	3996	2543	6539	6665	36.7	34.0	29.3	6665
Rewa	286	45	331	130	10226	10356	10687	23.9	40.0	36.1	10687
Sagar	0	9	9	448	12758	13206	13215	24.8	46.8	28.4	13215
Satna	0	469	469	389	9727	10116	10585	23.2	39.7	37.1	10585
Sehore	0	148	148	1779	4061	5840	5988	37.1	34.0	28.9	5988
Seoni	5	187	192	663	8257	8920	9112	30.1	37.5	32.4	9112
Shahdol	7	141	148	244	4901	5145	5293	60.4	37.6	2.1	5293
Shajapur	11	303	314	2275	6179	8454	8768	38.9	29.9	31.2	8768
Sheopur	2	3	5	124	2985	3109	3114	27.6	34.4	38.0	3114
Shivpuri	0	8	8	15	8187	8202	8210	22.7	28.3	49.0	8210
Sidhi	0	1696	1696	360	7712	8072	9768	47.4	30.9	21.7	9768
Tikamgarh	1	18	19	323	6375	6698	6717	29.0	42.5	28.5	6717
Ujjain	48	261	309	7314	966	8280	8589	48.5	37.8	13.6	8589
Umaria	7	113	120	26	4078	4104	4224	14.9	39.2	45.8	4224
Vidisha	8	1	9	446	5500	6446	6455	34.7	37.5	27.8	6455
West Nimar	1	184	185	671	9380	10051	10236	40.9	39.1	20.2	10236
Madhya Pradesh	597	10972	11569	54758	300515	355273	366842	37.1	35.4	27.5	366842

Source: Department of Public Health and Family Welfare, Bhopal.

HE 5: District-wise Details of Maternal Care—Deliveries in Madhya Pradesh, April 2006–March 2007

District	Domiciliary Deliveries By				Institutional Deliveries	Total Deliveries
	LHV/ANM	TBA	Untrained Person	Total		
Anuppur	3328	6365	1237	10930	6788	17718
Ashoknagar	145	8367	0	8512	15954	24466
Badwani	2182	15062	523	17767	13069	30836
Balaghat	93	13557	403	14053	17279	31332
Betul	2516	14722	676	17914	18675	36589
Bhind	2750	15121	2817	20688	22576	43264
Bhopal	2425	2993	464	5882	23062	28944
Burhanpur	1443	7672	123	9238	9883	19121
Chhatarpur	7805	15622	1043	24470	20803	45273
Chhindwara	8873	13430	1441	23744	21270	45014
Damoh	2817	15816	1719	20352	10375	30727
Datia	1090	6468	818	8376	7903	16279
Dewas	3699	4709	0	8404	24836	33244
Dhar	5856	20644	983	27483	20658	48141
Dindori	1261	10985	1787	14033	9816	23849
East Nimar	423	12561	17	13001	21505	34506
Guna	1558	8274	0	9832	19390	29222
Gwalior	20246	11017	5326	36589	36586	73178
Harda	183	9468	13922	23573	4271	27844
Hoshngabad	970	5776	1509	8255	21728	29983
Indore	4446	7992	75	12513	69502	82015
Jabalpur	3966	12964	3135	20065	38530	58595
Jhabua	3039	26345	2395	31779	22640	54419
Katni	4095	8531	1025	13651	15588	29239
Mandla	1605	13819	482	15906	8603	24509
Mandsaur	465	8342	0	8807	18544	27351
Morena	3274	11074	125	14473	34686	49159
Narsimhapur	3716	6144	512	10372	12597	22969
Neemuch	2704	4269	0	6973	15352	22325
Panna	14476	4076	2	18554	1123	29677
Raisen	4026	19064	174	23264	14911	38175
Rajgarh	5489	15326	25	20840	18317	39157
Ratlam	1683	8585	580	10848	22832	33680
Rewa	4826	30630	1630	37086	23843	60969
Sagar	6299	28048	400	34747	19625	54372
Satna	4427	17344	1778	23549	27428	50977
Sehore	2042	13342	95	15479	17382	32861
Seoni	1922	12387	491	14800	13353	28153
Shadol	6735	8559	1254	16548	14720	31268
Shajapur	8763	13816	525	23104	26303	49407
Sheopur	860	7984	340	9184	7163	16347
Shivpuri	4009	17338	662	22009	19118	41127
Sidhi	19064	23526	4532	47122	17200	64322
Tikamgarh	6587	11825	2300	20712	13012	33724
Ujjain	4598	13321	1606	19525	26957	46482
Umaria	1219	3285	1634	6138	9778	15916
Vidisha	3230	7377	230	10837	16112	26949
West Nimar	6262	17455	928	24645	17737	42382
Madhya Pradesh	203490	591397	61743	856630	919386	1776016

Source: Department of Public Health and Family Welfare, Bhopal.

HE 6: Infant and Maternal Deaths in Madhya Pradesh, April 2006–March 2007

District	Total ANC Registered	% age High Risk/Complicaions	Total Deliveries	No. of Maternal Deaths	No. of Infant Deaths
Anuppur	22518	5.4	17718	36	405
Ashoknagar	26803	14.2	24466	44	905
Balaghat	37133	11.3	31332	66	2018
Barwani	33525	1.5	30836	33	999
Betul	39188	18.0	36589	43	1048
Bhind	53585	14.0	43264	19	1181
Bhopal	59966	0.7	28944	71	172
Burhanpur	21290	7.1	19121	19	82
Chhatarpur	50329	5.8	45273	26	1503
Chhindwara	47149	4.2	45014	49	0
Damoh	37132	7.4	30727	29	512
Datia	17250	1.2	16279	16	734
Dewas	44603	4.1	33244	9	432
Dhar	56275	5.3	48441	32	0
Dindori	17741	2.4	23849	41	531
East Nimar	37991	6.2	34506	8	602
Guna	35314	8.9	29222	78	1239
Gwalior	57832	1.1	73178	0	358
Harda	17861	12.7	27844	12	368
Hoshangabad	31624	7.4	29983	18	851
Indore	103955	10.8	82015	15	108
Jabalpur	75190	3.8	58595	46	10
Jhabua	60605	13.2	54419	49	392
Katni	32127	6.7	29239	46	993
Mandla	26141	2.9	24509	56	807
Mandsaur	38167	10.5	27351	19	830
Morena	58244	3.0	49159	7	208
Narsimhapur	22345	7.0	22969	3	116
Neemuch	21925	10.2	22325	9	7
Panna	34534	4.2	29677	8	336
Raisen	39874	9.0	38175	20	538
Rajgarh	45501	5.9	39157	23	673
Ratlam	38014	13.6	33680	20	808
Rewa	85792	3.9	60929	49	1324
Sagar	71028	10.5	54372	73	422
Satna	56450	9.8	50977	62	2060
Sehore	38069	5.8	32861	21	518
Seoni	31980	8.8	28153	42	584
Shahdol	31078	6.8	31268	115	1062
Shajapur	49267	7.9	49407	16	618
Sheopur	21675	0.3	16347	9	97
Shivpuri	46928	6.3	41127	55	1372
Sidhi	81801	5.3	64322	100	0
Tikamgarh	46620	1.1	33724	8	86
Ujjain	52598	10.6	46482	24	992
Umaria	19668	7.3	15916	41	462
Vidisha	31013	0.9	26949	12	125
West Nimar	49044	4.7	42382	22	790
Madhya Pradesh	2054641	6.9	1776016	1619	30278

Source: Department of Public Health and Family Welfare, Bhopal.

HE 7: Details of Ante Natal Care in Madhya Pradesh, April 2006–March 2007

District/Division	ANC Registration			ANC With 3 Check-Ups	T.T. (PW) II Dose & Booster	I.F.A. Tab (Preg. Women)
	In 1st Trim. (%)	After 1st Trim. (%)	Total			
Anuppur	56.3	43.7	22518	22352	22352	30985
Ashoknagar	44.1	55.9	26803	23986	27574	27574
Balaghat	52.2	47.8	37133	33376	18217	34245
Barwani	46.6	54.0	33525	29556	32538	29688
Betul	64.2	35.8	39188	24727	36987	27977
Bhind	55.8	44.2	53585	42669	52687	29385
Bhopal	22.2	77.3	59966	59896	51192	56612
Burhanpur	36.2	63.8	21290	20355	20427	19424
Chhatarpur	40.1	59.9	50329	28263	47298	45653
Chhindwara	72.0	28.0	47049	47049	46856	51365
Damoh	50.3	49.7	37132	29918	36107	19281
Datia	29.0	71.0	17250	14494	16768	11661
Dewas	64.0	36.0	44603	39579	45448	34678
Dhar	30.0	70.0	56275	39393	54023	58414
Dindori	32.1	67.9	17741	14407	16636	16023
East Nimar	59.2	40.8	37991	34781	35982	27996
Guna	37.0	63.0	35314	25700	32559	29227
Gwalior	22.8	77.2	57831	11896	57830	29279
Harda	44.3	55.7	17861	16958	17012	5568
Hoshangabad	62.0	38.0	31624	28663	31526	17384
Indore	21.3	78.7	103955	85323	86671	102251
Jabalpur	81.4	18.6	75190	60272	71788	72453
Jhabua	29.6	70.4	60605	51824	58368	74709
Katni	48.0	52.0	32127	22334	31533	15897
Mandla	27.3	72.7	26141	18766	24906	29308
Mandsaur	43.7	56.3	38167	29407	36944	33969
Morena	45.6	54.4	58244	48356	58244	46822
Narsimhpur	46.0	54.0	22345	16109	20747	19655
Neemuch	39.7	60.3	21925	14857	21873	24067
Panna	30.0	70.0	34534	9669	32408	40016
Raisen	57.8	42.2	39874	31952	38047	27918
Rajgarh	23.9	76.1	45501	37424	44283	51245
Ratlam	50.2	49.8	38014	26387	33263	37291
Rewa	66.7	33.3	85792	57779	72671	53900
Sagar	34.6	65.4	71028	56269	69780	43427
Satna	40.8	59.2	56450	41340	59380	58761
Sehore	41.9	58.1	38069	30624	37129	41253
Seoni	53.6	46.4	31980	29853	29450	29648
Shahdol	38.6	61.4	31078	26214	30416	30310
Shajapur	53.7	46.3	49267	39809	47410	26338
Sheopur	52.4	47.6	21675	15893	16873	21675
Shivpuri	69.1	30.9	46928	35916	43195	29305
Sidhi	53.6	46.4	81801	79333	79372	40420
Tikamgarh	61.9	38.1	46620	46620	38739	22488
Ujjain	42.5	57.5	52598	43833	50153	50892
Umaria	36.8	63.2	19668	15687	16437	13879
Vidisha	69.8	30.2	31013	27348	34067	30890
West Nimar	49.6	50.4	49044	44150	47992	42769
Madhya Pradesh	46.7	53.3	2054641	1631267	1932158	1693375

Source: Department of Public Health and Family Welfare, Bhopal.

HE 8: Health Care of Expecting Mother in Madhya Pradesh, April 2006–March 2007

District	I.F.A. (Preg. Women)				T.T. (Preg. Women)			
	Service Need	Achievement		% age Achievement	Service Need	Achievement		% age Achievement
		2006–07	2005–06			2006–07	2006–07	
Anuppur	21900	30240	30985	141.5	21900	22541	22352	102.1
Ashoknagar	23490	27846	27574	117.4	23490	25662	27574	117.4
Balaghat	44670	49006	34245	76.7	44670	35552	18217	40.8
Barwani	46860	52987	54709	116.7	37290	32795	32538	87.3
Betul	45630	49592	27977	61.3	45630	37778	36987	81.1
Bhind	46470	38544	29385	63.2	46470	56472	52687	113.4
Bhopal	38280	24371	27918	72.9	65010	48165	51192	78.7
Burhanpur	93390	100748	102251	109.5	20910	21622	20427	97.7
Chhindwara	60420	43666	51365	85.0	50330	49989	47298	94.0
Chhatarpur	50310	65993	45653	90.7	60420	49562	46856	77.6
Damoh	35790	46055	19281	53.9	35790	36633	36107	100.9
Datia	20910	25166	11661	55.8	20910	18273	16768	80.2
Dewas	44400	38469	34678	78.1	44400	43127	45448	102.4
Dhar	37290	53566	29688	79.6	59370	55151	54023	91.0
Dindori	18540	19234	16023	86.4	18540	17936	16636	89.7
East Nimar	59370	87964	58414	98.4	35460	38224	35982	101.5
Guna	33300	33294	29227	87.8	33300	35880	32559	97.8
Gwalior	55260	44557	29279	53.0	55260	37688	57830	104.7
Harda	36210	23036	17384	48.0	15960	17913	17012	106.6
Hoshangabad	15960	17863	5568	34.9	36210	33033	31526	87.1
Indore	52320	62525	42769	81.7	93390	100748	86671	92.8
Jabalpur	72360	73552	72453	100.1	72360	74572	71788	99.2
Jhabua	35460	38224	27396	77.3	46860	57324	58368	124.6
Katni	35220	18067	15897	45.1	35220	31169	31533	89.5
Mandla	28800	36713	29308	101.8	28800	25755	24906	86.5
Mansaur	41010	32507	37291	90.9	39690	39141	36944	93.1
Morena	53340	44463	46822	87.8	53340	43638	58244	109.2
Narsimhapur	31860	20630	19655	61.7	31860	21807	20747	65.1
Neemuch	43530	51704	26338	60.5	24060	19743	21873	90.9
Panna	28710	42925	40016	139.4	28710	34825	32408	112.9
Raisen	41040	30110	30890	75.3	38280	40964	38047	99.4
Rajgarh	65010	54304	56612	87.1	42540	43000	44282	104.1
Ratlam	57360	56435	50892	88.7	41010	34667	33263	81.1
Rewa	64080	54157	40420	63.1	67110	74851	72671	108.3
Sagar	67560	62505	43427	64.3	67560	67761	69780	103.9
Satna	63780	54805	58761	92.1	63780	59202	59380	93.1
Sehore	42540	40625	51245	120.5	36930	38295	37129	100.5
Seoni	37860	31207	29648	78.3	37860	32616	29450	77.8
Shahdol	17250	14329	13879	80.5	29760	31249	30416	102.2
Shajapur	39690	43752	33969	85.6	43530	50331	47410	108.9
Sheopur	19290	19711	21675	112.4	19290	17035	16873	87.5
Shivpuri	49110	44248	29305	59.7	49110	46972	43195	88.0
Sidhi	67110	66602	53900	80.3	64080	74649	79372	123.9
Tikamgarh	41130	51910	22488	54.7	41130	40913	38739	94.2
Ujjain	24060	26940	24067	100.0	57360	50201	50153	87.4
Umaria	29760	35529	30310	101.8	17250	17381	16437	95.3
Vidisha	36930	47914	41253	111.7	41040	32800	34067	83.0
West Nimar	20910	23236	19424	92.9	52320	46384	47992	91.7
Madhya Pradesh	2035530	2051826	1693375	83.2	2035530	1961989	1932158	94.9

Source: Department of Public Health and Family Welfare, Bhopal.

HE 9: Districtwise Details of Infant Immunization in Madhya Pradesh, April 2006–March 2007

District	B.C.G.				D.P.T.			
	Service Need	Achievement		% age Achieve-ment	Service Need	Achievement		% age Achieve-ment
		2006–07	2005–06			2006–07	2006–07	
Anuppur	21491	18320	20951	97.5	21491	19650	19696	91.6
Ashoknagar	23052	23354	26631	115.5	23052	26639	24445	106.6
Balaghat	43836	35675	34060	77.7	43836	34586	34041	77.7
Barwani	36594	36131	35830	97.9	36594	36632	36783	100.5
Betul	44778	37107	34810	77.7	44778	37401	34281	76.6
Bhind	45603	55509	54141	118.7	45603	58726	57411	125.9
Bhopal	63796	68284	66842	104.8	63796	66972	65392	102.5
Burhanpur	20520	20720	19852	96.7	20520	21069	19970	97.3
Chhatarpur	49371	52564	51571	104.5	49371	50644	48865	99.0
Chhindwara	59292	53296	47187	79.6	59292	50739	46862	79.0
Damodh	35122	38215	35591	101.3	35122	36789	35621	101.4
Datia	20520	18519	16396	79.9	20520	17775	15917	77.6
Dewas	43571	39549	40281	92.4	43571	40521	41544	95.3
Dhar	58262	52164	53549	91.9	58261	52118	52233	89.7
Dindori	18194	17975	18190	100.0	18194	17926	17932	98.5
East Nimar	34798	36878	36257	104.2	34798	37014	36008	103.5
Guna	32678	38659	33251	101.8	32678	36336	31660	96.9
Gwalior	54228	63229	64264	118.5	54228	47919	57476	106.0
Harda	15662	16208	16088	102.7	15662	16288	16002	102.2
Hoshangabad	35534	32312	31523	88.7	35534	29135	28955	81.5
Indore	91647	92796	85975	93.8	91647	90206	85155	92.9
Jabalpur	71009	75501	96225	97.5	71009	73416	70040	98.6
Jhabua	45985	57721	54909	119.4	45985	56143	51840	112.7
Katni	34563	32439	34974	101.2	34563	30048	34453	99.7
Mandla	28262	25848	24915	88.2	28262	23452	23238	82.2
Mandsaur	38949	36572	37174	95.4	38949	37204	35331	90.7
Morena	52344	43551	57094	109.1	52344	40697	52862	101.0
Narsimhapur	31265	23205	22866	73.1	31265	21845	21072	67.4
Neemuch	23611	19483	19655	83.2	23611	19877	20304	86.0
Panna	28174	33136	27657	98.2	28174	32447	27187	96.5
Raisen	37565	39009	37567	100.0	37565	38450	36888	98.2
Rajgarh	41746	43262	41364	99.1	41746	39532	38240	91.6
Ratlam	40244	36006	35653	88.6	40244	36339	35467	88.1
Rewa	65857	80478	75131	114.1	65857	76192	65934	100.1
Sagar	66299	68686	71820	108.3	66299	66530	65773	99.2
Satna	62589	62031	61887	98.9	62589	59903	60791	97.1
Sehore	36241	37268	35554	98.1	36241	45451	35208	97.1
Seoni	37153	34683	31043	83.6	37153	31216	29317	78.9
Shahdol	29204	29128	29759	101.9	29204	28248	27610	94.5
Shajapur	42717	52571	50302	117.8	42717	51706	47103	110.3
Sheopur	18930	20805	17389	91.9	18930	17964	16135	85.2
Shivpuri	48193	45848	43136	89.5	48193	46825	43216	89.7
Sidhi	62884	71439	77910	123.9	62884	71165	73094	116.2
Tikamgarh	40362	42341	39926	98.9	40362	41098	37574	93.1
Ujjain	56289	51014	50553	89.8	56289	48920	46977	83.5
Umaria	16928	18210	16590	98.0	16928	17200	15972	94.4
Vidisha	40274	37743	34282	85.1	40274	35206	31049	77.1
West Nimar	51343	47753	47537	92.6	51343	48249	48461	94.9
Madhya Pradesh	1997529	2013196	1969112	98.6	1997528	1950408	1897403	95.0

Source: Department of Public Health and Family Welfare, Bhopal.

HE 9: Districtwise Details of Infant Immunization in Madhya Pradesh, April 2006–March 2007

District	POLIO				MEASLES			
	Service Need	Achievement		% age Achieve-ment	Service Need	Achievement		% age Achiev-ment
		2006–07	2005–06			2006–07	2006–07	
Anuppur	21491	19219	20499	95.4	21491	18920	19245	89.5
Ashoknagar	23052	26636	24445	106.0	23052	27283	24985	108.4
Balaghat	43836	34550	34041	77.7	43836	33786	32424	74.0
Barwani	36594	36632	36783	100.5	36595	33125	35157	96.1
Betul	44778	37401	34281	76.6	44778	37367	34660	77.4
Bhind	45603	58726	57411	125.9	45603	59502	55116	120.9
Bhopal	63796	66972	65392	102.5	63796	66841	63998	100.3
Burhanpur	20520	21069	19970	97.3	20520	20619	19296	94.0
Chhatarpur	49371	50445	48865	99.0	49371	50315	48839	98.9
Chhindwara	59292	50739	46862	79.0	59292	48451	46058	77.7
Damodh	35122	36667	35740	101.8	35122	37212	35966	120.4
Datia	20520	17733	16040	77.6	20520	17420	16140	78.7
Dewas	43571	40521	41544	95.3	43571	39013	39555	90.8
Dhar	58262	52118	52233	89.7	58261	51198	50499	86.7
Dindori	18194	17926	17930	98.5	18194	18119	18243	100.3
East Nimar	34798	37014	36008	103.5	34798	36907	35349	101.6
Guna	32678	36336	31660	96.9	32678	35437	30944	94.7
Gwalior	54228	47886	57476	106.0	54228	62564	52161	96.2
Harda	15662	16288	16002	102.2	15662	16232	15934	101.7
Hoshangabad	35534	29135	28955	81.5	35534	29425	27937	78.6
Indore	91647	90206	85592	92.9	91647	84168	83330	90.9
Jabalpur	71009	74208	70040	98.6	71009	73875	68173	96.0
Jhabua	45985	56143	51840	112.7	45985	55635	52163	113.4
Katni	34563	30048	34453	99.7	34563	30568	34220	99.0
Mandla	28262	23452	23238	82.2	28262	23486	23541	83.3
Mandsaur	38949	37204	35331	90.7	38949	36760	35420	90.9
Morena	52344	40697	52862	101.0	52344	41696	52864	101.0
Narsimhapur	31265	21845	21072	67.4	31265	21684	20057	64.2
Neemuch	23611	19877	20304	86.0	23611	19521	19606	83.0
Panna	28174	32447	27187	96.5	28174	30396	24402	86.6
Raisen	37565	38450	36888	98.2	37565	38552	37695	100.3
Rajgarh	41746	39532	38240	91.6	41746	40318	39234	94.0
Ratlam	40244	36339	35467	88.1	40244	35402	33579	83.4
Rewa	65857	76142	67066	100.1	65857	74503	68179	103.5
Sagar	66299	66530	65773	99.2	66299	66028	64568	97.4
Satna	62589	60288	60791	97.1	62589	57782	54497	87.1
Sehore	36241	35451	35208	97.1	36241	36358	35657	98.4
Seoni	37153	31216	29317	78.9	37153	30339	29645	79.9
Shahdol	29204	27684	25674	94.5	29204	27788	27475	94.1
Shajapur	42717	51706	47103	110.3	42717	50666	47016	110.1
Sheopur	18930	17964	16135	85.2	18930	18575	16052	84.8
Shivpuri	48193	46856	43630	89.7	48193	47359	43114	89.5
Sidhi	62884	71618	73185	116.2	62884	70096	70923	112.8
Tikamgarh	40362	42471	37283	92.4	40362	42395	38576	95.6
Ujjain	56289	48920	46997	83.5	56289	47339	47146	83.8
Umaria	16928	17200	15972	94.4	16928	16867	15811	93.4
Vidisha	40274	35206	31049	77.1	40274	35183	35469	88.1
West Nimar	51343	48249	48461	94.4	51343	49095	48692	94.8
Madhya Pradesh	1997529	1951965	1898295	95.0	1997529	1942170	1869610	93.6

Source: Department of Public Health and Family Welfare, Bhopal.

HE 10: Average Number of Children Born to Mothers Age Group between 45–49, 2001

District	Average Children Born to Married Women		
	Rural	Urban	All
Anuppur		Included in Shahdol	
Ashoknagar		Included in Guna	
Balaghat	4.02	3.72	3.98
Barwani	5.51	3.99	5.26
Betul	4.93	4.31	4.81
Bhind	4.73	4.23	4.60
Bhopal	5.37	3.75	4.02
Burhanpur		Included in East Nimar	
Chhatarpur	5.69	4.72	5.48
Chhindwara	4.58	4.06	4.43
Damoh	4.75	4.41	4.68
Datia	4.73	4.59	4.70
Dewas	4.87	3.99	4.62
Dhar	4.62	3.84	4.50
Dindori	3.74	3.71	3.74
East Nimar	4.90	4.08	4.66
Guna	5.29	4.46	5.10
Gwalior	4.96	3.99	4.32
Harda	5.20	4.27	4.99
Hoshangabad	4.90	4.11	4.64
Indore	4.00	3.22	3.44
Jabalpur	4.35	3.59	3.87
Jhabua	5.57	3.90	5.42
Katni	4.91	3.91	4.68
Mandla	3.79	3.89	3.80
Mandsaur	4.42	3.85	4.30
Morena	5.20	4.60	5.06
Narsimhapur	4.21	3.78	4.14
Neemuch	4.32	3.91	4.21
Panna	5.16	4.53	5.07
Raisen	5.07	4.74	5.01
Rajgarh	4.73	4.32	4.66
Ratlam	4.64	3.70	4.33
Rewa	5.17	4.41	5.04
Sagar	5.30	4.46	5.04
Satna	5.02	4.47	4.90
Sehore	5.21	4.48	5.08
Seoni	4.32	3.88	4.28
Shahdol	4.12	4.11	4.12
Shajapur	4.77	4.25	4.67
Sheopur	5.64	5.20	5.57
Shivpuri	5.31	4.56	5.18
Sidhi	5.27	4.57	5.17
Tikamgarh	5.08	4.94	5.05
Ujjain	4.37	3.65	4.07
Umaria	4.87	4.35	4.78
Vidisha	5.49	4.38	5.23
West Nimar	4.79	3.92	4.64
Madhya Pradesh	4.83	3.97	4.59

Source: Census of India, 2001, F series, Madhya Pradesh.

HE 11: Children Born to Married Women, 2001

District	Rural			Urban			Total		
	Persons	Male	Female	Persons	Male	Female	Persons	Male	Female
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	3.30	1.68	1.62	2.97	1.53	1.44	3.26	1.66	1.60
Barwani	4.07	2.08	1.98	3.31	1.72	1.59	3.95	2.03	1.92
Betul	3.81	1.95	1.85	3.46	1.80	1.66	3.74	1.93	1.82
Bhind	3.51	1.94	1.57	3.25	1.80	1.45	3.45	1.91	1.54
Bhopal	3.75	1.98	1.77	2.96	1.56	1.40	3.11	1.64	1.47
Burhanpur				Included in East Nimar					
Chhatarpur	4.02	2.12	1.90	3.51	1.86	1.65	3.91	2.06	1.85
Chhindwara	3.66	1.88	1.78	3.26	1.70	1.56	3.56	1.84	1.72
Damoh	3.60	1.88	1.72	3.52	1.85	1.67	3.59	1.87	1.71
Datia	3.55	1.90	1.64	3.43	1.85	1.58	3.52	1.89	1.63
Dewas	3.63	1.89	1.74	3.18	1.67	1.51	3.51	1.83	1.68
Dhar	3.56	1.84	1.73	3.01	1.58	1.43	3.48	1.80	1.68
Dindori	2.99	1.53	1.46	3.02	1.56	1.46	2.99	1.53	1.46
East Nimar	3.79	1.97	1.83	3.33	1.74	1.59	3.67	1.91	1.76
Guna	3.78	1.99	1.79	3.39	1.81	1.59	3.70	1.96	1.75
Gwalior	3.67	2.00	1.67	3.10	1.68	1.41	3.32	1.81	1.51
Harda	3.97	2.07	1.90	3.42	1.79	1.63	3.86	2.01	1.84
Hoshangabad	3.82	2.00	1.83	3.35	1.76	1.59	3.68	1.92	1.76
Indore	3.11	1.62	1.48	2.63	1.39	1.23	2.77	1.46	1.31
Jabalpur	3.45	1.79	1.67	2.94	1.56	1.39	3.17	1.66	1.51
Jhabua	4.14	2.11	2.02	3.16	1.64	1.52	4.05	2.07	1.98
Katni	3.60	1.85	1.75	3.09	1.62	1.47	3.50	1.81	1.69
Mandla	3.21	1.63	1.57	3.17	1.63	1.54	3.20	1.63	1.57
Mandsaur	3.13	1.63	1.50	3.04	1.58	1.45	3.11	1.62	1.49
Morena	3.71	2.04	1.67	3.39	1.87	1.52	3.64	2.01	1.64
Narsimhapur	3.38	1.76	1.62	3.11	1.64	1.47	3.34	1.74	1.59
Neemuch	3.02	1.57	1.45	3.03	1.59	1.44	3.02	1.57	1.45
Panna	3.75	1.95	1.80	3.35	1.78	1.57	3.70	1.93	1.78
Raisen	3.73	1.95	1.78	3.45	1.82	1.63	3.68	1.93	1.75
Rajgarh	3.20	1.68	1.53	3.28	1.73	1.55	3.22	1.68	1.53
Ratlam	3.38	1.75	1.63	3.08	1.61	1.47	3.29	1.71	1.58
Rewa	3.71	1.93	1.78	3.31	1.76	1.55	3.65	1.90	1.75
Sagar	3.85	2.01	1.83	3.44	1.82	1.63	3.73	1.96	1.77
Satna	3.67	1.90	1.77	3.41	1.79	1.61	3.62	1.88	1.74
Sehore	3.74	1.96	1.78	3.34	1.75	1.58	3.67	1.93	1.74
Seoni	3.49	1.78	1.71	3.10	1.61	1.49	3.45	1.76	1.69
Shahdol	3.08	1.57	1.51	3.10	1.63	1.48	3.09	1.59	1.50
Shajapur	3.30	1.73	1.57	3.28	1.71	1.57	3.29	1.72	1.57
Sheopur	3.66	1.93	1.72	3.56	1.89	1.66	3.64	1.93	1.72
Shivpuri	3.76	2.00	1.76	3.43	1.83	1.60	3.70	1.97	1.73
Sidhi	3.73	1.93	1.80	3.42	1.79	1.64	3.69	1.91	1.78
Tikamgarh	3.59	1.89	1.70	3.64	1.91	1.73	3.60	1.90	1.70
Ujjain	3.22	1.68	1.54	2.99	1.57	1.42	3.14	1.64	1.50
Umaria	3.46	1.78	1.68	3.23	1.68	1.54	3.43	1.77	1.66
Vidisha	3.98	2.08	1.89	3.40	1.79	1.61	3.85	2.02	1.83
West Nimar	3.74	1.94	1.81	3.18	1.67	1.51	3.66	1.89	1.76
Madhya Pradesh	3.59	1.87	1.72	3.13	1.66	1.48	3.47	1.82	1.66

Source: Census of India, 2001, F series, Madhya Pradesh.

HE 12: Women Married Below the Age of 20 years in Madhya Pradesh, 2001

District	Total			Rural			Urban		
	Ever Married Women	Share of Ever Married (below 15 years)	Share of Ever Married Women (15-19) years	Ever Married Women	Share of Ever Married Women (below 15 years)	Share of Ever Married women (15-19) years	Ever Married Women	Share of Ever Married Women (below 15 years)	Share of Ever Married Women (15-19) years
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	411529	0.4%	9.6%	361099	0.3%	9.9%	50430	0.4%	7.5%
Barwani	262613	0.6%	36.7%	221895	0.6%	40.2%	40718	0.4%	19.3%
Betul	344005	0.4%	11.7%	281895	0.4%	13.1%	62110	0.4%	6.7%
Bhind	361624	0.6%	39.8%	277620	0.6%	44.9%	84004	0.5%	27.2%
Bhopal	451900	0.6%	17.4%	87890	0.8%	38.5%	364010	0.5%	13.5%
Burhanpur				Included in East Nimar					
Chhatarpur	364115	1.1%	45.5%	286554	1.1%	53.8%	77561	0.7%	23.6%
Chhindwara	470374	0.4%	13.3%	357007	0.4%	15.2%	113367	0.4%	8.6%
Damoh	284994	0.6%	39.8%	234359	0.6%	47.1%	50635	0.5%	18.1%
Datia	163849	0.6%	39.8%	129903	0.7%	47.8%	33946	0.4%	19.4%
Dewas	352589	1.2%	42.9%	258809	1.4%	50.6%	93780	0.8%	25.5%
Dhar	452147	0.6%	33.6%	379427	0.6%	35.5%	72720	0.6%	24.6%
Dindori	165193	0.8%	32.5%	158300	0.8%	33.3%	6893	1.1%	19.5%
East Nimar	439728	0.4%	24.7%	323023	0.5%	30.4%	116705	0.4%	13.0%
Guna	415241	0.8%	42.4%	328764	0.9%	49.4%	86477	0.5%	22.6%
Gwalior	403322	0.5%	22.9%	157971	0.5%	37.6%	245351	0.5%	15.7%
Harda	120858	0.4%	25.6%	95628	0.4%	30.0%	25230	0.4%	13.1%
Hoshangabad	273023	0.5%	18.3%	190642	0.5%	23.6%	82381	0.4%	9.5%
Indore	668723	1.0%	27.7%	205539	1.4%	52.2%	463184	0.7%	18.4%
Jabalpur	560594	0.6%	17.5%	249797	0.6%	29.0%	310797	0.5%	10.7%
Jhabua	325514	0.3%	26.4%	295377	0.3%	27.7%	30137	0.2%	14.7%
Katni	290659	1.7%	40.3%	233016	1.9%	48.7%	57643	0.6%	14.7%
Mandla	249081	0.5%	21.2%	225792	0.5%	23.3%	23289	0.4%	7.5%
Mandsaur	344451	2.8%	49.9%	283548	3.1%	56.4%	60903	0.8%	23.8%
Morena	387263	0.7%	44.0%	304357	0.8%	50.6%	82906	0.5%	26.3%
Narsimhapur	259845	0.5%	26.0%	220029	0.5%	29.0%	39816	0.4%	13.6%
Neemuch	211487	3.1%	46.8%	156268	3.8%	55.8%	55219	1.0%	24.7%
Panna	217565	1.0%	41.0%	191422	1.1%	45.0%	26143	0.7%	20.1%
Raisen	274360	0.4%	27.0%	226304	0.5%	30.4%	48056	0.3%	15.3%
Rajgarh	354985	3.9%	59.7%	299342	4.4%	67.1%	55643	1.2%	28.7%
Ratlam	336403	1.7%	41.6%	236226	2.1%	52.7%	100177	0.8%	19.5%
Rewa	521149	1.5%	44.0%	442077	1.6%	48.7%	79072	0.9%	23.2%
Sagar	503750	0.6%	33.0%	360215	0.6%	42.2%	143535	0.4%	16.6%
Satna	491247	1.4%	40.2%	396372	1.6%	45.8%	94875	0.6%	21.4%
Sehore	277371	1.3%	40.3%	230570	1.4%	46.8%	46801	0.6%	17.8%
Seoni	308517	0.3%	16.1%	278178	0.3%	17.2%	30339	0.5%	8.2%
Shahdol	438828	1.8%	42.4%	341419	2.1%	52.1%	97409	0.8%	20.4%
Shajapur	368438	3.6%	59.4%	305249	4.1%	67.0%	63189	1.2%	30.8%
Sheopur	138179	1.6%	51.2%	117259	1.7%	56.3%	20920	0.9%	28.3%
Shivpuri	357411	0.9%	48.4%	300134	0.9%	56.0%	57277	0.6%	21.0%
Sidhi	464865	1.3%	50.1%	404819	1.4%	54.5%	60046	0.7%	28.0%
Tikamgarh	313831	1.3%	54.1%	260888	1.4%	60.1%	52943	0.9%	31.3%
Ujjain	484042	2.6%	45.7%	304076	3.5%	63.7%	179966	0.9%	21.7%
Umariya	138661	1.9%	42.9%	117517	2.0%	47.3%	21144	0.9%	23.9%
Vidisha	297917	0.6%	35.7%	234845	0.6%	42.0%	63072	0.5%	19.5%
West Nimar	393649	0.4%	29.8%	333300	0.4%	32.9%	60349	0.4%	15.1%
Madhya Pradesh	15715889	1.1%	34.1%	11684721	1.2%	41.3%	4031168	0.6%	17.7%

Source: Census of India, 2001, F series, Madhya Pradesh.

EL 1: Employment in Madhya Pradesh, 2001

District	Worker's Participation Rate, 2001					Child Workers, 2001			
	Total	Male	Female	Rural	Urban	Children (5–14 years) as Main Workers		Children (5–14 years) as Main and Marginal Workers	
						%	No.	%	No.
Anuppur									
Ashoknagar									
Balaghat	50.3	54.4	46.3	52.9	33.0	1.7	6115	5.5	19830
Barwani	48.4	53.0	43.7	50.9	33.9	6.3	19581	16.2	50515
Betul	44.2	51.0	37.0	48.0	27.2	2.8	10581	8.1	30259
Bhind	36.8	48.3	22.9	40.0	26.3	1.1	4099	3.7	14518
Bhopal	32.1	47.4	14.9	42.2	29.6	1.0	4411	1.9	8619
Burhanpur									
Chhatarpur	40.2	49.3	29.7	42.9	30.4	1.5	6050	3.8	15723
Chhindwara	42.2	50.8	33.0	46.2	29.6	2.6	12826	6.6	32049
Damoh	44.9	53.1	35.8	47.4	34.2	1.7	4747	4.9	13730
Datia	50.3	56.4	43.2	55.0	33.5	2.3	3683	11.9	19509
Dewas	44.4	51.8	36.4	49.4	31.0	2.7	9250	6.8	23691
Dhar	46.6	52.5	40.5	49.2	33.8	3.8	17834	9.5	44953
Dindori	57.0	58.9	55.0	58.2	31.9	6.9	10167	14.0	20668
East Nimar	43.9	52.8	34.4	49.1	29.7	5.0	22802	8.7	39638
Guna	41.0	51.4	29.2	44.1	29.5	2.0	9370	6.8	31509
Gwalior	32.5	47.6	14.7	38.3	28.7	1.2	4886	2.6	11071
Harda	44.9	52.8	36.4	49.4	28.3	3.2	4005	9.0	11409
Hoshangabad	35.7	49.3	20.5	39.0	28.3	1.2	3210	3.0	8178
Indore	36.2	51.8	19.1	45.6	32.2	2.0	11199	3.5	19874
Jabalpur	37.2	50.3	22.7	45.1	31.2	1.3	6304	2.8	14028
Jhabua	52.5	54.3	50.7	54.4	32.6	7.0	29389	23.1	96643
Katni	41.7	51.5	31.3	44.9	29.9	1.2	3232	4.1	11072
Mandla	51.9	55.5	48.3	54.3	30.9	3.2	7122	8.8	19818
Mandsaur	48.2	55.6	40.4	51.3	34.6	3.4	9944	7.7	22247
Morena	37.1	48.0	23.7	39.9	26.6	1.6	7399	4.6	21324
Narsimhapur	42.1	53.9	29.1	44.3	30.8	1.5	3549	3.7	8619
Neemuch	48.0	55.4	40.1	53.6	33.5	3.7	6385	7.3	12615
Panna	43.6	51.3	35.1	45.6	29.8	1.6	3791	5.7	13303
Raisen	36.6	49.5	21.9	38.1	29.9	1.1	3463	3.0	9259
Rajgarh	49.9	54.6	44.8	53.7	31.9	3.4	11298	11.9	38881
Ratlam	45.1	53.6	36.2	51.3	30.7	3.1	9586	9.0	27939
Rewa	43.7	49.4	37.7	46.2	31.2	1.3	7211	8.4	45973
Sagar	41.5	51.4	30.4	44.5	34.3	1.8	9657	4.4	23478
Satna	39.9	48.4	30.6	41.9	32.0	1.3	6575	3.4	17268
Sehore	41.8	48.8	34.1	44.9	28.0	1.3	3734	4.1	12220
Seoni	48.8	54.0	43.5	51.0	29.5	2.6	7754	7.5	22549
Shahdol	43.3	52.2	34.0	48.8	27.0	1.6	6436	5.4	21896
Shajapur	48.8	55.1	42.0	52.2	33.9	2.7	8910	8.8	29076
Sheopur	41.0	49.4	31.5	43.3	28.8	1.7	2876	5.5	9077
Shivpuri	45.2	52.0	37.3	48.7	27.9	3.1	12503	8.3	33333
Sidhi	41.4	48.0	34.2	43.4	29.0	1.7	9067	5.6	30522
Tikamgarh	47.1	52.2	41.3	49.5	35.9	1.6	5128	6.0	19426
Ujjain	44.1	53.8	33.9	52.4	31.2	3.7	15354	7.9	33139
Umaria	42.2	50.5	33.3	44.5	30.1	1.4	1939	4.8	6590
Vidisha	37.2	51.2	21.2	39.5	28.8	1.7	5579	4.8	15912
West Nimar	46.1	52.3	39.5	48.7	31.3	4.7	19264	8.1	33309
Madhya Pradesh	42.7	51.5	33.2	47.1	30.6	2.4	388265	6.7	1065259

Source: Census of India, 2001.

EL 1: Employment in Madhya Pradesh, 2001

District	Employment Share											
	Cultivators: Share of Main Workers			Agricultural Labourers: Share of Main Workers			Household Manufacturing: Share of Main Workers			Other Workers: Share of Main Workers		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Anuppur	Included in Shahdol											
Ashoknagar	Included in Guna											
Balaghat	45.2	49.4	9.6	27.2	29.8	5.9	4.9	5.1	3.1	22.6	15.7	81.4
Barwani	59.7	67.1	7.9	21.9	22.9	14.4	1.5	1.2	4.0	16.9	8.8	73.8
Betul	50.7	58.5	5.7	23.0	26.3	3.7	1.9	1.8	2.6	24.4	13.4	88.0
Bhind	59.7	69.1	20.1	12.3	13.5	7.2	1.8	1.4	3.4	26.2	16.0	69.2
Bhopal	11.4	50.9	0.8	6.7	29.2	0.7	1.8	1.5	1.9	80.1	18.4	96.6
Burhanpur	Included in East Nimar											
Chhatarpur	59.8	69.8	18.3	12.7	14.1	7.0	3.8	3.4	5.5	23.7	12.7	69.2
Chhindwara	44.9	54.9	6.3	23.8	28.0	7.6	1.8	1.5	2.9	29.5	15.6	83.1
Damoh	32.9	38.6	5.4	24.3	28.9	2.4	20.2	18.9	26.6	22.6	13.6	65.6
Datia	63.5	74.2	13.4	11.5	13.3	3.4	1.9	1.4	4.3	23.0	11.1	78.9
Dewas	45.3	55.8	8.5	26.4	31.4	8.9	1.8	1.4	3.2	26.5	11.4	79.3
Dhar	57.1	65.4	8.7	20.6	22.8	7.5	1.4	1.2	2.4	20.9	10.6	81.3
Dindori	69.3	71.0	6.1	20.0	20.5	3.0	1.9	1.9	5.0	8.8	6.6	85.9
East Nimar	38.4	47.0	3.8	34.4	41.1	7.6	1.9	1.3	3.9	25.4	10.6	84.7
Guna	55.9	66.9	8.0	17.8	21.3	2.4	3.1	1.7	8.8	23.2	10.0	80.8
Gwalior	27.1	60.5	2.9	7.6	16.6	1.0	2.7	1.5	3.7	62.6	21.5	92.4
Harda	43.2	50.4	7.2	32.1	37.6	4.3	2.0	1.7	3.4	22.7	10.3	85.1
Hoshangabad	33.2	45.2	3.6	24.9	34.4	1.6	2.5	2.2	3.3	39.4	18.1	91.5
Indore	16.3	46.4	1.3	10.4	28.8	1.2	3.6	2.1	4.4	69.7	22.8	93.1
Jabalpur	16.2	34.4	1.2	17.8	37.8	1.3	9.0	8.1	9.7	57.0	19.7	87.8
Jhabua	80.4	85.6	12.9	5.3	5.6	1.3	1.1	0.8	5.7	13.2	8.1	80.2
Katni	36.4	45.1	2.6	19.8	24.6	1.4	8.1	9.1	4.2	35.7	21.2	91.8
Mandla	54.0	58.2	4.6	27.1	29.0	4.7	2.0	1.9	2.7	16.9	10.9	87.9
Mandsaur	55.7	63.1	14.2	21.2	23.7	7.0	1.5	1.1	3.6	21.6	12.1	75.1
Morena	62.6	73.6	11.3	6.9	7.8	2.7	1.6	1.3	2.9	29.0	17.3	83.0
Narsimhapur	38.5	43.7	4.8	35.7	40.6	4.0	3.8	3.1	8.9	22.0	12.6	82.4
Neemuch	55.2	66.2	13.7	17.1	20.2	5.6	1.4	1.1	2.7	26.3	12.6	77.9
Panna	53.9	58.9	11.5	21.5	23.1	7.8	3.5	3.3	5.2	21.1	14.7	75.6
Raisen	39.8	46.6	7.8	28.5	33.5	4.7	4.2	3.4	7.9	27.5	16.4	79.6
Rajgarh	59.5	67.0	10.4	18.1	20.1	5.1	2.1	1.8	4.1	20.3	11.2	80.5
Ratlam	51.8	66.3	7.4	17.5	22.2	3.1	2.0	1.3	4.3	28.7	10.2	85.1
Rewa	42.2	47.4	10.8	30.5	34.1	9.1	5.2	4.4	10.0	22.1	14.1	70.2
Sagar	30.4	40.4	4.9	20.9	28.3	1.9	21.1	18.2	28.7	27.6	13.1	64.5
Satna	37.0	44.3	7.0	24.6	29.6	4.5	8.5	7.8	11.3	29.9	18.3	77.3
Sehore	53.3	61.5	6.8	22.9	26.2	4.2	1.8	1.5	3.5	22.1	10.9	85.5
Seoni	47.4	51.4	3.3	30.8	33.2	2.9	1.7	1.5	4.1	20.1	13.9	89.7
Shahdol	46.9	58.0	4.6	19.3	23.7	2.4	2.9	2.8	3.1	31.0	15.4	89.9
Shajapur	51.8	58.5	15.3	23.8	26.9	7.1	1.7	1.6	2.3	22.7	12.9	75.3
Sheopur	61.3	69.6	12.8	15.8	18.1	2.4	1.2	0.9	2.6	21.7	11.4	82.3
Shivpuri	69.0	76.9	7.6	11.7	12.9	2.3	1.5	1.3	2.7	17.8	8.9	87.4
Sidhi	54.7	60.7	11.7	23.2	25.7	5.1	2.7	2.7	2.4	19.4	11.0	80.9
Tikamgarh	68.9	75.9	29.7	9.7	10.4	5.6	3.1	2.3	7.2	18.3	11.3	57.5
Ujjain	45.4	63.7	5.0	17.5	24.2	2.6	2.3	1.5	4.1	34.8	10.6	88.4
Umaria	49.5	55.8	9.5	22.1	24.1	8.9	3.4	3.0	5.7	25.0	17.1	75.9
Vidisha	41.6	49.9	6.9	29.0	35.3	2.9	2.4	2.0	4.2	26.9	12.8	86.0
West Nimar	48.9	54.7	4.2	30.9	33.4	11.0	1.6	1.3	4.1	18.7	10.7	80.6
Madhya Pradesh	46.7	58.5	6.2	20.3	25.2	3.6	3.8	3.2	6.0	29.2	13.1	84.3

Source: Census of India, 2001.

EL 2: Dependency Ratio and Persons without Full Employment, 2001

District	Dependency Ratio									Persons without Full Employment (%)		
	All			Rural			Urban			All	Rural	Urban
	Total	Male	Female	Total	Male	Female	Total	Male	Female			
Anuppur	Included in Shahdol											
Ashoknagar	Included in Guna											
Balaghat	74.4	74.6	74.1	76.5	77.1	75.9	61.3	59.9	62.9	21.7	21.8	20.6
Barwani	100.6	99.8	101.4	106.0	105.6	106.4	73.9	72.2	75.7	12.5	12.5	12.0
Betul	84.8	83.6	86.1	90.3	89.6	91.0	63.9	61.6	66.5	19.3	19.2	19.6
Bhind	90.2	90.4	90.0	93.0	92.8	93.2	81.8	82.9	80.4	15.5	15.2	16.4
Bhopal	69.5	67.9	71.3	101.0	98.7	103.6	63.2	61.7	64.9	18.8	17.2	19.2
Burhanpur	Included in East Nimar											
Chhatarpur	95.0	93.7	96.5	99.8	98.7	101.2	79.4	77.6	81.5	15.3	15.1	16.0
Chhindwara	82.4	80.1	84.9	89.1	87.2	91.2	64.4	61.6	67.6	17.8	17.6	18.5
Damoh	84.6	81.3	88.3	87.5	84.5	91.1	72.7	68.7	77.3	17.4	17.6	16.7
Datia	84.2	81.7	87.2	86.3	83.6	89.6	76.8	75.0	79.0	15.7	15.8	15.5
Dewas	85.6	83.8	87.5	91.0	89.1	93.1	72.7	71.4	74.1	15.9	16.3	15.0
Dhar	87.9	86.6	89.2	92.1	91.8	92.4	69.2	65.3	73.8	15.2	15.6	13.1
Dindori	78.4	77.7	79.2	79.1	78.7	79.6	65.3	59.8	71.6	14.0	13.6	23.0
East Nimar	85.4	83.6	87.4	91.0	89.0	93.2	71.7	70.5	73.1	11.7	11.0	13.4
Guna	92.2	90.9	93.6	96.2	95.0	97.7	78.6	77.2	80.0	14.8	15.0	13.8
Gwalior	75.3	73.9	77.0	91.6	89.4	94.3	66.0	64.8	67.3	16.2	14.2	17.5
Harda	89.0	87.0	91.3	93.8	92.1	95.7	73.3	70.6	76.5	15.9	16.0	15.6
Hoshangabad	79.4	76.2	83.0	87.4	84.0	91.5	63.6	61.1	66.5	17.2	16.9	18.0
Indore	67.2	65.8	68.9	82.8	81.2	84.5	61.4	60.1	62.9	15.2	15.6	15.1
Jabalpur	66.7	64.0	69.8	79.9	76.6	83.6	58.0	55.8	60.6	20.5	20.3	20.6
Jhabua	104.4	105.8	102.9	108.2	110.2	106.2	71.0	69.6	72.5	15.1	15.0	15.1
Katni	79.8	78.8	80.8	84.9	84.4	85.5	63.0	61.2	65.1	20.0	21.1	16.0
Mandla	77.3	76.6	78.1	79.4	78.8	80.0	61.4	59.9	63.0	19.2	19.1	19.3
Mandsaur	77.6	76.7	78.6	80.2	79.5	80.9	67.0	65.4	68.7	13.1	13.1	13.3
Morena	92.2	92.3	92.0	95.9	95.7	96.1	79.9	80.8	78.7	14.5	14.3	15.4
Narsimhapur	77.0	74.6	79.7	79.5	77.0	82.3	65.0	62.9	67.3	16.0	15.9	16.7
Neemuch	74.0	73.6	74.4	76.8	76.8	76.8	67.2	66.1	68.4	13.4	13.2	14.0
Panna	91.0	89.4	92.8	93.2	91.8	94.9	76.7	74.7	79.0	17.4	17.2	18.9
Raisen	90.3	86.6	94.7	93.9	90.2	98.3	75.9	72.3	80.3	16.1	16.0	16.2
Rajgarh	89.4	89.2	89.6	91.9	92.1	91.6	78.4	76.6	80.5	16.4	16.6	15.5
Ratlam	80.0	79.0	81.0	86.9	85.8	88.0	65.9	65.2	66.6	15.7	15.6	15.9
Rewa	95.2	96.8	93.5	99.5	102.2	96.8	75.4	73.7	77.4	18.0	17.9	18.8
Sagar	86.0	81.8	90.9	92.0	87.6	97.2	72.8	69.0	77.3	15.9	15.8	16.0
Satna	88.8	88.6	89.1	92.9	93.4	92.4	74.6	72.5	77.0	16.6	17.2	14.6
Sehore	94.1	92.4	95.9	98.5	97.0	100.1	76.2	74.0	78.6	18.8	19.0	18.3
Seoni	80.9	79.3	82.5	83.2	81.7	84.9	62.4	61.3	63.6	19.7	19.7	19.2
Shahdol	77.5	76.3	78.7	81.2	80.6	81.8	67.3	65.1	69.9	20.6	21.3	18.5
Shajapur	86.9	86.1	87.7	89.4	88.8	90.0	76.6	75.2	78.1	16.6	17.3	13.8
Sheopur	95.1	93.5	96.8	97.3	95.7	99.1	83.9	82.8	85.2	17.3	18.1	13.0
Shivpuri	91.4	89.4	93.7	94.8	92.9	97.1	75.8	73.6	78.4	13.4	12.6	17.5
Sidhi	100.0	99.5	100.6	103.8	104.3	103.2	80.1	75.9	85.2	15.2	15.4	14.1
Tikamgarh	88.9	88.0	89.9	90.7	90.1	91.5	80.8	78.8	83.2	17.3	17.3	17.5
Ujjain	77.7	76.4	79.2	86.6	84.8	88.5	65.4	64.6	66.2	15.0	14.3	16.1
Umaria	85.1	84.3	86.0	88.2	88.0	88.3	70.9	67.5	74.8	20.2	20.2	20.4
Vidisha	92.7	88.8	97.4	98.1	93.7	103.5	75.2	72.6	78.1	13.7	13.1	15.8
West Nimar	88.7	86.3	91.3	92.3	89.8	95.0	71.3	69.5	73.3	11.4	10.9	14.0
Madhya Pradesh	84.3	82.9	85.8	90.9	89.8	92.1	68.2	66.5	70.2	16.4	16.2	16.7

Source: Census of India, 2001.

EL 3: Employment in Age group (15–59 years) in Madhya Pradesh

District	Percentage of Marginal Workers (age 15–59) out of Total Population								
	All			Rural			Urban		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	15.2	9.5	20.8	16.6	10.1	22.9	5.6	5.1	6.2
Barwani	8.8	3.9	13.9	9.9	4.2	15.7	2.6	2.0	3.2
Betul	11.8	7.3	16.5	13.8	8.1	19.7	3.0	3.8	2.1
Bhind	7.6	4.5	11.4	9.0	4.7	14.2	3.4	3.9	2.8
Bhopal	4.3	4.2	4.5	11.0	6.5	16.0	2.7	3.7	1.7
Burhanpur				Included in East Nimar					
Chhatarpur	8.8	4.1	14.3	10.3	4.4	17.2	3.5	3.2	3.9
Chhindwara	10.1	6.1	14.3	12.2	6.7	17.8	3.7	4.1	3.2
Damoh	10.9	5.8	16.6	12.5	6.5	19.2	4.1	3.0	5.2
Datia	10.7	4.6	17.8	12.6	5.1	21.5	3.9	2.9	4.9
Dewas	9.6	5.0	14.6	11.8	5.6	18.5	3.8	3.6	4.0
Dhar	10.2	5.2	15.4	11.6	5.7	17.7	3.3	3.3	3.5
Dindori	9.4	6.4	12.5	9.6	6.4	12.9	4.9	5.2	4.5
East Nimar	5.8	3.4	8.4	7.1	3.7	10.8	2.2	2.5	1.8
Guna	9.1	4.7	14.1	10.8	5.1	17.2	3.0	2.9	3.0
Gwalior	4.8	3.7	6.0	8.3	4.7	12.7	2.4	3.0	1.7
Harda	10.4	4.6	16.8	12.4	4.9	20.5	3.1	3.5	2.7
Hoshangabad	7.5	5.5	9.7	9.7	6.5	13.3	2.5	3.3	1.7
Indore	4.5	3.8	5.2	9.4	5.7	13.2	2.4	3.0	1.8
Jabalpur	7.1	6.3	8.1	12.7	9.7	15.9	3.0	3.8	2.1
Jhabua	12.0	5.4	18.6	12.8	5.7	20.0	3.2	2.8	3.6
Katni	12.2	8.8	15.8	14.8	10.4	19.3	2.7	3.0	2.3
Mandla	13.3	9.1	17.5	14.4	9.7	19.1	3.1	3.6	2.6
Mandsaur	8.0	4.0	12.2	9.2	4.3	14.3	3.0	2.7	3.2
Morena	7.4	4.0	11.5	8.6	4.2	14.1	2.9	3.4	2.4
Narsimhapur	8.4	5.6	11.6	9.4	5.9	13.3	3.3	3.8	2.7
Neemuch	7.6	4.5	10.7	9.0	4.9	13.2	3.9	3.6	4.2
Panna	11.0	6.0	16.6	12.1	6.2	18.5	4.0	4.5	3.5
Raisen	7.9	5.8	10.3	9.0	6.2	12.0	3.2	3.7	2.6
Rajgarh	11.6	5.4	18.3	13.1	5.8	20.9	4.6	3.8	5.6
Ratlam	9.6	4.9	14.5	12.4	5.4	19.6	3.3	3.7	2.8
Rewa	10.9	6.5	15.5	12.1	7.0	17.4	4.6	3.9	5.3
Sagar	8.6	5.0	12.6	10.7	6.0	16.1	3.4	2.6	4.3
Satna	8.7	5.6	12.2	10.2	6.3	14.3	3.2	2.7	3.7
Sehore	11.4	6.2	17.2	13.1	6.6	20.2	3.8	4.3	3.2
Seoni	13.7	7.6	19.9	14.9	8.1	21.9	3.3	3.7	2.8
Shahdol	12.5	8.6	16.6	15.7	10.4	21.2	3.0	3.5	2.4
Shajapur	12.3	4.8	20.4	14.0	5.1	23.7	4.6	3.4	6.0
Sheopur	12.0	5.1	19.7	13.6	5.6	22.6	3.3	2.6	4.1
Shivpuri	8.0	3.7	13.0	8.9	3.6	15.1	3.5	4.2	2.7
Sidhi	9.6	4.8	14.9	10.7	5.1	16.6	3.3	3.0	3.7
Tikamgarh	12.1	4.1	21.1	13.2	4.1	23.6	6.7	4.1	9.6
Ujjain	8.0	4.9	11.3	11.0	5.6	16.8	3.2	3.7	2.6
Umaria	12.8	9.2	16.5	14.0	9.6	18.6	6.4	7.1	5.5
Vidisha	7.1	4.7	9.8	8.3	5.1	11.9	2.8	3.4	2.0
West Nimar	6.1	3.2	9.2	6.8	3.3	10.4	2.4	2.6	2.2
Madhya Pradesh	9.2	5.3	13.4	11.4	6.0	17.1	3.2	3.4	2.9

Source: Census of India, 2001.

EL 3: Employment in Age group (15–59 years) in Madhya Pradesh

District	Percentage of Non-Workers (age 15–59) out of Total Population											
	All			Rural			Urban					
	Total	Male	Female	Total	Male	Female	Total	Male	Female			
Anuppur				Included in Shahdol								
Ashoknagar				Included in Guna								
Balaghat	12.3	8.9	15.5	9.4	7.5	11.3	31.3	18.1	44.9			
Barwani	8.4	4.7	12.3	5.4	3.5	7.4	26.1	11.4	41.7			
Betul	15.3	9.6	21.2	10.8	7.3	14.3	35.2	19.7	52.1			
Bhind	20.4	10.5	32.3	17.0	8.8	27.0	31.1	16.0	48.9			
Bhopal	29.2	15.4	44.7	13.1	7.7	19.2	33.2	17.3	50.9			
Burhanpur				Included in East Nimar								
Chhatarpur	15.6	8.3	24.1	12.1	6.4	18.7	28.1	14.9	43.2			
Chhindwara	17.5	10.4	25.0	12.4	7.6	17.5	33.3	18.8	48.9			
Damoh	14.3	8.0	21.2	11.4	6.2	17.2	26.5	15.9	38.4			
Datia	10.7	6.2	16.1	6.5	4.4	8.9	25.9	12.6	41.3			
Dewas	14.3	8.2	20.9	8.8	6.1	11.6	28.9	13.7	45.6			
Dhar	11.7	6.6	17.0	8.5	5.6	11.6	27.3	11.6	45.2			
Dindori	7.4	6.0	8.8	6.2	5.4	7.0	31.3	17.4	46.0			
East Nimar	15.1	7.6	23.2	9.4	5.1	14.0	30.7	14.3	48.2			
Guna	16.2	7.4	26.1	12.8	5.6	20.9	28.8	14.0	45.3			
Gwalior	27.1	13.4	43.2	17.8	7.9	29.6	33.2	17.2	52.0			
Harda	13.6	7.4	20.4	8.8	5.0	12.8	31.4	15.9	48.6			
Hoshangabad	23.5	12.3	36.1	18.7	9.5	28.9	34.5	18.6	52.2			
Indore	26.4	12.4	41.7	13.8	7.4	20.6	31.8	14.5	50.9			
Jabalpur	26.2	14.8	38.6	15.7	9.3	22.6	34.0	18.9	50.9			
Jhabua	6.0	4.0	8.0	3.9	3.0	4.7	28.3	14.6	43.2			
Katni	18.4	10.0	27.3	14.4	8.1	21.0	33.3	16.9	51.4			
Mandla	10.6	7.6	13.6	8.0	6.3	9.7	32.9	18.4	48.3			
Mandsaur	13.4	7.0	20.1	10.1	5.6	14.6	28.1	12.9	44.3			
Morena	19.1	9.5	30.8	15.9	7.9	25.6	30.9	15.4	49.4			
Narsimhapur	19.1	9.5	29.6	16.6	8.1	25.9	32.1	16.6	49.3			
Neemuch	14.6	8.0	21.6	9.1	6.0	12.3	28.8	13.0	45.9			
Panna	14.0	7.9	20.8	11.8	6.8	17.4	29.4	16.1	44.4			
Raisen	20.2	9.9	31.9	18.2	8.8	28.8	29.2	14.6	46.1			
Rajgarh	10.1	6.2	14.2	6.5	4.9	8.3	26.9	12.6	42.5			
Ratlam	15.4	7.8	23.2	8.3	4.8	11.9	31.8	14.9	49.7			
Rewa	14.6	9.7	19.8	11.9	8.1	15.8	28.9	17.6	41.7			
Sagar	16.8	9.2	25.4	12.8	6.7	19.7	26.6	15.4	39.1			
Satna	17.9	10.6	25.7	15.3	9.5	21.4	28.0	14.8	42.9			
Sehore	14.6	9.2	20.6	11.1	7.7	14.7	30.9	15.9	47.6			
Seoni	11.9	7.9	16.0	9.4	6.6	12.2	34.0	18.8	50.3			
Shahdol	17.8	10.2	25.7	12.2	7.2	17.3	34.2	18.7	51.5			
Shajapur	10.9	5.8	16.5	7.5	4.6	10.7	25.7	10.8	41.9			
Sheopur	14.4	7.2	22.4	11.8	6.2	18.1	27.8	12.6	45.1			
Shivpuri	12.6	7.1	18.9	8.9	5.4	13.1	30.9	16.0	47.9			
Sidhi	13.8	8.2	19.9	11.5	7.1	16.1	28.2	14.4	44.5			
Tikamgarh	11.0	7.0	15.5	8.5	5.8	11.6	22.6	12.9	33.5			
Ujjain	16.9	8.7	25.7	7.9	4.6	11.4	31.3	15.2	48.6			
Umaria	16.5	9.4	24.0	13.8	7.9	20.0	30.6	17.0	45.4			
Vidisha	19.5	8.5	32.1	16.5	6.6	27.9	30.6	15.4	47.6			
West Nimar	11.7	6.8	16.9	8.5	5.6	11.6	29.3	13.5	46.4			
Madhya Pradesh	16.5	9.1	24.5	11.3	6.6	16.3	30.9	15.8	47.7			

Source: Census of India, 2001.

EL 4: Percentage of Non Workers by Main Activity, 2001

District	Students			Household Duties			Dependents		
	Persons	Male	Female	Persons	Male	Female	Persons	Male	Female
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	46.1	53.5	39.9	10.0	1.2	17.3	39.7	40.4	39.1
Barwani	26.0	32.1	20.7	12.1	2.8	20.1	59.2	62.1	56.8
Betul	42.1	51.1	34.8	13.5	1.0	23.6	39.9	42.1	38.1
Bhind	40.6	55.1	28.8	21.5	1.0	38.0	35.4	40.0	31.7
Bhopal	39.7	52.9	30.7	22.0	0.9	36.6	30.8	36.0	27.2
Burhanpur				Included in East Nimar					
Chhatarpur	35.9	47.0	26.7	17.4	1.7	30.6	43.4	47.1	40.4
Chhindwara	39.8	50.7	31.4	16.4	1.0	28.4	38.3	41.3	36.0
Damoh	38.7	49.9	29.7	16.4	1.1	28.7	40.7	43.9	38.0
Datia	42.2	52.1	33.3	13.0	1.0	23.8	41.8	43.6	40.3
Dewas	38.2	50.5	28.3	15.7	1.2	27.6	42.7	44.2	41.5
Dhar	32.1	41.9	23.9	13.4	1.8	23.1	51.8	53.1	50.6
Dindori	38.8	46.5	31.7	7.3	1.2	13.0	50.8	49.0	52.5
East Nimar	34.3	45.0	26.0	17.8	1.6	30.2	43.9	47.9	40.9
Guna	33.0	46.3	22.8	20.3	2.0	34.4	44.0	48.2	40.7
Gwalior	39.0	54.0	28.0	24.6	1.0	41.7	31.2	36.8	27.1
Harda	36.9	47.9	27.9	15.9	1.1	27.9	43.8	46.5	41.6
Hoshangabad	38.5	52.8	28.3	21.9	1.1	36.7	34.4	38.5	31.5
Indore	39.1	54.6	29.0	24.4	1.0	39.6	31.0	35.9	27.7
Jabalpur	38.7	50.9	30.1	21.7	1.0	36.4	30.9	35.4	27.7
Jhabua	25.4	32.5	18.7	8.7	2.4	14.6	63.5	62.6	64.4
Katni	35.7	47.8	26.7	19.2	1.5	32.5	40.6	44.5	37.7
Mandla	42.1	51.0	34.5	10.5	1.7	18.1	42.9	42.4	43.2
Mandsaur	38.4	51.3	28.4	17.2	1.1	29.6	41.6	43.8	39.9
Morena	38.7	52.7	27.2	20.9	1.3	37.1	37.8	42.2	34.2
Narsimhapur	38.6	52.6	28.6	20.8	1.1	35.0	36.7	41.1	33.4
Neemuch	39.0	51.8	29.0	17.3	1.0	30.0	40.4	42.7	38.7
Panna	35.6	46.0	27.0	15.5	1.6	27.0	45.8	48.8	43.4
Raisen	37.1	50.6	27.2	20.8	1.4	35.1	38.3	43.5	34.5
Rajgarh	35.9	46.9	26.2	12.0	0.8	21.8	48.7	48.6	48.7
Ratlam	35.3	47.6	26.0	17.7	1.3	30.2	43.2	46.0	41.0
Rewa	43.1	53.1	34.5	14.2	1.2	25.4	39.0	41.1	37.2
Sagar	38.8	50.3	29.7	17.8	1.1	31.0	39.5	43.7	36.3
Satna	41.4	53.2	31.9	18.1	1.5	31.4	36.7	40.2	33.9
Sehore	40.2	51.9	30.2	14.2	0.9	25.6	42.1	43.1	41.3
Seoni	43.6	52.4	36.2	11.4	1.0	20.0	41.2	42.1	40.4
Shahdol	39.1	50.8	30.2	18.2	1.8	30.5	38.6	41.9	36.2
Shajapur	39.0	51.1	28.9	14.8	0.9	26.4	43.6	44.8	42.5
Sheopur	31.1	43.3	21.1	16.7	1.2	29.6	49.7	52.4	47.6
Shivpuri	36.3	47.8	26.1	14.6	1.2	26.5	46.8	47.9	45.7
Sidhi	36.6	48.5	26.4	16.3	2.1	28.2	44.5	46.2	43.0
Tikamgarh	38.9	48.3	30.3	12.0	0.9	22.2	46.4	47.6	45.3
Ujjain	36.8	50.2	26.8	19.6	1.3	33.2	39.4	42.3	37.2
Umaria	36.9	48.4	27.9	17.5	2.0	29.7	41.9	44.8	39.7
Vidisha	34.8	48.6	25.0	22.9	1.7	37.9	39.2	45.5	34.6
West Nimar	34.3	43.4	26.6	13.5	1.6	23.4	49.0	51.1	47.3
Madhya Pradesh	37.8	49.4	28.6	17.4	1.3	30.1	40.8	44.0	38.2

Source: Census of India, 2001.

EL 4: Percentage of Non Workers by Main Activity, 2001

District	Pensioners			Beggars, Vagrants etc.			Others		
	Persons	Male	Female	Persons	Male	Female	Persons	Male	Female
Anuppur				Included in Shahdol					
Ashoknagar				Included in Guna					
Balaghat	1.3	1.2	1.3	0.1	0.1	0.1	2.9	3.6	2.3
Barwani	0.6	0.6	0.7	0.1	0.1	0.1	2.0	2.4	1.6
Betul	1.3	1.5	1.1	0.1	0.1	0.1	3.1	4.2	2.3
Bhind	0.6	1.0	0.2	0.1	0.1	0.0	1.9	2.8	1.1
Bhopal	1.7	2.8	0.8	0.1	0.1	0.0	5.7	7.2	4.7
Burhanpur				Included in East Nimar					
Chhatarpur	0.6	0.8	0.4	0.1	0.1	0.1	2.6	3.3	2.0
Chhindwara	1.9	1.9	1.9	0.1	0.1	0.0	3.5	5.1	2.2
Damoh	1.2	1.2	1.3	0.1	0.1	0.0	3.0	3.8	2.3
Datia	0.7	0.9	0.6	0.1	0.2	0.1	2.1	2.4	1.9
Dewas	0.6	0.8	0.4	0.1	0.1	0.1	2.6	3.2	2.1
Dhar	0.4	0.5	0.3	0.1	0.2	0.1	2.2	2.6	1.9
Dindori	0.6	0.4	0.7	0.3	0.3	0.2	2.2	2.6	1.8
East Nimar	0.8	1.1	0.5	0.1	0.2	0.1	3.1	4.2	2.3
Guna	0.5	0.7	0.4	0.1	0.1	0.1	2.1	2.7	1.6
Gwalior	1.3	2.2	0.6	0.1	0.1	0.0	4.0	5.9	2.6
Harda	1.0	1.2	0.8	0.2	0.2	0.1	2.3	3.0	1.7
Hoshangabad	1.5	2.1	1.1	0.1	0.2	0.1	3.5	5.3	2.3
Indore	1.3	2.4	0.5	0.1	0.1	0.1	4.2	5.9	3.0
Jabalpur	2.3	3.5	1.5	0.1	0.2	0.1	6.2	9.0	4.2
Jhabua	0.6	0.5	0.7	0.1	0.1	0.1	1.7	1.8	1.6
Katni	0.9	1.2	0.7	0.1	0.2	0.1	3.4	4.8	2.4
Mandla	1.3	1.3	1.4	0.1	0.2	0.1	3.0	3.4	2.7
Mandsaur	0.6	0.9	0.3	0.1	0.1	0.1	2.1	2.8	1.6
Morena	0.4	0.7	0.2	0.1	0.1	0.0	2.0	3.0	1.2
Narsimhapur	1.0	1.3	0.8	0.1	0.1	0.1	2.8	3.8	2.1
Neemuch	0.8	1.3	0.5	0.1	0.1	0.1	2.4	3.2	1.8
Panna	0.5	0.6	0.4	0.1	0.1	0.1	2.5	2.9	2.1
Raisen	0.7	0.8	0.6	0.1	0.1	0.0	3.0	3.6	2.5
Rajgarh	1.1	1.1	1.2	0.1	0.1	0.1	2.2	2.5	2.0
Ratlam	1.1	1.6	0.7	0.1	0.1	0.1	2.6	3.4	2.0
Rewa	1.2	1.5	0.9	0.2	0.2	0.2	2.3	2.8	1.9
Sagar	0.9	1.1	0.8	0.1	0.1	0.1	2.8	3.7	2.2
Satna	0.9	1.3	0.7	0.1	0.2	0.1	2.8	3.7	2.1
Sehore	0.6	0.7	0.5	0.1	0.1	0.1	2.8	3.3	2.3
Seoni	1.1	1.1	1.2	0.1	0.1	0.1	2.7	3.3	2.3
Shahdol	0.7	0.9	0.5	0.2	0.2	0.1	3.3	4.5	2.4
Shajapur	0.6	0.8	0.5	0.1	0.1	0.1	1.9	2.2	1.7
Sheopur	0.4	0.4	0.4	0.1	0.1	0.0	1.9	2.6	1.3
Shivpuri	0.4	0.6	0.2	0.1	0.1	0.1	1.9	2.5	1.3
Sidhi	0.8	0.8	0.7	0.2	0.2	0.2	1.7	2.1	1.4
Tikamgarh	0.7	0.7	0.6	0.1	0.1	0.1	2.0	2.3	1.7
Ujjain	0.9	1.5	0.5	0.1	0.2	0.1	3.2	4.5	2.2
Umaria	0.5	0.7	0.4	0.1	0.1	0.1	3.0	4.0	2.2
Vidisha	0.8	0.9	0.7	0.1	0.1	0.1	2.3	3.1	1.8
West Nimar	0.8	0.9	0.7	0.2	0.2	0.1	2.2	2.7	1.8
Madhya Pradesh	1.0	1.3	0.7	0.1	0.1	0.1	2.9	3.8	2.2

Source: Census of India, 2001.

EL 5: Land Use Classification in Madhya Pradesh, 2004–05

(in '000 ha)

District	Geographical Area by Surveyor General	Geographical Area as Per Village Paper	Net Sown Area	Gross Cropped Area	% of Net Sown Area to Geographical Area	% of Area Sown More Than Once to Net Area Sown	Forest
Anuppur							
Ashoknagar							
Balaghat	922.9	924.5	250.8	303.1	27.1	20.9	505.0
Barwani	542.2	700.7	231.6	268.8	33.0	16.1	353.8
Betul	1004.3	1007.8	401.0	529.5	39.8	32.0	396.4
Bhind	445.9	445.2	329.3	355.9	74.0	8.1	8.9
Bhopal	277.2	277.9	153.4	219.2	55.2	42.9	44.1
Burhanpur							
Chhatarpur	868.7	863.0	399.6	507.0	46.3	26.9	214.2
Chhindwara	1181.5	1184.9	484.1	601.5	40.9	24.3	479.5
Damoh	730.6	728.6	310.7	400.4	42.6	28.9	267.1
Datia	269.1	295.9	201.4	233.7	68.1	16.1	24.8
Dewas	702.0	701.3	384.9	584.6	54.9	51.9	206.6
Dhar	815.3	819.5	506.1	710.6	61.8	40.4	120.7
Dindori	747.0	358.9	204.0	272.6	56.8	33.6	25.3
East Nimar	1077.6	1118.4	411.2	503.7	36.8	22.5	511.5
Guna	1106.4	1098.2	635.1	819.3	57.8	29.0	153.7
Gwalior	456.0	456.4	212.2	266.2	46.5	25.4	111.0
Harda	333.0	330.6	174.0	305.9	52.6	75.9	104.8
Hoshangabad	670.7	668.7	297.5	499.6	44.5	67.9	255.9
Indore	389.8	383.1	258.7	432.3	67.5	67.1	52.2
Jabalpur	521.1	519.8	274.9	377.0	52.9	37.2	77.7
Jhabua	677.8	675.7	360.1	426.6	53.3	18.5	131.7
Katni	495.0	493.1	198.2	262.5	40.2	32.5	100.0
Mandla	580.0	965.6	217.9	282.1	22.6	29.5	593.1
Mandsaur	553.5	551.8	359.3	539.1	65.1	50.0	38.2
Neemuch	425.6	393.5	186.8	291.1	47.5	55.8	94.4
Morena	498.9	501.7	268.1	332.6	53.4	24.1	50.7
Narsimhapur	513.3	513.7	303.1	400.8	59.0	32.2	136.2
Panna	713.5	702.9	249.6	294.4	35.5	17.9	299.6
Raisen	846.6	848.7	430.8	509.4	50.8	18.2	333.7
Rajgarh	615.3	616.3	423.1	607.7	68.6	43.6	17.6
Ratlam	486.1	486.0	330.7	488.8	68.0	47.8	34.3
Rewa	631.4	628.7	371.1	500.4	59.0	34.8	85.3
Sagar	1025.2	1022.8	538.2	739.6	52.6	37.4	296.9
Satna	750.2	742.4	361.0	482.7	48.6	33.7	203.7
Sehore	657.8	656.4	383.7	612.7	58.5	59.7	172.8
Seoni	875.8	875.4	364.6	468.7	41.6	28.6	328.2
Shahdol	995.2	935.7	341.6	401.4	36.5	17.5	304.3
Shajapur	619.5	618.5	452.3	683.7	73.1	51.1	6.0
Sheopur	660.6	666.7	157.9	192.6	23.7	22.0	291.2
Shivpuri	1027.7	995.4	409.5	550.1	41.1	34.3	330.1
Sidhi	1052.6	1039.2	355.7	484.2	34.2	36.1	433.6
Tikamgarh	504.8	504.0	252.3	388.9	50.1	54.1	69.3
Ujjain	609.1	609.9	490.0	777.6	80.3	58.7	3.1
Umariya	407.6	450.3	107.9	140.4	23.9	30.2	236.7
Vidisha	737.1	730.2	533.4	678.7	73.0	27.3	108.6
West Nimar	803.0	647.8	407.7	474.9	62.9	16.5	76.1
Madhya Pradesh	30824.5	30755.7	15078.1	20305.7	49.0	34.7	8688.5

Source: Commissioner of Land Records and Settlement, Gwalior.

EL 5: Land Use Classification in Madhya Pradesh, 2004–05

(in '000 ha)

District	Fallow Land			Cultivable Waste Land			Total
	Old	Current	Total	Immediately Available for Cultivation	Available for Cultivation after some Improvement	Uneconomical Patches	
Anuppur				Included in Shahdol			
Ashoknagar				Included in Guna			
Balaghat	15.8	35.6	51.4	9.9	8.9	10.4	29.3
Barwani	3.3	2.3	5.6	0.3	0.2	9.6	10.1
Betul	35.5	32.3	67.8	22.8	10.6	9.0	42.4
Bhind	7.2	13.2	20.5	5.6	2.1	2.7	10.5
Bhopal	3.2	3.0	6.2	0.7	1.2	2.6	4.5
Burhanpur				Included in East Nimar			
Chhatarpur	38.4	31.0	69.4	25.1	23.8	23.5	72.4
Chhindwara	31.0	38.5	69.5	12.2	4.8	3.2	20.1
Damoh	7.0	5.1	12.1	7.8	2.3	3.0	13.2
Datia	6.4	4.9	11.3	10.4	0.0	4.5	14.8
Dewas	1.1	0.6	1.7	2.1	0.3	0.2	2.6
Dhar	3.4	2.5	5.9	6.6	4.8	3.8	15.2
Dindori	31.4	33.7	65.1	8.2	3.9	2.1	14.2
East Nimar	12.9	8.9	21.9	0.4	0.3	0.7	1.4
Guna	10.3	8.3	18.6	50.9	26.9	11.0	88.8
Gwalior	7.1	5.9	13.0	12.9	5.1	4.5	22.5
Harda	2.5	1.0	3.5	4.1	1.6	1.1	6.8
Hoshangabad	10.4	5.6	16.0	10.3	8.8	7.4	26.5
Indore	3.2	2.4	5.5	4.4	4.7	4.2	13.2
Jabalpur	16.8	17.0	33.8	7.9	7.9	8.9	24.6
Jhabua	4.6	4.6	9.2	1.7	23.8	0.0	25.5
Katni	26.4	22.1	48.5	13.6	12.5	12.0	38.1
Mandla	32.7	29.1	61.8	7.6	6.6	5.5	19.7
Mandsaur	1.2	1.6	2.8	4.1	5.6	7.4	17.1
Neemuch	0.7	0.6	1.2	3.2	4.9	11.2	19.3
Morena	6.5	5.8	12.3	11.6	5.6	5.7	22.9
Narsimhapur	5.5	3.7	9.3	5.7	5.7	4.5	15.8
Panna	13.3	10.5	23.8	53.8	1.6	0.8	56.2
Raisen	3.3	0.9	4.1	4.1	3.7	4.6	12.5
Rajgarh	5.3	1.7	7.0	23.3	5.0	1.7	30.0
Ratlam	1.3	1.5	2.8	6.9	5.5	6.2	18.6
Rewa	23.7	20.0	43.7	3.8	0.6	0.9	5.3
Sagar	13.3	9.8	23.1	8.2	2.1	3.7	14.0
Satna	15.9	15.8	31.7	23.3	11.9	10.8	46.0
Sehore	4.7	0.4	5.1	10.1	0.0	0.0	10.1
Seoni	29.7	34.4	64.1	14.6	12.3	11.8	38.7
Shahdol	50.4	55.1	105.6	18.7	19.5	29.2	67.4
Shajapur	2.3	0.9	3.2	2.9	4.9	5.8	13.5
Sheopur	6.5	5.7	12.2	4.5	32.2	4.0	40.8
Shivpuri	26.4	26.3	52.7	29.5	20.2	25.7	75.5
Sidhi	28.0	41.9	69.9	35.2	17.2	13.6	66.0
Tikamgarh	16.9	27.7	44.6	4.5	4.5	10.5	19.5
Ujjain	1.9	1.4	3.3	6.7	2.5	1.3	10.4
Umaria	16.9	17.4	34.3	8.2	4.6	3.9	16.8
Vidisha	3.2	2.5	5.8	10.9	3.0	2.8	16.7
West Nimar	8.5	2.5	11.0	6.1	16.7	3.2	25.9
Madhya Pradesh	596.0	595.9	1191.9	525.5	350.9	299.0	1175.4

Source: Commissioner of Land Records and Settlement, Gwalior.

EL 5: Land Use Classification in Madhya Pradesh, 2004–05

(in '000 ha)

District	Land Not Available for Cultivation			Other Uncultivated Land Excluding both Fallow Land and Cultivable Waste Land		
	Area Under Non-Agricultural Uses	Barren and Uncultural Land	Total	Permanent Pastures and Other Grazing Land	Land Under Misc. Tree Crops and Groves not Included in Net Area Sown	Total
Anuppur			Included in Shahdol			
Ashoknagar			Included in Guna			
Balaghat	46.0	9.5	55.5	32.0	0.7	32.6
Barwani	22.5	72.3	94.8	4.4	0.5	4.9
Betul	46.8	25.9	72.7	27.5	0.0	27.5
Bhind	36.9	21.8	58.7	16.7	0.7	17.3
Bhopal	31.1	3.9	35.0	34.6	0.0	34.6
Burhanpur			Included in East Nimar			
Chhatarpur	36.1	1.5	37.6	69.5	0.3	69.8
Chhindwara	52.8	27.2	80.0	51.6	0.0	51.7
Damoh	32.1	59.3	91.5	34.0	0.0	34.0
Datia	21.6	14.6	36.2	4.6	2.8	7.4
Dewas	34.5	10.7	45.2	60.3	0.0	60.3
Dhar	49.0	76.1	125.1	46.4	0.0	46.4
Dindori	26.9	11.2	38.1	12.2	0.0	12.2
East Nimar	92.8	14.9	107.7	64.7	0.0	64.7
Guna	61.7	97.7	159.4	42.6	0.0	42.6
Gwalior	33.1	50.7	83.8	13.9	0.1	14.0
Harda	16.6	7.7	24.3	16.4	0.8	17.2
Hoshangabad	19.7	26.0	45.7	26.6	0.6	27.1
Indore	27.1	6.8	33.9	19.5	0.1	19.6
Jabalpur	32.1	36.8	68.9	39.9	0.1	40.0
Jhabua	57.2	83.5	140.6	8.6	0.0	8.6
Katni	12.8	55.8	68.6	39.6	0.1	39.7
Mandla	42.6	10.7	53.3	19.7	0.1	19.7
Mandsaur	72.5	48.6	121.0	13.3	0.1	13.3
Neemuch	46.4	37.2	83.6	8.1	0.0	8.1
Morena	40.0	89.0	129.0	18.7	0.0	18.7
Narsimhapur	24.1	1.0	25.1	23.9	0.2	24.1
Panna	42.0	22.8	64.9	8.8	0.0	8.8
Raisen	39.6	3.6	43.2	24.3	0.1	24.4
Rajgarh	41.1	29.9	71.0	67.7	0.1	67.7
Ratlam	30.1	40.1	70.2	29.3	0.1	29.4
Rewa	60.8	34.5	95.4	26.3	1.7	28.0
Sagar	54.3	19.0	73.3	75.8	1.4	77.2
Satna	61.8	14.9	76.7	19.9	3.5	23.4
Sehore	38.6	8.4	47.0	37.6	0.0	37.7
Seoni	48.1	11.9	59.9	19.8	0.0	19.9
Shahdol	74.3	30.9	105.2	10.6	1.0	11.6
Shajapur	52.3	41.6	94.0	49.5	0.1	49.6
Sheopur	32.2	97.8	130.0	34.5	0.0	34.5
Shivpuri	59.9	38.0	97.9	25.8	3.9	29.7
Sidhi	81.7	16.6	98.3	15.7	0.0	15.7
Tikamgarh	30.1	73.1	103.2	14.9	0.2	15.1
Ujjain	57.6	6.0	63.6	39.2	0.1	39.3
Umaria	30.6	8.7	39.3	15.2	0.2	15.4
Vidisha	36.9	9.7	46.6	19.1	0.1	19.2
West Nimar	37.1	31.8	68.9	58.2	0.0	58.2
Madhya Pradesh	1924.4	1439.7	3364.1	1341.2	19.7	1360.9

Source: Commissioner of Land Records and Settlement, Gwalior.

EL 6: Land Ownership by Social Categories and Gini Coefficient of Operational Holdings 2000–01

District	Ownership of Operational Holdings							Average Size Land Holding				
	Share of Others		Share of SC		Share of ST		Ginie Coef- ficient of Land Holdings	Average Size of Land Hold- ings	1995–96	2001	Decline (1995– 2001)	
	Owners	Land	Owners	Land	Owners	Land						
Anuppur	Included in Shahdol							Included in Shahdol				
Ashoknagar	Included in Guna							Included in Guna				
Balaghat	73.9	69.7	6.5	4.1	19.6	26.1	0.5	1.2	1.4	1.2	14.0	
Barwani	24.1	27.5	3.6	2.7	72.4	69.7	0.4	2.6	Included in West Nimar		2.6	
Betul	50.5	51.5	11.2	9.1	38.2	39.4	0.5	2.6	2.9	2.6	9.0	
Bhind	84.6	88.7	15.3	11.1	0.0	0.0	0.5	2.0	2.2	2.0	11.2	
Bhopal	83.4	87.5	15.1	11.1	1.4	1.0	0.5	2.6	3.3	2.6	20.6	
Burhanpur	Included in East Nimar							Included in East Nimar				
Chhatarpur	71.8	79.6	24.5	17.2	3.7	3.0	0.5	2.1	2.3	2.1	10.6	
Chhindwara	54.0	49.3	9.7	7.8	36.3	42.9	0.5	2.2	2.3	2.2	3.0	
Damoh	75.5	82.7	14.0	8.3	10.5	8.8	0.6	2.0	2.3	2.0	15.1	
Datia	76.9	84.5	21.3	14.2	1.8	1.3	0.5	2.1	2.5	2.1	17.1	
Dewas	74.2	83.3	13.7	7.4	12.1	9.2	0.5	2.9	3.7	2.9	22.4	
Dhar	39.1	52.5	4.1	2.3	56.8	45.2	0.5	2.8	3.1	2.8	9.7	
Dindori	27.8	21.3	6.3	4.5	65.9	74.1	0.5	2.4	Included in Mandla		2.4	
East Nimar	67.4	68.8	8.1	6.4	24.5	24.8	0.5	2.9	3.2	2.9	10.8	
Guna	72.2	79.5	16.7	11.7	11.1	8.3	0.5	2.6	2.8	2.6	8.2	
Gwalior	75.7	81.0	20.1	14.8	3.7	2.9	0.5	2.0	2.4	2.0	16.9	
Harda	70.5	82.4	13.8	7.4	15.7	10.0	0.5	5.4	Included in Hoshagabad		5.4	
Hoshangabad	79.2	84.3	8.6	5.4	12.1	9.6	0.5	2.8	3.7	2.8	25.6	
Indore	85.7	91.2	9.4	5.2	4.7	2.9	0.5	2.4	3.0	2.4	19.6	
Jabalpur	71.9	69.6	8.0	5.3	20.1	24.6	0.5	1.7	1.7	1.7	1.6	
Jhabua	5.3	6.3	1.6	1.1	93.1	92.5	0.4	2.0	2.2	2.0	8.2	
Katni	69.6	73.2	9.9	6.8	20.5	19.9	0.5	1.3	Included in Jabalpur		1.3	
Mandla	33.8	24.3	4.5	2.8	61.6	72.6	0.5	1.8	2.4	1.8	26.0	
Mandsur	83.0	88.5	15.4	10.3	1.6	1.1	0.5	2.2	2.4	2.2	7.7	
Morena	83.9	87.3	15.5	11.9	0.5	0.5	0.5	1.5	1.8	1.5	14.9	
Narsimhpur	79.3	82.5	10.0	6.4	10.7	10.8	0.5	2.3	2.5	2.3	8.5	
Neemuch	83.7	89.3	9.4	6.3	6.9	4.3	0.5	1.9	Included in Mandsaur		1.9	
Panna	72.3	78.5	17.0	12.2	10.7	9.3	0.5	1.8	2.0	1.8	8.9	
Raisen	77.4	84.2	11.5	6.9	11.1	8.7	0.5	3.0	3.6	3.0	17.8	
Rajgarh	79.9	87.0	16.4	10.0	3.6	3.0	0.5	2.4	2.4	2.4	1.2	
Ratlam	57.5	68.4	12.9	8.5	29.5	23.0	0.5	2.3	2.7	2.3	16.1	
Rewa	90.6	95.5	5.5	1.9	3.9	2.5	0.6	1.8	2.1	1.8	15.4	
Sagar	75.8	83.7	15.7	9.7	8.4	6.5	0.5	2.2	2.5	2.2	11.9	
Satna	79.5	85.6	10.9	6.6	9.7	7.5	0.6	1.6	1.8	1.6	9.8	
Sehore	78.4	84.1	15.1	9.6	6.5	5.5	0.5	3.1	3.5	3.1	12.4	
Seoni	51.9	50.0	9.8	9.2	38.3	40.7	0.5	2.3	2.6	2.3	12.3	
Shahdol	41.0	38.7	8.7	4.3	50.3	57.0	0.6	1.9	2.1	1.9	8.3	
Shajapur	79.2	88.8	18.6	9.8	2.1	1.3	0.5	2.6	3.2	2.6	18.0	
Sheopur	66.9	72.7	16.5	12.0	16.5	14.8	0.4	1.9	Included in Morena		1.9	
Shivpuri	68.9	77.2	20.0	14.6	11.0	8.0	0.5	2.3	2.6	2.3	13.1	
Sidhi	65.4	68.7	7.7	4.1	26.9	27.1	0.5	1.9	2.0	1.9	4.1	
Tikamgarh	75.2	77.6	21.4	18.9	3.4	3.2	0.5	1.6	1.7	1.6	5.0	
Ujjain	74.4	85.1	23.9	13.7	1.7	1.2	0.5	3.3	3.6	3.3	9.3	
Umaria	50.6	49.7	7.5	5.4	41.9	44.7	0.5	1.8	Included in Shahdol		1.8	
Vidisha	75.9	88.6	19.4	9.4	4.7	2.0	0.6	3.8	4.4	3.8	12.5	
West Nimar	64.5	68.0	5.4	3.6	30.0	28.3	0.5	2.8	3.0	2.8	8.3	
Madhya Pradesh	67.2	71.7	12.4	8.3	20.4	19.8	0.5	2.2	2.3	2.2	3.3	

Source: Agriculture Census 2000–01, Commissioner Land Records, Gwalior.

EL 7: Area, Production, Yield and Per Capita Availability of Foodgrains in Madhya Pradesh, 2003–04

District	Area Under Foodgrains ('000ha)			Production ('000 tonnes)		
	2000–01	2003–04	Mean Annual % Change	2000–01	2003–04	Mean Annual % Change
Anuppur				Included in Shahdol		
Ashoknagar				Included in Guna		
Balaghat	307.6	317.0	1.0	258.1	420.8	12.9
Barwani	144.9	158.5	2.9	157.9	202.3	7.3
Betul	240.1	325.3	8.7	285.5	372.0	7.8
Bhind	223.8	216.8	-1.1	272.6	325.5	5.4
Bhopal	102.6	112.6	3.0	127.9	154.1	5.7
Burhanpur				Included in East Nimar		
Chhatarpur	342.8	377.3	3.0	340.1	433.4	7.2
Chhindwara	338.3	364.4	2.4	433.3	583.8	8.6
Damoh	299.1	342.0	4.2	147.3	309.6	17.5
Datia	174.6	206.7	5.2	241.5	298.2	6.3
Dewas	108.9	228.3	17.4	240.2	368.6	11.6
Dhar	182.2	327.2	14.8	333.4	574.9	14.0
Dindori	198.8	216.2	2.7	107.8	140.3	7.7
East Nimar	149.7	186.7	6.6	248.5	232.8	-2.2
Guna	493.0	506.9	0.9	216.6	518.0	19.4
Gwalior	172.9	192.6	3.4	251.5	405.5	12.7
Harda	113.6	131.2	4.5	221.2	226.0	0.7
Hoshangabad	255.0	274.7	2.4	487.2	553.7	4.0
Indore	81.3	161.1	16.5	139.7	334.9	19.4
Jabalpur	310.2	352.6	4.0	269.3	390.0	10.3
Jhabua	266.8	322.4	5.7	283.7	361.5	7.2
Katni	222.4	247.1	3.3	127.7	223.8	14.3
Mandla	214.7	246.2	4.3	136.0	176.7	7.7
Mandsaur	123.3	185.8	11.2	131.5	254.5	16.1
Morena	186.5	176.6	-1.9	250.8	371.8	10.8
Narsimhapur	277.7	314.2	3.9	345.9	427.5	6.4
Neemuch	77.9	110.0	9.7	82.2	181.6	18.2
Panna	251.9	266.6	1.8	169.7	194.4	4.2
Raisen	393.1	407.6	1.2	476.8	478.9	0.1
Rajgarh	176.1	252.1	10.1	111.5	354.2	22.8
Ratlam	104.2	219.3	17.5	140.0	429.0	22.5
Rewa	445.5	462.2	1.2	389.4	447.5	4.3
Sagar	446.2	497.3	3.4	218.2	424.5	16.2
Satna	419.2	446.0	2.0	357.7	408.3	4.1
Sehore	155.9	282.0	14.9	365.0	482.3	8.1
Seoni	319.5	357.7	3.6	235.8	365.7	11.8
Shahdol	344.1	350.0	0.6	185.4	259.6	9.5
Shajapur	137.0	271.7	16.5	222.1	370.5	13.4
Sheopur	78.9	89.8	4.0	36.3	181.6	26.7
Shivpuri	284.4	299.9	1.7	158.9	471.4	22.1
Sidhi	442.6	441.3	-0.1	266.4	375.7	9.7
Tikamgarh	260.3	288.5	3.3	274.2	385.0	9.6
Ujjain	72.3	332.6	26.1	118.7	421.3	23.9
Umariya	118.2	123.3	1.4	61.3	85.6	9.5
Vidisha	489.0	528.2	2.5	486.4	595.2	6.1
West Nimar	167.1	204.1	6.0	282.8	332.2	5.0
Madhya Pradesh	10789.4	12795.7	5.2	10748.7	15957.0	10.9

Source: Tables of Agriculture Statistics, Commissioner Land Records and Settlement in Madhya Pradesh, 2000–01, 2003–04.

EL 7: Area, Production, Yield and Per Capita Availability of Foodgrains in Madhya Pradesh, 2003–04

District	Yield (Kg per ha)		Per Capita Production (in kgs)				
	2000–01	2003–04	Mean Annual % Change	Cereals	Pulses	Foodgrains	Oilseeds
Anuppur				Included in Shahdol			
Ashoknagar				Included in Guna			
Balaghat	839.2	1327.4	12.3	124.5	8.1	132.6	22.8
Barwani	1089.9	1276.1	4.9	352.6	16.6	369.2	12.6
Betul	1189.2	1143.8	-1.3	228.4	29.5	257.9	105.8
Bhind	1218.1	1501.2	6.3	163.5	57.2	220.7	100.6
Bhopal	1247.0	1367.9	2.9	59.6	18.9	78.5	47.4
Burhanpur				Included in East Nimar			
Chhatarpur	992.1	1148.7	4.5	191.8	88.2	280.0	22.0
Chhindwara	1281.0	1602.2	6.7	262.2	43.3	305.5	108.7
Damoh	492.4	905.2	15.2	132.7	142.4	275.0	32.5
Datia	1383.2	1442.7	1.4	302.4	153.8	456.2	24.1
Dewas	2206.4	1614.4	-12.2	202.2	66.6	268.8	281.2
Dhar	1829.8	1757.1	-1.4	298.6	16.1	314.8	145.8
Dindori	542.3	648.9	5.5	210.2	25.3	235.5	39.0
East Nimar	1660.1	1246.7	-11.1	111.6	24.3	131.1	63.7
Guna	439.3	1021.9	19.0	196.1	100.1	296.2	102.5
Gwalior	1454.4	2104.8	10.3	205.2	32.0	237.1	32.9
Harda	1946.6	1723.3	-4.3	379.5	76.4	455.9	408.3
Hoshangabad	1910.7	2015.5	1.7	407.4	83.1	490.5	182.9
Indore	1719.3	2078.9	5.8	118.1	10.0	128.0	90.3
Jabalpur	868.0	1106.1	7.2	114.0	60.3	174.3	3.4
Jhabua	1063.4	1121.3	1.7	209.5	39.1	248.5	26.1
Katni	574.1	905.7	12.2	175.8	26.7	202.6	4.2
Mandla	633.6	717.6	3.9	174.0	18.2	192.2	18.6
Mandsaur	1066.5	1369.6	7.4	173.1	32.9	206.0	178.2
Morena	1344.6	2105.5	12.0	208.0	15.4	223.4	112.1
Narsimhapur	1245.6	1360.5	2.8	208.7	220.3	429.1	120.1
Neemuch	1055.6	1651.1	12.0	181.7	58.9	240.6	182.0
Panna	673.6	729.3	2.5	130.6	86.6	217.2	4.4
Raisen	1213.0	1174.9	-1.1	245.6	159.3	404.9	60.9
Rajgarh	633.2	1404.8	18.3	195.9	73.6	269.5	219.4
Ratlam	1344.2	1956.4	10.4	300.5	37.0	337.5	146.5
Rewa	874.1	968.2	3.2	174.1	42.1	216.2	6.6
Sagar	489.0	853.6	14.2	98.5	103.0	201.5	79.2
Satna	853.2	915.6	2.3	157.7	50.2	207.9	4.8
Sehore	2340.9	1710.0	-12.3	341.8	83.5	425.3	293.7
Seoni	738.0	1022.5	9.3	259.6	44.4	304.0	84.7
Shahdol	538.8	741.8	9.1	149.3	9.9	159.2	7.8
Shajapur	1621.3	1363.7	-6.3	213.3	61.2	274.6	227.2
Sheopur	460.0	2022.8	25.8	281.5	26.6	308.1	220.7
Shivpuri	558.7	1571.8	21.5	242.2	69.3	311.5	120.4
Sidhi	601.8	851.2	9.8	168.9	24.8	193.7	6.7
Tikamgarh	1053.5	1334.2	7.0	238.9	65.8	304.7	62.6
Ujjain	1640.8	1266.8	-9.8	181.1	54.9	236.0	223.1
Umaria	518.7	694.8	8.5	141.6	17.8	159.4	9.0
Vidisha	994.8	1126.8	3.9	282.6	185.8	468.4	86.2
West Nimar	1692.1	1628.2	-1.3	194.0	12.8	206.8	37.4
Madhya Pradesh	996.2	1247.1	6.7	197.8	55.3	253.1	89.2

Source: Tables of Agriculture Statistics, Commissioner Land Records and Settlement in Madhya Pradesh, 2000–01, 2003–04.

EL 8: Irrigated Area in Madhya Pradesh, 2003-04

District	% of Net Irrigated Area to Net Area Sown	% of Gross Irrigated Area to Gross Area Sown	% of Net Irrigated Area to Gross Area Sown	Gross Area Irrigated (in'000 ha)
Anuppur		Included in Shahdol		
Ashoknagar		Included in Guna		
Balaghat	44.6	40.9	35.2	142.6
Barwani	31.6	27.4	27.4	73.3
Betul	24.8	18.8	18.8	99.5
Bhind	33.4	31.8	30.9	113.0
Bhopal	50.3	35.7	35.7	76.6
Burhanpur		Included in East Nimar		
Chhatarpur	53.2	42.5	42.5	206.3
Chhindwara	23.2	20.5	19.0	121.5
Damoh	32.7	26.5	26.0	102.8
Datia	56.8	48.3	47.7	114.7
Dewas	40.1	26.8	26.8	154.4
Dhar	42.9	31.2	31.2	217.1
Dindori	0.8	0.6	0.6	1.6
East Nimar	32.2	28.4	26.6	145.2
Guna	32.2	26.2	26.1	202.5
Gwalior	55.0	56.2	44.2	144.1
Harda	75.3	43.1	43.1	128.8
Hoshangabad	84.3	50.5	50.5	249.1
Indore	55.0	33.4	33.4	142.2
Jabalpur	35.5	29.7	26.0	111.3
Jhabua	15.1	13.2	13.0	54.9
Katani	30.6	26.0	23.0	68.4
Mandla	7.8	6.0	6.0	16.9
Mandsaur	18.9	14.7	14.6	67.5
Morena	62.7	51.0	50.7	166.3
Narsimhapur	56.4	42.9	42.6	171.7
Neemuch	24.4	9.9	9.9	45.7
Panna	32.4	28.4	28.4	80.0
Raisen	42.0	36.2	36.2	180.8
Rajagarh	37.6	27.0	27.0	158.1
Ratlam	28.3	36.1	36.1	93.6
Rewa	23.5	18.6	17.3	93.5
Sagar	37.9	28.5	28.5	202.1
Satna	36.3	27.5	27.4	130.9
Sehore	55.7	36.3	36.3	212.8
Seoni	26.3	20.6	20.6	96.8
Shahdol	5.7	4.8	4.8	19.2
Shajapur	40.8	27.8	27.8	184.1
Sheopur	64.6	54.0	51.7	104.9
Shivpuri	45.8	35.7	35.0	186.7
Sidhi	17.1	12.5	12.5	61.7
Tikamgarh	73.4	55.3	48.1	218.0
Ujjain	42.0	26.9	26.9	205.3
Umaria	17.3	13.4	13.4	18.8
Vidisha	41.5	33.0	33.0	222.2
West Nimar	41.1	35.4	35.4	168.4
Madya Pradesh	37.4	29.0	28.3	5776.1

Source: Tables of Agriculture Statistics, Commissioner Land Records and Settlement in Madhya Pradesh, 2000-01, 2003-04.

EL 9: Net and Gross Area Irrigated by Different Sources 2003–04

District	Percentage of Net Area Irrigated by Different Sources					Net Irrigated Area ('000 ha)
	Cannals	Tanks	Tubewells	Wells	Other Sources	
Anuppur			Included in Shahdol			
Ashoknagar			Included in Guna			
Balaghat	6.0	0.0	21.7	43.9	28.3	73
Barwani	60.5	21.1	0.2	13.5	4.7	123
Betul	11.8	0.1	9.6	66.5	12.0	99
Bhind	23.3	0.1	15.1	60.4	1.1	110
Bhopal	9.9	0.8	39.8	29.8	19.7	77
Burhanpur			Included in East Nimar			
Chhatarpur	14.4	2.4	1.0	71.1	11.1	206
Chhindwara	9.3	2.1	15.5	66.8	6.3	112
Damoh	10.0	0.4	24.7	23.0	41.9	101
Datia	26.9	0.9	3.8	66.8	1.7	113
Dewas	2.8	0.2	52.6	36.7	7.6	154
Dhar	4.0	3.5	49.4	24.9	18.2	217
Dindori	73.3	0.0	0.0	7.5	19.2	2
East Nimar	3.6	1.0	14.4	69.5	11.5	136
Guna	18.2	4.4	55.9	38.9	43.1	126
Gwalior	33.9	0.3	30.5	28.5	6.8	113
Harda	56.1	0.1	7.8	24.4	11.6	129
Hoshangabad	57.1	0.4	17.9	18.9	5.7	249
Indore	2.2	0.8	80.9	5.7	10.3	142
Jabalpur	8.6	0.1	53.7	23.0	14.7	98
Jhabua	18.9	12.7	5.6	37.8	25.1	54
Katani	20.4	2.9	4.1	40.5	32.1	61
Mandla	75.2	0.2	0.0	15.4	9.2	17
Mandsaur	0.7	0.1	6.8	86.4	6.0	67
Morena	21.7	0.2	9.8	66.8	1.4	165
Narsimhapur	0.6	0.0	41.7	53.5	4.2	170
Neemuch	3.4	0.0	30.7	65.0	0.9	46
Panna	15.7	11.1	5.8	26.5	40.9	80
Raisen	31.2	0.4	37.9	14.1	16.4	181
Rajagarh	3.2	2.9	18.4	64.6	10.9	158
Ratlam	1.7	3.7	51.0	36.2	7.4	93
Rewa	17.0	2.3	30.8	28.1	21.9	87
Sagar	3.9	1.4	22.9	39.7	32.1	202
Satan	5.4	1.2	48.4	28.1	16.9	131
Sehore	18.4	2.2	24.7	40.0	14.7	213
Seoni	50.9	7.1	1.6	30.8	9.7	97
Shahdol	24.6	5.0	9.8	21.6	39.0	19
Shajapur	4.1	3.1	29.4	52.1	11.3	184
Sheopur	45.5	1.0	41.3	6.3	5.8	100
Shivpuri	15.9	2.3	23.2	49.9	8.7	183
Sidhi	20.7	0.7	17.7	43.0	17.9	62
Tikamgarh	8.5	3.9	2.5	73.7	11.4	189
Ujjain	0.2	2.3	62.7	22.4	12.4	205
Umaria	14.9	4.0	15.2	23.5	42.4	19
Vidisha	15.9	1.7	39.3	14.3	28.8	222
West Nimar	9.4	0.3	11.1	54.4	24.8	168
Madhya Pradesh	16.9	2.3	26.7	39.7	14.6	5631

Source: Tables of Agriculture Statistics, Commissioner Land Records and Settlement in Madhya Pradesh, 2003–04.

EL 9: Net and Gross Area Irrigated by Different Sources 2003–04

District	Percentage of Gross Area Irrigated by Different Sources					Gross Irrigated Area ('000 ha)
	Cannals	Tanks	Tubewells	Wells	Other Sources	
Anuppur			Included in Shahdol			
Ashoknagar			Included in Guna			
Balaghat	6.0	0.0	21.7	43.9	28.3	73
Barwani	59.7	21.0	0.2	14.7	4.5	143
Betul	11.8	0.1	9.6	66.5	12.0	99
Bhind	22.7	0.1	16.3	59.8	1.1	113
Bhopal	9.9	0.8	39.8	29.8	19.7	77
Burhanpur			Included in East Nimar			
Chhatarpur	14.4	2.4	1.0	71.1	11.1	206
Chhindwara	8.6	1.9	16.3	67.3	5.8	121
Damoh	11.7	0.4	24.2	22.6	41.1	103
Datia	26.7	0.9	3.8	66.9	1.7	115
Dewas	2.8	0.2	52.7	36.7	7.6	154
Dhar	4.0	3.5	49.4	24.9	18.2	217
Dindori	73.3	0.0	0.0	7.5	19.2	2
East Nimar	3.4	0.9	15.3	69.7	10.8	145
Guna	11.3	2.7	34.8	17.8	27.0	203
Gwalior	42.1	0.2	29.9	31.4	5.4	144
Harda	56.1	0.1	7.8	24.4	11.6	129
Hoshangabad	57.1	0.4	17.9	18.9	5.7	249
Indore	2.2	0.8	80.9	5.7	10.3	142
Jabalpur	7.5	0.1	58.7	20.6	13.1	111
Jhabua	18.8	12.5	5.5	37.9	25.3	55
Katani	22.8	2.5	3.7	42.5	28.5	68
Mandla	75.2	0.2	0.0	15.4	9.2	17
Mandsaur	0.7	0.1	6.7	86.5	5.9	67
Morena	21.6	0.2	9.8	67.0	1.4	166
Narsimhapur	0.6	0.0	42.1	53.0	4.2	172
Neemuch	3.4	0.0	30.7	65.0	0.9	46
Panna	15.7	11.1	5.8	26.5	40.9	80
Raisen	31.2	0.4	37.9	14.1	16.4	181
Rajagarh	3.2	2.9	18.4	64.6	10.9	158
Ratlam	1.7	3.7	50.9	36.3	7.4	94
Rewa	15.8	2.1	28.9	30.9	22.2	94
Sagar	3.9	1.4	22.9	39.7	32.1	202
Satan	5.5	1.2	48.3	28.2	16.8	131
Sehore	18.4	2.2	24.7	40.0	14.7	213
Seoni	50.9	7.1	1.6	30.8	9.7	97
Shahdol	24.6	5.0	9.8	21.6	39.0	19
Shajapur	4.1	3.1	29.4	52.1	11.3	184
Sheopur	43.6	1.0	42.0	6.1	7.3	105
Shivpuri	17.0	2.3	23.1	49.1	8.5	187
Sidhi	20.7	0.7	17.7	43.0	17.9	62
Tikamgarh	7.4	3.4	2.2	77.1	9.9	218
Ujjain	0.2	2.3	62.8	22.4	12.4	205
Umaria	14.9	4.0	15.2	23.5	42.4	19
Vidisha	15.9	1.7	39.3	14.3	28.8	222
West Nimar	9.4	0.3	11.1	54.4	24.8	168
Madhya Pradesh	17.1	2.3	26.6	39.7	14.3	5776

Source: Tables of Agriculture Statistics, Commissioner Land Records and Settlement in Madhya Pradesh, 2003–04.

EL 10: Agriculture Machinery and Implements, 2003–04

District	Bullock Carts	Sugarane Crusher		Oil Engine Pumps	Electric Pumps	Tractors
		Power Operated	Operated by Bullocks			
Anuppur						
Ashoknagar						
Balaghat	109157	256	429	3474	9993	1264
Barwani	40225	0	0	1085	27709	1523
Betul	85696	666	1088	5856	42268	8423
Bhind	12262	233	0	10742	8767	4990
Bhopal	10366	173	56	2844	19265	5348
Burhanpur						
Chhatarpur	43965	38	130	22917	35604	5799
Chhindwara	55503	390	32	1330	84743	2768
Damoh	22788	44	14	4944	17526	4275
Datia	15827	82	84	10791	15396	5778
Dewas	47618	237	125	1626	48996	4517
Dhar	60675	4	2	1475	66061	7280
Dindori	125	0	0	622	199	284
East Nimar	62505	3	0	5651	53927	4941
Guna	37869	51	314	25994	51942	16359
Gwalior	4311	0	0	3883	13043	8120
Harda	16726	16	0	2307	13531	4648
Hoshangabad	33069	17	0	4005	16175	9004
Indore	16994	8	129	1932	48357	7483
Jabalpur	5241	38	40	1487	20439	4192
Jhabua	28394	35	0	9239	21251	1165
Katani	13009	17	6	4033	13726	1987
Mandla	4777	289	338	1102	910	566
Mandsaur	25416	0	2	2010	79384	6447
Morena	17889	317	362	14226	14325	10723
Narsimhapur	28443	1025	0	424	24269	3942
Neemuch	13211	0	206	613	36626	3940
Panna	37981	25	108	18848	6521	311
Raisen	34426	1134	763	8908	11035	10161
Rajagarh	30251	65	218	8264	69378	3996
Ratlam	19893	0	9	1685	49672	434
Rewa	3705	126	63	3427	17314	4968
Sagar	34672	54	0	25541	47778	12170
Satna	16506	44	22	3687	18976	9438
Sehore	42781	1000	185	5222	42861	8556
Seoni	57584	224	208	4462	15026	2010
Shahdol	54153	60	83	4015	4768	1923
Shajapur	50038	160	404	8756	77203	7031
Sheopur	13579	29	213	5371	7236	4919
Shivpuri	42976	97	292	34182	34442	7626
Sidhi	158	38	12	4732	10343	2106
Tikamgarh	38841	0	620	33333	66939	4312
Ujjain	26058	297	155	3728	75121	9879
Umaria	7321	0	0	2497	3278	762
Vidisha	18869	116	315	24836	16415	14533
West Nimar	73452	13	76	2228	52902	2244
Madhya Pradesh	1415305	7421	7103	348334	1411640	243145

Source: Tables of Agriculture Statistics, Commissioner Land Records and Settlement in Madhya Pradesh, 2003–04.

EL 10: Agriculture Machinery and Implements, 2003–04

District	Plant Protection Implements	Persian Wheels	Tractors per 10 Villages	Tractors per 100 Operational Holdings	Electric Pumps per 100 Operational Holdings	Oil Engines per 100 Operational Holdings
Anuppur			Included in Shahdol			
Ashoknagar			Included in Guna			
Balaghat	0	0	9.1	0.4	3.3	1.1
Barwani	0	0	20.6	0.6	11.7	0.5
Betul	0	0	59.9	1.8	9.0	1.2
Bhind	12	0	53.5	1.4	2.5	3.1
Bhopal	0	0	98.7	3.4	12.4	1.8
Burhanpur			Included in East Nimar			
Chhatarpur	0	0	48.6	1.2	7.4	4.7
Chhindwara	0	0	14.0	0.5	15.0	0.2
Damoh	0	0	30.6	1.4	5.6	1.6
Datia	0	168	96.0	2.7	7.2	5.1
Dewas	52399	0	39.8	1.1	11.7	0.4
Dhar	0	0	46.3	1.4	12.6	0.3
Dindori	0	0	3.1	0.1	0.1	0.2
East Nimar	108	0	46.3	1.0	11.2	1.2
Guna	0	0	72.2	2.6	8.3	4.2
Gwalior	0	0	104.6	3.7	6.0	1.8
Harda	12229	0	81.4	2.4	7.1	1.2
Hoshangabad	0	0	91.6	2.9	5.2	1.3
Indore	8531	0	116.0	2.9	18.6	0.7
Jabalpur	0	0	28.9	1.4	6.7	0.5
Jhabua	26979	70092	8.6	0.3	5.7	2.5
Katani	0	0	20.8	0.8	5.7	1.7
Mandla	0	0	4.6	0.2	0.3	0.4
Mandsaur	5536	0	68.4	1.8	22.2	0.6
Morena	0	0	134.2	4.0	5.3	5.3
Narsimhapur	0	0	36.5	1.3	7.9	0.1
Neemuch	3711	0	44.8	2.1	19.8	0.3
Panna	0	0	3.0	0.1	2.3	6.6
Raisen	0	0	67.3	2.3	2.5	2.0
Rajagarh	10136	0	23.0	0.9	14.8	1.8
Ratlam	67088	0	4.0	0.1	14.3	0.5
Rewa	0	0	18.2	1.1	4.0	0.8
Sagar	0	0	58.5	2.2	8.5	4.5
Satna	0	0	46.3	2.4	4.9	0.9
Sehore	0	0	79.8	2.1	10.5	1.3
Seoni	0	0	12.5	0.5	3.4	1.0
Shahdol	0	0	13.3	0.4	1.1	0.9
Shajapur	0	0	62.6	1.4	15.7	1.8
Sheopur	0	0	81.0	3.1	4.6	3.4
Shivpuri	0	4312	52.3	1.8	8.3	8.3
Sidhi	0	0	11.2	0.5	2.3	1.1
Tikamgarh	0	0	44.3	1.5	23.9	11.9
Ujjain	16794	0	87.0	1.9	14.3	0.7
Umaria	86	0	11.5	0.5	2.3	1.8
Vidisha	0	0	89.5	2.7	3.0	4.6
West Nimar	0	0	15.7	0.5	11.9	0.5
Madhya Pradesh	203609	74572	43.4	1.5	8.6	2.1

Source: Tables of Agriculture Statistics, Commissioner Land Records and Settlement in Madhya Pradesh, 2003–04.

EL 11: Livestock Population, Milk Production, and Veterinary Centres, 2003–04

District	Cattle (in '000s)				Buffaloes (in '000s)			
	Male	Female	Young Stock	Total Cattle	Male	Female	Young Stock	Total
Anuppur				Included in Shahdol				
Ashoknagar				Included in Guna				
Balaghat	253.2	142.1	154.5	549.8	39.0	50.2	51.7	140.8
Barwani	157.8	91.3	92.9	342.1	1.3	262.2	64.2	327.8
Betul	251.8	119.7	115.0	486.4	2.3	64.4	64.1	105.8
Bhind	30.6	62.2	60.3	153.0	0.8	171.5	163.2	335.6
Bhopal	32.4	44.0	43.4	119.8	0.8	41.9	27.7	70.5
Burhanpur				Included in East Nimar				
Chhatarpur	185.8	161.3	167.8	515.0	4.3	134.6	110.8	249.7
Chhindwara	287.1	198.8	212.6	698.5	6.1	67.8	86.3	160.1
Damoh	121.4	140.1	166.5	428.0	2.8	41.6	44.7	89.1
Datia	43.8	47.7	47.7	139.2	0.8	80.1	55.9	136.8
Dewas	274.3	105.4	83.6	463.2	2.9	71.6	74.2	148.8
Dhar	247.0	114.2	146.9	508.0	2.3	98.2	83.2	183.7
Dindori	147.2	78.2	74.7	300.1	15.0	14.3	16.1	45.4
East Nimar	179.8	107.2	117.6	404.6	3.5	68.2	54.3	126.0
Guna	156.7	214.7	212.8	584.2	3.9	135.6	122.1	261.6
Gwalior	66.3	91.7	98.1	256.1	3.4	108.6	80.3	192.3
Harda	64.4	42.5	47.4	154.3	0.8	42.4	28.2	71.4
Hoshangabad	74.6	93.4	54.4	222.4	10.5	55.3	18.9	84.7
Indore	53.0	74.8	71.9	199.7	1.7	111.8	49.1	162.7
Jabalpur	87.9	128.8	157.7	374.4	3.4	52.2	39.6	95.2
Jhabua	286.2	151.7	158.2	596.1	2.5	65.3	51.9	119.7
Katni	175.2	97.3	144.4	416.9	12.3	26.7	43.6	82.6
Mandla	158.2	105.2	112.2	375.6	22.1	24.1	26.1	72.4
Mandsur	66.8	72.0	65.2	204.0	1.2	56.3	56.1	113.6
Morena	62.2	50.2	48.8	161.3	1.3	191.6	155.0	347.9
Narsimhapur	93.1	86.6	108.9	288.6	2.0	37.1	44.8	84.0
Neemuch	46.9	91.9	78.4	217.2	1.3	59.4	47.4	108.1
Panna	172.2	208.1	165.5	545.7	7.8	107.5	81.0	196.3
Raisen	114.3	132.3	147.1	393.7	3.5	123.7	48.3	175.5
Rajgarh	125.6	115.7	110.3	351.6	1.2	125.1	102.7	190.4
Ratlam	90.6	88.2	91.3	270.1	1.4	76.0	59.2	136.5
Rewa	242.8	197.7	236.0	676.6	4.5	85.3	88.2	178.0
Sagar	134.1	221.9	239.7	595.6	3.3	65.3	63.6	132.1
Satna	233.3	241.0	252.7	727.1	9.5	81.1	76.2	166.8
Sehore	131.4	125.1	128.0	384.5	4.8	100.3	79.0	184.2
Seoni	221.9	127.8	151.4	501.1	8.7	51.4	52.4	112.5
Shahdol	289.6	159.8	200.2	649.5	69.2	43.1	56.3	168.6
Shajapur	119.3	143.1	126.4	388.8	2.5	133.8	98.9	235.2
Sheopur	50.5	89.3	58.0	197.8	1.8	49.5	37.7	89.0
Shivpuri	178.3	169.0	154.6	501.8	2.9	132.9	97.6	233.4
Sidhi	375.0	226.0	256.8	857.9	6.6	84.4	83.2	174.3
Tikamgarh	220.1	138.8	131.7	490.6	3.8	97.3	80.9	181.9
Ujjain	92.0	81.0	86.5	259.4	1.6	100.5	79.4	181.5
Umaria	96.6	70.8	80.1	247.5	6.3	19.3	19.7	45.3
Vidisha	83.4	83.5	88.9	255.9	3.5	49.8	39.2	101.6
West Nimar	216.0	135.0	138.7	489.7	3.8	99.7	69.4	172.9
Madhya Pradesh	6790.9	5466.8	5685.6	17943.3	294.9	3759.0	2972.9	7026.8

Source: Tables of Agriculture Statistics, Commissioner Land Records and Settlement in Madhya Pradesh, 2003–04. Department of Veterinary, Government of Madhya Pradesh.

EL 11: Livestock Population, Milk Production, and Veterinary Centres, 2003–04

District	Other Animals (in'000s)							Total	Gross Total (in'000s)
	Sheep	Goat	Horses	Mule	Donkey	Camel	Pigs		
Anuppur									
Ashoknagar									
Balaghat	0.0	205.8	0.1	0.0	0.0	0.0	21.0	917.6	1608.2
Barwani	18.9	272.7	0.1	0.0	1.0	0.0	2.5	965.1	1635.0
Betul	3.1	151.6	1.4	0.0	0.6	0.0	10.1	759.0	1351.3
Bhind	21.6	180.9	0.5	0.1	0.7	0.5	13.4	706.3	1194.9
Bhopal	0.2	42.1	0.2	0.0	0.2	0.0	3.3	236.3	426.5
Burhanpur									
Chhatarpur	27.8	332.2	0.7	1.1	1.2	0.0	23.4	1151.1	1915.8
Chhindwara	1.5	279.6	4.1	0.0	0.8	0.0	14.5	1159.1	2017.7
Damoh	9.6	93.6	0.5	0.1	1.7	0.0	10.0	632.6	1149.7
Datia	14.4	112.1	0.3	0.0	0.4	0.0	5.2	408.4	684.5
Dewas	0.4	120.1	0.5	0.0	0.9	0.0	15.3	749.3	1361.3
Dhar	10.0	360.8	0.5	0.0	1.9	0.0	2.7	1067.7	1759.5
Dindori	0.2	55.5	3.1	0.0	0.0	0.0	6.3	410.6	756.0
East Nimar	33.0	188.4	1.3	0.0	0.8	0.0	3.4	757.6	1288.3
Guna	4.6	195.0	0.3	0.0	0.7	0.0	8.4	1054.9	1900.8
Gwalior	64.7	196.1	3.8	1.9	2.0	0.5	26.0	743.3	1191.7
Harda	0.0	49.5	0.4	0.0	0.1	0.0	0.6	276.3	502.0
Hoshangabad	0.1	60.5	0.4	0.0	0.5	0.0	3.9	372.5	679.7
Indore	3.5	101.2	0.5	0.0	0.6	0.2	8.1	476.4	838.8
Jabalpur	4.0	116.5	0.4	0.0	0.3	0.0	15.1	605.9	1075.5
Jhabua	14.7	472.1	0.3	0.0	2.0	0.0	0.8	1205.8	1921.6
Katni	8.1	85.3	0.2	0.0	0.0	0.0	5.6	598.7	1098.2
Mandla	0.3	87.5	1.4	0.0	0.6	0.0	22.3	560.1	1008.1
Mandsur	24.9	102.6	1.4	0.1	1.8	3.9	4.3	456.5	774.1
Morena	27.2	142.2	0.6	0.4	1.8	0.5	52.2	733.9	1243.0
Narsimhapur	1.7	64.4	1.8	0.2	1.5	0.0	4.6	446.6	819.1
Neemuch	11.5	159.5	0.7	0.1	0.5	1.0	2.3	500.8	826.2
Panna	7.2	212.0	1.2	0.5	0.9	0.0	982.2	1946.0	2688.1
Raisen	1.1	77.3	1.9	0.0	1.1	0.0	2.7	653.3	1222.5
Rajgarh	17.8	165.1	1.0	0.3	1.9	0.1	13.8	742.1	1284.2
Ratlam	9.7	203.1	0.6	0.0	1.1	0.3	19.6	641.0	1047.6
Rewa	23.2	171.5	0.6	0.2	0.3	0.1	20.7	1071.0	1925.5
Sagar	2.0	109.5	1.3	0.5	0.3	0.0	5.3	846.7	1574.5
Satna	17.2	181.3	0.3	0.1	0.5	0.0	14.2	1107.4	2001.2
Sehore	0.3	96.7	0.5	0.0	0.9	0.0	6.4	673.4	1242.0
Seoni	0.0	147.1	0.7	0.0	0.1	0.0	6.5	768.0	1381.5
Shahdol	8.9	148.1	2.4	0.0	0.0	0.0	10.8	988.4	1806.6
Shajapur	19.9	193.1	0.7	0.0	1.8	0.2	4.9	844.6	1468.7
Sheopur	17.0	127.3	0.1	0.0	0.5	0.1	3.4	435.2	722.0
Shivpuri	52.3	251.9	0.2	0.0	0.5	0.0	10.2	1050.4	1785.6
Sidhi	22.3	369.4	0.8	0.0	0.1	0.1	13.6	1438.3	2470.4
Tikamgarh	44.2	282.0	0.4	0.1	0.8	0.0	7.5	1007.6	1680.2
Ujjain	7.3	131.7	1.1	0.2	1.5	0.1	9.1	591.9	1032.8
Umariya	5.0	69.3	0.2	0.0	0.1	0.0	1.5	368.8	661.5
Vidisha	4.3	102.1	0.7	0.3	1.9	0.0	5.7	472.5	829.9
West Nimar	4.8	264.7	0.6	0.0	1.7	0.0	2.6	937.0	1599.6
Madhya Pradesh	570.4	7530.7	40.6	6.5	38.6	7.8	1425.9	34590.6	59560.7

Source: Tables of Agriculture Statistics, Commissioner Land Records and Settlement in Madhya Pradesh, 2003–04. Department of Veterinary, Government of Madhya Pradesh.

EL 11: Livestock Population, Milk Production, and Veterinary Centres, 2003–04

Districts	Milch Animals (in'000s)	Milch Animals Per Capita	Milch Animal per House	Draught Animals per Operational Holding	Draught Animals per Capita Dependent on Agriculture and Allied activities	Annual Milk Production (in Kgs)	Production of Milk per Person in the District per Day(Kgs)
Anuppur				Included in Shahdol			
Ashoknagar				Included in Guna			
Balaghat	164.6	0.1	0.5	0.8	0.2	94300000	0.2
Barwani	351.2	0.3	2.1	0.7	0.1		0.0
Betul	147.2	0.1	0.6	0.5	0.2	70300000	0.1
Bhind	184.8	0.1	0.8	0.1	0.0	240400000	0.5
Bhopal	76.7	0.0	0.2	0.2	0.0	86200000	0.1
Burhanpur				Included in East Nimar			
Chhatarpur	246.0	0.2	0.9	0.3	0.1	132200000	0.2
Chhindwara	229.5	0.1	0.6	0.5	0.1	99100000	0.1
Damoh	158.2	0.1	0.7	0.4	0.1	92100000	0.2
Datia	82.8	0.1	0.8	0.2	0.1	63900000	0.3
Dewas	103.4	0.1	0.5	0.6	0.2	147400000	0.3
Dhar	190.0	0.1	0.6	0.5	0.1	122000000	0.2
Dindori	63.1	0.1	0.5	0.6	0.3		0.0
East Nimar	145.0	0.1	0.5	0.4	0.1	124600000	0.2
Guna	211.3	0.1	0.8	0.2	0.1	145700000	0.2
Gwalior	173.9	0.1	0.7	0.3	0.0	181300000	0.3
Harda	57.1	0.1	0.7	0.3	0.1		0.0
Hoshangabad	66.1	0.1	0.3	0.2	0.1	132400000	0.3
Indore	135.2	0.1	0.3	0.2	0.0	215500000	0.2
Jabalpur	119.1	0.1	0.3	0.3	0.0	177500000	0.2
Jhabua	116.8	0.1	0.5	0.7	0.2	76500000	0.2
Katni	115.7	0.1	0.5	0.7	0.2		0.0
Mandla	99.2	0.1	0.5	0.6	0.2	74600000	0.2
Mandsur	103.0	0.1	0.5	0.2	0.1	236100000	0.5
Morena	212.6	0.1	0.9	0.2	0.0	381900000	0.7
Narsimhapur	116.9	0.1	0.7	0.3	0.1	76500000	0.2
Neemuch	72.9	0.1	0.5	0.2	0.1		0.0
Panna	176.9	0.2	1.0	0.6	0.2	62000000	0.2
Raisen	182.8	0.2	0.9	0.2	0.1	97600000	0.2
Rajgarh	147.2	0.1	0.7	0.3	0.1	130600000	0.3
Ratlam	105.0	0.1	0.5	0.2	0.1	106000000	0.2
Rewa	217.4	0.1	0.6	0.5	0.1	161600000	0.2
Sagar	246.2	0.1	0.7	0.2	0.1	136100000	0.2
Satna	275.3	0.1	0.8	0.5	0.1	157400000	0.2
Sehore	138.3	0.1	0.8	0.3	0.1	116500000	0.3
Seoni	164.9	0.1	0.5	0.5	0.2	69800000	0.2
Shahdol	173.0	0.1	0.5	0.6	0.2	222400000	0.4
Shajapur	210.0	0.2	1.0	0.2	0.1	169400000	0.4
Sheopur	94.9	0.2	1.0	0.3	0.1		0.0
Shivpuri	267.1	0.2	1.1	0.4	0.1	165900000	0.3
Sidhi	148.2	0.1	0.4	0.8	0.2	137500000	0.2
Tikamgarh	140.6	0.1	0.7	0.7	0.2	96700000	0.2
Ujjain	179.4	0.1	0.6	0.2	0.1	217500000	0.3
Umaria	73.7	0.1	0.7	0.6	0.2		0.0
Vidisha	110.7	0.1	0.5	0.1	0.1	136200000	0.3
West Nimar	219.4	0.1	0.8	0.5	0.1	234300000	0.4
Madhya Pradesh	7013.4	0.1	0.6	0.4	0.1	5388000000	0.2

Source: Tables of Agriculture Statistics, Commissioner Land Records and Settlement in Madhya Pradesh, 2003–04. Department of Veterinary, Government of Madhya Pradesh.

EL 11: Livestock Population, Milk Production, and Veterinary Centres, 2003–04

District	Veterinary Hospitals	Veterinary Dispensaries	Total Veterinary Centres	Animals per Hospital and Dispensary
Anuppur		Included in Shahdol		
Ashoknagar		Included in Guna		
Balaghat	15	45	60	26804.1
Barwani	9	29	38	43025.6
Betul	18	51	69	19583.4
Bhind	10	29	39	30638.6
Bhopal	9	12	21	20311.2
Burhanpur		Included in East Nimar		
Chhatarpur	16	54	70	27368.6
Chhindwara	19	74	93	21695.5
Damoh	9	35	44	26130.2
Datia	6	23	29	23603.2
Dewas	12	27	39	34906.1
Dhar	21	54	75	23459.7
Dindori	9	24	33	22909.6
East Nimar	16	38	54	23857.1
Guna	15	72	87	21848.0
Gwalior	14	21	35	34049.1
Harda	4	12	16	31375.6
Hoshangabad	14	30	44	15447.2
Indore	12	27	39	21506.7
Jabalpur	12	32	44	24443.0
Jhabua	18	47	65	29563.3
Katni	8	30	38	28899.8
Mandla	12	36	48	21001.5
Mandsur	6	30	36	21503.9
Morena	11	30	41	30317.1
Narsimhapur	9	35	44	18617.0
Neemuch	11	20	31	26651.8
Panna	8	38	46	58437.3
Raisen	13	30	43	28430.1
Rajgarh	14	43	57	22529.9
Ratlam	12	35	47	22288.9
Rewa	16	63	79	24373.8
Sagar	18	50	68	23154.1
Satna	15	61	76	26331.8
Sehore	12	27	39	31846.0
Seoni	13	44	57	24237.0
Shahdol	17	65	82	22031.6
Shajapur	15	33	48	30597.6
Sheopur	8	25	33	21877.7
Shivpuri	15	58	73	24460.6
Sidhi	19	73	92	26852.5
Tikamgarh	13	46	59	28477.6
Ujjain	8	19	27	38250.9
Umaria	9	31	40	16537.5
Vidisha	8	38	46	18041.8
West Nimar	17	46	63	25390.4
Madhya Pradesh	565	1742	2307	25817.4

Source: Tables of Agriculture Statistics, Commissioner Land Records and Settlement in Madhya Pradesh, 2003–04. Department of Veterinary, Government of Madhya Pradesh.