

The Madhya Pradesh Human Development Report 1998

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The Madhya Pradesh
Human Development Report
1998

Government of Madhya Pradesh

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Directorate of Institutional Finance,

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Foreword

I am told that in politics we get no marks for reporting on what is real but we should instead keep promising to deliver. This perhaps inhibits us from developing a new kind of politics that takes people into confidence and discusses the state of development with them in a manner that shares concern and urgency to provoke collective action. The Madhya Pradesh Human Development Report that we initiated in 1995 was intended to do this. Looking back I am happy that it was received mostly in the spirit it was intended.

We saw the Madhya Pradesh Human Development Report 1995, as a necessary analytical complement to our thrust to strengthen the social sectors. By bringing out an independent Report, we had tried to map the gap in attainments and thereby make decision on rational resource allocation. I believe that the 1995 Report made an important contribution in focusing priority attention to the issues of human development, and helped in mainstreaming human concerns into the development discourse of the state as well as the country.

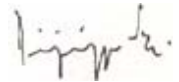
In this, the second such Report, we have attempted to carry forward the message of the 1995 Report. As the same time, since a state government with responsibilities for action cannot rest content with analysis, we feel that such a Report must also report on action. In this Report, apart from touching upon select issues relating to livelihood security and empowerment not addressed earlier, we have attempted to set out at some length the distance traveled since the last Report. There has been significant progress in many areas, less so in some others, and more still needs to be done. However forward to accelerate human development and improve the life of the people of Madhya Pradesh.

The work in Madhya Pradesh needs to be measured not merely on the basis of how much we have done on human development indicators, but in the manner in which we have sought to do it. The empowering of grassroots institutions, revitalisation of community management structures and creation of a participatory framework of action need a larger time-frame to consolidate. The process has begun. We achieved the major goal of universalising access to primary education by shifting to a community centred and rights-based model through the Education Guarantee Scheme that we pioneered. Implemented by communities and gram panchayats, the scheme as it works through, strengthens both schooling and panchayat raj and is leveraging the entire school education sector towards decentralised management. Watershed Management work when executed through peoples' watershed committees create grassroots organisations that are as or more important

than the engineering structures in the watersheds. These are only examples of how we have tried to work on a human development agenda through people's institutions and through the process strengthen both.

In this Report we have also aimed at increasing transparency and depth in the presentation of district level information and strengthening information on human development, which we hope will enhance its practical utility to representatives of the people, administrators, researchers and all those interested in human development in Madhya Pradesh. I trust that the 1998 Report will, like its predecessor, continue to provoke thought, comment, debate and reaction and keep our attention focused on the unfinished agenda of human development. Above all, I would be happy if the Report serves, as before, as a guide to people oriented action, reinforces the movement towards greater rationality in resource allocation decisions, and thereby contributes towards equal opportunities to all the people in our state to realise their potential.

Let me take this opportunity to congratulate Dr. Amartya Sen whose vision has inspired much of our government's work. I will also like to salute the memory of Dr. Mahbub-ul Haq whose pioneering advocacy carved out a place of Human Development Reports.



Digvijay Singh
Chief Minister
Madhya Pradesh

Acknowledgements

The making of this report has benefited from many individuals and institutions. They acted as guides, colleagues and catalysts to this report, and this report, which would not have achieved its present form without them. Interactions with them enhanced our understanding, and the deepened thematic content of this report.

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THE PROJECT TEAM

The Madhya Pradesh Human Development Report 1998 has been prepared by an integrated team comprising Dr. Raian Katoch and Shri R. Gopalakrishnan from the Government of Madhya Pradesh and personnel of 'Sanket', an independent multi-disciplinary research group based in New Delhi and Bhopal. The 'Sanket' project team consisted of Sandeep Dikshit, Maheen Mirza and Sharad Malhotra, assisted by Pawan Khera, Jamal Ahsan, Manish Verma, Alok Kumar Rajvanshi, Preeti Mathur, Ramanathan B., Smt. Rama Dhawan, and Dinesh Sinha.

THE ADVISORY GROUP

The advisory Group was constituted by the Government of Madhya Pradesh to guide and review the Madhya Pradesh Human Development Report Project. The Project Team interacted with members of the Advisory Group throughout the term of the project, thereby greatly enriching the report. A workshop of the Advisory Group was held in Bhopal on July 18th, 1998 to review the draft report. The workshop was presided over by Prof. K. Seetha Prabhu. It reviewed the draft report and made suggestions for its improvement.

The members of the Advisory Group are:

Dr. Vijay Vyas, Prof. K. Seetha Prabhu, Prof. O.S. Shrivastava, Dr. Vinod Vyasulu, Shri. S.R. Sankaran, Shri M.P. Parameshwaran, Shri. Ashok Jaitly, Dr. Vinod Raina, Dr. A.K. Shiv Kumar, Shri. P.V. Rajgopal, Shri P. Sainath, and Dr. R. Sudarshan

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Note : The following new districts were formed in 1998

- Morena District was divided into Morena and Sheopur in May 1998
- Shahdol District was divided into Shahdol and Umariya in July 1998
- Mandsaur District was divided into Mandsaur and Neemuch in July 1998
- West Nimar(Khargone) District was divided into Khargone (West Nimar)and Barwani in May 1998
- Hoshangabad District was divided into Hoshangabad and Harda in July 1998
- Jabalpur District was divided into Jabalpur and Katni in May 1998
- Mandla District was divided into Mandla and Dindori in May 1998
- Surguja District was divided into Surguja and Koriya in May 1998
- Bilaspur District was divided into Bilaspur, Korba and Janjgir-Champa in May 1998
- Rajgarh District was divided into Rajgarh and Jashpur in May 1998
- Rajnandgaon District was divided into Rajnandgaon and Kawardha in July 1998
- Raipur District was divided into Raipur, Dhamtari and Mahasamund in July 1998
- Bastar District was divided into Bastar, Kanker and Dantewada in May 1998

Abbreviations

ANR	Assisted Natural Regeneration	FPS	Fair Price Shops
ASI	Annual Survey of Industries	GCA	Gross Cropped Area
BAIF	Bharatiya Agro Industry Foundation	GDI	Gender Related Development Index
BIMARU	Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh	GDM	Gender Development Measure
CBO	Community Based Organisations	GESI	Gender-Equity-Sensitive Indicators
CBR	Crude Birth Rate	GIA	Gross Irrigated Area
CENDIT	Centre for Development and Instructional Technology	GOI	Government of India
CGWB	Central Ground Water Board	GOMP	Government of Madhya Pradesh
CHC	Community Health Centre	Ha	Hectare
CMR	Child Mortality Rate	HAF	Horti based Agro Forestry
CPR	Common Property Resources	HDI	Human Development Index
CSE	Centre for Science and Environment	HDR	Human Development Report
CSO	Central Statistical Organisation	ICCIDD	International Commission for Control of Iodine Deficiency Disorders
DAF	Dryland Agro Forestry	IGIDR	Indira Gandhi Institute of-Development Research
DANIDA	Danish International Development Agency	IGKVV	Indira Gandhi Krishi-Viswavidyalaya
DDP	District Domestic Product	IIPS	International Institute for Population Sciences
DIET	District Institute of Education and Training	IMR	Infant mortality Rate
DIF	Directorate of Institutional Finance	IOD	Index of Deprivation
DME	Directory Manufacturing Establishments	IRDP	Integrated Rural Development Programme
DPEP	District Primary Education Programme	JFM	Joint Forest Management
DPIP	District Poverty Initiative Project	JRY	Jawahar Rozgar Yojana
DRDA	District Rural Development Agency	K/cal	Kilo calories
DWCRA	Development of Women and Children in Rural Areas	LAMPS	Large Area Multi Purpose Society
DWACR	Children in Rural Areas	LMI	Large and Medium Scale Industries
EGS	Education Guarantee Scheme	MARKFEP,	Marketing Federation
EPW	Economic and Political Weekly	Mcum	Million cubic metres
ET	Evapo Transpiration	MFP	Minor Forest Produce
FAO	Food and Agriculture Organisation	Mm	Milli metre
FDC	Forest Development Corporation	MMR	Maternal Mortality Rate
FPC	Forest Protection Committees		

MP	Madhya Pradesh	PRI	Panchayati Raj Institutions
MPHDI	Madhya Pradesh Human Development Index	RCC	Reinforced Concrete Cement
MPHDR	Madhya Pradesh Human Development Report	RGI	Registrar General of India
MPT	Multi Purpose Trees	RKS	Rogi Kalyan Samiti
MT	Metric Tonnes	ROW	Rest of the world
NA/ na	Not Applicable/ not available	RPWP	Rural Public Works Programme
NABARD	National Bank for Agriculture and Rural Development	Rs.	Rupees
NBSS &LUP	National Bureau of Soil Survey and Land Use Planning	SC	Scheduled Castes
NCA	National Commission of Agriculture	SCERT	State Council for Education and Research Training
NCAER	National Council of Applied Economic Research	SDO	Sub Divisional
NCERT	National Council of Educational Research and Training	SHC	Sub-Health Centre
NCHSE	National Commission for Human Settlements and Environment	SIEMT	State Institute of Educational Management and Training
NDE	Non-Directory Establishments	sq km	Square kilometre
NGO	Non Governmental Organisations	SRS	Sample Registration Scheme
NIC	National Industrial Classification	SSI	Small Scale Industries
NRSA	National Remote Sensing Agency	ST	Scheduled Tribes
NSDP	Net State Domestic Product	SWC	Soil and Water Conservation
NSS	National Sample Survey	TB	Tuberculosis
NSSO	National Sample Survey Organisation	TFR	Total Fertility Rate
NTFP	Non Timber Forest Produce	TRIFED	Tribal Co-operative and Marketing
NWDB	National Wasteland Development Board	TW	Tube wells
OAE	Own Account Enterprises	TWP	Total Watershed Planning
OFR	On Farm Reservoirs	UNDP	United Nations Development Programme
PACS	Primary Agriculture Credit Societies	UNFPA	United Nations Population Fund
PDS	Public Distribution System	NICEF	United Nations Children's Fund
PET	Potential Evapo Transpiration	USAID	United States Agency for international Development
PHC	Primary Health Centre	VFC	Village Forest Committee
PIA	Project Implementing Agency	VHAI	Voluntary Health Association of India
		VRDP	Village Resource Development programme
		WIMCO	Western India Match Company
		WPR	Workforce Participation Rate

Glossary

Aam	Mangifera indica (Mango)	mandal	
Amla	Phyllanthus emblica (Goose berry)	Mahila	Female elected representatives on the
Babera	Terminalia bellerica	Panchas	Village Council
Baniya	Trader	Mahua	Madhuca indica
Basod	Traditional bamboo workers	Maiguzars	Landlord ; One paying revenue to (for holding land under) government
Bel	Aegle marmelos	Neem	Azadirachta indica
Benami	Fictitious	Nistar	Requirements of villagers of forest
Beta	Son	produce	
Bhatti	Fire Kiln	Panch	Ward member in the village panchayat
Bhumiswami	Land owner	Panchayat	Elected Village Council/ the third tier of decentralised governance
Bija	Seed	Pati	Husband
Chandan	Sandalwood	Patta	Leaf
Chinnd Taad	Phonix acqulis	Patwari	Lowest level revenue officer
Chironji	Buchnanian lanzan	Phad Munshi	Person appointed by the Primary Society to procure tendu leaves from pluckers and pay wages to them
Deewan	A post akin to the Chief Minister of a State under the erstwhile states of India Gram Panchayat Village Council, elected by the Village Assembly	Pita	Father
Gram Sabha	Village General Body or Assembly	Pucca	Made of processed or treated raw materials
Gram Udhog	Village Industry	Rabi	Winter crop
Harra	Terminalia chebula	Saj	Terminalia tomentosa
Hitgrahi	Beneficiary of Government Programmes	Sal	Shorea robusta
Imly	Tamarindus indica Linn. (Tamarind)	Sarpanch	Elected head of the Gram Panchayat
Jamun	Ugenia jambulana	Tehsil	A revenue sub-division, within a district
Janpad	Block level elected Panchayat Body	Tendu	Diospyros melanoxylon
Panchayat		Thekedari	Contractorship
Karanj	Pongamia glabra	Til	Sesame seed
Kharif	Monsoon crop	Urad	A type of pulse
Kodo Kutki	A type of pulse	Vidhan Sabha	State Assembly
Kutch	Untreated/ construction made on untreated raw materials	Zamindars	Landlord
Mahila	Women's group		

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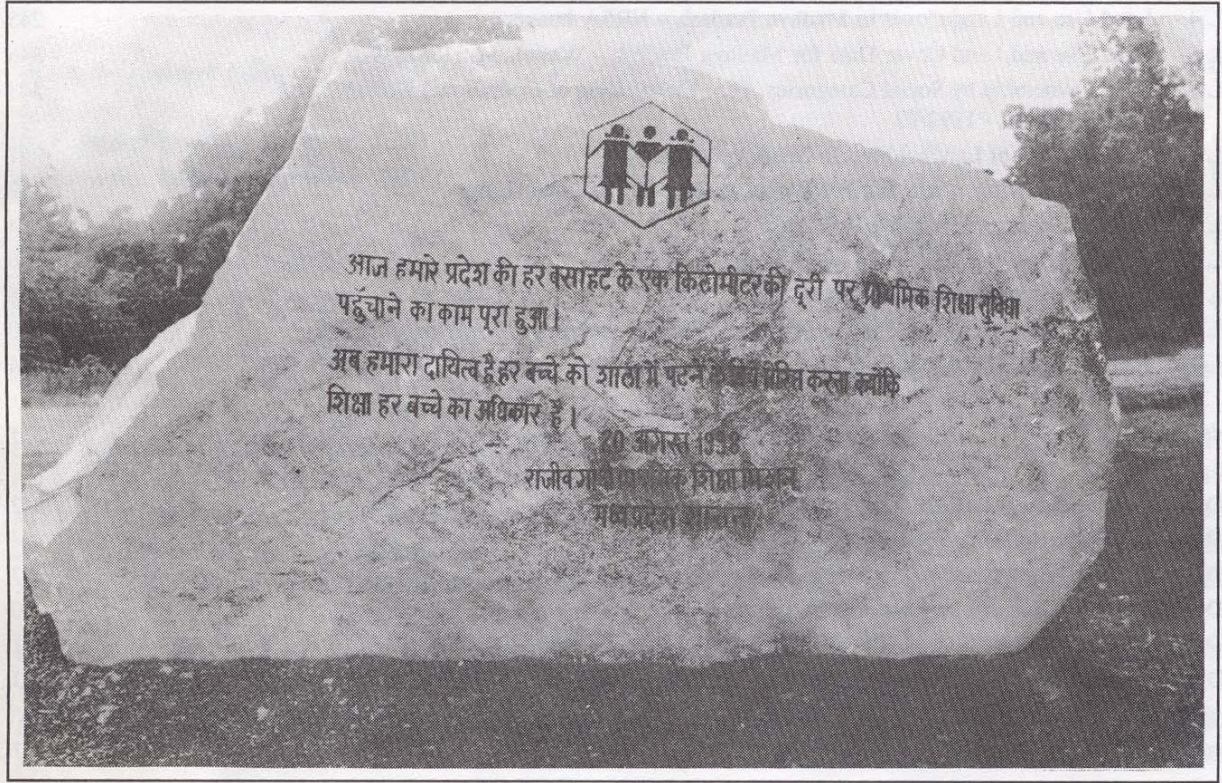
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The State and Human Development The Road Covered

1. The Backdrop: Madhya Pradesh and Human Development

The Government of Madhya Pradesh produced its first Human Development Report in 1995 to benchmark its status in areas affecting human development. This was seen as a document to create concern on the low status of human development in the state and mobilise collective action to address it with a sense of urgency. It was also seen as providing the conceptual underpinnings for a shift in development priorities effected by the government which converted selected human development tasks into Missions in the state. These Missions centered on an agenda of livelihood security, education and selected issues of basic health care. A Human Development Report (HDR) that identified the gaps of the state in these areas was expected to create and sustain political and policy support to such an agenda.

A Human Development Report produced by any government of a State beset with historical backwardness in critical areas of human development tends to become a confessional. It becomes an open admission of failures in the attainment of basic development needs that any progressive government is expected to address. Democratic governments do not have the privilege of distant they are expected not merely to diagnose or interpret, but are voted to office to make change. A Report of this nature becomes controversial in a context of competitive and adversarial politics that is yet to evolve into becoming bipartisan on issues of development. The media also tends to project the sensational underside with a new sense of discovery. All these place great demands on political courage to begin and continue to produce such Reports.

The Government of Madhya Pradesh showed that courage. It did it with a full awareness of these consequences. It believed that there was nothing that was contained in a Human Development Report that was not felt by the people in their everyday lives. It was more

important to make people *think* about it so that they were Moved to look for solutions. The issue was one of vision and guts. The vision was that democratic governments must work with people on human development, and through combined action of State and civil society many of the tasks on hand could be effectively addressed. If facts were made known, concerns shared, and an enabling environment for participatory action provided, society would take on the tasks that governments were labouring to do. A new atmosphere of collective action could develop that would make seemingly formidable tasks achievable.

Looking back at the three years since the publication of the first HDR by the State Government, the most important objective seems to have been met in that, today, the human development agenda and related issues of education, health and livelihood security dominate the political discourse in the state. New initiatives in the fields of education, health and livelihood security have moved over substantially to community-centered management. There is a better understanding of collaborative action and public-private partnership. In fact there has been a shift in the model of action with participatory action replacing state-directed delivery.

2. Addressing Human Development: Goals Beyond MPHDR 1995

On October 1, 1995, the MPHDR was formally released by the then Union Finance Minister Dr. Manmohan Singh at New Delhi. The exercise was well received within Madhya Pradesh by people's representatives, administrators, non-governmental organisations, and contributed both to the political discourse and dialogue with organisations related to development. The emergence of a vocal 'human development lobby' in India which includes politicians, academics, administration and international organisations has been aided by the response to MPHDR 1995.

Within the State of Madhya Pradesh, the 1995 report has contributed in substantial measure to mainstreaming

concerns, debate and action on human development. The term 'human development' has gained currency in the sphere of government's action and public discourse.

The Government of Madhya Pradesh in collaboration with the United Nation's Development Programme held an all India workshop on State level Human Development Reports in Bhopal in November 1996. MPHDR 1995 was presented as a welcome initiative for such state level efforts. Putting on focus the objectives of the government in launching on an agenda of Human Development Reports as an instrument towards accelerating human development goals in Madhya Pradesh, the Chief Minister Mr. Digvijay Singh in the workshop stated that "In most of our states, uneven development is a reality... and a Human Development Report by measuring our efforts and pointing out the gaps, serve a very useful purpose. It becomes an effective planning instrument to direct limited resource. Such a Report is not merely a framework for measurement but as much a reaffirmation of vision - vision about a just, humane and equitable social order... Human Development Reports are relevant to us only if they trigger action towards greater investments in the social sector".

With regard to the first two objectives, MPHDR 1995 has been wed into the planning process in Madhya Pradesh. The Approach Paper to the Draft IXth Five Year Plan for Madhya Pradesh states "A substantial shift has taken place in recent years of the greater emphasis on basic minimum services at the national level and the human development agenda adopted by the State Government... Social services will now appropriate 42.37 percent of Plan investment, as compared to 18.73 percent in the Eighth Plan". The Plan document states that "An important indicator of the State's backwardness... is the Human Index".

Madhya Pradesh Human Development Report 1998 goes beyond the 1995 report, where in many ways, it attempts to fill the gaps in the 1995 report. The first Madhya Pradesh human development, Report in 1995 had dealt with the status of education, health gender issues in the State. The third component of human development, related with standard of living or access to resources for a good quality of life had not been looked into. This Report makes a beginning in addressing them, and covers some issues related to livelihoods and natural resources.

The chapters of the Report can be conceptually

grouped into three sections. The first section deals with the steps taken in the last three years by the State Government on human development, and in increasing people's participation in it. The second section is built on the theme of *People and Natural Resources*. This section covers two critical issues for the people of the State! Forests, and Water Management in two separate chapters. While they are specific to their context, these chapters present a picture of the two resources - forests and water. Both chapters discuss the impact of the natural resource on people's lives, and the sustenance derived from them, leading onto current issues and trends towards more people directed management of these resources. The chapters establish a link between the constraints and potential, the current and emergent issues and governmental and other action in this regard in the State. The chapter on People Oriented Management of Forests dwells on the history of people-forest-state relations, enumerates past and present policies and practices, and advocates increased people's participation in forest management. The chapter on Water Management and Livelihoods Security states the challenge of food security, and employment, and then outlines the issues related with exploiting water resources and technology in two regions of the State. The chapter then argues for decentralised management of watershed development on the lines of watershed Mission adopted by the State government, and finally proposes watershed-led sustainable solutions for livelihood security.

Given the fact that reportage also needs to develop to develop a user manual for identifying of problems and measuring outcome for actual interventions, the third section presents a database on the State. This is data culled from independent sources which can be an aid to more effective comprehension of sector, as well as outcome indicators for human Development interventions thus far.

3. New Opportunities for Human Development in Madhya Pradesh 1995-1998: Participatory Governance through Panchayat Raj

An entirely new period of possibilities for realising human development goals opened up in the State when Madhya Pradesh became the first state in the country to hold elections to Panchayat Raj Institutions after the Seventy Third Amendment of the Constitution. The Constitution

Panchyati Raj: Transforming Lives

- Jhabua District is known for its drought proneness. Mass migrations to adjoining districts and states is commonplace here. Sagwa is a Panchayat in Jhabua, which witnesses frequent and acute shortage of drinking water both for humans and animals. Irrigation was out of question. Galiya Kodar, the Sarpanch of this Panchayat, struggled to get a pond constructed in the Panchayat to contain seasonal migrations. He succeeded in getting two ponds made. No. single family now needs to migrate to Malwa or Rajasthan, and today these ponds cater to the irrigation needs of over a hundred tribal farmers during the Rabi season. The Sarpanch has now taken up the task of educating every child of this Panchayat upto Higher Secondary. to achieve his goal he has launched a door to door campaign.
- Village Bhadol of Datia District was like an ordinary village with ills of alcoholism and gambling akin to many villages. There were a number of bhattis. People from adjoining villages would come here to drink and gamble. The village earned notoriety because of this. Mahipal Singh, the young Sarpanch of this Panchayat took up the cause of redeeming the village of these ills. A band of youths in his leadership launched a crusade against alcoholism and gambling with a missionary zeal. They would demolish the bhattis and penalise the gamblers. Today the village boasts of total prohibition and is also free from gambling.
- Gayatri Bai Uike lost her husband in an accident. She started a dreary existence bringing up her children and farming on her fields. People of her village. Kohani Dewari, in the Shahpura block of Mandla District, decided to make her their Sarpanch. Overcoming her initial inhibitions. Gayatri took up the responsibility. She thought of the girls of her village, especially belonging to poor families. What if they meet the same fate as hers? She still had an advantage over her fate, She belonged to a family which had land and other productive assets. Having pondered over this issue she decided to promote education of girls. She got sanction of rupees 20 lakh for a 50 seat ashram school for girls. The government could not give land for this school. Gayatri Bai Decided to donate her land. She gifted two acres of her land to the village to ensure future for the girls of the area.
- The Dudhiya Panchayat of Indore District is one example where a Panchayat in brining about development by availing of its right to impose royalty on mines and quarries given to Panchayats all over the state. Roads in the entire Panchayats have been murrumed by revenue generated by the Panchayat through royalties. A sub health centre is under way being constructed with the money earned through royalty and contributions from the people besides funds from JRY. Dry toilets, stop dams and ponds are the other achievements of this Panchayat.
- In the Farsegarh Panchayat of Bastar District, Kamlabai the Sarpanch saw irregularities at the Fair Price Shop. Realising the importance of the PDS in her area, she ensured the ouster of the person running the shop. A tribal youth was given charge of the shop People of Farsegarh are now happy with the functioning of the service and the Sarpanch wants this transformation to be replicated where ever stakes of the people are involved.

Source: Different volumes of Panchayat gazette

Amendment provided for direct election to panchayat bodies with reservation for weaker sections like scheduled tribes, scheduled castes and women. This resulted in creating an entirely new cadre of people taking on leadership roles and replacing the bureaucratic model of governance.

Despite the limitations that such efforts at political decentralisation have in a context of unevenly owned economic resources, the emergence of a new leadership at the local level has had a dramatic impact in a churning of the rural polity in Madhya Pradesh. The drama is still

Table 1: Devolution of Powers to Panchayats in Madhya Pradesh

Sector	Task	Powers to panchayats
Education	Primary education	Setting up new schools in response to community demand, appointing teachers, arranging for space for conducting schooling and management of all such schools set up through Education Guarantee Scheme is done by Gram Panchayats All new teachers are appointed by Janpad Panchayat All school buildings costing below Rs. 3 lakhs are constructed by gram panchayats.
	Primary and secondary school education	Panchayat, Janpad and District level Education Committees oversee all matters of school education like location of new schools, transfer of teachers within the district and staffing of District Institutes of Educational Training.
Health	Primary Health	Panchayats recruit volunteers to become rural health practitioners or Jan Swastya Rakshaks Panchayat responsible for disease surveillance and reporting epidemics Health Committees of Gram Panchayat, Janpad Panchayat and District Panchayat supervise all aspects of primary health management.
	Water shed Management	Community-level watershed management committees undertake work with panchayat support
Natural Resource Management	Forest Management	Powers vest with gram panchayats for supervision, issue of transit passes for forest produce. Community-based Joint Forest Management Committees manage degraded forests under panchayat Co-operative of pluckers manage collection of non-timber forest produce under panchayat supervision
	Management of water bodies	The management of water bodies and their tenancy rights vest with panchayat at all the three levels. But the ownership of these water bodies have not been transferred. Fishing rights vest in gram panchayats
	Management of Minor Minerals	Mining royalty rights along with tenancy rights vest with gram panchayats.

unfolding and the contestation between existing power structures of landlord-petty bureaucrat nexus with the new ' leadership is far from settled. The veil of silence has been lifted from the countryside as many women move out from the private sphere to the public sphere, and the "noise" of democracy is making itself heard in the gram sabhas. In all there are over 4,84,000 elected representatives to Panchayati Raj Institutions in Madhya Pradesh, of which 1,84,000 are women.

The deepening of political democracy in the State as a result of this major change and the resultant unleashing of creative energy of people provided an enabling context for a sharper focus towards human development goals on the one hand and a change-over to a participatory model of delivery on the other. Education, health and livelihood security was a peoples' agenda and now *panchayat raj* provided a forum for their articulation. These were also the sectors where panchayat leadership could make a critical difference in improving delivery. The challenge has been to seize this opportunity and reorder structures of governance in a manner that accommodated and channelised these new energies. This also required devolving wide ranging powers to Panchayat Raj Institutions in the areas of education, health and natural resources management. Table 1 shows the powers that were moved to panchayat raj institutions in the areas of school education, health and natural resource management.

This deepening of democracy through Panchayat Raj Institutions has been complemented by a broadening in terms of creating plural grassroots organisations. between 1994 and 1998 several areas were carved out for direct community action. In the area of natural resources management, watershed committees for development of watersheds, joint forest management committees for management of degraded forestland, fish-workers cooperatives for management of fishing tanks and pluckers' co-operatives for management of non-timber forest, directly manage these activities. These structures have enabled the transition from seeing people as objects of development to active agents of change, which is integral to a vision of human development. The contention between the bureaucracy that sees participation only as an instrumentally or an efficiency tool and the deeper vision of that critical to a political democracy, may be far from settled, but the process of community empowerment has

4. Focused Action on Human Development Goals: Missions

4.1. Background: Breaking out of the *Bimaru* trap

Madhya Pradesh has long been stereotyped as a "*Bimaru* state in terms of attainments on a human development agenda. Along with other states in this category like Bihar, Rajasthan and Uttar Pradesh, Madhya Pradesh was seen to be accounting for a considerable backlog in areas like literacy, basic education, and levels of nutrition, basic health and poverty. In Madhya Pradesh 31.3 % of people were reported living below the poverty line while the corresponding All-India figure was 33.5 %¹. As against a national literacy percentage of 52.1 %, Madhya Pradesh had only 44.2 % and in case of female literacy, the figures were 39.4 % and 28.8 % respectively. Infant mortality was as high as 97 while the national average was 72 in 1996. The Disability Adjusted Life Years (DALY) lost due to premature mortality in the State have been estimated to be 332 per 1000 population as compared to the national average of 224 per 1000 population. These were historical lags and call for urgent action in these areas. To respond to some of these issues, the Government of Madhya Pradesh conceived of Missions in selected areas centering on the themes of basic education, health and livelihood security.

The seven Rajiv Gandhi Missions set up by the Government on 20 August 1994 sought to signal priority to certain selected areas affecting human development. The overarching goal of these Missions was to help Madhya Pradesh break out of the *Bimaru* trap in the quickest possible time. The challenges of underdevelopment in these areas required unconventional and radical responses that hinged on concerted action that would help the State to make rapid advances in these areas. It was also a recognition that these actions require to be done by the State in partnership with people. This called for a clear definition of tasks, sharing

¹The NSS Sample Survey on Expenditure of 1993-94 providing estimates of people living below the poverty line (Head Count Ratio) has not been officially accepted by the Planning Commission and the State Government as yet. However for use, we adopt the poverty figures correspond to what has been published as the Head Count Ratios for Madhya Pradesh along the lines suggested by Planning Commission-Expert Group on Poverty 1993 (EOPL) (page 59).

Table 2: Missions, Goals and Structures for Implementation

Mission	Goal	Structure of Implementation
Primary Education	Universalise Primary Education	Village Education Committee, Panchayats at Village, Block and District levels
Watershed Management	Improve land and water resources in degraded areas	Watershed Committees
Control of Diarrhea Diseases	Reduce diarrhea deaths to bring down child mortality	Panchayats
Elimination of Iodine Deficiency Disorders	Universalise use of iodised salt in the state	Panchayats, schools
Rural Industries	Focus on sericulture, leather, handloom and handicrafts for value-addition and increased employment	Artisan Collectives
Fisheries Development	Improve productivity, area under coverage, and income-share through co-operativisation	Fish worker co-operatives
Sanitation	Make Sanitation a peoples movement	Zilla Swastya Samitis

of problem perception, revamp of administrative structures to facilitate participatory action, public declaration of a time-frame for action and societal mobilisation for achieving goals.

In August 1994 the Government of Madhya Pradesh identified tasks of universal primary education, watershed management, control of diarrhea diseases, elimination of iodine deficiency disorders, rural industries, fisheries development, and sanitation to be converted to Missions. The Mission on Universal Primary Education was carved out from the education sector for focused action. Watershed management in a Mission-mode sought to address the problem of poverty of people living in environmentally degraded areas. Missions on Control of Diarrhea Diseases and Elimination of Iodine Deficiency Disorders addressed two areas of work that were often neglected within the health system, but required the inter-sectorality of a Mission to be successful in reducing infant mortality in the State on account of water-borne diseases and for addressing a major health problem that afflicted a large number of the indigenous tribal population in the State. The Missions on Rural Industry and Fisheries Development were targeted at increasing rural employment and value addition. These Missions sought to impart urgency to these tasks through a time-bound model of delivery, and developed models of collective action.

4.2 Missions Goals and Structures for Implementation (refer Table 2.)

Each Mission developed its plan of action and a methodology of execution that was premised on popular participation.

4.3 Mission Performance: 1994-1998 (ref. Table 3)

Among the major achievements of these Missions have been ensuring universal access to primary schooling for all children in Madhya Pradesh, environmental regeneration of over a million hectares of land, significant reduction case fatality rate on diarrhea deaths and thereby on infant mortality, and ensuring elimination of iodine deficiency disorders. The greater contribution has been in demonstrating that many of the tasks of human development are achievable within realistic time-frames collective action.

4.4 Universalising Access to Primary Education in Madhya Pradesh by 1998, through the Rajiv Gandhi Prathmik Shiksha Mission

The first challenge identified by the government as a Mission was to universalise primary education in the state. The inability to universalise primary education has been one of independent India's gravest failings. The Forty fifth article of the Directive Principles of the Indian

Table 3: Mission Performance: 1994-1998

The missions attempted to deliver tasks within given time-frames

Mission	Target set in 1994	Work done by 1998
Mission for Primary Education	Provide a primary schooling facility within 1 Kilometres of every habitation by 1998	30274 habitations in Madhya Pradesh provided primary schooling facility by July 1998. Madhya Pradesh declared universal access to primary education by reaching a primary school facility under one kilometre of every habitation in August 1998. This was made possible by the Education Guarantee Scheme (EGS) of the Mission, which guarantees a functioning school within 90 days from the date of demand from any community, deprived of schooling facility. Started on 1 January 1997, the EGS created over 19000 primary schools through community participation in 18 months. 2 lakh teachers trained. New child friendly curriculum introduced.
Mission for Watershed Management	Improve land and water resources in 12 lakh hectares of land through watershed management by 1999	Watershed management worked completed in 12 lakh hectares by June 1998. Work executed in 7002 villages by over 5000 Peoples Watershed Committees and 101 collaborating Non-Government Organisations. Mission now covers an enhanced target of 33.3 lakh hectares, which is one percent of India's land making the mission India's largest watershed management programme. Thrift and Credit Societies of women in watersheds of drought-prone Jhabua make a saving of 3.5 crores in four years.
Mission for Control of Diarrhea Diseases	Reduce diarrhea deaths by 70% by 200 to bring down infant mortality (28% of child deaths in the state are attributed to diarrhea)	Case fertility Rate on account of diarrhea in the state reduced by 84% in the three years from 1994 to 1997.
Mission for sanitation	Make sanitation a peoples movement in the state	65 sanitary marts facilitated to come up in the private sector. Mission yet to go to scale.
Mission for Fisheries Development	Increase area under coverage, productivity and co-operativisation	Area, productivity and number of co-operatives register significant rise. Fishing rights in major irrigation tanks given to co-operative societies of people displaced by these projects.
Mission for Rural Industries	Focus on sericulture, leather, handlooms and handicrafts for job generation and skill upgrading	Major project for sericulture up graduation developed and OECF assistance obtained to generate 100,000 jobs in the tribal districts of Surguja, Bilaspur and Raigarh. Several skill up gradation centers set up.
Mission for Elimination Iodine Deficiency Disorders	Eliminate iodine deficiency disorders by universalising use of iodised salt by 1996.	Universal use of iodised salt achieved in the state by January 1996. Mission closed after independent evaluation by International Council for Control of Iodine Deficiency Disorders (ICCIDD) confirms universal use.

Lok Sampark Abhiyan: Methodology and Key Findings

When the Government of Madhya Pradesh produced the first sub-national Human Development Report in the world one thing that became clear was the inadequacy of information and the lack of its authenticity in some of the vital sectors. This prompted the Rajiv Gandhi Shiksha Mission of the state to devise a peoples survey or a Lok Sampark Abhiyan to define the problem of primary education in terms of "How many children do not go to school and who are they". The Lok Sampark Abhiyan mobilised panchayat representatives to undertake a door-to door survey of children not going to school in 1996 and all children in the villages of 34 districts were covered. Over 10 million children were contacted in over 6 million households.

Objectives and Methodology of LSA

- Assess the current status of schooling facilities for primary education
- Undertake a survey of children at household level to list children of school going age who are in school and out of school
- Undertake this survey through a combined team of panchayat functionaries, teachers and volunteers so as to make it a motivational campaign for enrolment of all children
- Develop local understanding of the causes of non-enrolment to trigger local community action for educational planning
- Sharing the onus of universal enrolment in particular and planning for primary education in general with elected panchayat leadership and develop a bonding on these tasks between teachers and community leadership
- Use this survey to also assess the status of literacy and consolidate the campaign for total literacy and develop synergy between primary education and literacy efforts at the panchayat level
- Use this survey to also assess the status of literacy and consolidate the campaign for total literacy and develop synergy between primary education and literacy efforts at the panchayat level.
- Development of Village Education Register as basic record of educational statistics of each village to be maintained in two copies at the gram panchayat and the school.
- Use this survey as a basis for cohort monitoring for completion of primary schooling

The methodology was to form state and district level resource groups to plan and support the campaign through training. The survey was undertaken by the panchayat level campaign team conceived as a team of frontline volunteers acting more as motivators than passive collectors of statistics to create a collation for community-managed primary education at the village level. The tools used were collective activities for environment building door-to-door survey, collective school-mapping, motivation of parents for universal enrolment, consolidation of data into village education registers and development of village education plans.

Major Findings

- The data revealed that access issues were far from solved. The habitation pattern of tribal families being to live in scattered hamlets primary schooling facilities were not available in many habitations
- The issue of drop-out was exaggerated in comparison to enrolment. The non-availability of facilities in many habitations was not reflected in the near 100% enrolment reports. For every child reported to have dropped out there were two others who had never been enrolled.
- The survey exposed the near-total irrelevance of the Government of India scheme of Non-Formal Education (NFE). It was found that 90% NFE centres had come up in villages with primary schooling facility and that the scheme did not reach out the un-served and remote habitations of the state. It was largely dysfunctional as it did not build in accountability to the community.
- Girl children were the most disadvantaged category in terms of a section of population with 35% non enrolment
- Tribal blocks showed the maximum non-enrolment.
- The LSA data provoked the government to launch on the Education Guarantee Scheme building on the coalition with the community for universalising primary education and making schooling facilities within reach of the disadvantaged areas and groups in the state.

Source: Amita Sharma & R. Gopalakrishnan. s Bringing the People Back In: From Lok Sampark Abhiyan to Education Guarantee scheme in Madhya Pradesh, Rajiv Gandhi Missions 1997

Constitution had directed the Indian State to provide free and compulsory education within a period of 10 years to all of India's children. That the Government of India and several of India's educationally backward states have been unable to do it even by the turn of the century tell a sad story of the unused creative potential of our people and is an affront to the rights of the child.

The Rajiv Gandhi Shiksha Mission was created to address tasks of universal access, enrolment, retention and ensuring achievement of competencies. The mission successfully mobilised over US\$ 250 million as external assistance under the District Primary Education Programme to strengthen primary education in 34 out of 45 districts of the State. These resources were deployed for increasing amenities, training of teachers and development of contextually relevant curriculum, and were implemented through the Panchayat Raj Institutions.

In 1996 the Mission undertook a Lok Sampark Abhiyan to mobilise the community to undertake a door-to door survey of children not going to school as well as amenities for primary education in these 34 districts. Through this exercise the Mission was able to develop an alternative Peoples' Information System on the status of primary schooling in these districts. The involvement of panchayat leadership in defining the problem led to forging alliances with them for finding solutions. The key findings of the *Lok Sampark Abhiyan* were that: there were several villages in the State without access to primary schooling facility especially in the Scheduled Caste clusters and Scheduled Tribe hamlets, that enrolments were exaggerated, and societal control on primary education was missing (see box on methodology and key findings of *Lok Sampark Abhiyan*)

Responding to these findings and to consolidate State-Community partnership in primary education, in 1997 the Mission innovated an *Education Guarantee Scheme* (EGS). The primary objective of the EGS was to universalise access to a functional schooling facility in the quickest possible time (see Box). The scheme sought to share the task of universal primary education with communities and local bodies. Under the scheme, the government guaranteed the provision of a trained teacher, her or his salaries, training of teacher, teaching-learning material and contingencies to start a school within 90 days, whenever

Ending BIMARU

Madhya Pradesh is one of the so-called BIMARU states where educational and health indicators are way below national ones. Chief Minister Digvijay Singh has taken a welcome initiative to get his state out of this classification by involving local communities in programmes to expand education and health. Under his education Guarantee Scheme all areas which do not have a school within one kilometre can apply to start their own local school and the state government will finance a teacher to be chosen by the local panchayat. This is a good way of making the teacher accountable to the local community and reducing the chances of high teacher absenteeism which has been the plague of education in many states. The scheme also ensures that teachers from urban centres are not sent to remote areas from which they seek transfer and that local teachers are appointed instead. The new teacher will be on probation for three years after which he or she will be confirmed if the local community approves of his performance (it would have been better to keep teachers on five-year renewable contracts as in China but even Mr. Singh's limited reform has been challenged in courts by vested interests).

This is a welcome initiative to empower local bodies to run their own service. Many problems remain in such decentralisation such as a shortage of skills quarrels within the bureaucracy and capture of benefits by the dominant castes. Yet it seems that education and health (which has also been decentralized) are two areas where decentralisation has considerable chances of success. Mr. Digvijay Singh claims that to tackle widespread goitre his government decided not to expand subsidies but instead launch a campaign to educate tribals on the benefits of iodised salt. The result he claims is that public education has helped reduce mortality from diarrhea from 3-4 percent of the disease's incidence to 0.4 per cent. If these claims hold up, Madhya Pradesh will cease to be a BIMARU state within a decade.

Editorial in the Economic Times 26th August, 1998

A New EGS: Education Guarantee Scheme in Madhya Pradesh

Under the scheme, the Government guaranteed the provision of teacher. Her/his salaries, training of teacher, teaching-learning material and contingencies to start a school within ninety days wherever there was a demand from a community without a primary schooling facility within one kilometre, provided this demand came from at least 25 learners in case of tribal areas and 40 learners in case of non-tribal areas. The community that made the demand could also suggest the name of a suitable local resident to be the teacher to be called 'guruji' and the Gram Panchayat was empowered to appoint such a guruji after the Chief Executive Officer of the Janpat (block) panchayat had verified the bona fides of the demand and the qualifications of the guruji proposed. The training of the guruji would be organized by the district administration which would also credit the amount of annual salaries upfront in the gram panchayat's bank account. The local community or gram panchayat was expected to come up with the provision of space for teaching-learning. While the Government ensured the critical basic inputs for transacting primary education (here defined as the teacher and her or his salaries, training, teaching-learning materials, contingencies and academic supervision), the communities shared the task of universalising primary education by its contribution to creating the demand identifying the teacher and providing the learning space. The EGS was short, an effort of the state government to universalise access to schooling facility focusing on the hitherto un-reached sections in the quickest possible time and thereby convert the rhetoric on universalisation on primary education into a reality in Madhya Pradesh.

The EGS recognises the urgency of time: that generations of children have wasted away waiting for primary schooling facility. This is sought to be accounted for by fixing a time limit in the scheme of ninety days to respond to any demand from a community deprived of the facility. If there is any community without a schooling facility within one kilometre which is the stipulated norm, the State Government guarantees to start an EGS school in ninety days. This crashing of the time frame forces the implementing agencies to undertake this exercise in a campaign mode. The response to the scheme in the first year of operation in Madhya Pradesh indicated the unfulfilled demand for primary education that existed even in remote tribal areas of the state. It reveals the hollowness of much academic writing on low parental motivation as

inhibiting primary education as yet more instances of blaming the victims.

The EGS reduces the cost of delivering primary education by re-examining the critical basic inputs required for transacting education. The critical inputs identified are a teacher, who is a local resident training of the teacher, teaching-learning material, some amount for the contingencies and academic supervision. The community is expected to come up with provision of space for learning. The annual cost of operating an EGS school works out to just Rs. 8500 and shows the cost-effective nature of the Scheme. It does this without comprising any of the basic requirements for quality.

The EGS has now been in operation in MP over one year since 1st January 1997. The performance of the scheme is evident from the fact that on an average, more than forty primary schools came up each day of the year in Madhya Pradesh through EGS in 1997. In the first one and a half year of operation 19289 EGS schools came up in the state is also indicative of the fact that most of these schools have come up in the tribal districts of the state justifying the assumption that majras, tolas, and phalias in many tribal villages lacked schooling facilities. The scheme has evoked an overwhelming response as it was seen to be simple to operate, gave effective control to the local community and did not lose out on any of the vital attributes of good primary education.

The EGS has been instrumental in reaching primary education facility within one kilometre of every habitation in Madhya Pradesh enabling the state government to declare universal access by August, 1998.

Please see Tables in Annexure to this chapter.

Source: "A new EGS: Education Guarantee Scheme in Madhya Pradesh". R Gopalakrishnan and Amita Sharma, Rajiv Gandhi Shiksha Mission, Occasional Papers.

there was a demand from a community without a primary schooling facility within 1 kilometre and provided this demand came from at least twenty five learners in case of tribal areas and 40 learners in case of non-tribal areas.

The community that made the demand could also suggest the name of a suitable local resident to be teacher to be called the guruji who would then be appointed by the Gram Panchayat. The training of the guruji would then be organised by the district administration, which would also credit the amount of annual salaries to the Gram Panchayat Account. The local community or Gram Panchayat was expected to provide the space for teaching-learning. While the government ensured the critical basic inputs for transacting primary education, the community shared the task of universalizing primary education by its contribution to creating the demand, identifying the teacher and providing the learning space. The EGS was, in short an effort of

the Mission to universalise access to schooling facility for the hitherto un-served sections of people in the quickest possible time and thereby convert the rhetoric on universalisation of primary education into a reality in Madhya Pradesh.

The Education Guarantee Scheme as a rights-based, community-centered initiative responded effectively to the uneven distribution of primary schooling facilities in the State and within 18 months of its operation, has reached primary education to every habitation in the State. The fact that, in the first year of operation more than 40 primary schools opened each day, is evidence to is wide acceptance. Equally interesting has been the fact that communities volunteered to provide space for teaching learning in the form of buildings in 88 percent cases. EGS proved that demand for primary education exists in even the remotest and poorest habitations, that communities are willing to

Want a School? Just Ask for it

Madhya Pradesh's radical guarantee scheme is spreading education at minimal cost to remote villages and tribal pockets

At first it was one of those rumors no one took seriously. The idea that the local community could simply write to the authorities demanding a school in their village and actually get one within three months was so preposterous that few villagers were willing to credit it.

"It was difficult for us to believe we could have a school in our midst after all three years. And just for the asking," says a bemused Rama Pitha Solanki, an elder of Varthia Phalia (tribal settlement) of Moghrikheda village in Khargone District. Yet, since July the incredible has been happening in hamlet after hamlet of Madhya Pradesh (MP). Schools have begun functioning in at least 12598 habitations with the launch of the state's education guarantee scheme (EGS), a radical yet simple plan to take schooling to hitherto un-served areas, especially in the tribal belt.

All that the community has to do is list 25 children needing schooling (40 in the case of non-tribals) and arrange for a building or space for learning. Provided there's no formal or non-formal learning facility within a kilometre, the government guarantees that within 90 days it will line up a trained and supply free teaching and learning materials. The EGS intervention, launched in January this year, has proved so popular that a surprised officialdom is still waiting to catch its breath as demands pour in.

The statistics are impressive. Already, over 300,000 pupils have been mopped up by the EGS as thousand of schools have sprung up in hitherto unlettered territory. Be warned, however, that EGS are not your conventional schools. In Varthia phalia, the EGS centre-officials are careful to make the distinction functions out of Rama Pitha's thatched house most days, or in the courtyard behind the cowshed at other times. It has 32 children in the five-six age group under the watchful eye of a youngster who has just passed high school and is the 'trained' guruji. There are textbooks, at least enough to share among the students, and a set of teaching learning materials (TLM), the same as is used in formal schools to attain the officially prescribed minimum levels of learning with Amar Singh Solanki, the guruji.

Extracts from an article: "Want a School? Just ask for it" by Lata Jishnu, Business World, November 1997

make contributions and that universal primary education is achievable in the immediate time frame. The change required was to make people drive primary education and not educational bureaucracies. Structures required to be modified to put people in charge, and this could then trigger an institutional reform in education. The Education

Guarantee Scheme of Madhya Pradesh received the Gold Award for the best innovation at the inaugural biennial Commonwealth "International Innovation Awards" from the Commonwealth Association for Public Administration and Management. The scheme was selected from 121 programmes from 24 countries in recognition of its innovation, effectiveness, relevance, significance, replaceability and appropriateness to context.

By August 1998 Madhya Pradesh has achieved the first major milestone-that of having universalised access to a schooling facility in every habitation. The challenge of universal enrolment and retention still remains. The profile of children out of school reveals that they are mostly girl children and belong to the scheduled tribes and castes. The EGS has now brought a facility within reach and the current challenge is to ensure universal enrolment and retention. This is to be done in the State through focused Mahtla Shiksha Abhiyans or Girl Education Campaigns prior to the commencement of the schooling season. Successive campaigns organised through community volunteers, panchayats and political leadership have shown dramatic rises in enrolment, especially of the disadvantaged sections. As a result of the campaign launched in July - August 1997, the enrolment of girls in schools rose from 34.4 lakhs to 42 lakhs.

Improving Quality

To improve the quality of primary education, the most significant interventions since 1994 have been recurring teachers' training, creation of academic Cluster Resource Centres for every group of 10-12 primary schools and strengthening the training infrastructure. The District Primary Education Programme has considerably helped in this area. 6296 Cluster Resource Centres and 369 Block Resource Centres have come up in the State to provide academic support to teachers. On an average 2,00,000 teachers are being trained each year since 1996, as against an average 20,000 in previous years. A new child-friendly curriculum called Seekhna-Sikhana was developed by the State Council for Educational Research and Training and introduced at the primary level. The mid-day meal for children introduced by the

Government in 1994 has served as an incentive for retention. The stage is now set in Madhya Pradesh to ensure a sound base for the educational pyramid. The challenge now is to build complementary structures at the elementary education level to address the demand to be generated by this expanded base of primary education. The other challenge is to build on the community-centering of education implemented successfully at the primary level by the Mission at higher levels.

4.5 Demonstrating a model for environmental turnaround and poverty reduction in Madhya Pradesh through the Watershed Management Mission

The Mission attempted to integrate concerns of poverty reduction and environmental regeneration through a strategy of participatory watershed management. The need to integrate these concerns has been articulated in several policy pronouncements on this issue including UNCED's

Bairani Kuldi

"Bairani Kuldi" literally means Womens' Bank. Over 25000 women have come together to organise 1748 Women and-Thrift Groups in Jhabua district and have accumulated a saving of Rs. 3.5 crores. What started as an alternative to the exploitative system of rural credit in the informal sector is now well on way to becoming a movement to empower women. The principles on which Bairani Kuldi groups operate are democratic, simple, flexible and lend themselves to consumer friendly solutions.

The Women and Thrift Groups in Jhabua sponsor as many as 38 activities ranging from agricultural credit, small income generating activities, to small consumer loans. The activities of the group has increased the awareness amongst its members, made them economically self reliant and more capable of combating vagaries of nature.

The fact that the banks in the district have loaned Rs. 30 lakhs to 116 Bairani Kuldi groups for agricultural activity is an indication of the increasing confidence in the repaying capabilities of these groups.

Source: Gauri Singh, Mission Director, Rajiv Gandhi Watershed Mission, GOMP

In Wonderland

Jhabua in Madhya Pradesh is a many splendoured wonder where indomitable political will and the tribals have proved that the regeneration of the environment is possible.

The Tribals have gone to war. The Quest : regeneration of the environment. The location Jhabua, an upland in western Madhya Pradesh with an area of 6,782 sq. km and a forest cover of 624 sq. km. Almost 80 per cent of this forest is severely degraded or has suffered the ill effects of bad management of natural resources.

There are two types of residents among the villages of Jhabua district. Those who have been the forest and the jungle and those who were migratory labour, till recently. Gula Ralu is well past his 80th year. He is the eldest amongst the members of the 105 families of Ambakudra village. He has seen the forest and he has seen it vanish. But he feels that of late there is change in the air. The women dress better and the men have stopped running to town in search of jobs. All this has happened in the last three years.

The village used to see 500 people migrating every year in search of work and the women were left to look after the livestock. Three acres of land which had earlier sustained Jadila bai, her family, and her livestock were failing to do so. Getting fodder for the animals was a big problem.

"I used to go to Ratlam, 50 km from here, for a few kg of fodder for my three cows and had to borrow money from the village money lender who charged interest at the rate of 50 to 70 per cent," recounts Jadila Bai in 1992, Jadila and her husband realised that the cows were a burden. After selling them off for Rs. 100 they left for Indore 150 km away in search of work.

But today the hills have turned green and so have the once barren fields in the area. No longer does Jadila Bai have to leave her home. Her daughter who accompanied them during their hardships in 1992 now goes to a school. Her fields yielded one tonne of wheat in 1996 and her saving now amount to Rs. 5,000.

Source : Extracts from article by Anil Agarwal and Richard Mahapatra "Down to Earth", Feb. 15, 1998.

Agenda 21, but the conversion of this consensus into operational programmes had not happened except as pilot experiments. The Mission was premised on the understanding that the livelihood security crisis that people faced in environmentally degraded lands was the result of a distortion in the relationship between people and their natural resource support base. It recognised that techno-centric regeneration programmes that visualised picture post-card environmental transformations could not come about except if they were worked through the people and addressed their livelihood concerns. The Mission, therefore, adopted direct participation by the people as a key strategy.

The situation was opportune for such a strategy because wage-employment oriented public programmes like Employment Assurance Programme (EAS) and resource reconstruction programmes like the Drought Prone Area Programme, both advocated a watershed based plan for environment management. The Government of India

suggested that fifty percent of all EAS funds could be used for watershed development and this greening of anti-poverty investment provided the much-needed financial support to the Mission. Funds were available, technical resources could be pooled at district and below-district level and labour energy was on hand, all of which led to the creation of a labour-intensive model of integrated watershed management.

The fundamental difference made by the Mission was in the area of institutional arrangements. Degraded lands in each block, of the area of 5000-10000, hectares were identified as Mili Watersheds through consultative forum. Watershed Committees were elected in villages, which then federated to the Mili Watershed Committees. Each watershed had User-Groups of the landed, Self-Help groups for the landless and Thrift and Credit Groups for Women. These Watershed Committees were oriented to develop Watershed Development Plans. These Plans were then approved and the money for

execution passed on directly to these Committees. A Project Implementation Officer so

designated, catalysed technical and financial support and was made a joint signatory to fund transactions in the first year after, which the elected Committees directly handled funds.

The Mission has, in the last four years, grown to be India's largest watershed management programme. Started with a target of 12 lakh hectares, it has already expanded to cover 33.9 lakh hectares, amounting to over one percent of India's land. The Mission works in 7827 villages. Soil and moisture conservation works have been completed in 12 lakh hectares, there are 30344 User Groups and Self-help Groups formed. 5304 women Thrift and Credit Groups are operational with a saving of over Rs. 4.15 crores. Over Rs. 3 crore has been voluntarily contributed by the User Groups for maintenance of the structures. In over 3000 villages, the level of ground water has increased. Many of these Watershed Committees have evolved to address other development concerns like education and sanitation in the watershed areas, demonstrating inter-mission synergy.

4.6 Missions in basic health care

Two relatively smaller tasks, minor only in terms of attention by the public health administration and not in terms of their urgency were chosen as Missions. The Mission on Control of Diarrhea Diseases sought to address the area of health education, sanitation and safe water consciousness to prevent deaths on account of diarrhea. It was estimated that 28 % of Madhya Pradesh's high infant mortality, was on account of easily preventable diarrhea diseases. This situation existed because of a grey area of relative inaction that lay between two chairs of implementing bureaucracies- the Public Health Engineering system which was to ensure supply of safe water and the Public Health department which intervened through curative measures when epidemics were reported. The area of missing action in educating people on use of safe water and the causes and prevention of waterborne diseases, was taken up as the Mission, to be worked through inter-sectoral co-ordination and community action.

The Mission undertook a series of campaigns on the theme of safe water and health. In 1995, through a major state- wide societal mobilisation on Oral Dehydration Therapy (ORT), the Mission brought into its fold the entire range of panchayat leadership in the State. ORT

depots were created in over 60,000 villages through this mobilisation.

This was followed up by a detailed mapping of high-risk villages, which frequently reported cases of water-borne diseases. 11086 such villages were identified for targeted action. The second phase of the campaign in 1997 was directed to these villages. Using water quality testing kits, an intensive communication exercise was done in all these villages. This included ensuring adequate points of safe water supply, health education on prevention of water borne diseases, domestic management of diarrhea, etc. In the third phase of the campaign done in 1998, this exercise was scaled up to cover all the over seventy thousand villages in the State and urban shanties in 6 major cities of the State. The increased awareness and consequent reduction in Case Fatality Rate are given in Table 4.

Table 4: Diarrhea Cases, Deaths and Case Fatality Rate in Madhya Pradesh, 1991-1998

Year	Number of Cases	Number of Deaths	Case Fatality Ratio
1994	1,44,151	2,928	2.00
1995	1,58,879	1,737	1.10
1996	1,78,819	1,528	0.85
1997	1,78,819	610	0.34

Source: Rajiv Gandhi Mission for Control of (Diarrhea) Diseases, Government of Madhya Pradesh

The Mission on Elimination of Iodine Deficiency Disorders focused on a major health problem affecting the indigenous people or tribes in the State. This area of activity was again considered marginal in the public health system. By converging action in an inter-sectoral way, the Mission sought to achieve universal use of iodised salt in the State. The Mission intervened at both supply and demand levels. A major Communication Campaign with focus on school children and panchayat leadership was organised. Simultaneously the salt traders of the State were mobilised to commit themselves through a public declaration that they would trade only in iodised salt. The Civil Supplies Department of the Government also introduced iodised salt to be sold through the public distribution system in the State. The intensive campaign helped the Mission to achieve its target of universal use eleven months ahead of schedule. The Mission was closed by handing it over to the community in January 1996 after an independent Evaluation of the International Council for Iodine Deficiency Disorders (ICCIDD) confirmed universal use.

The Mission also received an award from the ICCIDD for this work and this short-term win was important in both motivating the other Missions and reaffirming the Mission model of time-bound delivery.

While addressing issues of basic health care, the Missions encountered considerable inadequacies in rural health care and so piloted a scheme of barefoot doctors or Jan Swastya Rakshaks. This was an effort at capacity building in the community for basic health needs and not seen as an extended arm of the Health Department. Under the scheme, one person from each village was to be selected by the Panchayat and trained on basic health care at the Public Health Centre for six months. The Jan Swastya Rakshak could then begin to impart basic health care in the village, for which services the community would pay the person. In the two years since the scheme is in operation, over 20,000 Jan Swastya Rakshaks have been trained in the State.

4.7 Mission Experience: Summary

The experience in Madhya Pradesh has been that converting certain selected tasks in human development into Missions with specific time-frames helps to breakdown those tasks to make them achievable. Issues in education, health or employment are often perceived to be too large to be amenable for immediate action. This in turn dissolves the political will to act on them with urgency. It may therefore be essential to demonstrate a certain can-do approach that motivates the political system and the community. This requires dismantling bureaucratic turf and getting people together to address a task. Community-centered action with supportive bureaucratic structures are seen to be most facilitating. The challenge is mostly in the area of institutional reform and for policy entrepreneurship to develop models that are cost-effective and people-centered. The Missions in Madhya Pradesh have made a beginning and have achieved the salience to provoke institutional reform in the areas in which they have been working.

5. Education: The continuing challenge

Rapid strides in primary education reinforce the need to increase educational spending at the higher levels of middle schools, high schools and technical education in

Madhya Pradesh. The constitutional assurance in India is for free and universal elementary education for children up to the age of fourteen and therefore the need to increase investment at the middle school level and at the high school level becomes a major priority. In the period from 1994 to 1998, 28511 new primary schools, 1631 Middle Schools and 610 High Schools have come up in the state. The primary education sector has expanded mainly on account of the community-centering of primary education effected through the Education Guarantee Scheme, Alternative Schools and new schools created from resource support through the District Primary Education Programme (DPEP).

There is already a major gap in educational facility at the middle school level according to the Sixth All-India Educational Survey (1993. NCERT) which will be further accelerated with the enlarged base for primary education in the State.

There was a conscious policy shift to promote technical education in the State from 1994. Policy was changed to promote private sector participation in technical education and government focused on creation of Industrial Training Centres (ITI), Mini-ITIs through Rural Development funds and Poly-Technic colleges. The number of Engineering Colleges increased from 13 to 27 between 1994 to 1997 while during the corresponding period polytechnic colleges increased from 36 to 44. There are 665 colleges in the State for general education and the government has moved to a policy framework of raising resources through user fees in higher education in medical and engineering colleges while at the same time protecting the students from weaker sections through State support. Efforts at decentralising the management of institutions for higher education was also initiated by the setting up community management boards for these institutions.

Trends in public expenditure in education show that the State's own allocation to education has gone up from 5.9 percent of the budget in 1995-96 to 12.3% in the budget of 1997-98 and is estimated to be 15.6 percent in 1998-1999. The plan outlay for school education is expected to go up from 3.8% of the total plan outlay in the Eighth Plan to 8.3% in the Ninth Plan and from the actual expenditure of Rs.756 crores in the Eighth Plan to an estimated Rs.1672.55 crores in the Ninth Plan. The District Primary education Programme operative in 34 districts will bring in an additional Rs.1000 crores into the sector.

Alternative Schooling in Madhya Pradesh

Alternative Schooling (AS) was introduced as an intervention under DPEP for bringing within the educational fold children in the 6-14 age group not able to participate in formal schooling for a variety of socio-economic reasons. AS became operational in DPEP districts in August'95 with the technical support of Digantar an NGO based in Jaipur, Rajasthan. In the first year 418 AS became functional, expanding rapidly to become 5524 by 1998.

AS is postulated on the belief that effective schooling is possible only through contextualisation. It defines contextualisation as the building up of meaningful relationship between the learning child, the teacher and the child's environment as therefore attempts to create a flexibly organised teaching learning process to respond sensitively to learner needs and to move beyond the structurally dichotomised categories of formal and non-formal streams that currently cleave the educational system.

AS is characterised by a non-graded course, which replaces the formal system's chronologically sequenced linear segments of learning with compulsory annual progression to make the movement through each hierarchy. In such a system the pressure of time determines the pace of teaching, whereas the non-graded system permits each child to achieve satisfactory level of learning and a congenial pace allowing simultaneity of differential levels in different subjects for a child. The level of learning changes only when a child acquires basic abilities. After completing the alternative school course, the child is expected to reach a level of learning equivalent to the fifth standard of the formal primary school. As such AS has an innovative curriculum with a teaching learning package that integrates a continuous learner evaluation system. In view of the fact that AS is a new concept, and is intended to address a heterogeneous group of learners in a non-graded system, AS teachers and supervisor are given intensive training. A 21 day induction training programme has been scheduled at the DIET level or at the Block level as per the district's convenience for both teachers and supervisors. This is followed by a 12-15 days training each successive year.

The functioning of AS is based on decentralisation and community participation. AS allows operational flexibility to the school to enable it to respond to community needs and so school and vocation timing are locally fixed. AS emphasises the local affinity of the teacher for a greater bond between the school and the community and for ensuring regular teaching. Gram panchayats have the power to recruit teachers who have to be local. There are 2 teachers to a school of which one is a woman. Qualification for the teacher is a higher secondary

educational level to be relaxed to class 8 if which necessary to accommodate a local person. The gram panchayat submits a panel of names to the district office. The first on the panel are called for training and if found suitable are appointed by the gram panchayat. For every group of ten contiguous alternative schools there is a supervisor. Qualifications of supervisor are higher secondary and he/she should be a local resident. The supervisor is appointed by the janpath panchayat. The supervisor is expected to monitor and supervise the schools academically. Alternative schools materials for the school are to be procured by the janpad panchayat.

AS allows space for non-government (NGO) action to enable viable alternatives to evolve for effective teaching in different conditions. 6 NGOs have been involved in designing and implementing innovative context specific alternative schooling programmes. Of these some have attempted experimental academic work. The NGO "Roopnar" in Khairagarh and Chui Kliadan block of Rasnandgaon district targets migrant children and has developed its own local specific teaching learning material, using the Chattisgarh dialect, Apna School Shramniketan, targets mainly tribal children in the Jauhari block of school. Its teaching learning material is prepared on participatory basis involving the community seeking to make education relevant to the working environment of the people. Besides these, the other NGOs collaborating are Rajiv Gandhi initiative for elementary education, Bhopal, Satguru Seva Trust, Satna Rural Development Society, Raisen and Abhivyakn in Tikamgarh and Ratlam.

Thus through its own academic structure and by allowing NGO participation AS has been to investigate alternative approaches to curriculum and pedagogy and encourage, 'decentralised development and contextualisation of academic processes.

Currently there are 105749 children studying in AS. Reports, show steady participation. The effectiveness of AS's pedagogy in motivating learners is evident in the fact that several children studying in AS are being able to clear class V Board examination in just three years time. The most significant index of school effectiveness is community participation which is evident in the beautiful stable structures built entirely by the local community using its own resources for housing their schools, the maximum number of such local shelters emerging " in the remote tribal areas.

Source : Amita Shanna, "Alternative schooling in Madhya Pradesh". Raiv Gandhi Shiksha Mission, 1998

Inter functional allocations reveal that a substantial portion of allocation is one salaries of teachers and other staff especially at primary and middle education levels and is estimated as over 95 percent. This situation is expected to change at the primary level with the DPEP leveraging funds towards interventions for academic support and quality. The major challenges in the sector in the immediate time frame could be summarized as expansion of middle level education, institutional reform for decentralised management and reorientation of evaluation systems for quality. In Madhya Pradesh the major difference in the last four years has been that people and peoples institutions have been brought into education management, hitherto a preserve of educational bureaucracies. The stage is now set for a contestation as to which system would prevail and the political challenge is to leverage the change towards peoples control of education in all its aspects.

1. Health the Continuing Challenge

Madhya Pradesh progress in reducing the infant mortality from 196 per thousand live births in 1950 to 97 by 1996 is significant. However health improvements have lagged behind All-India averages and as of 1995 the State had the highest crude birth rate and the second highest infant mortality rates in the country. However the current unacceptably high levels of mortality and morbidity in the state do not reflect the transition in the health status in the population that has taken place in the recent past. Between 1981 and 1996 the crude death rate in the State decreased by an amount of 5.5. absolute points while the infant mortality rate decreased by 45 absolute points. In comparison, decline in the two indicators at the national level was 3.5 and 38 absolute points respectively.

The share of Public Health in the State Budget rose from 2.8 % in 1995 to 4.2% in the budget of 1998-99. There is also an increase in allocation to the Health sector in the IXth Plan. The Plan outlay for Health has gone up by sixty percent from actual expenditure made in the sector in the VIIIth Plan to the outlays for the IX the plan to and similarly in and in water and sanitation by 71 percent. The State Government is committed to continuing the trend of increasing health outlays, particularly capital expenditure and non-staff expenditures.

2."Strengthening Primary Health Care in Madhya Pradesh", PK Mehrotra and Alok Chaurasia, 1997

Increasing emphasis is also being given to strengthening rural sanitation and health education, which has a direct impact on reducing infant mortality and case fatalities.

It would however be simplistic to locate either the causes or remedial action within the health sector. The historical lags in the State in areas like education and within it female literacy, the relatively under developed communication and transport infrastructure, the demographic profile of tribal populations living in inaccessible and remote areas, the low density of population that made provision of services costly and difficult and even non availability of technically trained personnel in addition to poverty have contributed to the relative backwardness.

A review of the health sector of the state also reveals persistent regional variations with the Vindhya region and northern Madhya Pradesh reporting a comparatively poorer status. By contrast Chattisgarh and Western Madhya Pradesh regions present a relatively better health situation, as both the crude birth rate and infant mortality are the lowest in these regions. There are considerable rural-urban variations with the rural areas much poorer in health indicators. Table 5 below shows estimates of selected mortality indicators for rural shows estimates of selected mortality indicators for rural areas for major geo-physical regions of Madhya Pradesh in 1992. The causes for the regional variations needs closer interrogation.

Table 5: Selected Mortality Indicators of Regions of Madhya Pradesh

Area	Crude Death Rate	Infant Mortality Rate
Chattisgarh	12.5	76.5
Vindhya	15.1	124.8
Central Madhya Pradesh	16.1	145.9
Malwa Plateau	13.6	119.1
South Central Madhya Pradesh	13.5	96.9
South Western Madhya Pradesh	13.2	84.2
Northern Madhya Pradesh	15.7	140.3

Source: "Below State Level Estimates of Vital Rates, 1987-1992". Registrar General of Indian 1996

There has been a rapid expansion of health infrastructure especially in the rural areas in Madhya Pradesh although they still fall short of desirable norms. The norms for development of infrastructure have been to have a sub health centre for every 5000 population, a primary health Centre for every 30,000 population and a Community Health Centre for every 80,000 population. The gap in facilities (Table 6) calls for considerable additionality of resources to be made available for health sector expansion.

The effort at quickly closing this gap to keep up with national norms has resulted in the system expanding by compromising in some parts on infrastructure, staff and facilities. The fact that the system retains its curative bias has affected efficient delivery of primary health care. Yet another major drawback is the low population density and wide spread of villages in Madhya Pradesh where a Sub-health Centre for 3000 population covers as much as 6 villages over an area of more than 36 square kilometers whereas in Kerala a single village may have as much as 4 Sub Health Centres covering an area of only 7 square kilometers. The single most important defect in primary health care has been the near total lack of community involvement and it is here that some stirrings of change have happened in Madhya Pradesh in the last four years which can lead to a paradigm shift in the delivery of health care.

The first major step at involving the community began at the district hospital in Indore where the local administration involved the community to do a massive cleaning campaign of the hospital in the wake of the plague epidemic in Surat in Gujarat. The community came forward to support this campaign and soon a nucleus of community volunteers was created for hospital management. This group called itself a Rogi

Kalyan Samiti or Patients' Welfare Committee and began undertaking larger improvements in the hospital including generation of funds through user fees. The funds so generated were used for improving hospital amenities. Impressed with this model of community management, the State Government institutionalised this arrangement and motivated other districts to follow this example. The funds received from RKS through user charges do not get deposited in the State Exchequer but is at the disposal of the Executive Committee. The RKS are registered as autonomous NGOs, and have complete control over funds. The funds are used to ensure cleaning, Security and other services of the hospital through private agencies, apart from upgrading existing infrastructure. By end 1996, a total of Rs.8 crores had been collected all over the State in different hospitals. Members of Parliament and the Legislative Assembly have also earmarked funds for RKS from their discretionary funds. District Red Cross Societies function in tandem with RKS, and the daily collections by RKS range from Rs.1,000/- to Rs. 15,000/- depending on location.

Another major step towards community -centering of primary health was through initiating the *Jan Swastya Rakshak* scheme discussed earlier. The much-needed gap in rural health care in Madhya Pradesh could only be bridged by unconventional methods like creating a paramedic or barefoot doctor in every village. The scheme has resulted in creating over 20,000 such rural health practitioners who could become effective outreach agents of the government health system. The scheme is premised on community support to these *Jan Swastya Rakshaks* who will be paid for their services. A mid-course evaluation of the scheme revealed poor ownership of the scheme by the Public Health system, which has historically been suspicious of rural health practitioners. Efforts are currently underway to integrate it fully within the system

Table 6: Rural Allopathic Health Care institutions required in Madhya Pradesh

Institution	Numbers Currently in Existence	Numbers Required in		Gap	
		1998	2001	1998	2001
Sub-Health Care	11938	17506	18674	5568	6736
Primary Health Care	1814	2245	2395	431	581
Community Health Care	197	561	599	364	402

Source : Strengthening Primary Health Care in Madhya Pradesh, PK Mehrotra and Alok Chaurasia, 1998

The real challenge in Madhya Pradesh today appears to be to move to a horizontal management of health care delivery as against management of vertical programmes based on national and state level prioritisation. The experience of the two missions on health in Madhya Pradesh as well as of the *Rogi Kalyan Samiti and Jan Swasthya Rakshak* point to the need to involve civil society more effectively in the management of health and utilise the opportunities created through decentralised governance of panchayat raj. Issues of public health being inter-sectoral and requiring societal mobilisation for efficient delivery, the challenge today is for policy reorientation to put the public health system on its head and start planning from below. Problem mapping exercises that can engage community leadership can generate awareness on an unprecedented scale. Networking with other sectoral departments that impinge on health, like water supply, sanitation or rural development could lead to dramatic improvements in health delivery.

7. Watershed management: Continuing Challenges

The Challenge before the Mission is to sustain investment into watershed management in the context of competing demands for the same pool of funds available. By demonstrating through results of a study by the national Remote Sensing Agency on the jhabua watersheds, the Mission hopes to persuade policy makers to invest more in this area. The Mission has recently restructured at the apex level into a Society under the chairmanship of the Chief Minister, with experts represented in the Governing Body to strengthen the facilitating environment for poll

The Mission has also taken up the challenge to work from below to create a policy environment favorable for sound environment management. The work of the Mission needs to be complemented by policy reform for sound water management. People should create the pressure for such reform. The Mission proposes to undertake preparation of Block-level "Peoples' Water Reports" by watershed Committees working together with selected blocks. This Report will be presented to the elected representative of the Legislative Assembly requesting for policy reform. Through this exercise an environmental consciousness is sought to be created among people, make elected panchayat leadership friends of the watershed programme and engineer a debate in the countryside about the environmental situation and what needs to be done.

The Mission, after four years, has come to a stage where it confronts issues of inequity in the water

management policy. The present water policy regime allows anyone with access to capital and technology to mine the resource of water. Now when the conversation of that water has been effected through collective action, should not individual rights to appropriate that water be restrained? The Mission proposes to argue for allowing communities organised in watershed Committees to be given powers to regulate the drawal of water from those watersheds. A new community-regulated water management policy can be experimented with in completed watersheds.

The Mission is to be seen as complementing efforts at increasing agricultural productivity in the State through improvement of degraded lands, For the Mission's success it is imperative that the efforts of the Departments of Agriculture, Animal Husbandry and Forests are streamlined in a manner that contributes to synergy.

8. Mobilising information for human development in Madhya Pradesh.

One important lesson of MPHDR 95 was the inadequacy of authentic information on human development indicators. To cite one example : the *Lok Sampark Abh'yan* that the Government of Madhya Pradesh undertook in 1996-97 through community volunteers, teachers and panchayat leadership revised many of the earlier formulations on key areas of educational planning like access to facilities, enrolment and drop-out rates. This manner of developing an alternative people's database also leads to information becoming action. When the panchayat leadership goes around asking details of children not going to school, it is less interested in statistical outcomes and instead, collectively engages in developing solutions. The Education Guarantee Scheme of Madhya Pradesh is a good example of the government having to respond to the dissonance, debate and problem-solving inherent in adopting such a methodology.

The institutional back-up to this has come in Madhya Pradesh by a redefinition of accountability-structures from being upward to higher echelons of bureaucracy to being outward towards the community. The Government has institutionalised compulsory meetings of the *gram Sabha* once every quarter, to enable the public to engage in a social audit of the development activities undertaken

in the panchayat. The efficacy of these has been reinforced through the *gram sampark abhiyans* or village Contact Campaigns initiated by the Government once every six months. In these campaigns a government official is assigned one village in the State and is expected to periodically update information and report on issues affecting the public including provision of basic services. The State Legislature has also passed a bill on Right to Information in the state, to legally ensure accountability of government to the citizens of the state. It is awaiting Presidential assent. These measures though, need an enabling context of mass literacy to be truly effective in pushing people towards demanding their entitlements.

9. Focusing Interventions: Adivasi and Dalit Woman

Achievement of Human development goals in Madhya Pradesh depends critically on how imaginatively the state uses its scarce resources to target the one who is at the bottom of the heap the woman belonging to the scheduled Tribes and scheduled Castes in the State. She is the one to whom human development seems to be reaching out last. If statistics can have faces, the faces that emerge on human development statistics in Madhya Pradesh are those of woman from these categories who seem to be waiting at the crossroads of class, caste and gender divides. Any simple desegregation of health indicators, educational indicators or livelihood security indicators show human belonging to these categories as the most deprived. These point to the need for concerted action on a simple human development agenda that focuses on improving health, education and employment opportunities for the dalit and tribal woman. Instead of a plethora of schemes what seems to be required is focused action in areas like female literacy. A beginning in this direction has been made in Madhya Pradesh since 1997 to undertake Campaigns for female education of mahila shiksha abhiyans. In the first campaign, this time focusing on the dalit and adivasi girls in the state is in progress. By reaching out to clusters of scheduled castes and tribal hamlets, the Education Guarantee scheme has brought education closer to this group as evident from the fact that over 45% of all students in EGS schools are girls. A closing of the gender gap in education can lead to major improvements in human development.

10. Inter-sectorality of the Human Development Agenda: Issue of Institutional Reform.

The experience with accelerating a human development agenda in the state throws up the urgent need for institutional reform restructuring within government. This area has got inadequate attention in the Human Development Reports at the international level as they were primarily advocacy documents. A report of the state Government which seeks to move from an advocacy document to an action document has to squarely confront this issue. Human development bureaucratic turfs, not around tasks. Any effort like that attempted through the mission experiment in Madhya Pradesh, or the larger opportunity for participatory action opened by Panchayat raj, will remain constrained, until the issue of institutional reform is addressed by the State. From an outside view it may appear a relatively simple issue to organise institutional resources around tasks but for governments this is nothing short of a miracle. Compartmentalisation has been the bane of bureaucracies, and quite often well-intentioned prioritisation's have ended up only creating more bureaucracies.

The emergence of a Panchayati Raj system opens up possibilities, but they are open to the danger of being sucked into the bureaucratic machine as the lowest appendage of a State apparatus. Instead of being a "Panchayatization of the government" it can end up as the governmentalisation of the panchayat" and thereby muffle the creative energy of community action. The key issue would be of redefining administrative institutions and collapsing them around human development tasks to work together with panchayats and other community organisations.

Human development tasks are inter-related and there are obvious synergies. Inter-sectorality has to be embedded in any strategy for action on this agenda. Human development tasks in the context of a State like Madhya Pradesh need considerable financial resources. Much of these resources can be found by moving over to inter-Sectoral modes of action that do not grow the bureaucracy but substitute community energies to achieve goals. Today those funds are sectorally deployed, and in a manner that dissipates rather than fuses collective energy. Governments need to focus on institutional reform to get human development goals within reach. Imagination and not finance seems to be the critical resources to make this happen.

Annexure 1: Status of Education Guarantee Schools as on 30/9/98

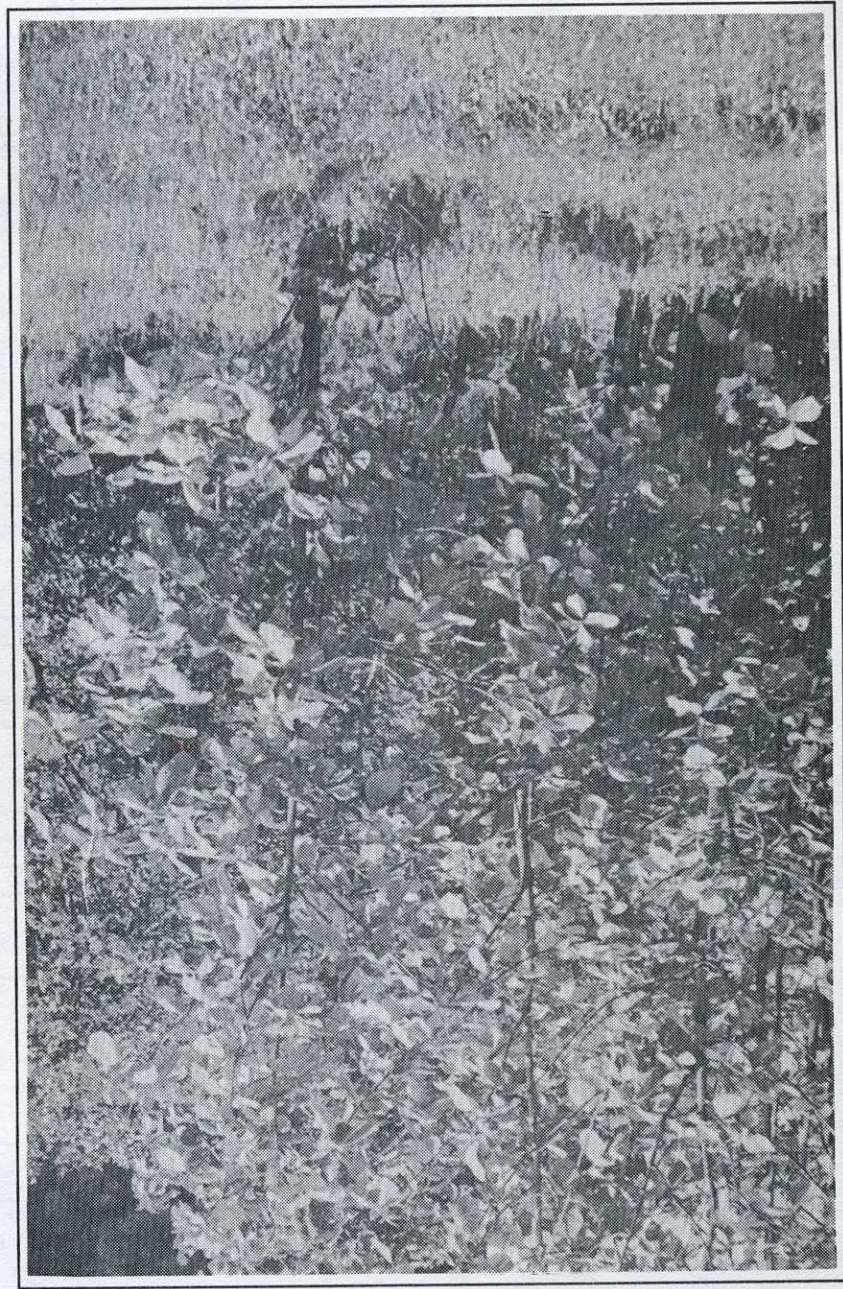
District	Tribal Population in %	EGS Schools	EGS Schools Located in Tribal Areas	Percentage of EGS Schools Located in Tribal Areas
Betul	37.5%	230	169	73%
Raisen	14.4%	192	82	43%
Rajgarh	3.3%	242	19	8%
Sehore	10.2%	70	24	34%
Bilaspur	23.0%	850	462	54%
Raigarh	47.7%	646	390	60%
Surguja	55.7%	1153	892	77%
Guna	12.0%	457	169	37%
Dhar	53.5%	867	807	93%
Rajnandgaon	25.2%	118	78	67%
Rewa	12.4%	332	106	32%
Satna	13.0%	527	172	33%
Shahdol	46.3%	766	465	61%
Sidhi	30.4%	765	279	36%
Chhatarpur	3.8%	145	30	20%
Panna	14.9%	189	58	30%
Tikamgarh	4.1%	370	48	13%
Mandsaur	4.8%	76	9	11%
Ratlam	23.3%	188	140	75%
Bhind	0.3%	167	26	15%
Morena	5.6%	396	82	21%
Shivpuri	11.3%	468	176	38%
Datia	1.7%	73	8	11%
Mandla	60.3%	871	766	88%
Seoni	37.0%	289	181	63%
Vidisha	4.4%	230	18	8%
Shajapur	2.4%	103	91	88%
Dewas	15.0%	121	91	75%
Khandwa	26.8%	200	24	12%
Damoh	12.4%	239	38	16%
Rajpur	18.3%	548	33	6%
Khargosan	46.2%	1688	844	50%
Jhabua	85.7%	1400	1330	95v
Bastar	67.4%	1510	1253	83%
Balaghat	21.9%	352	106	30%
Gwalior	2.9%	386	116	30%
Bhopal	3.1%	110	64	58%
Narsinghpur	12.9%	202	48	24%
Hoshangabad	17.4%	136	49	36%
Indore	5.5%	120	18	15%
Chhindwara	34.5%	446	162	36%
Ujjain	2.1%	82	4	5%
Jabalpur	17.9%	629	324	52%
Sagar	8.5%	248	40	16%
Durg	12.4%	93	34	37%
45 Districts	23.3%	19289	10325	54%

Annexure 2: Status of Education Guarantee Scheme as on 30/09/98

District	EGS Schools	Total Enrolment	St Enrolment	ST as % of total enrolment	Girls Enrolment	Girls enrolment as % of total enrolment
Betul	230	7614	5590	73%	3645	48%
Raisen	192	7562	3232	43%	3610	48%
Rajgarh	242	10369	817	8%	4467	43%
Sehore	70	2769	945	34%	1240	45%
Bilaspur	850	33150	17901	54%	15581	47%
Raigarh	646	18586	11209	60%	9328	50%
Surguja	1152	36864	28385	77%	17326	47%
Guna	457	20449	7564	37%	8564	42%
Dhar	867	30345	28221	93%	13048	43%
Rajnandgaon	118	4062	2702	67%	1984	49%
Rewa	332	16783	5342	32%	8376	50%
Satna	527	24809	8094	33%	11961	48%
Shahdol	766	22214	13551	61%	10885	49%
Sidhi	765	32560	11861	36%	15367	47%
Chhatarpur	145	5957	1214	20%	2617	44%
Panna	189	8127	2438	30%	3657	45%
Tikamgarh	370	16938	2190	13%	7834	46%
Mandsaur	76	3479	394	11%	1647	47%
Ratlam	188	7204	5369	75%	3021	42%
Bhind	167	7397	1132	15%	3087	42%
Morena	396	21511	4458	21%	8916	41%
Shivpuri	468	20991	7888	38%	8765	42%
Datia	73	3360	381	11%	1362	41%
Mandla	871	30485	26827	88%	12499	41%
Seoni	289	8375	6281	75%	3936	47%
Vidisha	230	10096	1212	12%	4846	48%
Shajapur	103	4635	278	6%	2132	46%
Dewas	121	5203	2602	50%	2185	42%
Khandwa	200	8200	5248	64%	2706	33%
Damoh	239	9545	2864	30%	4104	43%
Rajpur	548	19036	11041	58%	8947	47%
Khargoon	1688	47626	42387	89%	20479	43%
Jhabua	1400	47322	42590	90%	20822	44%
Bastar	1510	52850	48094	91%	23254	44%
Balaghat	352	12320	6653	54%	5421	44%
Gwalior	386	16424	3778	23%	6898	42%
Bhopal	110	3850	1001	26%	1502	39%
Narsinghpur	202	7070	2121	30%	3182	45%
Hoshangabad	136	4252	2466	58%	1956	46%
Indore	120	5384	700	13%	2477	46%
Chhindwara	446	13912	8625	62%	6121	44%
Ujjain	82	3036	243	8%	1366	45%
Jabalpur	629	20996	6299	30%	9238	44%
Sagar	248	10433	1878	18%	4591	44%
Durg	93	3243	908	28%	1654	51%
45 Districts	19289	707393	394974	56%	316604	45%

Annexure 3: 100% Access to Primary Education within 1 km of all habitations of Madhya Pradesh

District	Habitations			Served Habitations	Prim. Schooling Facilities Till 1994	Facilities Created during 1994 to 1998			Total
	Revenue Villages	Totals/Majras/p Aras/Falias,etc	Total			NPS + AS	EGS	Total	
Balaghat	1388	522	1910	1910	1942		352	352	2294
Bastar	3880	4442	8322	8322	3918	250	1510	1760	5678
Betul	1406	331	1737	1737	1511	210	230	440	1951
Bhind	933	668	1601	1601	1495	225	167	392	1887
Bhopal	538	4	542	542	946		110	110	1056
Bilaspur	3590	2251	5841	5841	4615	400	850	1250	5865
Chhatarpur	1192	523	1715	1715	1388	420	145	565	1953
Chhindwada	1948	447	2431	2431	2285		446	446	2731
Damoh	1206	47	1253	1253	935	220	239	459	1394
Datia	445	15	460	460	492	168	73	241	733
Dewas	1134	17	1151	1151	1246	230	121	351	1597
Dhar	1571	1536	3107	3107	1637	328	867	1195	2832
Durg	1821	59	1880	1880	2365		93	93	2458
Guna	2265	605	2870	2870	1573	481	457	938	2511
Gwalior	776	396	1172	1172	1692		386	386	2078
Hoshangabad	1554	2	1556	1556	1489		136	136	1625
Indore	645	80	725	725	1445		120	120	1565
Jabalpur	2400	201	2601	2601	2538		629	629	3167
Jhabua	1357	2546	3903	3903	1647	438	1400	1838	3485
Khandwa	1068	70	1138	1138	1369	240	200	440	1809
Khargone	2171	1784	3955	3955	2037	230	1688	1918	3955
Mandla	2160	2554	4714	4714	2355	500	871	1371	3726
Mandsaur	1761	274	2035	2014	2355	500	871	1371	3726
Morena	1406	943	2349	2349	2018	470	396	866	2884
Narsinghpur	1081	40	1121	1121	872		202	202	1074
Panna	1048	459	1507	1507	933	255	189	444	1377
Raigarh	2244	2942	5186	5186	2780	279	646	925	3705
Raipur	4033	218	4251	4251	4187	350	548	898	5085
Raisen	1509	209	1718	1718	1362	212	192	404	1766
Raigarh	1736	13	1749	1749	1294	249	242	491	1785
Rajnandgaon	2378	12	2390	2390	1912	437	118	555	2467
Ratlam	1077	213	1308	1308	1233	240	188	428	1661
Rewa	2725	913	3638	3638	1775	526	332	858	2633
Sagar	1843	80	1923	1923	1743		248	248	1991
Sarguja	2432	5805	8237	8237	3376	370	1152	1522	4898
Satna	2040	488	5228	5228	1482	638	527	1165	2647
Sehore	1072	167	1239	1239	1231	277	70	347	1578
Seoni	1613	115	1728	1728	1499	249	289	538	2037
Shahdol	2106	2012	4118	4118	2364	440	766	1206	3570
Shajapur	1124	188	1312	1312	1325	100	103	203	1528
Shivpuri	1459	402	1861	1861	1390	206	468	674	2064
Sidhi	1882	180	2683	2683	1628	470	765	1235	2863
Tikamgarh	973	547	1520	1520	955	343	370	713	1668
Ujjain	1135	2	1137	1137	1795		82	82	1877
Vidisha	1624	223	1847	1847	1286	290	230	520	1806
Total	75785	36184	11196	11196	81267	10985	19289	30274	111541



People Oriented Management of Forests

1. Historical Background

Since time immemorial, man and forest have been very closely associated. This relationship is perhaps older than any form of man made laws regarding ownership of natural resources. After the advent of kingship in India until the pre British days, forests happened to be the property of the King - with no ownership rights for commoners. However, people were free to utilise forests economic gain or domestic needs, in this supply-dominated era.

The main objective of British, during their period of rule, was to exploit the colonial forest resources in order to supply timber to their Railways and the ship building industry in England. The British realised the need and importance of proper forest utilisation to meet the needs of their industries, both indigenously and in England. But this methodical endeavor initiated a system of scientific forest management in India and the judicious economic exploitation of forest resources led to steady development of forests in the country. In this period., large-scale survey of Indian forests was carried out and reserve forest areas were demarcated. The first such reservation in the country was made in the Central Provinces in 1865. These reserves were generally created in the remote forest interiors so as to create minimum disturbance to the local population, and all local rights were settled by resettling the affected villages outside these reserved forest areas. The opposition to it was forcefully put down.

The most famous case was in Bastar, where the tribals had rebelled against ban on shifting cultivation which was imposed on the persuasion of the then Dewan of Bastar State (Shri Baijnath Panda). The rebellion was forcefully put down by bringing in British troops from outside the State. Baijnath Panda had to flee to save his life, but the order stayed. This instance of peoples initiative in forest matters had significant implications which is evident even today when we see that Bastar has luxuriant forests, whereas in the immediate adjoining area pf Koraput district in Orissa forest cover is comparatively poor.

In the Central Provinces (and also in princely states, which now jointly form Madhya Pradesh). most uncultivated lands were subsequently settled with landlords, and were recorded as Dhar (jungle) in (he revenue records by the British. After independence, these were taken over by the State Government, and were either transferred to the Forest Department for management, or were allotted to the rural poor. In some cases, where private forests survive even today, farmers are prohibited from changing its land-use, as these are covered under the Forest Conservation Act, thus acting as a great dampener to private forestry efforts.

This still left a sizeable chunk of uncultivated land removed from habitation which came under government ownership as reserved forests, where all rights of the people, except those specifically mentioned, were extinguished. These lands were then used to produce valuable timber for industries, railways, markets, and export. At the turn of the century, the area with government in Central Provinces alone was 19.498 square miles (5 million Ha approximately).

After independence, it was realised that the objectives of colonial forest policy should be redefined to suit the needs of the country. The National Forest Policy, 1952 appreciated the multiple benefits of forests. The significant role played by forests in fulfilling local needs and their intangible benefits (recreational, environmental etc.) were also recognised by forestry planners. However, in congruence with the overall macro economic policies, the utilisation of forests for optimising revenue was still set to be the dominating aim of managing country's forests. Nevertheless, it was envisaged that the management of forests under the broad framework of the new forest policy would not only provide optimum revenues to the public exchequer but would also take care of the growth and development of forests. A target forest area covering one third of the total land area was to be the goal of the new National Forest Policy.

Forests were nationalised in the early fifties and were initially placed under the Revenue Department. the erstwhile owners or persons with control over forests such as the Zamindars and Malguzars, acting on the imminent

Forests in Madhya Pradesh

The area covered by forests is 155.414 Sq.km. which accounts for about 35 percent of the total land area of the state. The forests are not evenly distributed in the State. The eastern and south-eastern districts of Bastar, Raipur, Balaghat, Rajnandgaon, Bilaspur, Surguja and Mandla have good forest areas, while the districts in the western and northern regions are poor in forest cover.

The break-up of the State's forest areas by different categories is given below.

1 Forest area (legal status)		Area in Sq. Km
	Reserved forests	80,996
	Protected forests	69,083
	Unclassed forests	5,335
	Total	155,414
2. Forest area by composition		
	Teak forests	27,783
	Sal forests	25,704
	Miscellaneous forests	101,927
	Total	155,414
3. Forest area by terrain		
	Hilly	83,242
	Plain	72,172
	Total	155,414
4. Forest area by management		
	Protection forests (for soil and water conservation)	8,400
	Production forests:	
	i) Tree forests (Industrial & commercial wood)	40,000
	ii) Minor forests (Small timber, fuelwood etc.)	92,342
	National parks and sanctuaries	15,752
	Total	155,414

Source: Madhya Pradesh Forest Department

possibility of nationalisation and take over of forests from their hegemony/ ownership, often ruthlessly exploited forests before handing them to the Government. This trend continued for the period the forests were under the Revenue Department and subsequently the Forest Department, till proper demarcation was done, which took considerable time.

2. Deforestation

Due to increase in biotic pressure, and forest resources not responding to this increasing need, the old harmony between the people and forests broke down. Deforestation was one manifestation of this disharmony. In addition to increased livestock and human pressure on forests, there are various other supporting reasons for deforestation in the State. These are set out below.

Forests have received low priority in State resource allocations. Especially compared to agriculture, uncultivated lands got a very low priority in development plans. In Madhya Pradesh, the allocation to forestry sector was only 0.91 per cent of the total State Plan Budget during the Vth Plan period (1974-79). These are extremely low figures, considering that about 35 per cent of the area of the State is declared as forest.

Second, a laissez faire policy was followed with respect to revenue lands. There were no resources specifically allocated, and neither was any specific Government Department made responsible for grasses and pasture development. The lands that were left out to provide the community needs of forest produce and grazing, were often assigned and brought under cultivation in due course.

Third, depletion has taken place more in those forests which have a nebulous legal status viz. village forests. Similarly, degradation has been seen to be faster in forestlands meant for village nistar' needs. As they were close to village habitation, pressure from nistar and other uses of the forest by villagers and livestock dissuaded government from taking them up under afforestation schemes. Further, rights and privileges with village communities vis-à-vis these village forest lands were not compatible with their regeneration, and these lands as open access resources were victims to the "tragedy of the commons" phenomenon.

1. See box on Nistar

Fourth, the control and domain of State Government exercised through the Department of Forests, over forests and even on reserved lands, is fragmented and has been constrained by external factors. Given the ease of access to forests to people for legitimate as well as illegitimate uses, and the socio-political environment that often prevents strict control, it has not been very easy for the State to enforce its property rights.

Fifth, the most important cause of deforestation has undoubtedly been the increasing demands of fuelwood and

Role and Importance of the Forestry Sector			
The role of the forestry sector in the Stat's economy is significant. The contribution of forests to the State's total revenue receipt is around 10 percent as can be seen from the following: (Rs. Crores)			
Year	State's Total revenue	Total revenue from forests	Percentage contribution of forests
1989-90	3404.83	422.83	12.42
1990-91	3687.01	373.83	10.12
1991-92	4119.93	478.49	11.61
1992-93	5313.5	399.27	7.51
1993-94	5872.4	489.00	8.32
<p>Source: M.P. Forest Department</p> <p>Apart from its significant contribution to the State exchequer, the forestry sector plays an important role in the socio-economic upliphment of the people, especially the rural population living in and around the forest areas. It provides around 100 million person-days of employment to the rural poor every year. About 43,000 persons are regularly employed in the various establishments of the forest department. The tribals forming a quarter of the total population of the state are almost entirely dependent on forestry for their livelihood. It is estimated that the sector generates employment opportunities to the tribals tot he tune of around 70 million person-days.</p> <p>Source: M.P. Forest Department</p>			

Nistar

Madhya Pradesh, as a State has accepted the responsibility of providing i.e., requirements of villagers of forest produce, to all agriculturists, village artisans and agricultural labourers.

With the formation of the State of Madhya Pradesh, the reserve forests were exclusively for the use of the State, except for certain rights given to forest villagers. The villagers, has the rights of nistar and grazing in the protected forests but the requirements were not satisfactorily available, Depots from where villagers were given forest produce for their nistar has begun in early 1955 in Mahakoshal and in Madhya Bharat but this was unacceptable particularly to villagers not living near a forest who were denied the right. Therefore in 1958 the State government brought the resolution wherein it was said that the nistar requirements of cultivators be fulfilled by nearby forests and that there should be no distinction what so ever. The forest nistar Policy of Madhya Pradesh also stated that material extracted from Nistar Forests would be supplied free of royalty. Every villager was entitled 250 bamboos per year, at fairly inexpensive rates, except in Bastar where it was free. Traditional bamboo workers or *basod*, cultivators of Pan and Orchard owners, agarbatti manufacturers were given concessions. Fuel wood supply was free, except for a fee for extraction by bullock cart. Poles and round logs for construction was also to supplied from nistar depots at highly concessional rates, except in Bastar where they were free.

But the conflict between people and foresters still exists where the latter blame the former exercising nistar rights for degradation of forests, The point of view is that unregulated grazing and removal of fuel wood and nistaris have reduced the forests, especially the partially regenerated areas that are completely destroyed The picture of nistar, which emerges from the point of view of villagers, is that supply of timber, bamboo, fuel and fodder is crucial for his /her ordinary livelihood. Next to agriculture nistar becomes the most important element in village life.

The real problem of nistar, therefore, is not necessarily the enormous gap between demand and supply, but the failure to provide those critical items, especially fuel, which is leading to an increasing biotic pressure on forests through unregulated extraction of material To avoid this the governments would have to evolve short and long terms strategies which would increase satisfaction rate in the matter of nistar. (Extracted from "Forests of Madhya Pradesh" ,MN Buch, 1991)

Nistar Policy of GOMP: In order to create better conditions to encourage the villagers to raise trees on their marginal lands and achieve self reliance in forest produce requirement, and meanwhile help reduce pressures on natural forest, the Government of Madhya Pradesh declared a New Nistar policy in 1994. According to this new policy the prevailing nistar facility shall be restricted to those villages who are located within the 5km of forest boundary This policy provides for supply of nistar forest produce at market rates to the residents of villages, located beyond 5km radius of forest boundary This policy provides for supply of nistar forest produce at market rates to the residents of villages, located beyond 5km radius of forest boundary This policy provides for supply of nistar forest produce at market rates to the residents of villages, located beyond 5km radius of forest boundary The supply of such materials in villages beyond 5km from forest boundary is to be organised through village panchayats who shall buy necessary nistar-material from scheduled depots of the Forest Department.

To dissuade villagers from resorting to illicit felling to satisfy their nistar requirement, it was felt necessary to arrange supply of such material through panchayats, at market rates.

Source: M.P. Forest Department

grazing, The estimated demand and present supply of timber, fuel wood and fodder are given in Table.

Table 1: Estimated Demand and Supply of timber, fuelwood and fodder

Forest	Total	present	surplus/
Produce	domestic Demand	production from Forests	Deficit
(M.Tonnes each)			
Timber	2.00	00.50	-01.50
Fuel wood	24.30	00.60	-23.70
Fodder	83.20	41.90	-41.30

Source : Madhya Pradesh Forest Department

A wide gap in demand and supply has put excessive pressure on the forests. In addition to home consumption, wood is also extracted for sale. As per the estimates, the ratio of firewood to food grain price doubled in 1975-85, which made cutting wood for sale an attractive economic proposition. There has been a rapid increase in the incidence of head loading, which in itself is attributable to declining opportunities for the landless in rural areas to earn a livelihood.

There is need to differentiate between urban and rural demand patterns and their effect on wood fuel supplies as well as inter-fuel substitution. Urban wood fuels usually traded with a much wider effect on the supply scene than village fuelwood demand, and the greater use of logs and larger branches means that reasonably-sized trees are cut with a more degrading effect on forests. Village supplies come from lopping pruning or pollarding trees. The district-wise demand and supply position for timber and fuel are given in Annexure. 1.

In the past, deforestation has often been associated with sudden policy change or periods of uncertainty like take-over of private forests and abolition of landlordism. Once large trees are felled, the old harmony between people's demands and supplies through twigs and branches gets disrupted, and government's efforts towards replanting come to naught. As these examples indicate, local patterns of deforestation vary and it is 'never a simple matter of numbers outstripping environment' (Westby, 1985) It occurs not only as a result of local pressures on resources, but also any

momentary disruption of the institutional framework responsible for resource protection at management :

3.Forest Policy : Independence to 1980

Till the mid-seventies the response of the government this crisis of deforestation was to bring more area under reserved category and produce market oriented timber tree in order to increase State revenues, Forestry has thus mean raising trees in order to get sustained yield of timber in perpetuity From the First Plan in 1952 emphasis was laid on the conversion of "low" value mixed forests into "high " value plantations of commercial species like teak and eucalyptus, The 1952 , National Forest Policy its resolution No. 13/52-F dated 12th may 1952, for instance declared that village communities should in no event be permitted to use forests at the cost of "national interest " In Madhya Pradesh in mid-seventies, in prevailing view was that State has taken great strides in the development of scientific forestry and there was much greater emphasis on man-made forests, designed to meet industrial requirements. Thus scientific forestry was equated with raising of industrial plantations.

This deprived millions of poor of the livelihood goods that they used to get from mixed forests, The neglect of people's demands during 1960-80 exacerbated biotic pressure and made regeneration of natural more difficult.

In Madhya Pradesh, after nationalisation of timber trade in 1971 , There was a great emphasis on maximisation of revenues, production of wood increased by more than 40 per cent from 2.99 Mcum in 1956 to 4.21Mcum in 1976 although there was no corresponding increase in growing stock As in other states, the entire thrust of forestry was towards the high forest system created after clear-felling and ruthless cutting back of all growth except of the species chosen for dominance, The 6th Five Year Plan (1980 -85) of Madhya Pradesh stated, "to produce 25 million cm of industrial wood it would be necessary to subject 5.5 million ha of production forest lands to intensive management , that is to clear - felling and planting . With the massive Plantation programme being launched in the State, there would be extensive monocrops of teak in the forests.

As regards efforts made in the past to meet tribal demands for fruit, medicinal herbs etc. from forest lands, the same plan document admitted, "no special programmes were taken, which could directly contribute to the upliftment of the tribal economy The programmes executed were essentially the forest

development programmes which benefited the tribals only indirectly,.. (but) the tribals got substantial wage earning opportunities. "

4. Social Forestry Phase

The degradation of village lands and protected forests led to increased pressure from the people on the reserved forests. In order to reduce this pressure, the National Commission of Agriculture recommended growing trees on lands accessible to village people, To quote form its report of 1976 "Free supply of forest produce to the rural population and their rights and privileges have brought destruction to the forest Having over-exploited the resources, they cannot in all fairness expect that somebody else will take the trouble of providing them with forest produce free of charge One of the principal objectives of social forestry is to make it possible to meet these needs in full form readily accessible areas.... Such needs should be met by farm forestry extension forestry and by rehabilitating scrub forests and degraded forests. "

By the mid-seventies the realization became clear that if peoples' demands were not met it would be impossible to save forests, This as to be achieved through social forestry on village and project was launched in Madhya Pradesh in 1981- 82 and continued up to 19875 -86 in 21 districts, plantations were raised over 41,875 ha of million seedlings were distributed, mainly to the agriculturists,

Social forestry was not tried on forest lands, as such lands were sought to be used for producing timber and pulpwood and peoples' participation on such lands was not encouraged, Thus social forestry was seen as a programme which would release industrial forestry form social forestry was seen as a programme which would release But in order to keep people out it was necessary to make community and private lands to draw off the pressure on forest lands.

5. Policy Impact

What had been the impact of these forest related policies on the people? And more importantly have these policies been sustainable in terms of either increased production of timber, or checking the process of deforestation ?

Rights and access which the people, especially tribals, earlier enjoyed have often remained uncurtailed, but two processes have constrained and diminished them The first is deforestation , and the other is industrial them The first is deforestation and the Other is industrial Plantations. The effects on local people of the of forests can be illustrated by a recent study of areas in Chattisgarh (Madhya Pradesh) which were heavily forested a few decades back, The distance required to collect forest products is reported to have multiplied several fold, as indicated in Table.2

Table2: Distances traveled to collect from forests in Chattisgarh -over twenty years

Collection of	Distance traveled in mid-sixties(in kilometres)	Distance traveled in (in kilometres)
Flowers	1.8	3.8
Leaves	1.7	3.9
Fruits	2.1	3.5
Seeds	1.4	4.4
Bamboo	1.3	5.5
Firewood	1.3	3.7
Average	6.1	4.1

Source: Fernandes and Menon 1988:15

Whereas the effect of deforestation on tribal economy is well understood the impact of industrial plantations is not so well documented, For their part, plantations have usually been single species or a few species, equally entailing loss of diversity and access, often on a large scale, It was noted in the 1981 International Conference on tropical forest management at Dehradun that, This forest (sal forest) represents to Poor forest -fringe - entailing loss of diversity and access, for fuel and manure, The decision to convert this may or may not be used for the welfare of these same people but would certainly deprive them of an output form the forest which they were enjoying " Shri M N Buch ex-Forest Secretary of the Government of Madhya Pradesh wrote in a publication by the National Commission for Human Settlements and Environment in 1987. "This (the policy

of subsidising industrial raw material) is clearly discriminatory. The rights of huge section of society cannot be wiped out in order to benefit a few industrialists. For instance, The Orient Paper mills was promised a lakh ton of bamboo per year from 4 districts of the State, This eliminated all bamboo from Rewa,, Panna, Satna and Shahdol. When such a situation arises, the Forest Department tells the villagers to fend for themselves because there is nothing in the forests for them".

At the same time highly privileged prices have been standard practice for industries, A report by the Centre for Science and Environment in 1985 has mentioned that in Madhya Pradesh in 1981 -82 industrialists paid the Forest Department 54 Paise for a 4 meter bamboo, while forest dwellers paid a little over Rs. 2 a bamboo supplied by the Government .

6.Evaluation of Social Forestry Efforts

It is now acknowledged that social forestry was an initiative that just did not take off and did little to address the negative policy impacts referred to above. Evaluations have brought out the factors responsible for this lack of success.

According to the government revenue and community wastelands were not made available to the Forest Department on time and this was one of the major reasons for the lack of success. The role of the village community was not in conformity to the needs of the programme. The Panchayats did not come forward to take charge and control of the community plantations in the manner expected, The grazing of village cattle being crucial issue. The grazing of village cattle being a crucial issue, The cooperation of villager was inadequate, Since non-forest public lands in villages are devoid of administrative control, and there are large-scale encroachments on them it was impossible to locate compact areas even to the extent of 5has There was an almost total lack of organisational ability at the village level. and women' participation was poor in most districts, especially in the north To compound these weaknesses, these was no continuity or linkage in the wastelands so developed and they were scattered.

The villager felt that they or the gram panchayat has

little say i the programme. The villagers whose common lands were developed insisted on benefits being made available to them only whereas gram panchayats wanted to have control over the forest products and services arising out of the developed wastelands, Gram panchayat could not become a viable organisational or administrative unit at the grass-root level for development and management of the public wastelands, The mid-term review of Madhya Pradesh Social Forestry project (USAID, 1985) commented that the principal aim of social forestry to built up institutional capacity of panchayats has fallen by the wayside because of the existing political economy of the panchayats, It concluded that short-term political motivation of the leaders and cattle pressure would not allow community managed plantations to last very long.

In the community forestry programme of a few villages in Madhya Pradesh, it was observed in a study by an independent agency, Centre for development and Instructional Technology (CENDIT) in 1985, that there was factionalism in the villages and the poor were hardly consulted about social forestry. Government officers were mainly interested in fulfilling targets, and often adopted the line of least resistance. The panchayats were not keen to take over plantations. Often, community land was handed over to the Forest Department to avoid encroachment by the poor. The practice of the panchayat auctioning grass from such plantations reduced the availability of fodder for the poor.

Social forestry on village lands failed to take off in Madhya Pradesh because the local people were not inspire confidence in every constituent village; and there is no tradition of management (meaning protection, fresh planting and punishment to offenders) of common lands. The area available as village lands was also far less than anticipated at the project stage. Besides these structural constraints, there were shortcomings in the way the programme was conceptualised and implemented, leading to a marked divergence between the stated objectives of social forestry and the actual outcomes.

First, market oriented trees were planted which did little to improve consumption within the village. Fodder trees were generally ignored, Close spacing to accommodate more trees affected grass production.

Second, as projects did little to meet the demand of the poor for fuelwood and fodder, pressure on forest land continued.

Third, as deforestation was perceived to be due to fuelwood and fodder demands of the people it was assumed by the policy makers that given government help, people would willingly invest their labour and capital in raising fuelwood and fodder trees. However, as fuel and fodder were often collected free, farmers preferred income-generating trees, and continued to collect branches, twigs, leaves and grasses from forests as before. Thus the assumption in Social Forestry about how village. and not in the national objective of providing fuelwood and fodder to the poor.

Fourth as State funds got locked to meet the matching contributions required for external assistance for social forestry projects, forest lands were starved for funds, with several adverse effects. The neglect of forest lands hurt forest dwellers and tribals. It reduced timber supplies to the markets, resulting in price escalation, which further increased smuggling from forest lands.

Fifth, species selection and spacing were considered technical questions, and hence were not examined carefully at the project stage. Benefits, which could flow to the poor from species yielding intermediate products, were not properly appreciated. The value of a tree was linked in the minds of foresters with the final product obtained through felling. Thus production of grasses, legumes, fodder, fruit and Non Timber Forest Produces (NTFP) was neglected. Spacing has often been reduced to avoid intermediate management operations, to reduce plantation cost, and to cut down on staff supervision time. Consequently spacing thinning and pruning which could have produced intermediate yields of grass and tree products for the people have not been made use of. Technology with which the foresters were familiar for large-scale plantations for markets within Forest areas was applied to small-scale village woodlots, where the need was more for fodder and subsistence, then for timber.

7. Policy Initiatives after 1987

An impression was gaining ground since 1987 in the Government of India, Planning Commission and the National Wastelands Development Board (NWDB) that

the policy of producing industrial timber from lands, and subsistence goods from village and farm lands was becoming unworkable. Unlike earlier plans, where meeting industrial needs used to be one of the main objectives of investment in forestry the VIIth plan Document (1985-90) recognised the importance of non-market and ecological benefits from forests. It did not explicitly mention producing timber for commercial purposes as one of the objectives of forest policy. It also stated that raw material for forest based industries would be provided only after meeting the needs of the local people.

The Central Board of Forestry in its December, 1987 meeting presided by the prime Minister and attended by the Chief Ministers decided that forest lands would be used for preserving soil and water systems, and not for generating state incomes. All supplies to the market and industry would be met from farm forestry. Small and marginal farmers would be especially encouraged to use their degraded lands for meeting commercial requirements (GOI, 1987). This was followed by another announcement by the Forest Minister in the parliament in May 1988 that 70 per cent of the total afforestation would be in the farm sector. The Central Board of Forestry also took a courageous step in recommending a ban on commercial exploitation of forests, which was accepted by various states, including Madhya Pradesh. In fact, commercial logging operations are banned in Madhya Pradesh in 16 districts.

The new Forest Policy announced in 1988 gives higher priority to environmental stability than to earning revenue. It discourages monocultures and prefers mixed forests. Relevant paragraphs from the policy are: The life of tribals and other poor communities living within and near forests, revolves around forest. The rights and concessions enjoyed by them should be fully protected. Their domestic requirement of fuelwood, fodder, minor forest produce, and construction timber should be the first charge on forest produce. '.....As far as possible, forest based industry should raw material needed for meeting its own requirements, preferably by establishment of a direct relationship between the factory and the individuals who can grow the raw material..

The Ministry of Environment and Forests, GOI. in an official paper in March, 1991 stated, This (National Forest Policy 1988) reverses the recommendations of the

NCA , which favored commercial plantations on forest lands, and tree planting for meeting the subsistence needs on private lands of the rural people. It is visualised that industrial supply from the forest areas would eventually be phased out so that the industry meets its requirements largely from trees raised on private degraded lands.

The reasons attributed for this change in approach since the late eighties can broadly be summarised as follows:

- The definition of " development " and the strategy for achieving it has changed world over, and it is no longer equated with economic development or industrialisation.
- In all sectors, generally the government looks after the infrastructure or welfare needs are met from the private sector. In forestry this distribution responsibility was not being followed, and the reverse was being attempted so far.
- It was assumed in the late seventies that given government help, people would willingly invest their labour and capital in raising fuelwood and fodder trees. However, as fuel and fodder were often collected free, both farmers and Panchayats preferred income generating trees, and continued to collect branches, twigs, leaves and grasses from forests as before. Several forestry projects, In Madhya Pradesh, large farmers liked to grow teak, but the social forestry programmes could not satisfy this as teak is not classified as fuelwood or fodder tree.
- As funds in Madhya Pradesh got locked to meet matching contributions for external assistance for social forestry projects, forest lands were starved for funds, with several adverse effects. It reduced timber supplies to the markets, resulting in price escalation. This increased smuggling, which led state governments to clamp stricter laws on harvesting. movement and sale of trees even from private land. These regulations hit farmers,
- It appears that interests of the local population were often directly pitted against Departmental considerations. Forests were sought to be protected not for the people , but against them it was being realised at the Government of India level that other usufruct based species were required as planting of teak only transfers biotic pressure , as planting of teak only transfers biotic pressure from one region to another yet large scale propagation techniques in important, Minor Forest Produce (MFP) like tamarind, neem and mahua are still to be developed for specific sites, On the other hand teak the major planted species on forest lands, is not preferred by tribals. In districts, such as Bastar and Rajnandgaon. tribals organised themselves and resisted planting of commercial species on forest lands,
- Another issue at stake in the planting of teak and other such timber only species is sustainability. planting teak encourages smugglers or undisciplined behavior. When priorities are to be fixed, livelihood products like NTFPs on which the local population might be depending should rank high in the prevailing environment of smuggling of timber it was ironic that tribals, who for centuries lived in harmony with forests, were tempted to eke out a living by felling timber trees, although there is some evidence to suggest that the poor do not cut trees which provide usufructs, but only such trees where value is in the stem only .
- Species selection and spacing are considered technical questions, and hence are not examined carefully at the project stage, Benefits which could flow to the poor from species yielding intermediate products were not properly appreciated.

8. Joint Forest Management (JFM)

8.1 joint forest management in Madhya Pradesh

There are over 30, 000 villages in the State situated on the forest fringes, These villages constitute almost 40% of the total villages in the State, The tribal population of the State is about 15.4 million, 90% of which is living on the forest fringes, These villages are greatly dependant on forests for their livelihood and have an intimate and reciprocatory relationship with forests. It is generally understood that the biotic pressure from villagers seeking fuelwood, fodder and timber, both for their needs and for generating Any effort of the government could not check the increasing damage to the forests.

After the experience of the past that government alone cannot effectively protect and manage the vast forest resource, State Government decided to take the co-operation of people living adjoining to the forest area and finally introduced the concept of participatory management in forestry sector. With a view to involving local people in forest management, not only to check further degradation

of forest for their basic needs, but also to introduce the concept of sustainable forests development together with village development, Government of India issued a circular on 01/06/90 supporting joint planning and management of degraded forests in all parts of India. The State of Madhya Pradesh took a lead in JFM.

The concept of Joint Forest Management may be defined as - "The sharing of products, responsibilities, control and decision making authority over forest lands between Forest Department and local user group. It involves a contract specifying the distribution of authority responsibilities and benefits."

JFM is the best way to protect, regenerate and manage forests. The basic object behind it is to make the local people aware that they are owner of the forests collectively and Forest Department is a manager. It is important for people to realise the fact that they have stake in the protection and improvement of forests, and that their social and economic life becomes enriched by tangible and intangible benefits flowing from well protected and managed forest tracts near their habitation and all this is possible if they actively participate in Forest Management.

In accordance with the guidelines of Government of India, the State Government passed a resolution in December 1991 for community participation in forest management to prevent illicit felling in sensitive forest areas and to rehabilitate degraded forests. Two types of Village Committees were prescribed:

Village Forest Committees to be formed for rehabilitation of degraded forests (density upto 40%)

Forest Protection Committees to be formed to protect well - wooded forests (density more than 40%)

The State Government resolution of 1991 proved a milestone in the launch of JFM activities. JFM activities

in Harda division set the wheel of JFM in motion and it was followed in many more forest areas of the State.

In order to reduce the dependence of the villagers on forests, Village Resource Development Programme/Eco-development programmes have been taken up as important activity of the JFM. Eco-development is based on the belief that if forests support village development - its resources, cattle, veterinary inputs, schools, health, water, roads, etc. then the people will appreciate the role of forests and help in its protection.

Eco-development is different from social forestry in one respect, that is, it is implemented in fringe areas, whereas social forestry was generally in areas remote from forest lands. However, the two share a common assumption - if resources outside forest lands become more productive, people will give up gathering from forests. There are some success stories, but these are mostly pilot experiments, and their large-scale replication is still to be tried.

By itself, poverty alleviation does not reduce dependence on open resources. However it may facilitate it, if combined with measures like Joint Forest Management. Here too, Joint Forest Management should not mean just giving a share from forest produce to the people. Only when people are given greater security of access to the forest products that they depend on and a sense of partnership in forest management will have a greater motivation to ensure that the forest resource is not degraded. They will then assist or undertake the protection of the resource through regular patrolling and regulation of use. This will require fulfilling several conditions, which seem to be lacking at present in Madhya Pradesh.

8.2 Present Status of JFM in Madhya Pradesh

To make the provisions of 1991 resolution more effective, in 1995 a revised resolution was issued by the State Government which included elaborate arrangements to ensure participatory micro planning for the protection and management of forests and a clear approach for an integrated Village Resource Development Programme (VRDP). VRDP is viewed as a complementary activity to forest protection. Women's participation was ensured by offering them 50% membership in Committees.

As a result of the efforts made by the State Government, significant progress has been made till date. Out of the

8301 JFM committees in Madhya Pradesh, 4376 are Village Forest Committees (VFC), and 3925 are Forest Protection Committees (FPC). The total area under JFM is 38,48,261 hectares (please see table 3 for further details). The aim is to cover 50 percent of the 30,000 villages situated within a five kilometre periphery of forests with JFM activity by turn of the century.

Provisions for sharing wood products to the extent of 30% for VFC areas and free nistar to FPC areas have been made. Minor forest products are already free from government royalty and free for collection and trading, except for nationalised MFP (tendu leaves, harm, salseed, and some gums). For people residing in villages

outside the 5 kilometre periphery of forests, forest produce is available at market rates.

The World Bank assisted Madhya Pradesh Forestry Project has undertaken forestry development through JFM in both closed and open (degraded) forest area. Assisted natural regeneration (ANR) has been taken up in well-wooded areas to promote natural regeneration. In addition, VRDP is in operation in the degraded forest areas under the MP Forestry Project. Till March 1998, 146000 ha. of forest area under ANR was covered constituting approximately 800 forest protection committees. Likewise, 290000 ha. of degraded forest land is being protected by 633 village

Table 3. Forest Committees and Forest Area under Joint Forest Management: 1998

Forest Circle	Forest Protection Committee		Village Forest Committee		Total	
	Numbers	Area in hectares	Numbers	Area in hectares	Numbers	Area in hectares
Balaghat	133	92337	43	11840	176	104177
Betul	241	119882	42	7512	283	127394
Bhopal	124	24982	148	17091	272	42073
Bilaspur	452	319151	923	308972	1375	628123
Chhindwara	181	91016	123	44089	304	135105
Chhatarpur	54	48959	42	44358	96	93317
Durg	238	129311	157	44440	395	173751
Gwalior	5	11343	21	21645	26	32988
Hoshangabad	251	217402	136	49538	387	266940
Indore	55	31178	239	210123	294	241301
Jabalpur	238	38243	136	32369	374	70612
Jagdulpur	162	84892	20	6295	182	91187
Kanker	285	198787	139	58106	424	256893
Khandwa	122	112139	226	157071	348	269210
Rewa	47	25511	176	59433	223	84944
Raipur	363	219671	363	136589	726	356260
Sagar	110	56755	150	33986	260	90741
Shahdol	191	175772	186	122595	377	298367
Sarguja	571	203277	876	189179	1447	392456
Seoni	79	29789	61	14995	140	44784
Shivpuri	23	9808	58	20464	81	30272
Ujjain	Nil		111	17366	111	17366
Total	3925	2240205	4376	1608056	8301	38482621

Source: Madhya Pradesh Forest Department

forest committees and approximately 19000 ha. of degraded land has been undertaken for rehabilitation works. To assist people in villages outside the five kilometre periphery of forests, the Madhya Pradesh Forestry Project is covering them with extension forestry.

There have been many instances of petty conflicts amongst people in JFM areas, but they do not relate to usufruct distribution among themselves. Conflicts take place sometimes when the members of the committees apprehend forest offenders, but these conflicts are resolved internally. According to the new Nistar Policy, people living within 5 km periphery of forests such forest are eligible for the forest produce on concessional rates.

8.3 Important Components of JFM Strategy:

Some important components of JFM strategy are:

a. Introduction of village resource development programme: It is based on the strategy of involving communities in the management and sustainable utilisation of forests creating alternative sources of

income and employment to reduce pressure on the forests. The creation of village assets have gained the confidence of the villagers and hence, consolidated the JFM approach.

b. Microplanning: In this approach people are being involved in planning and it helps in proposing the management of the forests and development of village resources, as people want.

c. Participation of Non-governmental Organisations: NGOs are being encouraged to work as an intermediary between government and the villagers in various JFM activities.

d. Training: The training programmes are tailored to inculcate attitudinal changes in the staff so that they are able to communicate with the local people, especially those living in the vicinity or the forest areas, to facilitate in preparing of micro-plans of that area. This also sensitizes them into working together.

Transformation of a village society The case of Village Forest Committee: Karidongri, Bilaspur

Over the last few years, under Joint Forest Management considerable progress has been made by the Government, in involving communities in forest protection and management. Primarily, the benefits have been in awareness building, establishing linkages, and convergence between different government schemes. The example of Karidongri illustrates this.

Karidongri is a forest village in Bilaspur district. Out of 57 families of the village, 15 families were landless, while the others had un-irrigated land. All families were traditionally dependent on forests for their livelihood. A Village Forest Committee was formed in 1995, with these families, and they became actively involved along with officials in the development of the village as well as the forest resources. As a result of which, they created, a diversion channel, a new tar dam, bunding of 20 acres of agricultural land, wells with 8 electric pumps, leveling of lands and a general- store with the help of funds made available by the Government and other sources - The villagers also started pisciculture as an income generating activity. Gradually, as a result of these activities, all the families were now earning their livelihood from sources other than forests. A self-help group of women assisted by DWACRA has started manufacturing bricks. A grain bank, which provides social security to the village, has also been established.

The committee members have protected the forests assigned to them diligently from illicit felling, grazing, fire and encroachment. They have also helped in registering 51 forest offence cases. Besides protection, the Village Forest Committee has taken active interest in afforestation and have planted 54,780 plants in 60 hectares of land. They have sown 192kgsofseedin 1996-97 in blank forest area out of which 13,3000 seedlings have been established. The VFC members have resolved to plant 1,000 seedlings in non-forest area and name it as "Shakti Van". The sole objective is to raise fuel wood plantation to supplement their fuel wood requirement.

Source : Madhya Pradesh Forest Department

Excerpts from "Documentation of Self Help Groups in Madhya Pradesh "

.....Several workshops were organised for all forest officers of the district, from forest guards to district forest officers, to sensitize them about the needs of JFM- to get the full support of the people, hence the need to understand and respond to their problems. These workshops revealed that the main obstacle was the existing image of the forest department as being the enemy of the villagers. To build a rapport with the villagers and improve communication, a new friendly image had to be developed. How was this to be done? The forest personnel themselves came out with the existing hurdles in the path of their friendship with the villagers and suggestion to overcome these hurdles.

They realised that:

Their contact with the villagers was not frequent. At the most they met the leaders.

Whatever contact they had with the villagers was of a negative nature i.e. how to punish the villagers. They never realised that with their facilities and powers they could be of some help to the villagers as human beings as well.

Once this realisation came to them from within themselves, there was no hurdle in overcoming it. The workers themselves felt guilty of their shortcomings due to which they could not achieve the goals of JFM nor perform the work efficiently for which they were being paid. Beside this sensitization to change the attitudes of the forest personnel, the training also included details of account keeping of self help groups.....

A study conducted for Madhya Pradesh Mahila Arthik Vikas Nigam, Bhopal

needs are generally collected by women. Therefore, they are being actively involved in efforts to generate alternate sources for fuelwood and fodder on field bunds. An even more critical move has been involving women in formulating microplans in areas allotted to VFC's. Women leaders in villages, and women panchayat representatives are entrusted with the task of motivating and organising women to play an effective role in these activities. Existing women's groups such as the mahila mandals are also being involved in participatory management of forests.

Most of the head-loaders in the State are women, whose livelihood is curtailed by the new forest management arrangements. They have very few alternative sources of income so they need to be compensated. The formation of Self-help Groups (SHG) of women is one of the most significant strategies being adopted to involve women and compensate them. The initiation of thrift and credit activities under SHGs enables women to realise their productive potential and they could be seen as and helped to become economic actors. Making women effective income earners helps reducing their dependence on forests.

The functioning of SHGs follow almost similar pattern. Homogeneous groups of 10-20 women form a SHG. The group carries out compulsory thrift on weekly basis ranging from Rs.5-10 per person. Some of SHGs are also linked with the DWCRA programme

9. Critical Issues in Joint Forest Management

9.1 Peoples choice-share in management or share in usufruct

None of the two options i.e.. Social Forestry and Joint Forest Management, seriously question the existing objectives for which forest lands should be managed. Change in management should follow, and not precede, a change in the objectives for which forest lands are managed. In the long run, it is not management, which attracts people to forests, nor rights in forests, but the lure of obtaining livelihood products. It is increase in their incomes through enhanced supplies of NTFPs, which may induce people to give up grazing in forest lands, or invest their labour in its protection. Thus, in order to seek peoples' co-operation, it would be better if they can be guaranteed to gather more output from forest lands. Meeting peoples' requirements is one of the important objectives of managing forest lands.

This requires a complete and explicit reversal of the recommendations of the National Commission on

e. Gender Focus of Forest Management: Gender has become an inseparable issue of forestry development recently. With the participation of community in the management of forest resources being widely accepted now, true participation cannot be achieved without involving women. Fuelwood and fodder for domestic

Agriculture, 1976, which favored commercial plantations on forestland, and trees for consumption and subsistence on private land. It is necessary that subsistence and consumption be met from forest and common lands, and market demand should by and large be met from private lands. Using private lands for short rotation products will permit the large area of forest lands to be used for long gestation trees. "Scientific" forestry should therefore mean that wild fruits, nuts, NTFPs, grasses, leaves and twigs become the main intended products from forest lands and timber a by-product from large trees like tamarind, jack and sal.

Although the above suggestion has been accepted to some extent in the current Forest Policy, its implementation relating to a change in the choice of species or silvicultural practices by the States is still in initial stage. Sharing management of forest lands with the people is an important goal, but the process will proceed at different paces in different conditions. In the meantime, what is essential is to develop usufruct-based trees, shrubs and grasses on degraded forestlands to meet their livelihood needs. Where a large number of people have claim to forest produce, low management and low value output (but high in bio-mass) solutions have perhaps a better chance of success. Practical political-economy considerations suggest that technology is easier to change than institutions.

9.2. Administrative Issues

Under the JFM programme, an enormous range of activities are to be tackled in the initial years covering improved health, improved drinking water, improved school facilities, stop dams, income generating programmes, better access roads etc. There should be emphasis on bio-mass increase, development of fodder resources, & veterinary medicine. There is emphasis on improved agriculture through horticulture, soil and moisture conservation activity, improved fields, better crop varieties etc. These and other activities under the programme raise the question of practicality of management and implementation.

Secondly, it is believed that JFM will reduce the workload to a great extent. In JFM experience, there is already the feeling in government that the staffing levels are inadequate, especially at guard level. The lack of vehicles is seen as a major constraint. State government feels that JFM, setting up the institutions, agreements,

persuasion, monitoring etc. all require great inputs, and cannot be entirely left to village communities.

Thirdly, different sections of forest bureaucracy have different workload. The staff in Social Forestry and Production (as well as the FDC staff) may be under worked while Territorial staff may be overworked.

Fourthly, decision on the extent to which creation of Eco- development and Joint Forest Management activities is envisaged, has to be taken.

There is need to involve other rural development agencies of the State Government in the implementation of these highly specialised activities. There may be a need for a co-ordination committee at District level under the auspices of the Collector, but ways to achieve this have to be worked out.

Care will need to be taken to ensure that JFM does not just become the next development bandwagon. JFM is process oriented and does not lend itself to becoming a target and product oriented programme. There is a need to consolidate the JFM experience in Madhya Pradesh. Along with expansion of the programme, the capacity of institutions to support it should also be critically evaluated and improved.

The constraints to be eliminated at all levels include social, ecological, physical, historical, attitudinal and institutional. The social, political and economic relations of forest users (who are predominantly from tribal groups) with the State have all too often been one of mistrust. The State government itself, responsible for regulating land use in the vast area is closely associated with this process. Building confidence between the State Government, and its forest related Departments and the local people would be a necessary condition for successful devolution of authority. The managers of the forests have to accept the peoples depending on these forests as their partner in managing the forest resources.

The State Government is now faced with the task of planning and implementing the forestry management system (as well as a wide range of other development activities) suitable to a wide range of agro-environmental conditions and local needs. Further this task is to be accomplished in partnership with the communities, which are both socially and culturally diverse and widely disbursed. Such a complex task requires effective and

mutual communication (both within the State Government and between staff and villagers), flexibility and the devolution of responsibility and initiative to the field and village level.

10. Non Timber Forest Produce (NTFP) or Minor Forest Produce (MFP)

The Minor Forest Produce (MFP) of Madhya Pradesh can be categorised as nationalised and non nationalised products based upon the State control on the trade of these products. The major nationalised products are Tendu leaves, Sal Seed, Harra and Gums. The major forest products under the non nationalised category are Chironjhi, Mahua flower, Bahera, Bel etc.

Tendu leaves: Prior to 1964, Tendu leaves growing on government lands were sold unplucked to contractors and those that grew on private lands were disposed by the owners of the land in the manner they saw fit. This provided a space for market intermediaries. Also there was high volume of theft of tendu leaves from government lands. In order to control this and check the exploitation by middlemen, the State took over the trade of tendu leaves by enacting the Madhya Pradesh Tendu Patta (Vyapar Viniyaman) Adhiniyam, 1964.

Under this Act, agents were made responsible for the collection of tendu patta. The price paid by the purchaser depended upon the number of standard bags delivered to him. However, the agents who were usually private individuals or private companies, heavily exploited the primary collectors in this system. To improve the condition of the collectors, the Madhya Pradesh State Minor Forest Produce Co-operative Federation was formed in 1984, whose mandate was to free the primary collectors from exploitation by the middlemen. Between 1984 and 1988, the Federation experimented collecting tendu leaves under the auspices of institutions such as MARKFED, LAMPS and PACS.

The State Government in 1988 decided to totally eliminate the middleman, following which a three tier co-operative institution was designed. At the first tier, the body consists of Primary Forest Produce Co-operative Societies whose members are the tendu leaf collectors. The Primary Society appoints a Phad Munshi to procure the leaves and pay wages to the pluckers. The secondary level consists of the District Primary Forest Produce Co-operative Unions headed by the District

Collector. At the apex level of this institution is the Madhya Pradesh State Minor Forest Produce Co-operative Federation. Each tier is allotted commission rates on the total sale done by them. The government also operates a group insurance scheme for the members of primary societies. The premium is borne by the Government of India and Madhya Pradesh State Minor Forest Produce Co-operative Federation.

Harra: The collection of Harra, a nationalised forest produce is done by the Minor Forest Produce Federation through the Primary Societies in Harra producing districts. The total quantity of Harra produced in the State during the year 1990-91 was reserved for TRIFED (Tribal Co-operative and Marketing Federation). In subsequent years, the disposal of Harra was done through auctions/ tenders.

Sal Seed: MP State Minor Forest Produce Co-operative Federation collects Sal seeds through Primary Co-operative Societies. The collected seeds are supplied to 4 industries, which have entered into an agreement with the government. The extraction costs and the royalty are recovered from the industries.

Gum : Gum collection of both Salai and Kullu gum was banned in Madhya Pradesh in the forest circles of Gwalior, Shivpuri, Ujjain & Khandwa and the submergence areas of Narmada Sagar in Badwani and Jhabua forest divisions. In case of Kullu gum the State government lifted the ban in 1996 in Morena, Khandwa and Bastar districts. The process of advance sale has been adopted in the sale of nationalised gums. The State government has fixed the collection rate of Kullu gum at Rs.750/- to 3,000/- per quintal depending upon collection season. The collection rate of Salai gum has been fixed as 1550/- per quintal for the year 1996-97.

Non Nationalised Forest Products: State Government has de regulated non nationalised forest produce trade from 1984 onwards, and any individual is free to collect these forest products in any quantity for domestic or commercial consumption.

The importance of minor forest produce or NTFP, lies not only in the gainful employment provided through activities related to collection and utilisation of MFPs in conjunction with usual agricultural activities, or in the annual revenues provided to the State government to the

tune of around Rs 75 crores. The importance lies in the role these produce play in the livelihoods of tribal communities and forest dwellers, providing them with diverse products for consumption for their houses, for requirements of energy. etc.

Collection and Sale of Minor Forest Produce in the State

The collection and sale of MFP are done through three tier Co-operative structure;

- An Apex Federation at the State level
- The district union at the forest district level (Total SO]
- The primary Forest Co-operative Societies at the village level (Total 1947)

After the 76th amendment of the Constitution and enactment. of Panchayats (Extension to the Scheduled Areas) Act, 1991 (PSEA, 1996), the Government of Madhya Pradesh defined the term MFP as follows: "MFP is the first produce which. can be harvested on a non-destructive basis". The Government of Madhya Pradesh has also decided that the entire net profit coming out of the business of MFPs will be given to co-operative societies. Out of the total pro fit to the societies, 20 % would be spent on forest regeneration. 50 % would be distributed among tendu patta collectors and remaining amount would be spent for village development .

The quantity of nationalised MFPs collected and wage: paid during last few years are given in Table 4.

Jila Union-wise MFPs (tendu patta, sal seeds and harra) collection and wages distribution during last two years are (given in Annexure 2 & 3.

Collection of Non-nationalised MFP:

The Madhya Pradesh Minor Forest Produce Federation was given the job of collecting Non-nationalised MFP in the year 1995-96 through its Primary Co-operative Societies. The process adopted for collection is: A short listing of species has been done by the Apex Federation ii which 100 species of commercial importance have been identified. The Primary Co-operative Societies and the District Unions have been asked to survey the possibilities; of collection and marketing of these produce. The Apex Federation acts as a facilitator in marketing the product collected by the Primary Co-operative Societies. The amount of collection of various species done by the Primary co-operatives and wages paid during the last two years an given in Annexure-4.

11. Privatisation of Forest Lands

The present policies regarding government forests have not been adequately successful in either improving productivity, or improving welfare of the people. Several alternatives have been suggested including leasing of forest lands to user-industries.

Table 4. Collection of Minor Forest Produce in Madhya Pradesh by the State						
Year	Tendu Patta		Sal Seed		Harra	
	Quantity collected/(lakh standard bags)	Wages paid (Rs. in crores)	Quantity collected/(lakh standard bags)	Wages paid (Rs. in crores)	Quantity collected/(lakh standard bags)	Wages paid (Rs. in crores)
1992-93	44.64	112.65	5.47	7.38	1.40	1.54
1993-94	40.98	123.93	4.38	5.91	0.88	0.96
1994-95	42.08	127.14	1.39	2.09	0.55	0.61
1995-96	39.36	118.68	3.61	5.79	1.07	1.39
1996-97	44.42	155.75	7.90	12.64	0.92	1.57

Source : Madhya Pradesh State Minor Forest Produce Federation

The estimated demand by Industry for wood and bamboo has been assessed at 6.4 million tonnes in 1991 as against the current utilisation of 3.2 million tonnes, increasing to 20.2 million tonnes by the year 2015. Assuming a low productivity of 3 tonnes per ha per annum, the requirement can be met from 2 million ha. There is 141 m ha of cultivated land in the country, 60% of which is owned by rich and affluent farmers, who are market oriented, and can be trusted to fulfill the requirements of Industry. Industries require fast growing species viz. eucalyptus or bamboos, which can be easily produced in 5-8 years time. Those varieties are eminently suitable for farm forestry. Leasing out lands to industries is thus not necessarily the only solution to meet this demand.

It may be relevant here to mention the recent upsurge in the number of companies offering private teak plantations to the urban rich. Commercial sector in forestry, if desirous of acquiring large chunks of degraded land to take advantage of economy of scale, can follow this example and learn from the experience of such private sector initiatives. Leasing of forestlands on a large scale even to the poor is not desirable. First, a great deal of private land, often with the poor, is uncultivated, but may be suitable for trees. More than 5 to 6 million-hectare lands have been leased to the poor in the last two decades. In addition, in semi-arid regions a great deal of private land is either uncultivated or yields very low output. The total area of such land is estimated at 35 million hectares, which is comparable with the area of degraded forest lands. Hence there is no case for further privatisation, unless suitable technological and institutional arrangements have been worked out to bring this huge chunk of land under trees or agro-forestry. Second, privatisation would encourage farmers or the poor to plant short-term exotics, or use land for agriculture. Both forms of land-use for degraded lands are environmentally not desirable. The limited market demand is another constraint. What is required, is to put degraded public lands under shrubs, bushes, or slow growing multi-purpose trees (MPT), which are environmentally more sustainable. However, this does not bring immediate returns, and if such land is leased to the poor, the " are unlikely to be motivated to undertake this kind of plantation.

Third, the number of the poor families is very large, and privatising in favour of some while ignoring others, is likely to produce social tensions. Fourth, villagers have rights of collection on most degraded forest lands, and privatisation would perhaps go against existing settlement laws, and be opposed by other villages, having usufructory rights in the concerned forest land. Fifth, the experience of some of the NGOs like Sewa Mandir in Rajasthan shows that they were more successful when they undertook afforestation of public lands, rather than of private lands. This is because the constraints in semi-arid monocropped areas are such that an individual approach is less likely to succeed than working with groups. Lastly, most forestlands are in tribal areas, where market penetration is weak. The population per village is not high, and hence working with groups does not raise the kind of problems encountered in non- forest public lands, where penetration of markets and large size of villages have eroded the cohesive nature of village society.

On the whole, there is no escape from continuing the present system of government management on forest lands.

12. Other State Level Initiatives

Encouraging tree planting and private investment on non- forest wastelands: The State Government has taken many important decisions to encourage and assist the farmers and other private growers for raising plantations on private and public waste lands. Efforts have also been made to overcome the factors that discourage the farmers to go in for plantations. The thinking is that farmers can play an important role to bridge the big gap between the demand and supply of the forest produce. Some of the efforts made by the State Government are enumerated below:

1. In 1997, the State Government amended M.P. Land Revenue Code 1959, where following changes have been introduced:
 - Power to permit felling of dead/dying trees of Mango, Jarnun, Tamarind, Mahua, Sandalwood, Harra on private lands has been delegated to Panchayats.
 - No permission for felling and transit for timber in the holding of any private owner will be required when

such trees are planted, including commercial plantations.

2. In 1997, the State Government declared a Policy of leasing non-forest (revenue) wasteland to private companies to produce tree based raw material for their industries. This will definitely go a long way in reducing pressure on natural forests, and in stabilising tree-based industries,
3. Lands under tree plantations have been exempted from the provisions of Land-Ceiling Act.
4. Transit permit rules have been liberalised to promote tree plantation on private lands.
5. Contractual supplies to industries beyond 31.12.1998 have been terminated to create better market condition for private growers.

These efforts made by the government have encouraged farmers to take up more forestry activities on private degraded/ wastelands.

Market information There is generally little awareness amongst farmers about the kind of price that they could reasonably expect to get for their trees. To overcome this problem, forest department has established an Industrial Liaison Unit, which would co-ordinate between the tree grower and consumer and will provide all necessary market information.

Research is needed to identify other short-rotation, high-value species besides eucalyptus. Farmers should have a range of trees on their land, which meet various needs, and spread the risk of the collapse of any one market. Such activities have already been initiated in 14 Extension and Research Divisions, and the State Forest Research Institute, Jabalpur.

Choice of species In addition to the growing of eucalyptus, there is a strong demand by farmers for growing fruit trees and bamboo. Women are particularly keen on species that produce fruit for consumption and sale. While one need not be unduly pessimistic about what has been achieved, there certainly is a good case for distributing more fruit seedlings. Where fruit trees had been supplied, farmers addressed the problem of protection and management by planting them around the homestead on currently under- utilised land. Farmers have expressed willingness to pay for seedlings of fruit bearing trees in many instances, indicating the strength

of the demand. Therefore, providing seedlings, or grafted varieties of fruit species can be an effective step.

Nurseries Fruit seedlings, which require longer duration to raise, are, not being distributed, one of the reasons is the lack of certainty on budgets for nurseries provided by the government. Money is available for nurseries only as a part of plantation programme, and this deters officers from planting seedlings, which require to be kept for a long time in the nurseries.

There is urgent need for large quantities of improved high yielding and disease resistant planting material. Assurance on purity of the material is more vital in fruit and forest seedlings than in seasonal crops, since the test and taste of the fruits and trees can be had only after 3 to 5 years. Moreover, not much research data has been generated on the 'rainfed' horticultural crops.

The primary objective of every forestry project states that it wishes to help people. However, in many cases it has been seen that direct support to people's lives does not extend beyond wages. It is advisable that programmes attempt, to both aim for and assess the non-monetary benefits to people, so that programmes in future can be evolved and designed with increased direct and tangible benefits for communities.

13. Towards People Oriented Management

With livelihood forestry, subsistence and consumption would be met more from forest land, and market demand would be met more from private land. Using private lands for short rotation products will permit the large area of forest lands to be used for long gestation trees, which enrich the environment and provide a range of products to the

poor. Choice of species and management practices should be radically changed to suit the new policy. In Madhya Pradesh, changes at the policy level has allowed government to harness the tremendous attachment of the tribals for forests. The schemes have been conceived to demonstrate that development of forests also benefits the tribals. This has initiated a new era of partnership between the tribals and the government.

There are technical, environmental, political, economic, and managerial aspects of the people oriented management of the forests.

Technical If the site is bare and degraded to the point that it cannot support trees, then grasses, legumes, local shrubs and agave may be the only alternative. Attempting to plant trees on bare soil, would result in low survival, or poor growth. Besides, grass cover can reduce run-off of rain and soil loss. Protection of bare areas has resulted in excellent growth of grasses in Jhabua and it has become good source of income for members of Village Forest Committee.

Environmental The maintenance of life support system is a function performed mainly by the crown bio-mass of trees. It is this component of trees that can contribute positively towards the maintenance of the hydrological and nutrient cycles. Trees, which provide a lot of leaves, twigs, and branches, enrich the soil much better than those, which provide poles and timber alone. One of the main outputs from forests should be water, which is possible only when forests are considered more in the context of local rather than "national" needs.

Political If trees for timber are grown primarily on forest lands, no matter what instructions are issued by the government for giving a particular share to the poor (such as in Hitgrahi scheme in Madhya Pradesh), they are difficult to implement, as supply is not equal to demand. Besides this, the chances of intermediaries and trader-smugglers benefiting from this arrangement increases. If low value (low in market value terms, but high in bio-mass) output is planned, government may try to restrict the entry of people into the forests, the poor will still manage to access the forest lands and fulfill their needs. If species suitable for individual gathering by households are planted, the poor would directly appropriate the benefits. Unlike commercial timber species, relatively low value non-rotational trees for intermediate products would not attract the attention of rich farmers and contractors. What people get out of trees can depend more on what is planted than on who manages them.

This is not to suggest that forestlands will not produce any high value timber, or that conflict between the poor and the rich can always be avoided in the changed policy framework. Trees like Sal will continue to produce timber, as well as MFP. There would be species like bamboo, which would be demanded by many groups, the best part can be given to the people and the rest to industry. All that is being suggested here is that once the objective of forest lands is redefined, problems are likely to get reduced, if not disappear.

Economic The demand for marketed wood in India is limited. By duplicating the same species like eucalyptus on forest lands as on farm lands, we are ultimately cutting into the profits of the farmers, and thus undermining the farm forestry programme itself. It would be ironic if production of eucalyptus on farm lands, which is far cheaper, is discouraged because the production of more expensive eucalyptus is on government lands. Although there is yet no glut of eucalyptus in Madhya Pradesh, the experience in several parts of the country point to a possibility of market saturation, if common species are planted on both forest and private lands.

Demand and Supply position shows that the demand for commercial wood, although at present unsatisfied, is only a small fraction of the demand for fuelwood. The gap between supply and demand of timber and pulpwood can be met by afforestation of private and revenue wasteland.

Unlike timber which is bought from markets, fuelwood is generally gathered by rural people and even by the urban poor. Only the lower middle class (the middle class use kerosene and the rich use gas) in urban areas and the very rich in rural areas buy fuelwood. Moreover, in some parts of the country cow-dung and husk are used as fuel. The source of supply is thus varied. Farmers' produce has to compete with supplies from head-loaders, bullock carts, and merchants who buy wood from forest auctions.

The fact that fuelwood markets supply hardly 10-15% of the total fuelwood consumed has two implications. First, the gatherers can always beat the producers over the pricing of fuelwood; the producers would be price-takers, rather than price-makers. Second, the market price of fuelwood would always be lower than its social cost for replacement of growing stock through investments in plantations. These make production of wood for fuelwood markets a non-viable proposition. It may also be mentioned here that although the real price of fuelwood in urban markets increased steadily between 1975 and 1985, it started declining after 1985, causing further loss to the producers (Singh 1985, Chambers 1989, Saxena 1990). These considerations prove beyond any doubt that the fuelwood gaps-can be met only through trees which produce a lot of twigs and branches, grown in public land.

There are several implications of this. First, in case degraded lands are to be used for wood production, there must be reservation for this sector as far as poles, pulpwood, and timber (to the extent possible) is concerned, and these species should not be raised on forest lands. Second, research needs to identify other short-rotation, high value species, which suit farmers' requirements of planting on marginal lands and bunds. Third, such species should be promoted in forest lands where the main product is different from wood, like MFPS.

Managerial A further advantage of planting "trees of the poor" (which are essentially employment augmenting trees, as they require labour for gathering and collection, as opposed to trees which are clear-felled) on forest lands is the likelihood of improved co-operation. People are reluctant to protect trees, which will be auctioned or felled to the benefit of government, contractors and forest staff. They are much more likely to collaborate in protection of trees from which they, much more than others, are in a position to benefit.

Forest lands have a comparative advantage in growing long gestation trees which may be less attractive to farmers. Fortunately, these are also the source of several MFPS. Rather than raise plantation crops, these lands should be used for non-rotational trees and natural forests, the produce

of which is gathered. Bamboo, amla, fruit and oil trees like mahua and karanj, which provide income to the poor and raw material for artisans, should get a priority. These should be supplemented with shrubs, and bushes to yield fibre, fuelwood and fodder in the shortest possible time, and some trees which can go well with teak and can provide fuelwood in the short time. The policy should be to encourage usufruct-based am 21 place of trees which require felling.

The suggestions given here require 'productivity', and 'economic value' to be redefined in terms of multipurpose utilisation and satisfying basic human needs, rather than maximise the timber value, the objective scientific forestry should be to maximise biomass, allowing a tree to expand horizontally rather than to pm in the vertical direction only. In place of stem-based forestry, crown based forestry will be environmentally, superior, as well as satisfy people's needs. Thus it will be more sustainable than conventional forestry. This requires a new outlook and a new silviculture, in which the of all poor people to secure rights of gathering would paramount.

The lessons of experience are clear. Addressing the livelihood security needs of the poor has to be the essential touchstone of any vision that seeks to ensure long term sustainability of forest resources.

Annex.1 Demand Production Potential of Forest Produce

District	Total Demand in Thousand			Potential Production in Thousands			Surplus/Deficit in Thousands		
	M3 Timber	M3 Fuel	N.T. Bamboo	M3 Timber	M3 Fuel	NT Bamboo	M3 Timber	M3 Fuel	N.T. Bamboo
Bhind	27.6	309.903	2.23	2.29	20.64	1.15	-25.31	-289.26	-1.08
Gwalior	56.19	195.36	1.34	9.87	88.85	4.93	-46.32	-106.51	3.59
Datia	9.3	98.41	0.71	3.12	28.06	1.56	-6.18	-70.35	0.854
Guna	29.06	337.52	2.43	41.19	370.75	20.59	12.13	33.75	17.86
Shajapur	22.06	271.63	1.95	3.06	27.51	1.53	-19.00	-244.12	-0.425
Ujjain	43.09	272.04	1.92	1.72	15.47	0.86	-41.37	-256.57	-1.06
Ratlam	26.94	213.78	1.52	12.71	114.39	6.35	-14.23	-99.38	4.82
Mandsaur	36.95	383.55	2.75	20.13	181.19	10.06	-16.82	-202.36	7.31
Dhar	26.41	378.63	2.73	11.54	103.89	5.77	-14.87	-274.74	3.03
Rajgarh	20.81	263.81	1.9	4.01	36.11	2.05	-16.80	-227.7	0.151
Bhopal	66.65	100.2	0.62	4.29	38.64	2.14	-62.36	-61.56	1.51
Vidisha	21.75	248.03	1.74	11.67	104.99	5.83	-10.08	-143.04	4.04
Tikamgarh	19.75	249.77	1.8	8.51	76.61	4.25	-11.24	-173.16	2.452
Rewa	31.48	420.56	3.03	11.44	102.93	5.72	-20.04	-317.63	2.689
Morena	43.17	525.96	4.08	85.79	557.86	42.89	42.62	31.7	38.81
Shivpuri	26.07	370.64	2.88	53.40	345.15	26.55	27.02	-25.49	23.66
Indore	83.7	231.99	1.68	15.81	102.76	7.9	-67.89	-129.23	6.217
Jhabua	22.94	396.86	3.1	37.14	241.43	18.57	14.20	-155.43	15.47
W.Nimar	46.55	664.49	5.17	89.58	582.27	44.79	43.03	-82.22	39.62
Sehore	20.33	266.48	2.07	32.11	208.71	16.05	11.78	-57.77	13.98
Raisen	20.39	285.09	2.22	43.15	280.44	21.57	22.76	-4.65	19.35
Chhatarpur	28.67	361.36	2.80	40.75	264.89	20.37	12.08	-96.47	17.565
Sagar	47.51	453.32	3.5	47.62	309.53	23.77	0.11	-143.79	20.27
Damoh	21.28	283.89	2.2	50.42	327.72	25.21	28.64	44.39	23.00
Satna	36.49	454.6	3.53	46.2	300.27	23.1	9.71	-154.33	19.572
Dewas	32.25	361.05	2.91	86.41	345.66	43.2	54.16	-15.39	40.29
E.Nimar	45.47	489.21	3.94	165.66	662.65	82.83	120.19	173.44	79.89
Panna	18.22	280.29	2.27	133.13	532.52	66.56	114.91	252.23	64.28
Jabalpur	101.64	689.95	5.49	93.92	375.67	46.96	-7.72	-314.28	35.92
Narsinghpur	21.34	313.78	2.54	34.02	136.07	17.01	12.64	-177.71	14.46
Sidhi	33.07	600.89	4.88	115.28	461.12	57.64	82.21	-139.77	52.75
Durg	82.94	735.56	5.9	68.45	273.81	34.22	-14.49	-461.75	28.32
Hoshangabad	43.25	511.16	4.14	224.62	314.47	112.31	181.37	-196.69	108.17
Betul	36.88	532.03	4.33	347.09	485.93	173.54	310.21	-46.1	169.21
Chhindwara	51.25	668.11	5.43	398.92	558.49	199.46	347.67	-109.62	194.03
Shahdol	50.02	760.36	6.19	446.59	625.22	223.29	396.57	-135.14	217.09
Rajnandgaon	43.61	670.18	5.46	272.99	382.18	136.49	229.38	-288.00	131.03
Bilaspur	116.32	1740.53	14.17	670.03	938.04	335.01	553.71	-802.48	320.84
Raigarh	48.47	859.62	7.01	533.33	746.95	266.76	485.06	-112.67	259.74
Seoni	32.72	529.73	5.16	279.72	279.72	139.86	247	-250.01	134.69
Mandla	41.53	696.61	6.79	781.68	781.68	390.84	740.15	85.07	384.04
Surguja	69.56	1071.36	10.44	1257.73	1257.73	628.86	1188.17	186.37	618.42
Raipur	139.09	1839.49	17.87	786.48	786.48	393.24	647.4	-347.98	375.36
Balaghat	48.74	784.49	7.04	561.23	436.51	280.61	512.49	476.4	273.56
Rastar	79.66	1971.08	17.72	3146.76	2447.48	1573.38	3067.1	128.42	1555.65
Grand Total	1971.69	24143.36	199.62	11091.46	17659.24	5545.42	9119.75	-6483.01	15256.82

Annex.2

Wages Distribution in Tendu Patta Collection in the year of 1996 & 1997

Jila Union	Wages		Jila Union	Wages	
	1996	1997		1996	1997
N. BALAGHAT	23139725.000	22705931.500	C.BASTAR	4914737.100	4474434.00
S.BALAGHAT	24925012.000	21689419.500	S.BASTAR	15644373.850	6495086.850
BILASPUR	19165352.500	18477394.250	W.BASTAR	13684305.250	14237007.050
JASHURNAGAR	14932215.200	14088414.200	BADWAHA	3394048.350	3605010.500
KORBA	30597559.650	28513450.000	BADWANI	303654.750	206781.000
N.BILASPUR	39363907.100	39476470.520	BURHANPUR	6094319.350	4726299.550
RAIGARH	67985081.850	60893014.000	KHANDWA	12450413.150	13260289.000
BHOPAL	12248689.250	12924911.650	KHARGONE	249550.750	2203542.600
OBEDULLAHGANJ	9639634.200	995704.950	BHANUPRATAPPUR	1444748.550	1577787.150
RAJGARH	2876707.400	1927433.200	KONDAGAON	84952511.000	69377000.000
RAISEN	22641940.300	21701420.300	KANKER	34215893.950	29459391.500
SEHORE	12186415.500	10373407.100	NARAYANPUR	11094723.850	893190.300
VIDISHA	19949611.500	19057200.400	E.RAIPUR	42320113.500	41011007.800
N.BETUL	14537502.000	13572816.250	N.RAIPUR	57169894.250	56796545.750
S.BETUL	5526960.250	5385334.150	S.RAIPUR	18698652.700	18827341.400
W.BETUL	7145408.900	6524278.250	E.SIDHI	53641506.800	5544024.850
E.CHHINDWARA	9239214.950	7698345.200	REWA	19733433.300	12231572.950
S.CHHINDWARA	8197250.600	7324176.300	SATNA	31804687.250	27687800.000
W.CHHINDWARA	6253034.900	508050.250	W.SIDHI	43888479.250	40067982.500
CHHATARPUR	48204109.800	5371042.750	N.SHAHDOL	37664900.00	28221900.000
N.PANNA	1772953.250	16129415.050	S.SHAHDOL	2267305.050	21467243.000
S.PANNA	10885388.150	9006489.450	UMARIA	25185622.700	21371439.600
TIKAMGARH	1187227.250	10450497.750	NARSINGHPUR	18449617.900	14773496.500
DURG	14380549.750	13977988.500	N.SEONI	19821432.750	15306709.250
KAWARDHA	13080401.250	11742869.250	S.SEONI	15193867.500	13572659.100
RAJNANDGAON	65643538.050	46979632.000	DAMOH	8997699.200	6714786.750
DATIA	366467.500	284765.000	S.SEONI	10269005.250	10698506.700
GWALIOR	2298069.900	1759247.350	DAMOH	107571136.250	994591.150
MORENA	3011688.400	2528676.850	S.SAGAR	3092306.250	28936983.600
SHEOPUR	14715475.950	1276807.550	E.SARGUJA	1197496.450	1128218.500
HARDA	9496789.750	8345414.000	KOREA	50209369.000	46554929.750
HOSHANGABAD	9237882.150	82387220.450	N.SARGUJA	30656386.250	28136566.150
DHAR	4374936.650	2665697.300	S.SARGUJA	15860922.700	12997459.650
DEWAS	25510293.550	21775735.100	W.SARGUJA	3719813.100	3084621.650
INDORE	101983.350	799188.150	GUNA	37703838.900	376000506.300
JHABUA	398980.650	2898732.900	SHIVPURI	2631962.200	2603627.600
DINDORI	14302221.150	13959505.000	MANDSAUR	1674047.200	1858907.750
E.MANDAL	18058233.900	15179575.250	RATLAM	958710.900	718354.000
JABALPUR	35047508.300	26887350.000	SHAJAPUR	95810.900	718354.000
W.MANDLA	28872523.750	220.3268.000	UJJAIN	472041.500	243972.050
GRAND TOTAL				1540715237.750	1817546962.350

Annex.3 Wages Distribution in Sal Seed and Harra Collection in the year of 1996 & 1997

Sal Seed

NAME OF THE JILA UNION	WAGES	
	1996	1997
N.BALAGHAT	2 588552.00	55307.200
JASHPURNAGAR	69110200.000	7553444.800
KORBA	141246.400	71996.800
N.BILASPUR	1707992.000	291321.600
RAIGARH	6598062.400	124626.400
KAWARDHA	1943086.400	26113.600
DINDORI	2189187.200	17235.200
E.MANDLA	4234521.600	29833.600
C.BASTAR	8800000.000	5889561.600
S.BASTAR	372800.000	513568.000
BHANUPRATAPP UR	1454198.400	23780.800
KONDAGAON	41825984.000	66097.200
KANKER	9179787.200	946745.200
NARAYANPUR	5797816.000	502091.200
E.RAIPUR	9274326.400	266636.800
N.RAIPUR.	195785.600	24739.200
S.RAIPUR	7338148.800	944385.600
S.SHAHDOL	1352859.200	24116.800
E.SARGUJA	2812800.000	7488286.400
KOREA	259081.600	355952.000
N.SARGUJA	803529.600	1959547.200
S.SARGUJA	4757160.00	16572114.400
W.SARGUJA	247353.000	29368.000
G.TOTAL	125786473.800	35621280.200

Harra

NAME OF THE JILA UNION	WAGES	
	1996	1997
N.BALAGHAT	1643980.000	686181.200
S.BALAGHAT	150319.000	141783.400
BILASPUR	534.300	170.000
JASHPURNAGAR	5010.200	562546.200
KORBA	35613.500	1318081.000
N.BILASPUR	4856.800	1972.00
RAIGARH	119696.200	254806.200
N.BETUL	3250.000	2779.500
S.BETUL	82453.800	60052.500
E.CHHINDWARA	605651.800	730133.00
W.CHHINDWARA	561193.100	635859.500
S.PANNA	5655.00	4845.000
DURG	74846.200	197733.800
KAWARDHA	276126.500	217917.900
RAJNANDGAON	423636.200	147943.690
DINDORI	947295.700	1639180.800
E.MANDLA	174608.200	284450.800
JABALPUR	35750.000	30838.000
W.MANDLA	396981.000	569466.000
C.BASTAR	46278.700	60327.900
S.BASTAR	40669.200	15444.500
W.BASTAR	44881.200	34000.000
BHANUPRATAPPUR	984490.000	917500.200
KONDAGAON	1495000.000	752549.200
KANKER	3635294.000	5111860.900
NARAYANPUR	752865.100	87917.500
E.RAIPUR	182369.200	28124.800
N.RAIPUR	24078.600	38216.000
S.RAIPUR	290112.550.	330458.750
N.SHAHDOL	40942.200	109140.000
S.SHAHDOL	594100.000	1241646.000
S.SEONI	161236.400	75923.700
KOREA	4500.600	30685.000
N.SARGUJA	9464.000	15398.600
S.SARGUJA	9908.600	609960.000
W.SARGUJA	65790.400	86343.000
G.TOTAL	13929438.250	15581972.540

Annex4 NON NATINALISED MINOR FOREST PRODUCE

Minor Forest Produce Collection Through Primary cooperative Societies 1996-96							
Name of M.F.P	Actual Collec tion (Qntis)	Collecti on rate in 95-96	Collectio n rate in 95-96	Amount Disburs ed 95-96	Additiona l Amount Disbursed (Rs. Lac)	Total Revenue (Rs. Lac)	Net Revenue to Societie s (Rs. Lac)
		(By middle men) (in Rs.)	(by societies) (Rs./Kg)				
Charpta Seed	6163	0.60	2.25	13.88	10.		
Amla Dairy	1206	2.00	4.00	4.82	2.41	7.34	2.42
Amla Green	2100	1.00	2.00	4.20	2.10	5.25	1.05
Chironji	2360	5.50	15.00	35.40	22.42	59.00	23.6
Seed							
Chironji Kernal	15	20.00	190.00	2.35	2.55	3.15	0.30
Baheda	262	1.00	2.00	0.52	0.26	1.05	0.53
Safed Musli Green	260	6.00	10.00	2.50	1.00	5.00	2.50
Belguda	639	1.00	3.00	19.20	1.28	3.20	1.25
Satawar	368	2.00	5.00	1.54	0.92	2.16	0.62
Nagarmotha dry	312	2.00	3.00	0.94	0.32	1.25	0.31
Nagarmotha Green	125	1.00	1.50	0.19	0.06	0.38	0.19
Sitaphal	450	2.00	4.00	1.60	0.80	2.40	0.60
Honey	236	12.50	35.00	8.28	5.32	1.83	3.55
Imli	110	2.00	4.00	0.44	0.22	0.66	0.22
Mahul Patta	2360	1.00	2.00	5.90	3.54	3.26	2.36
Chiraita	709	2.00	4.00	2.84	1.42	3.55	0.71
Lac	100	6.00	10.00	1.00	1.00	1.50	0.50
Broom (Nos.)	9450	3.00	5.00	47.25	47.25	7.25	0.60
Mahua Flower	6923	3.00	4.50	31.18	10.40	62.35	31.17
Neem	1837	1.00	2.00	3.67	1.83	8.27	4.60

Minor Forest Produce Collection Through, Primary cooperative Societies 1996-97			
Name of M.F.P.	Actual Quantity (Qntis)	Collection Rate (Rs./Kg)	Amount Paid (Rs. Lac)
Charota Seed	43817.12	2.00	87.63
Amla Dry	2397.45	5.00	10.79
Amla Green	2100.00	2.00	4.15
Achar Guthli	1026.00	30.00	30.78
Chironji Seed	26.00	190.00	4.94
Baheda	262.00	2.00	0.52
Safed Musli Green	2522.27	25522.27	25.22
Belguda	669.00	3.00	2.00
Satawar	336.00	5.00	1.93
Nagarmotha	269.00	2.00	0.54
Mahul Patta	559.57	2.00	11.12
Chiraita	723.39	4.00	2.89
Lac	7683.10	4.50	34.57
Mahula Flower	7683.10	4.50	34.57
Neem Seed	1863.37	2.00	3.67
Mahua Gulli	94.00	9.00	0.67
Honey	263.21	35.00	9.21
Broom (Nos)	9450.00	5.00	0.47
Saidhoop	110.00	15.00	8.65
Gilo	1.00	4.00	0.00
Teekhur	7.00	4.00	0.03
Bhilwa	3.65	3.00	0.01
Beejaphal	112.00	2.00	0.22
Kosam Gutli	22.00	3.35	0.07
Phool Behri	2850.00	5.00	0.14
Tulsi Seed	395.00	3.00	1.19
Char gond	194.00	15.00	2.91
Dhavai Flower	5.00	3.50	0.02
Khokri Puttu	264.00	5.00	1.23
Kanta Broom	7534.00	3.50	0.26
Bechandi	1.00	5.00	0.01
Brijdanti Seed	3.60	4.00	0.01
Ghagra	271.00	3.00	0.81
Bilora	38.75	3.50	0.14
Godlajari	99.50	4.00	0.40





Water Management for Livelihood Security

1. The Challenge of Food Security

As we approach the next millennium, India faces a daunting challenge of maintaining food security in the face of rapidly growing population. The gross food grain consumption in India was 176 million tonnes (MT) in 1991 -92. On the basis of the projected growth of population and shifts in the pattern of consumption (given income elasticities), the planning Commission estimates the gross food demand to be around 285 MT by the year 2006. The same figure is obtained with projections using the rate of growth of food grain demand during the 1980's which was between 3.5% to 4.0% per annum. It is clear, therefore, that to maintain food security even at the per capita nutritional levels (2100kcal per day,) 109 MT of foodgrains have to be produced additionally by 2006.

Where is the increase going to come from? The net area sown in India has remained remarkably static at 140 million hectares since the end of 1960's. Even though there are regional variations in the regard there is a clear indication that extension of cultivated area is no longer a major source of growth in Indian agriculture. The required additional foodgrain output has to come from three sources:

1. Expansion and fuller utilisation of the irrigation potential.
2. Yield improvements in irrigated agriculture.
3. Yield improvements in irrigated agriculture.

Expansion and Fuller Utilisation of the Irrigation Potential

Irrigation potential from surface water in India has been estimated at 73 million hectares. The latest Central Ground Water Board (CGWB) estimate of the groundwater potential is 64 million hectares. The total irrigation potential from surface and groundwater together is, therefore, 137 million hectares. The Gross Irrigated Area (GIA) WAS 62 million hectares in 1990 -91, which left a balance

of 75 million hectares to be exploited. The medium to high rainfall regions of Bihar, Orissa, eastern Madhya Pradesh, eastern Uttar Pradesh and northern Andhra Pradesh together account for nearly 65% of the unutilised irrigation potential. Let us realistically estimate how much of the irrigation potential could be realised by 2006. Since the mid-1970s, the rate of expansion of irrigated area has undergone a global decline at a precipitous rate (FAO, 1990). The global rate of expansion of irrigated area, which was 1% per annum in the early 1960s, peaked between 1972 and 1975 at the rate of 2.3% per annum, after which it has steadily declined, falling to below 1% per annum, in the late 1980s. The expansion of irrigated area in India also follows a similar pattern. The rates of growth as also the average absolute increment per annum in the GIA over the last three decades, suffered a decline during the 1980s from their peak levels reached in the previous decade (see Table 1). Expansion of irrigated area in India seems to be facing several definite and fast approaching environmental and financial constraints:

Table 1: Rates of Growth of Irrigated Area 1926-1990

Period	Rate of Growth(%)	Annual Rise (million ha)
1962-65 to 1970-73	2.93	0.94
1970-73 to 1980-83	3.20	1.36
1980-83 to 1988-90	2.23	1.23
1962-65 to 1988-90	2.80	1.20

Source: India's Tribal Societies and Development through Environmental Regeneration

1 For an elaboration of this see Shah, M, D Banerji, P S Vijay Shankar and Pramathesh Ambasta (1997) : India's Drylands: Tribal Societies and Development through Environmental Regeneration (forthcoming), New Delhi: OUP

Given this past record, the Eighth Plan's projection of the GIA by the year 2006 at 114 million hectares seems to be very optimistic. Alternatively, disaggregated state-level Projections have been made on the basis of past trends and incorporating a locational shift in the pattern of irrigation towards the hitherto un-irrigated tracts. On the basis of these calculations, the GIA can be expected to reach a maximum of 88 million hectares by the year 2006, implying an addition of 26 million hectares at a rate of 1.7 million hectares per year. This is more than what has been achieved in India during the three decades ending 1990. Assuming that the share of rice and wheat in GIA (65%) does not change significantly, about 17 million hectares can be expected to come under these two crops. Since the large, irrigated tracts of the Indo-Gangetic plains and South India are approaching saturation, much of this irrigation expansion would take place in eastern region. Given the low yield levels of these crops even under irrigated conditions, we can assume that average yield levels there would stabilize around 2 tonnes per hectare. Expansion in irrigated area may therefore be expected to contribute an additional 34 million tonnes of rice and what to total output of foodgrains in the year 2006.

Yield Improvements in Irrigated Agriculture

Another part of the additional foodgrain output can come from yield improvements in the areas already under irrigation. Out of the 62 million hectares of GIA, 40 million hectares were under rice and wheat in 1990-91. The average annual increment in foodgrain yield recorded by irrigated agriculture was 0.04 tonnes per hectare in the 1970s and 1980s. Assuming that this trend is sustained during the fifteen years period ending 2006 AD, a yield rise of 0.6 tonnes per hectare can be expected under irrigation. This would mean an additional 24 million tonnes of foodgrains from this source.

Yield Improvements in Rainfed Agriculture

The contribution of irrigated agriculture to foodgrain production from area expansion and yield improvements is therefore, likely to be around 58 million tonnes, leaving a shortfall of 51 million tonnes of foodgrains. In other words, even in the best possible scenario of irrigation development, nearly half the additional supply of foodgrains needed to match the future rise in demand will have to come from the rainfed segment of Indian agriculture. Most of this is located in the dryland regions (see Table 2).

Table 2: Projected Foodgrain Demand and Supply Scenario (in million tonnes), 2006 AD

Food Determined by 2006	285
current production	176
shortfall to be met	109
maximum potential of irrigated Agriculture:	
a) Through area Expansion	34
b) Through yield improvements	24
Total (a+b)	58
Balance Required from Unirrigated Agriculture	51

Source : India's Drylands: Tribal Societies and Development through Environmental Regeneration

in a recent study Bhaduri (1993) has shown that labour productivity in Indian agriculture has fallen relative to average labour productivity in the economy as a whole. This follows from the well-known fact that over the last 60 years, the share of agriculture in national income has fallen dramatically (from 54% in 1931 and 28% in 1993-94) without a corresponding decline in its share in the workforce (which was 71% in 1931 and 65% in 1993-94).

Thus while employment has not risen fast enough in the non agricultural sectors to draw labour away from agriculture, this labour has increasingly been employed in very low productivity work in agriculture. The flip side of this phenomenon suggests the conclusion that if we want to raise overall output and employment in the economy the most effective means would be to raise the productivity of agriculture,

Indian agriculture is a complex entity comprising a diversity of social and ecological elements, indeed, agricultural policy in India since the mid-1960s has concentrated on extending the Green Revolution package all over the country irrespective of these variations. Even in the mainlands of the Green Revolution the strategy is already reaching a point where its sustainability is doubtful. What is more, the dryland regions are characterised by a qualitatively different set of constraints, which not only pose unique challenges, but also represent a vast untutilized potential. This potential is completely overlooked today. The drylands sector is characterised by the lowest levels of productivity even while employing nearly 50% of the labour

force Indian agriculture, Both the scope for raising productivity and its potential aggregate impact is the highest in this sector. Moreover, since the poorest sections of the Indian society live here, a rise in productivity in this sector would have an immediate impact on poverty alleviation. It would also have a positive impact on the pattern of interregional inequality by benefiting the most backward areas. Finally, if we concentrate our investment in these areas on labour intensive works which raise the productivity through the process of environmental regeneration we could also go a long way towards making the overall growth path of the Indian economy both employment-oriented and sustainable in the long run.

Thus, from the point of view of growth, equity food security and sustainability we must concentrate employment planning in Madhya Pradesh on raising the productivity of the dryland agriculture sector. Here the focus must be on the lands of the poorest farmers. Latest data from the Rural Labour Enquiry, 1987-88 reveals that the proportion of the landed among agricultural labour households² has risen to a high as 79% in 1987-88 (this is the figure of both all India and Madhya Pradesh). According to the NSS 48th Round data in 1992% as many as 72% of the rural households in the country owned less than one hectare of land (Planning Commission, 1997). This an increasing number of small and marginal landowners, operating low productivity holdings are being forced to enter the labour market. Work allocation in the following areas would make a 3-fold contribution to employment generation:

- Providing short run (revolving³) employment:
- Increasing the productive capacity of the economy, which would create demand for labour in the next round (sedimented employment)³
- Raising the ability of the land to sustain the household, which would reduce the dependence of these farmers on wage labour, thereby improving prospects of other workers in the labour market.

3. The Context of Madhya Pradesh

Madhya Pradesh has the highest proportion of India's dryland districts within its area. 23% of India's 177 dryland districts occupying 19% of India's dry area are in Madhya Pradesh. 89% of the districts in Madhya Pradesh covering 81% of its area are drylands. According to the comprehensive classification of the National Bureau of Soil Survey and Land Use Planning (NBSS-LUP), most of Madhya Pradesh has a growing period (the period in which the moisture of the soil is adequate for supporting plant growth) of 150-180 days. At present only 19% of the cropped area in the State has irrigation facilities. Even if the ultimate irrigation potential from surface and groundwater sources is realised, over 55% of the net sown area in Madhya Pradesh would still remain dependent on unagenda for development of certain rainfall. A breakthrough in the dryland sector should therefore be given the highest priority in the agenda for development of Madhya Pradesh. Further, the all-India pattern of declining labour productivity in agriculture is visible in equal measure in Madhya Pradesh as well. The need to break low productivity in equilibrium trap of the agricultural sector cannot be overstated. There is another dimension to the unique significance of Madhya Pradesh in the national scene, encompassing as it does a wide variety of agro-ecological regions, Madhya Pradesh can be said to typify the two most important development experiences within India's rainfed agriculture—the near stagnation in the relatively high rainfall eastern region and the increasingly unsustainable rock regions of the country. We present a tentative outline of the agricultural development experience of two such regions in Madhya Pradesh to illustrate the need to adopt a completely new strategy of water management for development in the agricultural sector,

A study of Agricultural Development in Two Regions of Madhya Pradesh

In order to assess the ground pictures for the problems stated above for Madhya Pradesh two areas have been taken up to study closely. One represents the Malwa-Nimar region in western Madhya Pradesh and the other the Bilaspur division in the Chattisgarh region in eastern Madhya Pradesh.

2. Landed households which derive a majority of their income from agricultural labour.

3. This is the distinction suggested by K N Raj in 1956: the employment associated directly with the investment process may be called revolving employment, the other type of employment, which is connected with the sediment of productive capital left by the investments, may be referred to as sedimented employment” (Raj, 1990. P.179)

In order to present a comparative picture, we profile 5 districts of the Malwa-Nimar region in Western Madhya Pradesh. These districts together account for nearly 25% of the total geographical area, 22% of the population of the state, and about 40% of the tribal population of Madhya Pradesh.

Table 3 shows that these districts are predominantly rural in character with 70% to 90% of the population living in rural areas, with the economy of these districts being largely rural in character. The share of agriculture in the work force is quite high. 70% of the workers were engaged in agriculture as the principal activity in 1991.

However, when we examine the composition of the work force, it is seen that the share of self-employed farmers is high in the tribal dominated districts (Jhabua in Western Madhya Pradesh and Sarguja in Eastern Madhya Pradesh). This is in conformity with the all India pattern as revealed by Census data which show that over two-thirds of the tribal workforce in India are in the category of self-employed farmers, while for the combined population of tribals and non-tribals, the corresponding percentage is much lower (38%).

These predominantly rural districts with a substantial chunk of tribal population are among the poorest and the most backward districts in the country. Small and marginal farmer and agricultural labour households account for the bulk of the poor. In the next two sections, we summarise the available data on the development experience of the districts. We will show how the similarities in the overall socio-economic indicators of these regions have resulted from two entirely different development trajectories in the past three decades - trajectories which are moreover representative of the development experience in the country as a whole.

4. Bilaspur Division (Eastern Madhya Pradesh) Untapped Potential

Located in the Chattisgarh region of Madhya Pradesh, the division with three districts of Bilaspur, Raigarh and Sarguja typify the backwardness of India's eastern regions as well as its growth potential. Situated in the Central Indian tribal belt, this division has a large concentration of tribal

Table 3: Total Rural Tribal Population in Selected Districts, 1991

District	Population (Lakhs)	Rural		Tribal		Agriculture Labour	Cultivators	Agriculture Workers
		Population		populaton				
		Lakhs	%	Lakhs	%			
Western Madhya Pradesh								
Jhabua	11.30	10.33	92	9.68	86	30	41	71
Dhar	13.67	11.88	87	7.31	54	23	56	79
Dewas	10.33	7.70	75	1.56	15	30	41	71
West Nimar	20.28	17.23	85	9.38	46	27	52	79
East Nimar	14.32	10.37	72	3.83	27	31	38	69
Bilaspur Division								
Sarguja	20.83	18.32	88	11.18	54	16	65	81
Raigarh	17.22	15.59	91	8.21	48	23	59	82
Bilaspur	37.94	31.45	83	8.74	23	23	53	76
Total	145.89	122.87		59.89	41			
Source: Statistical Handbooks (various issues)								

Table 4: Ultimate Irrigation Potential, Potential Created and Utilised from Surface Water, 1997

Area	Gross Cropped Area (GCA) (000ha)	Irrigation potential (000ha)			Irrigation potential/GCA (%)		
		I	II	III	I	II	III
Chhattisgarh Plains	3783	1934	1016	852	51.1	26.9	22.5
Northern Hills	1778	435	142	76	24.4	8.0	4.3

Note: I = Ultimate, II= Created III= Utilised
Source: Indian Gandhi Krishi Vishwavidyalaya, 1997

population. Nearly 4% of India's tribals and 18% of Madhya Pradesh 's tribals live here, Tribals account for nearly half the population in Raigarh and Sarguja districts, and 37% of the entire division.

Bilaspur division falls to two distinct agro-climatic zones: the Chhattisgarh Plains zone , covering the entire district of Bilaspur and parts of Raigarh district, and the entire district, and the Northern Hills zone covering the remaining part of Raigarh district and the entire district of Sarguja. The two major rivers Mahandi and Son control drainage in the division. On account of these large perennial rivers and their numerous tributaries criss-crossing the terrain, availability of surface water in the division is high, the ultimate irrigation potential from surface water sources and its utilisation is given in Table 4, The table shows that at present, about 60% and 80% of the ultimate irrigation potential of the Chhattisgarh plains and the northern zones respectively remains unutilised, A similar picture emerges in the case of ground water as well (Table5).

Table5: Groundwater Potential and Utilisation in Bilaspur Division (hectare Meter), 1994

	Annual utilisable recharge	Net annual with drawal	Balance unutilised
Bilaspur	183081(100)	21600(12)	161481(88)
Raigarh	94506(100)	4736(5)	89770(95)
Sarguja	141777(100)	9186(6)	132951(94)
Division	419364(100)	35522(8)	383842(92)
Total			

Source: Mission Document, Rajiv Gandhi Mission for Mission for Watershed Development 1994

Table 6: Irrigated Area (%) and Cropping Intensity, 1993 -94

	NIA / NCrA	GIA/ GCA	Cropping intensity
Bilaspur	29	23	129
Raigarh	7	7	129
Sarguja	4	4	113
Division	16	14	118

Source : Basic Agriculture Statistics of Madhya Pradesh. 1989-90 to 1993

Note : NIA = Net Irrigated Area ,
NCrA= Net Corpped Area; GCA = Gross Area

Table 5 shows the groundwater balance of the Division. According to the Central Groundwater Board estimates, the net annual withdrawal of groundwater amounts to merely 8% of the annual utilisable recharge for the division as a whole, With most of its resources potential remaining unutilised, the irrigation ratio (gross irrigated area as a proportion of the gross cropped area) is higher in Bilaspur district (23%), while in other tow districts, the ratio is about 14% which is lower than the average of Madhya Pradesh (Table 6.) Surface irrigation sources (canals + tanks) account for the 81% of the net irrigated area in the division. In must also be noted that nearly 80% of the irrigated area in the division is located in the Bilaspur district, 85%of the cropped area in the division is dependent on erratic rainfall food crops occupy

over 90% of the cropped area, with paddy accounting for 65%. It should also be noted that over 80% of the area under paddy in the division is rainfed. Much of the cropped area being rainfed, a substantial gap exists in the principal crops the current yield level of rice in the division is only about 65% of the national average.

An important factor contributing to the prevalence of poverty seems to be the inequalities in the distribution of the productive assets, particularly land. In the division as a whole, the size of 70% of the operational holdings (with a share of about 27% of the operational) is below 2 ha and 50% of the holdings are smaller than even 1 ha in size. Thus, in spite of its vast endowment of natural resources, Bilaspur division paradoxically remains one of the poorest regions in the country. The backwardness of the region, and of the tribal communities is a direct consequence of the lack of a build up in the natural resource base of the area. A sustainable growth path for the division can be opened up by a development strategy based on renewal rather than replacement which views the regeneration of the natural resources base as a powerful engine of growth. The synergy of growth and environment must be exploited through a comprehensive resource management perspective, which is sensitive to the diversity of natural environments and cropping systems. From this perspective, what is looked upon as a constraint is turned in to possibility. Nothing could illustrate this better than reflection on the rainfall pattern of Bilaspur division. The average annual rainfall of the division is as high as 1200 to 1600 mm. However, 85 to 90% of it is received during the months June to September with most of the rain in a few discrete and high intensity bursts (lasting four to five days), typically producing a large volume of runoff. Table 7 gives the average monthly climatic data and water balance of Bilaspur district for the decade 1985-95. It shows the annual rainfall is sufficient to meet only 70% of the annual potential evapo-transpiration (PET) demand, leaving an annual water deficit of 520 mm. Rainfall exceeds the PET during the period from the mid-June to early October (humid period). From mid-October onwards, PET exceeds rainfall and the stored soil moisture gets gradually exhausted. Soil remains dry during the months December to May.

Table 7: Rainfall Evapo-transpiration and Water Balance (mm) in Bilaspur.

Month	Monthly Rainfall	Monthly PET	Water Balance (p-pet)
January	22.1	84	-61.9
February	28.2	114	-85.8
March	16.3	165	-148.7
April	12.6	243	-230.4
May	22.6	243	-220.4
June	200.4	273	-72.6
July	415.6	195	+220.6
August	322.8	99	+223.8
September	178.2	93	+85.2
October	37.9	102	-64.1
November	5.9	105	-99.1
December	8.4	75	-66.6
Total	1271	1791	-520.0

Source: Regional Agriculture Research Bilaspur

Thus a critical constraint to rice production in Chhattisgarh is the moisture regime. For assessing the suitability of a crop the rainfall distribution during the growth period rather than the total quantum needs to be assessed. Table 8 gives the water demand for evapo-transpiration for rice varieties of different maturity. Taking seepage and percolation losses together with this demand, the total water requirement of rice per week works out to be about 50 mm. Together with the variability of monsoon rain this figure is used to determine the stable rainfall period for rice, which is defined as the period when the weekly average rainfall is greater than 50 mm and corresponding coefficient of variation is less than 100%. For Bilaspur District the stable rainfall period is estimated to be 86 days long, thus, it is clear that in the absence of irrigation, the rice crop is highly prone to agricultural droughts the probability of which is estimated to be once in three years.

Table 8: Evapo transpiration (ET) during Different Growth Stages of Rice

Crop Stage	Early Maturity		Medium Maturity		Late Maturity	
	Duration (weeks)	ET (mm)	Duration (weeks)	ET (mm)	Duration (weeks)	ET (mm)
Seeding	5	43.9	3	90.5	3	100.3
Vegetative	5	178.9	6	249.3	8	300.8
Reproductive	4	164.3	6	209.4	6	248.2
Maturity	3	73.8	3	77.7	4	100.7
Total	14	460.9	17	626.9	21	750.0

Source: Impact of National Agriculture Research Project on the Agriculture Development in Eastern Madhya Pradesh; Indira Gandhi Krishi Vishwavidyalaya(1996)

What is required, therefore, is a new approach to agricultural development, which seeks to plug this crucial moisture deficit through a package of measures of rainwater harvesting combined with a farming strategy in tune with the water cycle of the region

5. Western Madhya Pradesh: Intensive Groundwater Exploitation

Compared with the Bilaspur division, five districts of Western Madhya Pradesh, namely Dewas, Dhar, Jhabua, East Nimar, and West Nimar have followed an entirely different trajectory of development. These districts broadly represent the two agro-climatic zones Malwa plateau and Nimar valley. All five districts have at least part of their land in the Narmada valley agro-climatic zone, with East and West Nimar districts being located almost entirely in the Narmada valley. Northern portion of Dewas and Dhar districts occur in Malwa plateau. Dewas, Dhar and Jhabua are located to the north of Narmada river and East and West Nimar districts occur to the south. Most of the tribal settlements are located in the hilly and forested upper catchment of the Narmada valley. These districts are located in the semi-arid and dry sub-humid climates in the annual rainfall of 800-1000 mm. The rainfall is highly seasonal, 90% of it concentrated in the period June to September,

with the total number of rainy days ranging between 40 to 50 days.

The agrarian economics of these districts show a more diversified cropping pattern than the single crop agriculture of Bilaspur division. Food crops occupy only about 60% of the cropped area here. Within the non-food crop sector soyabean has the largest acreage in Dewas and Dhar districts, with its share being higher than that of jowar, wheat and maize put together. Interestingly, however the tribal dominated Jhabua remains largely subsistence oriented, with food crops accounting for nearly 85% the area. In East and West Nimar districts cotton has been and remains to be the single most important cash crop. It is noteworthy that unlike in the Bilaspur division, the cropping pattern in the districts of western Madhya Pradesh has undergone dramatic changes over time with the share of the traditional jowar crop declining and new crops like soyabean emerging in its place. This shift seems to be primarily away from food crops towards oilseeds and other cash crops. Along with a remarkable shift in the cropping pattern, it is also seen that total area under crops has been growing steadily in western Madhya Pradesh during the period 1970-94. The pace of agricultural expansion seems to have accelerated during the period 1980-94, as can be

seen from the substantial jump in the annual rates of growth of cropped area (Table 9). It was during this period that the Green Revolution Technology made major inroads into the rainfed dryland agriculture of this region.

Table 9: Annual Compound Rates of Growth of Gross Cropped Area, 1970-94

Districts	1970-71 to	1980-81	1970-71 to
	1980-81	to 1993-94	1993-94
Dewas	0.79	2.08	1.52
Dhar (%)	0.53	1.44	1.05
Dhabua (%)	0.05	2.22	1.27
East Nimr (%)	0.47	0.82	0.67
West Nimar (%)	0.17	0.67	0.45
Madhya Pradesh	0.48	0.93	0.72

Source: Calculated from Indian Agricultural Statistics (various issues)

Following the introduction of this package, there has been a substantial rise in the area under irrigation and cropping intensity. With the notable exception of Jhabua, the irrigation ratios are in general higher than the average for Madhya Pradesh as a whole. The cropping intensities in the case of Dewas and Dhar districts are high on account of double cropping made possible by development of irrigation sources. The cropping intensity in East and West Nimar districts, is low in spite of high irrigation on account of the predominance of an annual crop (cotton), occupying over 25% in the cropped area.

The agricultural expansion and intensification in western Madhya Pradesh following the introduction of the Green Revolution Package have been aided by and have resulted in a rapid growth of irrigated area. Most of this growth in irrigated area took place during the 1980's. As a result, even though the cropped area has been growing at a fairly rapid rate (roughly between 1 to 2 % per annum in different districts), GIA/ GCA ratio went up by over four times in the last three decades in all districts. Thus, driven by the impetus of the hybrid seed technology, the agriculture in this dry land region has moved in to the water and energy intensive regime during the last few years. It is noticeable that in these districts a substitution of relatively less water consuming local varieties of seeds with hybrids, which need irrigation, is also taking place at a rapid rate. This process of substitution has almost completely displaced unirrigated varieties of wheat in all districts. Even in the case of cotton, which is still largely grown as dry land crop the movement towards the irrigated varieties is clearly visible. Given their water resource endowment, the pathways of agricultural development in Bilaspur division in East Madhya Pradesh and the Western Madhya Pradesh districts present an interesting paradox. In spite of an apparently high potential, water resources remain under utilised in Bilaspur division. On the other hand, located in a comparatively low rainfall regime, the districts of the Nimar valley and Malwa plateau have moved far ahead in the matter of utilisation of water resources. As most of the streams here are carriers of seasonal run-off having very little post-monsoon flow, irrigation potential from surface water is limited. The expansion has entirely been driven

Table 10: Irrigated Area ('000ha) by Source, 1993-94

Districts	1970-71 to	Tanks	Wells	Tubewells	Net Irrigated Area
	1980-81				
Dewas	3.2(3)	1.0(1)	59.4(53)	49.2(44)	112.87(100)
Dhar (%)	11.2(7)	4.3 (3)	64.6(40)	80.3(50)	160.4(100)
Dhabua (%)	12.6 (21)	4.6 (8)	18.7 (31)	25.3 (41)	61.2(100)
East Nimr (%)	4.9(5)	0.7(1)	78.1(78)	16.9(17)	100.7 (100)
West Nimar (%)	24.0(13)	0.5(1)	114.1(63)	41.9(23)	180.4 (100)

Source: Basic Agricultural Statistics of Madhya Pradesh 1989-90 to 1993-94, Gwalior : Commissioner for Land Records and Settlement

Table 11: Growth in Number of Tubewells in Western Madhya Pradesh, 1970-94

	Dewas		Dhar		Jhabua		E. Nimber		W. Nimber	
	W	TW	W	TW	W	TW	W	TW	W	TW
1970-71	8263	0	23875	18	9936	0	28116	10	17277	22
1980-81	16840	188	36585	1386	13287	0	31410	19	44336	18
1989-90	28674	4530	43517	10045	16971	75	45527	381	64911	664
1993-94	29047	6044	44858	13955	17532	157	43830	806	71410	7117

Source: 1, Indian agricultural statistics, various issues; 2. Basic Agricultural Statistics of Madhya Pradesh 1989-90 to 1993-94, Gwalior : Commissioner for Land Records and Settlement

Note W= Welts; TW-Tube=Tube wells

by groundwater. The break-up of irrigated area by source is given in the table 10.

It can be seen from the table that nearly 90% of the irrigation in western Madhya Pradesh is accounted for by groundwater. The rapid expansion of irrigated area has been facilitated by an intensive exploitation of the groundwater resources of the region. Break-up of the irrigated area by source reveals the most striking aspect of the dependence on groundwater, namely, the growing share of tubewells in irrigated area (Table 11).

In fact, by beginning of 1990's, tubewells had become the most important mode of irrigation in Dewas and Dhar districts. During the same period, the number of wells also underwent a quantum leap in all five districts.

Even though extraction of groundwater has been growing at an exponential rate, official estimates of groundwater development in the districts, prepared by the Central Groundwater Board (CGWB), presents a rather comfortable picture. The groundwater balance of the districts of western Madhya Pradesh is shown in table 12.

However, the question needs to be posed whether the agricultural expansion fuelled by extraction of groundwater on such a scale is sustainable in a predominantly hard region. The natural rate of replenishment of groundwater is usually very low in hard rocks. Hence, while there can often be fairly large reservoirs of stored water in hard rock aquifers (accumulated over several years), renewability of this resource in flow terms is likely to be

Table 12: Groundwater Balance

District	Annual Utilisable Recharge	Net Annual Withdrawal	Annual Balance Unutilised	Level of Development (%)
Dewas	67402	25238	42164	37
Dhar	97901	31268	66633	35
Jhabua	46222	5005	41217	11
East Nimar	71111	24364	46747	34
West Nimar	98629	32462	66167	33

Source: Mission Document, Bhopal: Rajiv Gandhi Mission for Watershed Development (1994)

limited. The second important characteristic of the hard rock geology is the high variability of groundwater availability within a drainage basin. This means that we must be very modest in the rate and depth of extraction of groundwater. Thus, the crucial fact to be monitored in both areas, is the absolute number and share of tubewells in groundwater irrigation, which provides an indication of the rate and depth of extraction. The increasing depth of groundwater extraction creates a very real danger of groundwater mining in these districts.

It is clear that the traditional categorisation of the areas by the level of groundwater development adopted is deeply flawed. One just cannot have the same classification across geological strata. A much lower level of development in the hard rock regions, for instance, could be as serious as a higher level elsewhere. It is often misleading to assume a high groundwater potential in hard rock areas, and thereby derive figures for low level of groundwater development, as the CGWB has done. In contrast to alluvial areas (characterised mainly by geological continua), in hard rock regions there is a sharp spatial distinction between the zones of recharge and the zones of discharge. Thus, given the nature of their geology, great caution needs to be exercised in the development of groundwater in hard rock areas,

Extremely detailed data on water level fluctuations in the network of 89 hydrograph stations periodically monitored by CGWB in the five districts of Western Madhya Pradesh indicate that many of these fears may not be unfounded. The pre-monsoon water level showed a steady declining trends in nearly 75% of the hydrograph stations between mid-1980s and mid 1990s, with the decline being over 1 metre in nearly 40% of the stations (Table 13). It should be remembered that

the quantum of annual rainfall during the same period shows no tendency of a secular decline.

This is reinforced by the reports of the Irrigation and Water Resource Departments (Government of Madhya Pradesh) on pre-monsoon water levels in 10 observation wells in Dewas block. Time series data available from 1977-93, show that the average depth to water level has been steadily declining and the decline has become more sustained after the mid 1980s.

Thus, any simple-minded attempt at extending the Green Revolution strategy to the hard rock regions like the districts of Western Madhya Pradesh is likely to be unsustainable in the long run. The sanguine presumption in this respect must be sobered by the realisation that the very foundation of this strategy of tubewell irrigation can have little hope for success in these areas. There is an urgent need to work out a path of sustainable prosperity for this area through interventions, which significantly deviate from the current development models.

6. Watershed Developments and Total Watershed Planning

It is, moreover estimated that of the total water sources of the country over 40% is in the form of soil moisture. Water used for irrigation from surface and groundwater sources together, even at their fullest development, would come to less than 20 % of the total. Strategies are needed which optimise the utilisation of soil moisture.

Such a development strategy requires the adoption of an appropriate water management and utilisation system referred to here as the Total Watershed Planning (TWP)

Table 13: Frequency distribution of decline in water level (3 yearly average), 1983-95

Decline in water level (m)	Dewas	Dhar	Jhabua	East Nimar	West Nimar	Total
< 0	0	3	7	3	8	21
0-1	7	4	6	11	5	33
1-3	4	8	3	7	4	26
> 3	3	0	0	0	6	9
Total	14	15	16	21	23	89

Source Central Groundwater Board, Regional Office, Bhopal

approach. This approach attempts to identify endowments and constraints of an environmentally balanced, equitable and sustainable growth path for a region. It integrates interventions in areas of soil conservation, water harvesting, groundwater recharge, sustainable agriculture, land use optimisation, forest conservation, wasteland development and renewable energy. The objective of such a TWP is to stabilise the natural resource base so as to facilitate its equitable and long-term use.

The TWP approach recovers the crucial link between development and environment. It provides an insight into the synergetic relationship between environment and growth with energy conservation and resource recycling being inscribed into the very fabric of technological development. What is more, TWP does not remain concerned only with technological choices regarding resource allocation for creating productive social infrastructure. It goes further and includes reservoir management and the cropping pattern, as also the methods of irrigation.

The distinguishing feature and unique strength of the total watershed planning approach is its sensitivity and fine-tuning to variant base conditions prevalent in different areas. These conditions such as soil, rainfall, topography, forest type, geology, crop regime, pattern of land holding, percentage of tribal population etc. constitute what may be termed the "constraint matrix" which defines the area and consists of the parameters within which our "solutions matrix" needs to operate. By identifying and making a social choice about the "optimal" solutions for each constraint set TWP achieves a match between the two matrices.

This development strategy consists of three crucial respects:

1. TWP regards environmental regeneration as a source of labour intensive growth, while augmenting productive capacities, increasing the efficiency of resource use, reducing inflation by expanding the supplies of essentials, and correcting regional imbalances.
2. Rather than positing growth in income as the principal aim of development, the fundamental objective is to provide livelihood security to the resource poor. Livelihood

security in backward regions adequate stable and sustainable access to resources meet the basic needs such as food, fodder, firewood, potable drinking water, health facilities and educational opportunities.

3. Rather than viewing growth as a process to be engendered from above, it places emphasis on a participatory development process, which entails the empowerment of the people.

Underlying the strategy of water management for development are certain principles of natural resources use. These are :

Livelihood security the poor and marginalised people

The primary objective of the resource use is livelihood security of poor and marginalised sections of people. From this perspective, a poor tribal household in the Bilaspur division is seen as operating with six critical "*budgets*": food, fodder, fertilizer, firewood, water (the 5 natural resource budget) and transactions with the rest of the world (ROW). The process of natural resource emasculation and environment degradation that these regions are subjected to, results in massive deficits in the 5 budgets. As a result the burden of adjustment falls in the ROW budgets, which only deepens the dependence of poor households on external axes of power. This, in turn, aggravates deficits in the 5 natural resource budgets and deepens the dependence on the external relationship of interlocked exploitation, and so on, in an endless spiral. For achieving livelihood security, this spiral of resources emasculation, poverty and indebtedness needs to be broken by checking the degradation of the natural resource base of the area through environment regeneration. Households have to be protected against the vagaries of erratic rainfall and market fluctuation through guaranteed access to food. In water-scarce areas, assurance of minimum water is the primary instrument of food security.

Equitable arrangements entitling the poor to natural resource base

At the same equitable arrangements need to be worked out which entitle the poor to regenerated natural resource base. The natural resource base of an area comprises land, water and biomass. Livelihood security to the poor household is insured by institutionalising their entitlement to water and biomass through resource right. This is possible only if the resource base regenerated is treated as common property over which community control is exercised. For

instance, the assurance of minimum water for food security can be made operational only if conditions of equitable access for all to the 'new' water (i.e., that which is conserved and made available), is laid down. In such a framework of institutionalisation of equitable water right, the satisfaction of the basic needs of the user community is given priority. Basic needs are ascertained on the basis of what is needed to sustain a family at minimum nutritional level. Surplus water after meeting the basic needs can be made available for providing other economically valuable services, for which the community could charge a price. The same principle applies in the case of biomass as well, priority being given to meeting the basic needs of the community for the fodder, firewood and NTFP.

Maximising the end-use efficiency of resources

To get the maximum out of the limited resources, it is necessary that the community exert strict end-use control over its utilities. In the case of water, this implies the regulation of the cropping pattern to optimise water use. In place of a high value irrigation intensive plan, a low risk agricultural package would give priority to crops and varieties that are less water intensive and have an assured yield to a given level of water application. Irrigation, therefore, is primarily seen as protective, to drought proof the crop against risks associated with the rainfall fluctuations. Similarly, in the choice of species for afforestation, those that satisfy the basic needs of the community for fodder and firewood would be preferred to the water intensive 'horticulture-flower' type, oriented towards external market.

Sustainable and location-specified strategies of development

With an assessment of the minimum requirement of water and biomass for meeting the basic needs of the people, the alternative modes of deriving it from local and external sources could be worked out. The idea of ecological balance is, the guiding principle here.

Land use system based on the TWP approach

The TWP approach has very definite implications for pattern of land use, which is based on the following decision-criteria:

- Optimising match between different land-types and the alternative system of biomass production.

- Maximum biomass production from the soil by careful water management and choice of vegetative species which optimise use of soil moisture; and

- Maximising the biomass input into the soil so as to raise soil productivity and biomass output over dm-

A synoptic view of the kind of choice that could be made in the Chhatisgarh and Nimar valleys is presented below-

Chhatisgarh Region

Soils with poor water retention are *bhata* or lateritic soils and *matasi* or sandy loams. When occurring in the unbunded unplanned (tikra) farming situation these soils are subjected to heavy erosion and leaching. It would be better to PK these soils under perennial, tree-based land use system. with multi-purpose tree species such as *Dalbergia sisoo*, *Pongamia pinnata* and *Terminalia belerica*. They could also be brought under silvi-pastoral land use by combining these trees with grass species like *Stylosanthes haniata* and *Pennisitum spp.* In uplands with relatively more retentive soil *likealfsol (dorsa* or clayloams), horticultural species such as *Zizyphus Mauritania*, *Punica gr Anona squamosa* and *Anocardium occidentale*, could be combined with grass species mention below.

Table 14 : Suggestions for kinds of plantations different land and soil types

Land	Water Available - poor (Bhata/ Matasi)	Water Available -Good (Dorsa)
Upland	* Silviculture * Silvi- Pastures	*Horti Pastures *Dryland Horticulture
Midland	*AGri-Pastures *Agro-Forestry	*Horticulture *Horti Based *Alley Cropping
Low land	* Paddy with Trees * Plantation on Bunds	* Paddy

In gently sloping midland, agro-forestry system combining trees with agriculture crops could be attempted on *and matasi* soil. Trees species such *Dalbergia sisoo Albizzia lebbek, Gmelina arborea* etc, could be combing with agricultural crops like *urad, til, soyabean, gram* CIL. Alternatively, agricultural crops could be rotated with *leguminous*, fodder grass species in a two or three year cycle. In slightly more water retentive soils, agricultural

Crops such as pigeonpea, soyabean, black gram etc., could be combined with the horticultural trees such as Punica granatum and Emblica officinalis though alley cropping agro forestry system could optimally utilise the area occupied by bunds on paddy fields (estimated to be 10% of the total area under paddy). Tree plantation on the bunds would stabilise them over the years as well. Tree species such as Acacia catechu, Terminalia arjuna, Sesbania grandiflora or agricultural crops such as long duration pigeonpea could be used for bund stabilisation in the system.

The major farming situation, together with the existing cropping pattern and proposed interventions in Bilaspur division are given in the table to follow.

Nimar region

Except in the extreme cases of severely handicapped soils all land can support some form of biomass production. In the land less suited for agricultural uses, cropping system can be integrated with pastures (through lay farming) or perennial vegetation (through agro forestry system). When

Table 15: Farming situation, existing cropping pattern and proposed interventions in Bilaspur division.

Farming Situation	Constraints	Existing Crop System	Proposed Interventions
Hilly	Low Soil Fertility Shallow Soil Depth High Rill Erosion	Mixed Cropping with Pigeonpea, Koda-Kutki, Til, Urad, Niger etc Fallow in Rabi	1. Soil & Water Conservation (SWC) Measures with Agro-Forestry, Vegetative Bunds and Improved Crops Varieties
Upland Bunded Crops	Low Soil Fertility Shallow Soil Depth High Rill and Sheet Erosion Low Productivity	Extra Early Rice Kodo-Kutki, Pigeonpea, Urad, Til, etc Fallow in Rabi	1. SWC Measures as in Hilly Farming Situation 2. Small On Farm Reservoirs (OFR) at relative sites 3. Double cropping with of Legumes, Wheat Vegetables, etc. with runoff conserved in OFRs
Upland Bunded	Drought in Rice Low Fertility Soil	Early Rice Fallow in Rabi	1. Small OFRs and Dug wells 2. Double cropping with Grams, Wheat etc., with watering from OFRs 3. Soil Improvement 4. Trees on Bunds 5. Fish culture in OFRs
Lowland Bunded	Drought in Rice	Medium duration Rice Fallow in Rabi	1. Small OFRs and Dug Wells 2. Double Cropping with Grams, Wheat Etc., with Watering from OFRs 3. Soil Improvement 4. Trees on Bunds 5. Fish Culture in OFRs
Extremely Low land	Flooding in Rice prolonged Soil Wetness	Long Duration Tall Rice	1. OFRs towards the Sites of Bahara Land 2. Rice-Rice-Moong with Watering from OFRs. 3. Fish Culture in OFRs

Source: Impact of National Agriculture Research Project on the Agriculture Development in Eastern Madhya Pradesh; Indira Gandhi Krishi Vishwavidyalaya(1996)

such integration is not possible, silviculture and silvi-pasture can be tried.

Table 16 : Land use system for different situations in the Nimar valley.

Water	Land type Good (LCC: 1-3)	Land type Medium (LCC:4)	Land type Poor (LCC:5-7)
Available	Agriculture	Horti-based Agro- forestry	Horticulture
Not Available	Lay farming	Dry land Agro- forestry	Silviculture

Note: LCC refers to Food and Agriculture Organisation's (FAO) land capability classes 1 to 8

In horti based agroforestry (HAF), horticulture trees are combined with arable crops. *Mangifera indica* (mango), *Citrus* species etc., can be integrated into these systems. HAF is suitable for actively cultivating farmers with watering facilities. The dryland agro-forestry system (DAF) is suitable for those farmers who own land of medium quality and have no watering facilities. Species such as *Zizyphus mauritania*, *Emblica officinalis*, *Psidium guajava* etc., are good for such land use system. In lay farming, a period of pasture is rotated with field crop in a 3 to 4 year cycle. *Stylosanthes hamata*, *Serhima sulcatum* (excellent fodder) and *Cenchrus ciliaris* are commonly rotated with sorghum. Silviculture and silviculture land use system are appropriate for LCC 5 to 7. *Anogeissus latifolia*, *Prosopis cinneraria* are good fire wood species. Other species suitable for these system are *Pterocarpus marsupium*, *Terminalia arjuna* (for fodder), *Acacia catechu* (for construction timber) and *Dendrocalamus strictus* (bamboo).

7. Livelihood Security, Rural Employment and Watershed Development in Madhya Pradesh

An analysis of historical expenditure on employment programmes in Madhya Pradesh, as elsewhere in the country, reveals a predominance of roads and building which reflects an imbalance in the composition of the investment in the employment programme. Works related to land and water development, which are labour intensive in the construction and- the post construction phase have traditionally been neglected. Thus, the primary objective of employment generation is undermined. This can be clearly seen from the fact that the wage to non-wage cost ratio which remained between 70:30 and 60:40 in the sixth plan

period, fell to 53:47 in the seventh plan. For Madhya Pradesh the figure was 44:56.

Moreover the profile of the assets suggests that the interventions are not properly planned and do not represent a long term vision. The lack of planning means an absence of proper prioritisation of expenditure between different assets, in response to local needs. The national commission of rural labour laments the absence of a shelf of projects, as a result of which projects are selected on an ad hoc basis and assets are created under pressure from the village political elite. In the context of such severe imbalance in asset creation, it is worthwhile to remember that the type of asset created has a role to play in aggravating or mitigating the possible inflationary consequences of public work. This is particularly so if the size of the works programme has to increase in order to generate greater employment and cover more of the employment and the poor than they are doing at present. It is therefore, desirable that priority is assigned to work which helps to increase the productivity of agriculture.

The preoccupation with the resource constraint arises from the vision of these employment programmes that allow no role for Rural Public Works Programmes (RPWPs) themselves to ease such constraints. Such a vision is inappropriate in treating these programmes as mere relief measures with no potential to contribute to economic growth. In fact, increasing the productivity of agriculture through labour intensive techniques can create the basis for easing the real resource constraint. The fear underlying the argument for relief orientation is that a productivity raising emphasis would encourage excessive expenditure on capital equipment and administration and on employment of skilled labour. The presumption here is that all productivity increases must necessarily be labour displacing. Such a view ignores the immense vista of possibility of labour - intensive, productivity-increasing technologies opened up by total watershed planning.

Madhya Pradesh has a total land area of 44 million hectare, of which about 55 % is under cultivation. As mentioned above, 81% of the total land area is a dry land watershed. Not all of these would require watershed treatment. Assuming the watershed programme embodying labour intensive work is initially targeted to 50% of the dryland watershed, the total area under such a programme would come to 17.93 million hectares. At a treatment cost of rupees 4000 per hectare (which is the national norm for watershed development for drylands), the

cost of watershed development programme in Madhya Pradesh would amount to rupees 71720 million. With the wage cost forming 70% of this expenditure (i.e, rupees 50204 million) and at a wage rate of rupees 35 per labourer (the statutory minimum wage prescribed for employment programme during 1996), the programme can generate a total of 1435 million person- days of employment.

To put this figure in perspective, we have estimated the total unutilised rural labour time in the state for the year 1996. Total rural population for 1996 is arrived at by projecting the growth of the base figure of 1991 census at a rate of 2.01% per annum (which is the rate of growth of rural population in Madhya Pradesh between 1981 and 1991). Applying the unemployment rates according to the concept derived from the 50th round of the national sample survey (NSSO, 1996) on the projected rural population, the number of unemployed persons can be estimated. The total number of openly unemployed in the rural area in Madhya Pradesh, according to this method of estimation, work out to 0.168 million, 0.450 million and 0.618 million as per the Usual Principal Status, Current Weekly Status and Current Daily Status definitions respectively. Even with the most liberal estimates of the unemployment, the watershed treatment programme has the potential to generate about

2300 person-days of employment per unemployed person in the rural area of Madhya Pradesh. In other words, assuming an average employment of 200 days per person in a year, the watershed programme can guarantee full employment in the rural area for the next twelve years. In addition to providing relief employment to the poorest of the poor, and while setting in motion the unemployed rural labour to arrest the process of environmental degradation, the watershed development programme can also lay the foundation within the agrarian economy for long term growth.

In this context, the Government of Madhya Pradesh has already taken the largest initiative of its kind in the country through setting up the Rajiv Gandhi Watershed Mission. Watershed management works were completed in 10 lakh hectares by June 1998. The Mission now covers an enhanced target of over 31 lakh hectares under 702 milli watersheds spread over 45 districts. It covers 7002 villages and 3800 watersheds in Madhya Pradesh, and there are 101 collaborating Non-Government Organisations. This makes the Mission India's largest watershed management programme. The initial results of the Mission are extremely encouraging. It also raises larger issues regarding an alternative model that integrates concerns of poverty reduction and environmental management which deserve immediate attention.



Information on Human Development : Technical Note

This Chapter has three Sections : the First Section is a Technical Note on the Human Development Indices, the second Section explains the tables in which data is presented on the State, and the third Section contains the statistical tables on the State and its districts.

1. Technical Note

The Technical Note is further divided into three sections. The first deals with the methodology for the Madhya Pradesh Human Development Index and the Gender Development Index. The second deals with the other indices presented in this Report, primarily the Human Development Measures. The third section explains the data and its analysis undertaken in the tables presented in this report.

1.1 Human Development Index

The Madhya Pradesh Human Development Index was first calculated in 1995 for all 45 districts. Based on the UNDP Human Development Index, it attempts to show the relative status of human development in districts.

The Human Development Index is a composite index comprising 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 traveled, from a minimum level of achievement, and the path still to travel.

The index is calculated by the following formula:

$$HDI_{ij} (\text{Index}) = \frac{\text{Target}_j - \text{Value}_{ij}}{\text{Target}_j - \text{Min}_j}$$

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 Rajnandgaon 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.

1.1.1 Education

UNDP uses literacy rate as one of the two parameters. Recently it has changed the second indicator from mean years of schooling to school enrolment. The MPHDI had used these two criteria in 1995, and they will be used for this year's education index also.

Literacy denotes the most basic and essential criterion. Literacy levels are available for each district from the Census of India, 1991, and these figures were used for the index on literacy. 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. Literacy has also been assessed by the National Literacy Mission groups in districts. This figure, however, was not available to us from all the districts at the time of publishing of this Report. Further no estimates of literacy for years later than 1991 at district level have been released or available from any credible source.

In 1995 MPHDI, female literacy was given a weight greater than male literacy for the literacy index. However, this year since a separate Gender Development Index has also been calculated to assess the relative level of development of women vis-à-vis men, the literacy index for the 1998 Human

Development Index does not give any extra weight to female literacy.

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 percent used in 1995. The minimum rate is taken as 0 percent.

The second component of education is the combined school level enrolment. The figures for children enrolled in schools in 1996 were provided by the Commissioner Public Instructions, Madhya Pradesh. The estimated population for 1996 was assessed. The share of population aged 6-19 years in the 1991 census, to total population then, was applied to the population estimates arrived for estimates for population in age group 6-19 for 1996. The enrolment numbers were divided by this figure to arrive at estimates for enrolment.

The enrolment figures in many cases exceeded estimated population in age group 6-19 years, and hence the figures required adjustment. These figures were adjusted to the enrolment rates in 1991. The number of school going population to total population in age group 6-19 years in the 1991 census was calculated, and compared to the enrolment figures in 1991 based on figures of Government of Madhya Pradesh.

The enrolment rates for 1996 were assessed as a combination of the enrolment rates based on the enrolment figures of Government of Madhya Pradesh and the ratio of enrolment rates in 1991 to enrolment rates in Census. For enrolment rates in 1996, we took half the enrolled figures according to the Commissioner of Public Instructions. Then the ratio of enrolment in 1991 by Commissioner of Public Instruction figures to enrolment in 1991 Census was applied to population in age groups 6- 19 years. Half of this figure was taken and added to the number arrived at above. These numbers were taken to be estimates for actual enrolment. The degree of correlation of these figures to the estimates through projections was very high (excess of 0.93). The population enrolled so arrived at was divided by estimates of population in 1996 in age group 6-19 years to get the enrolment rates, for entire district, and male and females separately.

The target maximum for this figure is difficult to assess, since the age group 6-19 includes ages at which many children would have passed out of the school after fully completing it, and would therefore not be counted. However, as we have no estimates to arrive at an acceptable figure for a target maximum for calculating

the Index of Deprivation in school enrolment, we use 100 per cent as the target maximum, and 0 percent as the minimum.

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.

1.1.2 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 have been arrived using the methodology applied by Census for calculating mortality tables for 1981¹. This is explained in detail later in this Chapter. These estimates are subject to corrections, after final fertility tables are released, and Census publishes estimates for Life Expectancy based on this data. Census has released estimates for child mortality, but are yet to publish estimates for Expectancy of Life at the time of the publication of this report. 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.

1.1.3 Income

The UNDP HDI uses 'adjusted per capita income for countries' to calculate the Index of Income. For the MPHDI Income Index, two criteria have been used. Since it is extremely difficult to assess district domestic products, 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. It has also been

¹ The methodology has been taken from 'Indirect Estimates of Fertility and Morality at the District Level. 1981, Occasional Paper No. 4 of 1994, Office of Registrar General of India.

argued that per capita incomes are not an adequate measure by themselves to measure ability to access opportunities and it needs to be adjusted by either indicator giving an idea of distribution of income amongst the population or levels of poverty. The incomes were adjusted by distribution and poverty levels, as will be explained later.

1.1.3.1 District Income

Data for calculating the District Domestic Product (DDP) is not available to enable a district - to - district calculation. The State Domestic Product (SDP) 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) and a mix of various sources. 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 task of preparing district income estimates, but the data is not yet ready². 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

² 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

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 (DME), Non - Directory Establishments (NDE), 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 1990 (though the results of the survey are not officially released we have used the data only for our estimates). Similarly, calculations for district shares are somewhat related to or correspond to, wherever possible, with 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, 91.4 per cent of the net state domestic product for 1995-96 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, oilseeds was taken and states 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 available to estimate districts 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 as well as royalty and cess from all major and minor minerals in the state was available district wise. The share of each district to the total production

value, and revenue from mining 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), we had data on district wise number of small units (SSI) and investments in them to date, and current employment. The Annual Survey of Industries gave district wise data on SSI units, employment, fixed investment and gross and net value added. 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 1991-92, 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 was difficult for turnovers and outputs in the Large and Medium Scale Industries (LMI) sector. 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-directly establishments, and own account enterprises, which gives data for digit level under the NIC classification. District wise distribution of DME and NDE is not available and, data on establishments is not available below I digit NIC. We took data for unregistered manufacturing from the Economic Census 1990 (provisional for Madhya Pradesh), 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 1990. Taking figures of own account enterprises 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

No data was available to estimate district wise share in Railways. The state level estimates are provided directly by the Central Statistical Organisation, and there was no basis available with

us to allocate state income from Railways to districts. Data on trains, railway lines and stations were not available for most districts, disabling us from making any kind of assessment.

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 districts 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. This section was not assessed in 1995.

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 Own Account Enterprises in each district in Wholesale Trade, Retail Trade and Hotels and Restaurants, according to the Economic Survey 1990.

13. Banking and Insurance

Banking and Insurance domestic product was divided on the share on 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 1991 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.

1.1.3.2 Adjusted Incomes

Incomes so calculated were divide by the population of the district to arrive at per capita district income. These figures are calculated from 91.4 per cent of SDP of the state in 1995-96. 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, use 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. Thus the impact of industrial estates and industrial development in Raisen, or Dhar, and the agriculture prosperity of rich farmers in Narsinghpur does not give too distorted a picture of incomes in these districts. We have used the formula used by UNDP to adjust the per capita income, based upon the poverty line figures of the Planning Commission.

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 adjusted to 1991-92 prices. This figure was multiplied by 0.914 to make it comparable with our allocation of 91.4 per cent of NSDP. To arrive at district poverty line figures, we took a weighted average of rural and urban population with the adjusted rural and urban poverty line figures. 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. To use Atkinson's formula and derive adjusted district incomes, we need one

poverty line to compare districts. To enable this, the state poverty line based upon the Planning Commission's adjusted poverty line was used (weighed to rural and urban), and district per capita incomes were calculated on a comparative score by multiplying the factor arrived by state poverty line.

Using Atkinson's methodology (based upon the principles of marginal utility of income above the poverty line), per capita income above the poverty line were adjusted. Adjustments were undertaken to arrive at figures of income that give a comparative strength of districts, not overly distorted by the range of incomes by the districts. The adjusted per capita incomes appear to be brought down and the range of income reduced substantially. However, the adjustment is only for the basis of developing an index, and the reduced range and reduced high and low ensure that the values of index of deprivation are not too skewed against districts with lower per capita incomes.

1.1.3.3 Poverty Index

The scale of poverty is the most important indicator of the welfare of people in the district. Data from IRDP surveys on rural poverty (Development Commissioner, Government of Madhya Pradesh) are available for 1992, and were used for estimating poverty levels in MPHDR 1995. However, these figures are not the best estimate for poverty. The only other reliable source for information on poverty in Madhya Pradesh available was the NSSO survey in 1993-94 that estimated poverty rates by expenditure method for sub-state regions, according to agro-climatic zones. These figures for Madhya Pradesh divided into five zones are now available.

For many of the categories, under which the district domestic product was available, certain measures were available for adjusting incomes to inequalities of distribution. These categories and their adjustment measures are : Agriculture and Animal Husbandry - Gini coefficient of operational holdings. Manufacturing - Registered - distribution of wages and remuneration to employees, workers and net value added. Public Administration - Gini coefficient of wages to Government employees. While the adjustments for different categories estimating distortions in distribution of incomes is a

better measure, we were constrained by lack of adequate measures for all the categories for which incomes are calculated across the 45 districts.

In the absence of such measures, regional estimates of poverty by NSSO in 1993-94³ were used. The rural and urban poverty rates for each agro-climatic zone was assumed to represent the poverty rates for all the districts in that zone. To get estimates of rural and urban poverty in each of the districts within an agro-climatic zone, estimated rural and urban population in 1995/96 was calculated. It was found that the relative per capita agriculture and forest incomes show a high negative correlation to the relative level of rural poverty across the agro-climatic zones. We therefore made an assumption that relative per capita agriculture and forest incomes would best reflect the relative levels of poverty in the districts within an agro-climatic zones, for which rural poverty estimates are available. The value of agriculture and forest output for the districts in each zone was divided by the total agriculture and forest output for the zone as a whole. The dividend was divided by share of the estimated rural population of the district to the estimated rural population for the zone as a whole. The poverty rate (head count ratio) for rural poverty for the entire zone was divided by the resultant dividend and the resultant figure was assumed to represent the rural poverty rate for each district within a zone.

For urban poverty, no single income measure was found significant enough, and we found that zonal urban poverty rates are sensitive to households which do not have access to safe drinking water, electricity and toilet. Similar to the calculation for rural poverty, we took the population in each district without access to all three facilities in the Census in 1991, and, the share of this population to the total such people in an entire zone. Similarly, the share of the estimated urban population in each district was divided by the total estimated urban population for each zone. The dividend from the

first was divided by the dividend from the second, and the result was multiplied with the NSS urban poverty rate (head count ratio).

The total poverty ratio was calculated from the weights of rural and urban poverty in each district. An index of poverty was calculated from these figures, with 0% as the target and 100% as the worst scenario.

Finally, the indices of poverty and income were combined a simple composite index with equal weightage, to arrive at an index of development for income. The three indices of development for health, education and income are then combined in a simple average to get the Human Development Index.

1.1.4 Calculation of HDI for Rajnandgaon

For example, in calculating the Index of Deprivation for literacy of Rajnandgaon:

Target for literacy = 100.0 per cent

Minimum. literacy = 0.0 per cent

Literacy of Rajnandgaon = 58.7 per cent

The calculation is:

$$\frac{100(\text{Target literacy}) - 58.7(\text{Literacy in Rajnandgaon})}{100(\text{Target Literacy}) - 0.0(\text{Minimum Literacy})}$$

Therefore, IOD for Rajnandgaon in literacy = $1 - 0.587 = 0.413$

1.1.5 Gender Development Index

The Gender Related Development Index (GDI) uses the same variable as the HDI. The difference is that the GDI adjusts the average achievement of each district in life expectancy, education attainment and income in accordance with the degree of disparity in achievement between woman and man. It is based on the GDI developed by UNDP, used first in the Human Development Report in 1995.

For the gender sensitive adjustment, we use a weighting formula that express a moderate aversion to inequality, setting the weighting parameter I equal to 2. This is the harmonic mean of the male and the female values. The harmonic mean is calculated by taking the reciprocal of the population weighted arithmetic mean of the female

³ These estimates have been taken from "Counting the Poor", Amaresh Dubey, Subhasis Gangopadhyay. Sarveloshana Analytical Report No I. Department of Statistics, GOI.

⁴ This note has been taken from the Technical Notes describing the methodology for Gender Development Index from the Human Development Report - 1995, Technical notes 1. Computing gender-equity-sensitive indicators, UNDP.

and male achievement levels (which are themselves expressed in reciprocal form). Although this may sound complicated, the basic principle is straight forward. The harmonic mean will be less than the arithmetic mean to the degree that there is disparity between male and female achievement.

1.1.5.1 Longevity

The first step in the calculation of the GDI is to index the variable for life expectancy and education attainment. Although the range for life expectancy is same for the women and men (60 years), the maximum and the minimum values are different. The value (or "fixed goal post") for male life expectancy is 82.5 years and the minimum value is 22.5 years. For female life expectancy the maximum value is 87.5 years and the minimum 22.5 years. The values for women and men are indexed accordingly.

Educational Attainment

The variable for educational attainment is a composite index. It includes adult literacy, with a 2/3 weight, and gross combined primary, secondary and tertiary enrolment with a 1/3 weight. Each of these sub components is indexed separately. Both indices use a maximum value of 100% and a minimum value of 0%. The two indices are added together with the appropriate weights to form the composite index for educational attainment.

1.1.5.2 Incomes

The calculation of the index for the income is more involved. In calculating the female and male shares of earned income, we used two pieces of information: the ratio of the average female wage to the average male wage and the female and male percentage shares of the economically active population aged 15 and above.

The ratio of the average female wage to the average male wage is not available for the state or the districts. The ratio is assumed to be the average ratio for the agricultural sector as well. The ratio of the female to the males was assumed to average to 67% based upon some recently conducted poverty assessment surveys in ten districts of Madhya Pradesh and reports on male and female wages from NGO reports from four other districts of the state⁶.

The ratio is crude proxy for gender income differentials in paid work. These approximations for wages aimed to be improved and assessed for each district, but due to lack of proper information for all districts, the same ratio was applied across the State. Apart from possible under estimating the male-female wage differential, the figure of 67 percent also does not account for the fact that women were more as casual labour and as marginal workers. working for less than 183 days a year. Men on the oilier hand work primarily as main workers (gainfully employed for 183 days or more per year). The ratio of 67 % also does not account for income disparities based on non-labour resources, such as land and physical capital. However, in the absence of better data we use this figure.

The next step in calculating gender disparity in income uses available information on the percentage share of men and women in economically active population aged 15 and above. Because of the lack of data on employment of gender, this procedure makes simplifying assumption that female employment and male employment are proportional to female and male participation in labour force. We have two choices here: one is to take the Workforce Participation Ratio (WPR), which includes main and marginal workers, and the second is to take only main workers, where the ratio of male to female main workers is very high. We choose to take main and marginal workers, for the sake of corresponding to the general WPR terms used to assess participation of people in the workforce. From the ratio of female to male wages we can derive two ratio: the ratio of the female wage to the overall average wage and the ratio of the male wage.

These total ratio are derived from the following definition of the total wage bill (WL):

$$WL = W_f L_f + W_m L_m$$

where W is the average wage and L is the total labour force, and the f subscript denote female, and m subscript denotes male.

Dividing the equation through by $W_m L$, we can solve for W/W_m

5 Social Assessment studies carried out in ten districts under the proposed District Poverty' Initiatives Project

6 This information was derived from NGOs working in Hoshangabad, Durg, Bastar, and Bilaspur.

$$W/W_m = (W_f/W_m) (L_f/L) + (W_m/W_m) (L_m/L)$$

we take the reciprocal of this result to solve for W_m/W . We can now also solve for W_f/W

$$W_f/W = (W_f/W_m) / (W/W_m)$$

a rough estimate of the female share of income can then be derived by multiplying the ratio of the of the average female wage to the overall average wage of the female share of the economically active population. The male share of the income can be calculated in the same way or by subtracting female share from I.

The third step in estimating disparities in the income is to calculate the female and the male share of the population. The adjusted per capita incomes are then discounted on the basis of the gender disparity in proportional income share. In using adjusted per capita incomes (adjusted on Aitkinson's formula and poverty ratio), we are already taking in account the diminishing marginal importance for human development of the additional income above the average world per capita income. Up to this point, the methodology is the same as that used for the human development index.

The discounting for the gender disparity is calculated as follows. We form two proportional income shares by dividing the female and the male shares of income by the female and male shares of the population if there were gender equality, each proportional share would be equal to I. We have apply the gender-equity-sensitive indicators (GESI) methodology of (1-ε) averaging - with equal to 2 in this case-to the two proportional income shares to derive the "equally distributed proportional income share". The more gender inequality there is, the lower this ratio will be related to I. We then multiply the adjusted per capita incomes by the equally distributed proportional income share to derive a measure of per capita income that, in effect, is now discounted for gender inequality. If there were no gender inequality, the ratio would be equal to I and per capita incomes would remain the same. As in the HDI, adjusted per capita income is proxy for access to basic resource necessary for human development. Finally, we index the adjusted per capita incomes with respect to maximum and minimum similar to those used in the HDI.

The last step in the calculating the GDI is to add index for the income that we have just derived to

the indices for life expectancy and the educational attainment and divide by 3. That gives each index a one third weight.

2. Note on Reading Data

This note explains the tables presented. In the preparation of this report, data has been used to state the level of development, and capabilities of people vis-à-vis human development, keeping in mind actual status and development of people. Extensive data has been presented to reflect most facets of human development, while care has been taken that it remains relevant to judging the quality people's lives and their society and living environment.

Human Development (denoted by HD)

HD I is the table on the Human development Index of Madhya Pradesh.

HD 2 gives the Gender related Development Index for all the districts of Madhya Pradesh. Presented for the first time for Madhya Pradesh, it is based on the methodology devised by UNDP's Human Development Reports, and reflects the relative development of females vis-à-vis males in each district, as well as the general level of human development.

Tables on Madhya Pradesh

Some tables have been presented on the state as a whole to give a snapshot picture of the state in terms of areas related to Human Development. The tables are self-explanatory, and contain information on Demography, Land Use, Agriculture, Health, Education, Employment, Infrastructure, Human Development and Gender Development Indices of the states on India, and estimates of Poverty in Madhya Pradesh and India.

District Human Development Profiles

On each of the district, selected information has been provided to give a comprehensive profile of the status of human development and deprivation in the district.

General Tables (denoted by GL)

The general tables give a multi-sectoral view on employment, SC/ ST, literacy access to infrastructure. The general tables are differentiated into rural/ urban and male/ female categories wherever possible.

Table GL I provides with estimates of rural and urban poverty in the districts of Madhya Pradesh, drawn from regional estimates of poverty estimated

by NSSO for 1993/94. These derived estimates are used in the construction of the Human Development Indices presented.

Table GL 2 gives demographic information on the scheduled castes. Taking primary data from the 1991 census, this table shows the share of SCs in population of districts, share of SC amongst the main workers to show disparities if any in between population strength and workers strength. The table also gives the district wise gender ratios and literacy rates. The table has been sorted in descending order of proportion of scheduled caste population to total population in the districts.

Table GL 3 gives demographic information on the scheduled tribes. Taking primary data from the 1991 census, this table shows the share of STs in population of districts, share of ST amongst the main workers to show disparities if any in between population strength and workers strength, and the district wise gender ratios and literacy rates. The table also gives information on the major and minor tribes amongst the STs in the districts. The table has been sorted in descending order of proportion of scheduled tribes population to total population in the districts.

Table GL 4 gives information on the road infrastructure in Madhya Pradesh. The table presents available data on pucca and kutcha roads in districts. Since no clear data is available on villages connected by any type of road, we have attempted other indices to show the extent of road coverage in this table. The table is sorted in descending order of rural roads in kilometres per 100 sq. kms. Area of the districts. Table GL 6 gives statistical information on selected people's institutions of Madhya Pradesh. Since little or no information was accessible of un-registered and informal people's institutions and organisations of people for political and economic rights and direct action, such institutions could not be incorporated into this table. This table attempts to assess the level of organisation of people, recognising that there is little information to assess the actual empowerment of people through participation in popular movements, through NGO and voluntary action, through nascent organisations etc. In place, we take the number of formally organised people's groups in every district, such as co-operatives, societies, development groups, and, separate them

into general bodies and economic, political and other development groups. The table is sorted in ascending order on the basis of the number of people in a district per economic, political or other organised bodies.

Habitat Tables (denoted by HA)

The tables present district-wise information on habitat in both urban and rural areas. The tables also give a comprehensive idea of households with respect to number of rooms, type of house (pucca, kutcha), fuel used and status of houses (rented, vacant) and the type and kind of business premises of various households.

Table HA I presents data on the forest cover and forest types in the districts of Madhya Pradesh comparing the situation in 1993 with 1997. The table is sorted in descending order of per capita forest area for the year 1991.

Table HA 2 provides information on the extent of slums in urban area in terms of population (percentage and density) and area occupied by slums, and towns in the districts. The table is sorted in ascending order of percentage urban population estimated to be residing in slum area. For many of these no specific information is available on slum dwellers, and no information for them has thus been provided.

Table HA 3 categorizes households into those residing in pucca, semi-pucca, kutcha, serviceable kutcha and non- serviceable kutcha houses in the year 1991, based on the household tables released for the 1991 census. These details are given separately for rural and urban areas. The table is sorted by the percentage of kutcha houses to total houses in a district.

Table HA 4 gives the percentage of households using different types of roofing materials. The type of roofing material used points to the quality of shelter afforded by people and the quality of protection from weather and other external elements to dwellers. While census also gives detailed information on types of materials used for flooring and walls in the house, roofing material appears to be the most informative and useful to assess quality of houses people dwell in. The table is sorted in ascending order of houses using grass/ leaves/ reeds/ thatch/ wood/ mud/ un- burnt bricks as roof material. These materials constitute the least strong indicating poor quality of houses.

Table HA 5 categorizes the total number of houses into those houses owned by the residents and houses taken on rented by the residents. The renting of houses in rural areas, exhibits to some extent the precarious nature of security of shelter, and the table is sorted in ascending order of rural houses taken under rent. The table also displays houses by number of people residing in it. This is an indication of over crowding in houses.

Table HA 6 derived from household tables from the 1991 census, gives the average number of persons residing per room in the districts of Madhya Pradesh. The households tables gives elaborate details of number of persons staying in one room, two room upto six room houses. This enabled calculation of distribution of persons per room in districts. From this data, the Gini coefficient of distribution of persons per room could be calculated, which estimates the gravity of deprivation with regard to housing in the state. The table is sorted in ascending order of the Gini coefficient in the districts.

Table HA 7 categorizes the households based upon the number of rooms occupied by them, ranging from no specified room, to upto six rooms per house. The table is sorted in descending order of share of households with six rooms to all households.

Table HA 8 gives the percentage of households with access to electricity, safe drinking water and toilet facilities for the year 1991. The access to safe drinking water, electricity and toilet facilities is one of the most informative and critical tables from the census. The access to these utilities, especially safe drinking water is a very good surrogate for estimating poverty and deprivation. Infact it has been found that across India, there is a high positive correlation between households without access to any of the three facilities and the levels of poverty estimated during the quinquennial surveys of the National Sample Survey Organisation. The table is sorted in ascending order of number of households without access to electricity, safe drinking water or toilet facilities.

Table HA 9 categorizes households by the sources of drinking water used. The census in 1991 categorizes households by access to drinking water from wells, tap water, hand pumps or tubewells, river or canal, tank and other sources. It also indicates the location of the water source so as to

estimate its accessibility. The table also shows households with source of water within the house or outside, indicating ease of access. The table has been sorted on households with tap water as the principle source of water, since tap water is perhaps the safest source of water.

Table HA 10 gives information on extent of institutional provision of safe drinking water to villages. The table presents data from the Public Health Engineering Department of the Government of Madhya Pradesh for villages covered with hand pumps for water. This is related with and the census information of 1991 showing population with access to safe drinking water from hand pumps in 1991, as well as the share of population with access to safe drinking water in 1981 and 1991. This table is sorted in descending order of access of population to safe drinking water in the year 1991 according to census tables.

Table HA 11 gives information on status of ground water and level of ground water exploitation besides giving information on the area under rural water bodies and irrigation reservoirs. The table also gives information on urban population with access to organised water supply. The level of ground water development is an indication of ground water already exploited, and lesser the level, higher is the un-exploited potential. The table is sorted in ascending order of the level of ground water development. Table HA 12 gives information on total, domestic and industrial consumption of electricity for urban and rural areas. The table gives further information on total and per unit electricity consumption for agriculture, street lighting and water works. The table is sorted in descending order of households with access to electricity.

Table HA 13 gives the percentage of households using different fuels for cooking and percentage of households using polluting and smoke emitting fuels. The table is sorted in ascending order of households using polluting fuels.

Employment and Livelihoods Tables (denoted by EL) These tables comprehensively represent the status of livelihood in Madhya Pradesh. The tables can be broadly grouped into two heads: Employment and Agriculture. Wherever possible the tables give rural/ urban and male/ female and SC/ ST break up. The Employment tables present a detailed view of the workforce in MP categorizing them into various

occupations. The Agricultural tables lay special focus on status of agriculture with special reference to developments in agricultural sector. Special grouping of tables related to agriculture can be adequately justified by the importance of agriculture and allied occupations, in the livelihood of the people of MP

Table EL 1 gives the Worker Participation Rate (WPR), percentage of main workers employed in Primary, Secondary and Tertiary sector, and the farm and Non- Farm sectors in 1991. The table besides detailing the percentage of Main Workers employed in different industrial categories also gives the percentage of children employed as main workers as per the 1991 census. This table is sorted on percentage share of children in age group 5-14 years who were working as main or marginal workers according to the 1991 Census.

Table EL 2 gives the Dependency Ratio of the population in 1981 and 1991 along with figures for persons without full employment in the ages between 15 and 59. Dependency ratios are defined as population in age groups below 15 years of age and above 59 years of age (considered the economically un-productive ages) to the population in the age group 15-59 years (considered the economically productive ages). There are no clear district level figures available except number of people seeking or available for work, which is a very small percentage of the population that gives us an idea of level on unemployment or under-employment. However, to get a rough estimate of the extent of under-employment or the demand for work, the table shows the percentage of number of persons without full employment to total population. Persons without full employment is defined as the number of people seeking or available for work, number of male and female marginal workers and the number of male non-workers, to the total population. These figures has been given for all, urban and rural and male and female. This table is sorted in ascending order of the Dependency Ratio in 1991. Table EL 3 gives the land use classification in Madhya Pradesh in the years 1992-93, with a break-up of total geographical area into net area sown, fallow land, cultivable waste land, uncultivable waste land and forest land and land not available for cultivation. It also gives figures on the land that can be brought under cultivation immediately and after some improvement. The total cropped area, the net area

sown along with the cropping intensity has also been given. Table is sorted in descending order of the percentage of net area sown to the total geographic area of the districts.

Table EL 4 this table gives the land use and the land cover statistics in Madhya Pradesh according to the National Remote Sensing Agency (NRSA) imagery (1988-89). The percentages of details of the area under Kharif, Rabi besides giving the double cropped area, net sown area and built up area. The table also gives the area under different forest types. These have been calculated out of the total geographical area so as to make comparison easier. The table is sorted in descending order of the percentage share of total agriculture area to total area of the district.

Table EL 5 lays special focus on the wastelands classifying them into various sub categories according to the National Remote Sensing Agency (NRSA) imagery (1988-89). The table gives comprehensive and reliable data on different categories of wastelands providing credible information for decision-making. The table also gives data on area under rivers, streams, and reservoirs. This table is sorted in ascending order of total wasteland area to total area of the district.

Table EL 6 provides information on the ownership of land by social categories. The Gini-coefficient of ownership of operational holdings for the 1992-93 given in this table is a critical indicator of the levels of inequality in the districts, primarily in rural areas. The information on the tenancy status of operational holdings is from the agriculture and land settlement statistics. The table also gives the share land held by the scheduled castes and the scheduled tribes. The table is sorted in descending order of the Gini-coefficient of operational holdings, i.e. in descending order in the level of equality in land such holdings.

Table EL 7 shows trends in average land holding size since 1981 in five yearly intervals thus giving a comparative picture. It also gives percentage decline in the holdings across a ten-year period between 1981 and 1991. The table is sorted in descending order of the average size of land holdings in 1990-91.

Table EL 8 gives the area, production, yield and per capita availability of food grains for the years 1971 and 1992. The mean annual percentage change has also been calculated for each of these.

This table is sorted in descending order of the per capita production of food grains in kilograms.

Table EL 9 gives net and gross irrigated area. It also gives the number and the area of wholly irrigated holdings, wholly un-irrigated holdings, partly irrigated holdings and holdings receiving irrigation in percentages for the years 1992-93. The table is sorted in descending order of number of holdings receiving irrigation.

Table EL 10 gives the percentage of gross and net irrigated area categorized on the basis of the source of irrigation in the years 1992-93. This gives us an idea about the source of water being used for the purpose of irrigation.

Table EL 11 gives the number and kind of agricultural implements in use for the year 1991-92 and 1992-93. The use of agriculture machinery is an indication of the level of mechanisation in agriculture, and the figures indicate both animal and power driven machines for a comparative picture. This table is sorted in descending order of the number of tractors in the district per 100 operational holdings.

Table EL 12 gives number of buffaloes and other animals disaggregated into sub-categories. It also gives information on the annual milk production and the number of veterinary centres in each district. The table attempts cross comparison across districts on intensity of animals, milch animals and milk production per capita. This table is sorted by number of milch animals per capita of population in descending order per district.

Table EL 13 gives a compact picture of the livelihood profile of Madhya Pradesh. It is a combination of data regarding major and minor occupation for the year 1981 and 1991, the table also lists out occupations with significant decadal growth rates and status of manufacturing. The table also analyses significant rates of growth and decline of various categories.

Education (denoted by ED)

The tables give a district-wise basic understanding of the status of education in Madhya Pradesh, with a special emphasis on female education. Whenever possible, the tables try to bring out the inequality between figures for male and female, rural and urban educational status.

Table ED1 highlights the literacy rates for 1991 which are a more accurate representation of

literacy, since they are calculated by number of literate in 1991 divided by the population in age 7 plus years. This is also termed as the crude Literacy Rate. The gap between male and female literacy and the ratio of male to female literacy shows the relative deprivation of females in literacy to males. The tables are sorted in descending order of the crude literacy rate of 1991.

Table ED 2 gives information on the educational status of population aged 19 years and above. This table suggests the level of education of population in different categories. These include the percentage of illiterates; Education attainment according to literacy received through formal and non-formal channels; and the level of schooling at different levels i.e. primary, middle, secondary, higher secondary, diploma, graduate and above level qualifications. This table is sorted in ascending order of the number of illiterates in 1991.

Table ED 3 gives the extent of deprivation of the population in education in 1991, This is estimated by taking the number of children in the age 7- 14 years who are not attending school, and are thus deprived of education, and illiterates in the age groups 15 years and above, who are deprived of education for life. The total population of children not attending school and illiterates is divided by population aged seven years and above to get the percentage of educationally deprived in districts, rural, urban, males and females. The tables are sorted in ascending order of level of deprivation for the entire district.

Table ED 4 gives retention rates for 1994-1995. Calculated from enrolment figures in different classes, the basic retention rate is the number of children enrolled in class five to those enrolled in class one. Other important indicators of retention, are the number of students in classes eight and ten to students enrolled in class one. To give a better picture, the table also calculated percentages of students enrolled in class eight to class five. The table is sorted in descending order of the retention rate (enrolment in class five to class one).

Table ED 5 gives information on illiteracy. It shows the number of illiterates and illiteracy rate in 1991, of the age group 15-35, 35-50 years, which are the target ages for literacy programmes and the illiterates and illiteracy in the age group 50 years and above. There figures are given separately for all, male and female. The table is sorted in

descending order of illiterates in age group 15-35 years, according to the census of 1991. The number of illiterates rather than the level of illiteracy gives us an indication of the quantum of the problem for decision making in the districts.

Table ED 6 gives information on the educational infrastructure. This includes the number of education institutions, stage wise enrolment of boys and girls and the number of teachers in primary schools, middle schools and high schools by districts in 1996. Total enrolment for boys and girls has also been calculated. Data on number of teachers is used to calculate the teacher pupil ratio. Information is also given on the number of education institutions per 10 square kilometres, to get an idea of the physical access of schools, and estimated population of children in the age group 6-19 years to number of schools to indicate basic provision of education institutions. The table is sorted in descending order of children in age group 6-19 years per education institution.

Health and Nutrition (denoted by HE)

The Health tables give a comprehensive picture of the health scenario in the state through selected health parameters such as Life Expectancy, Infant Mortality Rate (IMR), Crude Birth Rate (CBR), Total Fertility Rate (TFR), Child Mortality Rates (CMR) and access to Health infrastructure. The data is presented district-wise with rural/ urban and male/ female distinctions wherever possible.

Table HE 1 gives details on health infrastructure available in the district such as Community Health Centres (CHC), Primary Health Centres (PHC), Sub- Health Centre (SHC), District Hospitals, T B Hospitals etc. The table gives the percentages of population served by these health institutions along with the number of health personnel working in them. The total number of health centres per 100 sq. kms. is also given in order to indicate the physical accessibility of these. The table is sorted in ascending order of the coverage of primary health centres, denoted by rural population in lakhs covered by one primary health centre in the districts.

Table HE 2 gives the trends in the Total Fertility Rate and Child Mortality Estimates for 1981 and 1991. Besides giving Crude Birth Rate for the period 1976-81 and 1984- 90, the table also gives the TFR and CMR calculated using different methods. The data on estimated figures on child mortality from the census fertility tables form the only reliable district level source for output

indicators in health for mortality and fertility. The table has been sorted in ascending order of the estimates for child Mortality at age 1 year for the year 1991.

Table HE 3 presents indirect estimates for infant mortality rate, child mortality and life expectancy at age zero for different sections of the populations, for 1991, and some comparative Figures for 1981. These are estimates are based on fertility data on total number of children born and surviving of ever married women, given by the Census. Based on these data IMR is calculated using Pearson's method as suggested by Census of India. Mortpak Lite, a United Nation's programme for demography, was used extensive for these figures. While the estimates for infant mortality match well with the 1991 Sample Registration scheme (SRS) estimates, they are subject to modification, due to need to smoothen the population tables. Thus the estimates may get modified, but for the purpose of comparative analysis, and a fairly accurate picture of the status of longevity, the figures are very useful and suffice well. The estimates are also provided for rural and urban and males and females. Estimates of male and female life expectancy were also calculated using the widow techniques. However, the results did not compare well with SRS estimates and hence were dropped. The table also gives information on mean age of childbirth. The table is sorted in descending order of the estimated expectancy of life at birth for the years 1991.

Table HE 4 gives information on the Public Distribution System (PDS) in Madhya Pradesh for the year 1996. The table gives specific information pertaining to the number of Fair Price Shops (FPS) per 100 sq km and per lakh people, number of ration cards, population per ration card. These figures are compared with cereals distributed in 1994/95 per capita through the public distribution system, and cereals distributed per FPS per district. This table is sorted in descending order of Fair Price Shops per 100 square kilometres of area in a district.

Gender Tables (denoted by GE)

The Gender tables give an idea of the social, marital and the motherhood status of women in Madhya Pradesh. Gender tables are categorized district-wise and wherever possible give urban/ rural and SC/ ST differentiation.

Table GE 1 gives details on women currently married in ages 10-19 years based on census fertility tables for the year 1991. It gives the percentage share of married women aged less than 15 years and aged 25-19 years to all women married in the districts. Data on the number of children born per annum per hundred married women is also present in the table. This indirectly indicates one of the reasons for high infant and maternal mortality rates (IMR and MMR) in regions where these figures are high. The details are given for the total as well as for urban and rural women separately. The table is sorted in descending order of the mean age of marriage of women in the districts.

Table GE 2 gives details on Women Ever Married and Children Born per Annum in the districts. Information on married women in different age categories of 15 years and below and 16-19 years is critical for measures directed at fertility and population control. The table is sorted in ascending order of share ever married women aged 15 years and below to ever married women.

Table GE 3 gives the average age of first motherhood and the number of children of the 4th filial order and above born. The table also gives information on married women who are less than 15 years with children. The table also gives +

percentages of children born to women in the age group 40 plus. This table is sorted in ascending order of percentage of births of order four or more children born to mothers to total births in districts in 1991.

Table GE 4 gives details on average number of children born to mothers in the age group 45-49 years according to the fertility tables for the 1991 census. The average children born to this age group is a rough estimate of the number of average children being born to mothers, since births to women aged over 49 years is rare. The table is sorted in ascending order of average children born to mothers aged 45-49 years for the entire district.

Table GE 5 estimates the relative position of women in participation in political participation. There are no state-wide district level direct indicators available to assess women's political participation or empowerment. We use indirect measures, which are based on women representatives in the last three elections to the State Assembly (Vidhan Sabha). The measure for women's success in Vidhan Sabha Elections is measured by giving one third weight to women candidates securing more than 5 % votes to seats in Vidhan Sabha in every district and one third weight to all women candidates. This table is sorted by the index figures for women's participation in legislative assembly in Madhya Pradesh.



HUMAN DEVELOPMENT INDEX

- HD 1 Human Development Index (HDI)
- HD 2 Gender Development Index (GDI)

The section on Human Development presents the Madhya Pradesh Human Development Index (MPHDI) for 45 districts of the state in rank order in Table HD 1. Table HD 2 presents districts in rank order of the Gender Development Index for the districts of the state, for the first time.



HD1: MADHYA PRADESH HUMAN DEVELOPMENT NDEX – 1998

DISTRICT	EDUCATION				HEALTH		
	Literacy	Children's Enrollment In Schools	Education	Education	Life Expectancy	Health	Health
	IOD	IOD	IOD	HDI	IOD	IOD	HDI
INDORE	0.337	0.289	0.321	0.679	0.348	0.348	0.652
DURG	0.413	0.315	0.380	0.620	0.346	0.346	0.654
BHOPAL	0.357	0.347	0.354	0.646	0.337	0.337	0.663
NARHIMHAPUR	0.444	0.445	0.444	0.556	0.414	0.414	0.586
GWALIOR	04.23	0.202	0.349	0.651	0.414	0.414	0.586
BHIND	05.08	0.197	0.404	0.596	0.398	0.398	0.602
DEWAS	0.559	0.494	0.537	0.463	0.323	0.323	0.677
UJJAIN	0.509	0.471	0.496	0.504	0.437	0.437	0.563
RAIPUR	0.519	0.279	0.439	0.561	0.411	0.411	0.589
BILASPUR	0.547	0.340	0.478	0.522	0.386	0.386	0.614
RATLAM	0.558	0.534	0.550	0.450	0.455	0.455	0.545
SEHORE	0.596	0.366	0.519	0.481	0.363	0.363	0.637
HOSHANGABAD	0.475	0.465	0.741	0.529	0.435	0.435	0.637
MANDSAUR	0.513	0.462	0.796	0.504	0.523	0.523	0.477
RAISEN	0.592	0.487	0.557	0.443	0.495	0.495	0.505
DHAR	0.655	0.588	0.633	0.367	0.380	0.380	0.620
CHHINDWARA	0.551	0.504	0.535	0.4656	0.426	0.426	0.574
SHAJAPUR	0.608	0.520	0.579	0.421	0.514	0.514	0.486
BALAGHAT	0.468	0.325	0.420	0.580	0.442	0.442	0.558
JABALPUR	0.409	0.377	0.398	0.602	0.471	0.471	0.529
BASTAR	0.751	0.629	0.710	0.290	0.268	0.268	0.732
RAJNANDAGAON	0.556	0.423	0.512	0.488	0.443	0.443	0.557
RAIGARH	0.588	0.418	0.531	0.469	0.437	0.437	0.563
MORENA	0.587	0.425	0.533	0.467	0.442	0.442	0.558
SEONI	0.555	0.473	0.528	0.472	0.395	0.395	0.605
SIDHI	0.709	0.290	0.569	0.431	0.423	0.423	0.577
DATIA	0.564	0.299	0.476	0.524	0.640	0.640	0.360
SARGUJA	0.699	0.416	0.605	0.395	0.337	0.337	0.663
SAGAR	0.466	0.387	0.439	0.561	0.525	0.525	0.475
VIDISHA	0.559	0.431	0.517	0.483	0.585	0.585	0.415
EAST NIMAR	0.545	0.558	0.550	0.450	0.449	0.449	0.551
GUNA	0.654	0.546	0.618	0.82	0.551	0.551	0.449
RAJGARH	0.682	0.517	0.627	0.373	0.505	0.505	0.495
TILAMGARH	0.652	0.520	0.608	0.392	0.551	0.551	0.449
DAMOH	0.537	0.488	0.521	0.479	0.572	0.572	0.428
REWA	0.556	0.463	0.525	0.475	0.571	0.571	0.429
SHIVPURI	0.670	0.408	0.582	0.418	0.682	0.682	0.318
MANDLA	0.627	0.522	0.592	0.408	0.360	0.360	0.640
SATNA	0.553	0.222	0.443	0.557	0.700	0.700	0.300
CHHATARPUR	0.648	0.511	0.602	0.398	0.571	0.571	0.429
BETUL	0.541	0.448	0.510	0.490	0.508	0.508	0.492
SHAHNOL	0.652	0.603	0.636	0.364	0.500	0.500	0.500
PANNA	0.663	0.517	0.614	0.386	0.591	0.591	0.409
WEST NIMAR	0.640	0.581	0.621	0.379	0.417	0.417	0.583
JHABUA	0.810	0.672	0.764	0.236	0.571	0.571	0.429

IOD: Index of Deprivation

HDI: Human Development Index

HD1: MADHYA PRADESH HUMAN DEVELOPMENT NDEX – 1998

DISTRICT	INCOME				INDEX	
	Adjusted Per capita Income IOD	Poverty Rate IOD	Adjusted Income & Poverty IOD	Income HDI	Index of Deprivation	Human Development Index
INDORE	0.511	0.328	0.419	0.581	0.363	0.637
DURG	0.533	0.282	0.407	0.593	0.378	0.622
BHOPAL	0.587	0.365	0.476	0.524	0.389	0.611
NARHIMHAPUR	0.451	0.228	0.339	0.661	0.399	0.601
GWALIOR	0.676	.3242	0.459	0.541	0.408	0.592
BHIND	0.756	0.215	0.485	0.515	0.429	0.571
DEWAS	0.598	0.265	0.432	0.568	0.431	0.569
UJJAIN	0.545	0.201	0.373	0.627	0.435	0.565
RAIPUR	0.671	0.262	0.466	0.534	0.439	0.561
BILASPUR	0.608	0.333	0.471	0.529	0.445	0.555
RATLAM	0.481	0.191	0.336	0.664	0.447	0.553
SEHORE	0.580	0.340	0.460	0.540	0.447	0.553
HOSHANGABAD	0.492	0.397	0.445	0.555	0.450	0.550
MANDSAUR	0.465	0.239	0.352	0.648	0.457	0.543
RAISEN	0.303	0.341	0.322	0.378	0.458	0.542
DHAR	0.534	0.218	0.376	0.624	0.463	0.537
CHHINDWARA	0.593	0.312	0.453	0.547	0.471	0.529
SHAJAPUR	0.489	0.213	0.351	0.349	0.481	0.519
BALAGHAT	0.725	0.453	0.589	0.411	0.484	0.516
JABALPUR	0.752	0.422	0.587	0.413	0.485	0.515
BASTAR	0.709	0.252	0.480	0.520	0.486	0.514
RAJNANDAGAON	0.732	0.286	0.509	0.491	0.488	0.512
RAIGARH	0.722	0.285	0.504	0.496	0.491	0.509
MORENA	0.796	0.205	0.500	0.500	0.492	0.508
SEONI	0.754	0.368	0.561	0.439	0.495	0.505
SIDHI	0.659	0.364	0.512	0.488	0.501	0.499
DATIA	0.618	0.175	0.396	0.604	0.504	0.496
SARGUJA	0.783	0.365	0.574	0.426	0.505	0.495
SAGAR	0.591	0.517	0.554	0.446	0.506	0.494
VIDISHA	0.569	0.343	0.456	0.544	0.516	0.481
EAST NIMAR	0.635	0.500	0.567	0.433	0.522	0.478
GUNA	0.678	0.181	0.430	0.570	0.533	0.467
RAJGARH	0.699	0.287	0.493	0.507	0.542	0.458
TILAMGARH	0.725	0.213	0.469	0.531	0.543	0.457
DAMOH	0.523	0.553	0.538	0.462	0.544	0.456
REWA	0.807	0.294	0.551	0.449	0.549	0.451
SHIVPURI	0.617	0.161	0.389	0.611	0.551	0.449
MANDLA	0.867	0.537	0.702	0.298	0.551	0.449
SATNA	0.739	0.288	0.514	0.486	0.552	0.448
CHHATARPUR	0.797	0.249	0.526	0.477	0.565	0.435
BETUL	0.704	0.656	0.680	0.320	0.566	0.434
SHAHNOL	0.810	0.334	0.572	0.428	0.569	0.431
PANNA	0.794	0.238	0.516	0.484	0.574	0.426
WEST NIMAR	0.765	0.756	0.761	0.239	0.599	0.401
JHABUA	0.883	0.312	0.597	0.403	0.644	0.356

HD2: Gender related Development Index (GDI) – Madhya Pradesh

District	Life Expectancy in 1991		Index of Development Expectancy of Life		Equally Distributed Health Index	Literacy Rate-1991		Index of Development: Literacy	
	Males	Females	Males	Females	GDI	Males	Females	Male	Females
DURG	62.50	65.00	0.667	0.625	0.646	74.06%	42.78%	0.741	0.428
RAIPUR	60.40	59.80	0.632	0.538	0.582	65.06%	31.04%	0.651	0.310
BALAGHAT	56.20	55.60	0.562	0.468	0.511	67.63%	38.95%	0.676	0.389
RAJNANADGAON	57.00	60.40	0.575	0.548	0.561	61.26%	27.83%	0.613	0.278
BILASPUR	60.10	62.00	0.627	0.575	0.600	62.87%	27.26%	0.629	0.273
SEONI	58.50	58.30	0.600	0.513	0.554	57.50%	31.14%	0.575	0.311
INDORE	66.00	61.90	0.725	0.573	0.644	77.90%	53.35%	0.780	0.533
MANDLA	60.50	61.50	0.633	0.567	0.598	52.20%	22.24%	0.522	0.222
RAIGARH	59.90	61.50	0.623	0.567	0.94	56.03%	26.46%	0.560	0.265
JABALPUR	56.80	59.20	0.572	0.528	0.550	71.88%	45.20%	0.719	0.450
SARGUJA	63.40	63.80	0.682	0.605	0.642	42.13%	17.40%	0.421	0.174
BHOPAL	64.60	65.30	0.702	0.630	0.666	73.14%	54.17%	0.731	0.542
MANDSAUR	57.30	56.80	0.580	0.488	0.531	67.89%	28.32%	0.679	0.283
DHAR	62.20	60.80	0.662	0.555	0.605	47.62%	20.71%	0.476	0.207
CHHINDWARA	58.80	56.00	0.605	0.475	0.534	56.65%	32.52%	0.566	0.325
RATLAM	56.80	59.20	0.572	0.528	0.550	58.36%	29.13%	0.584	0.291
BETUL	52.20	51.70	0.495	0.403	0.445	57.42%	33.90%	0.574	0.339
DEWAS	61.60	58.80	0.652	0.522	0.582	61.15%	25.57%	0.611	0.256
EAST NIMAR	57.60	58.60	0.585	0.518	0.551	58.53%	31.53%	0.585	0.315
SAGAR	54.10	54.70	0.527	0.453	0.490	67.02%	37.78%	0.670	0.378
BASTAR	61.20	62.70	0.645	0.587	0.614	34.51%	15.30%	0.345	0.153
NARMSIMHAPUR	57.90	53.90	0.590	0.440	0.508	68.44%	41.59%	0.684	0.416
WEST NIMAR	58.10	56.20	0.593	0.478	0.531	47.99%	23.23%	0.480	0.232
SIDHI	57.10	56.50	0.625	0.485	0.549	64.25%	32.64%	0.643	0.326
UJJAIN	60.00	56.60	0.625	0.485	0.549	64.25%	32.64%	0.643	0.326
SEHORE	51.80	54.90	0.488	0.457	0.473	56.90%	21.99%	0.569	0.220
GWALIOR	65.50	63.90	0.717	0.607	0.662	70.81%	47.72%	0.708	0.417
HOSHANGABAD	57.30	54.50	0.580	0.450	0.510	65.83%	37.63%	0.658	0.376
SHAJAPUR	56.20	57.70	0.562	0.503	0.532	56.99%	19.77%	0.570	0.198
SATNA	50.10	47.40	0.460	0.332	0.388	60.03%	27.80%	0.600	0.278
DAMOH	52.80	53.60	0.505	0.435	0.469	60.49%	30.46%	0.605	0.305
REWA	53.80	49.90	0.522	0.373	0.438	60.67%	16.88%	0.607	0.269
RAJGARH	61.80	51.40	0.655	0.398	0.500	46.73%	15.62%	0.467	0.156
SHAHDOL	55.00	56.80	0.542	0.488	0.514	48.44%	20.09%	0.484	0.201
DATIA	56.80	52.50	0.572	0.417	0.488	60.18%	23.69%	0.602	0.237
TIKAMGARH	55.40	46.50	0.548	0.317	0.409	47.52%	19.96%	0.475	0.200
VIDISHA	53.90	51.30	0.523	0.397	0.456	58.04%	27.81%	0.580	0.278
RAISEN	52.00	53.70	0.492	0.437	0.464	54.04%	25.47%	0.540	0.255
JHABUA	54.70	48.40	0.537	0.348	0.424	26.29%	11.52%	0.263	0.115
PANNA	53.00	48.80	0.508	0.355	0.422	46.29%	19.41%	0.463	0.194
CHHATARPUR	47.50	41.40	0.417	0.232	0.305	47.50%	15.64%	0.475	0.156
SHIVPURI	60.50	55.54	0.633	0.467	0.546	57.99%	20.81%	0.580	0.208
MORENA	54.20	48.70	0.528	0.353	0.429	48.86%	17.99%	0.489	0.180
GUNA	54.20	48.70	0.528	0.353	0.429	48.86%	17.99%	0.489	0.180
BHIND	62.00	53.30	0.658	0.430	0.532	66.20%	28.20%	0.662	0.282

Source: MPHDRO-Sanket

HD2: Gender related Development Index (GDI) – Madhya Pradesh

District	Enrolment Rate - 1996		Index of Development: School Enrolment		Combined Education Index	Equally Distributed Education Index		Worker Participation Ratio	
	Males	Females	Males	Females	GDI	Males	Females	Male	Females
DURG	77.80%	58.26%	0.779	0.58	0.753	0.479	0.588	50.73%	36.88%
RAIPUR	85.61%	58.55%	0.856	0.59	0.719	0.402	0.517	53.37%	40.88%
BALAGHAT	75.71%	59.21%	0.757	0.59	0.703	0.457	0.554	54.12%	45.46%
RAJNANADGAON	67.19%	47.61%	0.372	0.48	0.632	0.344	0.445	54.87%	43.91%
BILASPUR	81.57%	49.14%	0.816	0.49	0.691	0.346	0.463	51.71%	37.50%
SEONI	62.07%	42.90%	0.621	0.43	0.590	0.351	0.442	54.34%	43.91%
INDORE	90.86%	54.91%	0.909	0.55	0.823	0.539	0.658	50.83%	16.14%
MANDLA	57.38%	37.59%	0.574	0.38	0.539	0.274	0.364	55.37%	46.98%
RAIGARH	79.15%	36.94%	0.792	0.37	0.637	0.300	0.408	49.77%	23.03%
JABALPUR	70.23%	53.43%	0.702	0.53	0.713	0.478	0.578	49.77%	23.03%
SARGUJA	72.21%	43.75%	0.722	0.44	0.522	0.262	0.351	56.73%	37.74%
BHOPAL	69.58%	60.62%	0.696	0.61	0.720	0.563	0.636	48.13%	13.50%
MANDSAUR	66.87%	40.22%	0.669	0.40	0.3675	.323	0.441	54.41%	38.26%
DHAR	49.48%	32.11%	0.495	0.32	0.482	0.245	0.328	52.84%	40.27%
CHHINDWARA	58.44%	40.11%	0.584	0.40	0.572	0.351	0.438	52.28%	34.19%
RATLAM	53.94%	38.62%	0.539	0.39	0.569	0.323	0.415	24.88%	36.62%
BETUL	60.93%	49.39%	0.609	0.49	0.586	0.391	0.471	53.24%	39.84%
DEWAS	58.92%	41.24%	0.289	0.41	0.604	0.308	0.413	50.98%	30.29%
EAST NIMAR	49.87%	37.61%	0.499	0.38	0.556	0.336	0.422	53.05%	33.71%
SAGAR	67.39%	53.93%	0.3674	0.54	0.671	0.4322	0.533	50.38%	26.23%
BASTAR	43.98%	29.99%	0.440	0.30	0.377	0.202	0.263	58.64%	48.67%
NARMSIMHAPUR	59.26%	51.26%	0.593	0.51	0.654	0.448	0.537	52.45%	25.45%
WEST NIMAR	48.14%	35.03%	0.481	0.35	0.480	0.272	0.350	52.39%	39.02%
SIDHI	78.36%	61.48%	0.784	0.61	0.549	0.296	0.390	51.55%	33.77%
UJJAIN	62.78%	42.23%	0.628	0.42	0.638	0.358	0.464	52.39%	26.24%
SEHORE	72.20%	53.62%	0.722	0.54	0.620	0.325	0.434	50.67%	32.38%
GWALIOR	93.66%	61.79%	0.937	0.62	0.781	0.484	0.612	47.48%	11.02%
HOSHANGABAD	56.64%	49.81%	0.566	0.50	0.628	0.417	0.507	50.85%	22.58%
SHAJAPUR	59.16%	34.94%	0.592	0.35	0.577	0.248	0.354	53.79%	34.72%
SATNA	95.09%	58.77%	0.951	0.59	0.717	0.381	0.505	19.88%	29.96%
DAMOH	56.64%	44.52%	0.566	0.45	0.592	0.351	0.447	52.50%	28.17%
REWA	62.74%	43.40%	0.627	0.43	0.614	0.324	0.430	46.36%	28.51%
RAJGARH	61.93%	33.08%	0.619	0.33	0.518	0.214	0.309	54.95%	38.32%
SHAHDOL	50.98%	27.57%	0.510	0.28	0.493	0.226	0.314	53.78%	32.55%
DATIA	82.69%	53.40%	0.827	0.53	0.677	0.336	0.462	50.67%	20.44%
TIKAMGARH	56.83%	37.10%	0.568	0.37	0.506	0.257	0.349	51.28%	33.02%
VIDISHA	65.16%	46.71%	0.652	0.47	0.604	0.341	0.445	52.09%	20.80%
RAISEN	58.80%	42.14%	0.588	0.42	0.556	0.310	0.406	50.91%	21.99%
JHABUA	43.33%	21.80%	0.433	0.22	0.320	0.149	0.205	56.22%	51.80%
PANNA	58.75%	36.04%	0.588	0.36	0.504	0.250	0.341	53.20%	28.67%
CHHATARPUR	55.74%	40.39%	0.557	0.40	0.498	0.277	0.364	51.65%	28.60%
SHIVPURI	72.39%	43.06%	0.724	0.43	0.558	0.248	0.355	52.74%	30.37%
MORENA	73.05%	36.98%	0.730	0.37	0.630	0.262	0.386	47.31%	12.37%
GUNA	54.48%	34.60%	0.545	0.35	0.507	0.235	0.330	51.52%	20.51%
BHIND	0.358%	0.464%	52.39	26.24	0.742	0.408	0.543	46.29%	4.16%

Source: MPHDRO-Sanket

HD2: Gender related Development Index (GDI) – Madhya Pradesh

District	Gender Share of Population Aged 14 + Years		Gender Share of Workers in 14 + Years		Worker Participation Ration +14			Estimated incomes per capita	Average Wage
	Males	Females	Males	Females	All	Males	Females	Male	Females
DURG	50.9%	49.1%	59.3%	40.7%	67.8%	79.1%	56.1%	6345	0.864
RAIPUR	50.0%	50.0%	57.3%	42.7%	72.8%	83.5%	62.2%	5148	0.858
BALAGHAT	50.0%	50.0%	54.7%	45.3%	76.3%	83.4%	69.2%	4676	0.849
RAJNANADGAON	49.1%	50.9%	52.7%	47.3%	79.9%	85.7%	74.3%	4619	0.842
BILASPUR	50.4%	49.6%	59.0%	41.0%	70.7%	82.7%	58.4%	5696	0.863
SEONI	50.8%	49.2%	56.4%	43.6%	76.3%	84.7%	67.5%	4429	0.855
INDORE	53.0%	47.0%	78.0%	22.0%	52.6%	77.5%	24.6%	6531	0.927
MANDLA	49.9%	50.1%	55.0%	45.0%	78.4%	86.5%	70.4%	3456	0.850
RAIGARH	49.9%	50.1%	59.3%	40.7%	72.5%	86.2%	58.9%	4704	0.864
JABALPUR	52.6%	47.4%	70.8%	29.2%	58.0%	77.9%	35.8%	4448	0.903
SARGUJA	51.4%	48.6%	61.8%	38.2%	72.7%	87.4%	57.0%	4180	0.873
BHOPAL	53.5%	46.5%	80.3%	19.7%	49.9%	74.8%	21.1%	5873	0.934
MANDSAUR	51.6%	48.4%	61.0%	39.0%	71.3%	84.4%	57.4%	6926	0.870
DHAR	51.3%	48.7%	58.9%	41.1%	74.5%	85.4%	62.9%	6334	0.863
CHHINDWARA	51.4%	48.6%	62.5%	37.5%	68.0%	82.6%	52.5%	5820	0.875
RATLAM	51.3%	48.7%	62.2%	37.8%	70.1%	85.0%	54.4%	6788	0.874
BETUL	51.1%	48.9%	58.7%	41.3%	73.0%	83.9%	61.7%	4861	0.862
DEWAS	52.0%	48.0%	65.2%	34.8%	66.4%	83.3%	48.1%	5776	0.884
EAST NIMAR	51.4%	48.6%	63.5%	36.5%	69.1%	85.3%	52.0%	5457	0.878
SAGAR	53.7%	46.3%	69.2%	30.8%	64.3%	82.8%	42.8%	5838	0.897
BASTAR	49.8%	50.2%	55.3%	44.7%	80.8%	89.9%	71.8%	4821	0.851
NARMSIMHAPUR	52.6%	47.4%	69.6%	30.4%	62.4%	82.6%	40.1%	7047	0.899
WEST NIMAR	51.3%	48.7%	59.2%	40.8%	73.6%	84.9%	61.6%	4332	0.864
SIDHI	52.5%	47.5%	63.3%	36.7%	71.2%	85.8%	55.0%	5250	0.878
UJJAIN	51.9%	48.1%	68.8%	31.2%	61.5%	81.4%	39.9%	6237	0.896
SEHORE	52.8%	47.2%	64.1%	35.9%	68.6%	83.2%	52.3%	5938	0.880
GWALIOR	54.9%	45.1%	84.1%	15.9%	49.2%	75.3%	17.3%	5102	0.947
HOSHANGABAD	53.2%	46.8%	72.2%	27.8%	59.9%	81.2%	35.7%	6695	0.907
SHAJAPUR	52.0%	48.0%	63.3%	36.7%	69.8%	85.0%	53.4%	6718	0.878
SATNA	52.4%	47.6%	65.1%	34.9%	65.0%	80.8%	47.6%	4559	0.884
DAMOH	52.3%	47.7%	67.8%	32.2%	66.5%	86.2%	44.9%	6429	0.893
REWA	51.7%	48.3%	64.2%	35.8%	62.0%	77.0%	45.9%	3972	0.881
RAJGARH	52.1%	47.9%	61.5%	38.5%	72.6%	85.8%	58.3%	4905	0.872
SHAHNOL	51.9%	48.1%	64.5%	35.5%	68.4%	85.0%	50.5%	3942	0.882
DATIA	54.0%	46.0%	74.9%	25.1%	59.2%	82.1%	32.3%	5609	0.916
TIKAMGARH	53.6%	46.4%	64.3%	35.7%	69.2%	83.1%	53.1%	4680	0.881
VIDISHA	53.7%	46.3%	74.3%	25.7%	61.8%	85.4%	34.3%	6028	0.914
RAISEN	53.5%	46.5%	72.8%	27.2%	62.3%	84.7%	36.4%	8329	0.909
JHABUA	50.5%	49.5%	53.5%	46.5%	84.8%	89.7%	79.7%	3317	0.845
PANNA	53.2%	46.8%	68.0%	32.0%	66.8%	85.4%	45.6%	4084	0.893
CHHATARPUR	54.2%	45.8%	68.2%	31.8%	66.0%	83.2%	45.8%	4056	0.894
SHIVPURI	54.6%	45.4%	67.5%	35.5%	68.5%	84.7%	49.0%	5618	0.892
MORENA	54.7%	45.3%	82.7%	17.3%	52.8%	79.9%	20.1%	4064	0.942
GUNA	53.5%	46.5%	74.5%	25.5%	60.8%	84.7%	33.4%	5083	0.915
BHIND	54.6%	45.4%	93.2%	6.8%	45.1%	79.9%	6.7%	4414	0.977

Source: MPHRO-Sanket

HD 2 : Gender related Development Index (GDI) – Madhya Pradesh

District	Female Wage to Average Wage	Male wage to Average Wage	Share of Earned Incomes		Proportional Income Share		Equally Distributed Income Index	Gender Related Development Index – 1997	Rank
			Female	Male	Female	Male	GDI-Income		
DURG	0.771	1.157	0.314	0.686	0.638	1.30	0.872	0.702	1
RAIPUR	0.777	1.166	0.332	0.668	0.664	1.336	0.887	0.662	2
BALAGHAT	0.785	1.178	0.356	0.644	0.712	1.288	0.917	0.661	3
RAJNANADGAON	0.791	11.87	0.374	0.626	0.736	1.273	0.928	0.645	4
BILASPUR	0.772	1.158	0.317	0.683	0.638	1.355	0.871	0.645	5
SEONI	0.780	1.170	0.340	0.660	0.691	1.300	0.906	0.634	6
INDORE	0.719	1.079	0.158	0.842	0.336	1.589	0.577	0.626	7
MANDLA	0.784	1.176	0.353	0.647	0.704	1.298	0.912	0.625	8
RAIGARH	0.771	1.157	0.314	0.686	0.626	1.376	0.860	0.620	9
JABALPUR	0.739	1.108	0.216	0.784	0.456	1.489	0.718	0.615	10
SARGUJA	0.764	1.146	0.292	0.708	0.600	1.379	0.845	0.613	11
BHOPAL	0.713	1.070	0.140	0.860	0.302	1.606	0.534	0.612	12
MANDSAUR	0.766	1.149	0.299	0.701	0.617	1.359	0.859	0.611	13
DHAR	0.773	1.159	0.318	0.682	0.653	1.329	0.884	0.606	14
CHHINDWARA	0.762	1.143	0.286	0.714	0.589	1.389	0.837	0.603	15
RATLAM	0.763	1.144	0.288	0.712	0.592	1.387	0.839	0.601	16
BETUL	0.773	1.160	0.320	0.680	0.653	1.332	0.883	0.600	17
DEWAS	0.754	1.131	0.263	0.737	0.547	1.419	0.803	0.600	18
EAST NIMAR	0.759	1.139	0.277	0.723	0.571	1.405	0.822	0.598	19
SAGAR	1.743	1.114	0.229	0.771	0.495	1.435	0.763	0.595	20
BASTAR	0.783	1.175	0.350	0.650	0.696	1.307	0.907	0.595	21
NARMSIMHAPUR	0.742	1.113	0.226	0.774	0.476	1.472	0.739	0.595	22
WEST NIMAR	0.772	1.157	0.315	0.685	0.646	1.336	0.879	0.587	23
SIDHI	0.760	1.140	0.279	0.721	0.587	1.373	0.840	0.586	24
UJJAIN	0.744	1.116	0.232	0.768	0.483	1.479	0.743	0.585	25
SEHORE	0.757	1.136	0.272	0.728	0.577	1.378	0.832	0.580	26
GWALIOR	0.704	1.056	0.112	0.888	0.248	1.617	0.464	0.579	27
HOSHANGABAD	0.735	1.102	0.205	0.795	0.438	1.494	0.702	0.573	28
SHAJAPUR	0.760	1.139	0.279	0.721	0.580	1.387	0.832	0.573	29
SATNA	0.754	1.132	0.263	0.737	0.553	1.407	0.810	0.568	30
DAMOH	0.747	1.120	0.241	0.759	0.505	1.452	0.766	0.561	31
REWA	0.757	1.135	0.271	0.729	0.560	1.411	0.814	0.561	32
RAJGARH	0.765	1.147	0.294	0.706	0.614	0.356	0.858	0.556	33
SHAHDOL	0.756	1.134	0.269	0.731	0.559	1.409	0.813	0.547	34
DATIA	0.728	1.091	0.183	0.817	0.397	1.515	0.659	0.537	35
TIKAMGARH	0.757	1.135	0.270	0.730	0.581	1.363	0.839	0.532	36
VIDISHA	0.729	1.094	0.188	0.812	0.405	1.512	0.668	0.523	37
RAISEN	0.733	1.100	0.199	0.801	0.428	1.497	0.693	0.521	38
JHABUA	0.789	1.184	0.367	0.633	0.742	1.253	0.935	0.521	39
PANNA	0.746	1.119	0.239	0.761	0.510	1.431	0.775	0.513	40
CHHATARPUR	0.746	1.119	0.237	0.763	0.517	1.409	0.787	0.503	41
SHIVPURI	0.748	1.121	0.243	0.757	1.535	1.387	0.805	0.488	42
MORENA	0.707	1.061	0.122	0.878	0.269	1.605	0.494	0.475	43
GUNA	0.729	1.093	0.186	0.814	0.400	1.521	0.660	0.473	44
BHIND	0.682	1.023	0.046	0.954	0.102	1.746	0.210	0.428	45

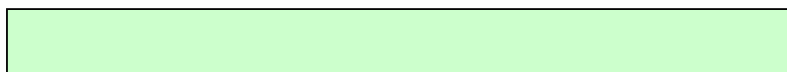
Source : Source: MPHDRO-Sanket



MADHYA PRADESH TABLES

The tables on Madhya Pradesh show some selected indicators related to Human Development of the State. Most State level information is available for recent years since it is drawn from surveys conducted by government and other independent agencies on a periodic basis

The last Table presents the Human Development Index and the Gender Development Index for the larger states of India.



Madhya Pradesh Tables: A Statistical Profile

POPULATION				
CATEGORY		TOTAL	RURAL	URBAN
All	Total	66181170	50842333	15338837
	Male	34267293	26164353	8102940
	Female	31913877	24677980	7235897
SC	Male	5027806	3920123	1107683
	Female	4598873	3602271	996602
ST	Male	7758174	7365693	392481
	Female	7640860	7287037	353823
Population Density		149		
Urbanisation (1981-91)		23.21		

Source: Primary Census Abstract 1991

CHILD AND MOTHER SURVIVAL INDICATORS			
	YEAR	M.P.	INDIA
IMR	1996	97	72
Under Five Mortality Rate	1992-93	130.3	109.3
Receiving breast milk & solid/ mushy food (age 6-9 months)	1992-93	27.7	31.4
Percentage of children receiving ORS or RHS for diarrhea	1992-93	33	30.6
Percentage of children fully immunized	1992-93	29.2	35.4
Neonatal Mortality: Urban	1992	34.8	
Rural		62.3	
Scheduled Castes		64	
Scheduled Tribes		60.2	
Others		54	
Post neonatal Mortality: Urban	1992	23	
Rural		44.4	
Scheduled Castes		45.5	
Scheduled Tribes		41.7	
Others		16.9	

Source : National Family Health Survey; Census 1991; Sample Registration Bulletin, Registrar General of India, New Delhi

BIRTH, RATE, DEATH RATE, NATURAL GROWTH RATE, TOTAL FERTILITY RATE, INFANT MORTALITY RATE 1981-1995														
		1981	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995*	1996*
BIRTH RATE														
Madhya Pradesh	All	37.6	39.4	37.2	36.4	37.0	35.5	37.1	35.8	34.9	34.96	33.0	33.0	32.3
	Rural	38.8	41.0	39.0	37.5	38.4	36.7	38.9	37.3	36.8	35.9	35.2	34.8	34.2
	Urban	31.4	33.0	30.1	31.9	31.2	30.3	29.3	29.7	26.5	24.6	24.4	23.9	23.0
India**	All	33.9	32.9	32.6	32.2	31.5	30.6	30.2	29.5	29.2	28.7	28.7	28.3	27.5
	Rural	35.6	34.3	34.2	33.7	33.1	32.2	31.7	30.9	30.9	30.4	30.5	30.0	29.3
	Urban	27	28.1	27.1	27.4	26.3	25.2	24.7	24.3	23.1	23.7	23.1	22.6	21.6
DEATH RATE														
Madhya Pradesh	All	16.6	14.2	13.6	13.3	14.3	12.9	12.6	13.8	12.9	12.6	11.6	11.1	11.1
	Rural	18.0	15.3	14.8	14.6	15.4	13.9	13.7	14.9	13.9	13.9	12.6	11.8	11.8
	Urban	9.3	9.4	8.8	8.0	9.8	8.6	7.6	9.2	8.5	7.8	7.4	7.7	7.6
India**	All	12.5	11.8	11.1	10.9	11.0	10.3	9.7	9.08	10.1	9.3	9.3	9.0	9.0
	Rural	13.7	13.0	12.2	12.0	12.0	11.1	10.5	10.6	10.9	10.6	10.1	9.7	9.7
	Urban	7.8	7.8	7.6	7.4	7.7	7.2	6.8	7.1	7.0	5.8	6.7	6.5	6.5
NATURAL GROWTH RATE														
Madhya Pradesh	All	21.0	25.2	23.6	23.1	22.7	22.6	24.5	22.0	22.0	22.3	21.4	21.9	n/a
	Rural	20.8	25.7	24.2	22.9	23.0	22.8	25.2	22.4	22.9	22.0	22.6	23.0	n/a
	Urban	22.1	23.6	21.3	23.9	21.4	21.7	21.7	20.5	18.0	16.8	17.0	16.2	n/a
India**	All	21.4	21.1	21.5	21.3	20.5	20.3	20.5	19.7	19.1	19.4	19.4	19.3	n/a
	Rural	21.9	21.3	22.0	21.7	21.1	21.1	21.2	20.3	20.0	19.8	20.4	20.3	n/a
	Urban	19.2	20.3	19.5	20.0	19.6	19.0	17.9	17.2	16.1	17.9	16.4	16.1	n/a
TOTAL FERTILITY RATE														
Madhya Pradesh	All	5.2	4.6	4.9	4.7	4.7	4.7	4.8	4.6	4.4	4.2	n/a	n/a	n/a
	Rural	5.5	5.6	5.4	5.0	5.1	5.1	5.1	4.9	4.7	4.6	n/a	n/a	n/a
	Urban	3.9	4.0	3.5	3.8	3.3	3.2	3.4	3.4	3.0	2.9	n/a	n/a	n/a
India**	All	4.5	4.3	4.2	4.1	4.0	3.9	3.8	3.6	3.6	3.5	n/a	n/a	n/a
	Rural	4.8	4.6	4.5	4.4	4.3	4.2	4.1	3.9	3.9	3.8	n/a	n/a	n/a
	Urban	3.3	3.3	3.1	3.2	3.1	2.8	2.8	2.7	2.6	2.8	n/a	n/a	n/a
INFANT MORTALITY RATE														
Madhya Pradesh	All	142	122	118	120	121	117	111	117	104	106	98	99	97
	Rural	152	131	124	128	128	125	120	125	109	113	105	104	102
	Urban	80	79	82	81	83	78	61	74	74	67	57	61	61
India**	All	110	97	96	95	94	91	80	80	79	74	74	74	72
	Rural	119	107	105	104	102	98	86	87	85	82	80	80	77
	Urban	62	59	62	61	62	58	50	53	53	45	52	49	46

* Estimated figures

** Jammu and Kashmir figures are not including the All India figures for all categories

Source: Sample Registration Bulletin, Part 31, January 1997, New Delhi.

EXPECTATION OF LIFE AT SELECTED AGES, INDIA & MADHYA PRADESH, 1988-1992		
Expectation of life at age (in years)	Madhya Pradesh	India*
0 (at birth)	53.4	58.7
1	59.8	63.0
5	60.3	61.9
10	56.4	57.8
20	47.6	48.7
30	39.0	39.9
40	30.3	31.1
50	22.0	22.7
60	14.7	15.4
70	9.4	9.8

*Excludes Jammu & Kashmir

Source: SRS Based Abridged Life Tables, 1988-92, Registrar of India, New Delhi.

LITERACY RATE BY LOCATION AND SEX: 1991 (LITERATES TO POPULATION 7+)			
Category	All	Rural	Urban
Literacy Rate	44.2	35.9	70.8
Female Literacy	28.8	19.7	58.9
Male Literacy	58.4	51.0	81.3
Gap in Male-Female Literacy	29.6	13.3	22.4
Ration of Male to Female Literacy	2.0	2.6	1.4

Source: M.P. Statistical Book 1995; Provisional Tables.

STATUS OF GENDER			
Category	Year	Madhya Pradesh	India
Female Life Expectancy at Birth	Year	Madhya Pradesh	India
IMR for Child	1991	106	
Child Mortality- Girl Child	1991(age 1-5 years)	64	
Total Fertility Rate	1991	4.6	3.6
Gender Ratio:			
All	1991	931	944
Rural	1991	943	951
Urban	1991	893	925
Scheduled Castes	1991	915	
Scheduled Tribes		985	
Worker Participation Ratio-Female		32.68	22.25
SC Female		35.3	26
ST Female		48.3	43.7
Mean Age of Marriage		17.4	20.0
% of Women Panchayat Representatives as on March 1997			
In Gram Panchayat		37.99	
In Panchayat Samiti		32.11	
In Zilla Parishad		33.44	
% of women Members of Parliament	1996	10.7	

Source: Census Tables, 1991, Madhya Pradesh, National Family Health Survey 1991-92.

DROP OUT RATE 1996-97 (% PER 1000)									
Stage	Total			Scheduled Castes			Scheduled Tribes		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Primary (I-V)	26.00	38.29	31.29	30.35	36.26	32.74	46.93	47.12	47.00
Middle (VI-VIII)	20.00	25.08	21.74	25.72	30.40	27.18	29.58	35.03	31.45
I-VIII	45.91	62.77	53.14	52.78	69.53	53.45	68.46	76.80	71.76

Source Basic Education Statistics for M.P., Directorate of Public Instructions, M.P.

NUMBER OF TEACHERS AND TEACHER PUPIL RATIO (30/09/96)							
Stage	No. Teachers			Teacher pupil ratio	No. of Trained Teachers	Percentage of Trained Teachers	Trained teacher Pupil Ratio
	Male	Female	Total				
Pre-Primary	1317	1730	3101	40	1861	60	66
Primary	152199	59188	211387	43	139515	66	66
Middle	69098	28879	97977	33	65645	67	50
High	17827	5678	23505	31	15983	68	46
HSS	38956	15562	54518	30	41434	76	39
Total	279451	111037	390488	38	261627	67	57

Source: Basic Education Statistic for M.P., Directorate of Public Instructions, M.P.

FEMALE – MALE DISPARITIES			
	YEAR	M.P.	INDIA
Female to male ration (per 1000 population)	1992-93	906	944
Female to male ration (0-60) (per 1000 population)	1991	952	
Female Life Expectancy at Birth (Years)	1989-93	53.8	59.7
Male Life Expectancy at Birth (Years)		54.1	59
Female Literacy Rate (%)	1991	29	39
Male Literacy Rate (%)	1991	28	64
Estimated Maternal Mortality rate (per 1000 live births)	1982-86	535	555

Source: Census 1991: Sample Registration Survey.

		(years)- 1989-93	1991	current prices) – 1990-93	1991-1992	1991-1992
1	Kerala	72.0	90	2,768	0.603	0.565
2	Punjab	66.4	59	11,217	0.529	0.424
3	Maharashtra	64.2	65	9,795	0.523	0.492
4	Haryana	62.9	56	9,037	0.489	0.370
5	Gujarat	60.1	61	8,045	0.467	0.437
6	West Bengal	61.5	58	5,663	0.459	0.399
7	Himachal Pradesh	63.6	64	6,390	0.454	0.432
8	Karnataka	61.9	56	6,331	0.448	0.417
9	Tamil Nadu	62.4	63	6,809	0.438	0.402
10	Andhra Pradesh	60.6	44	5,718	0.400	0.371
11	Assam	54.9	53	4,973	0.379	0.347
12	Orrissa	55.5	49	4,114	0.373	0.329
13	Rajasthan	58.0	39	5,086	0.356	0.309
14	Bihar	58.5	38	3,053	0.354	0.306
15	Madhya Pradesh	54.0	44	4,558	0.349	0.312
16	Uttar Pradesh	55.9	42	4,345	0.348	0.293
	India	*59.4	*52		0.423	0.388

States have been ranked in the descending order of HDI

(*) Excludes Jammu and Kashmir

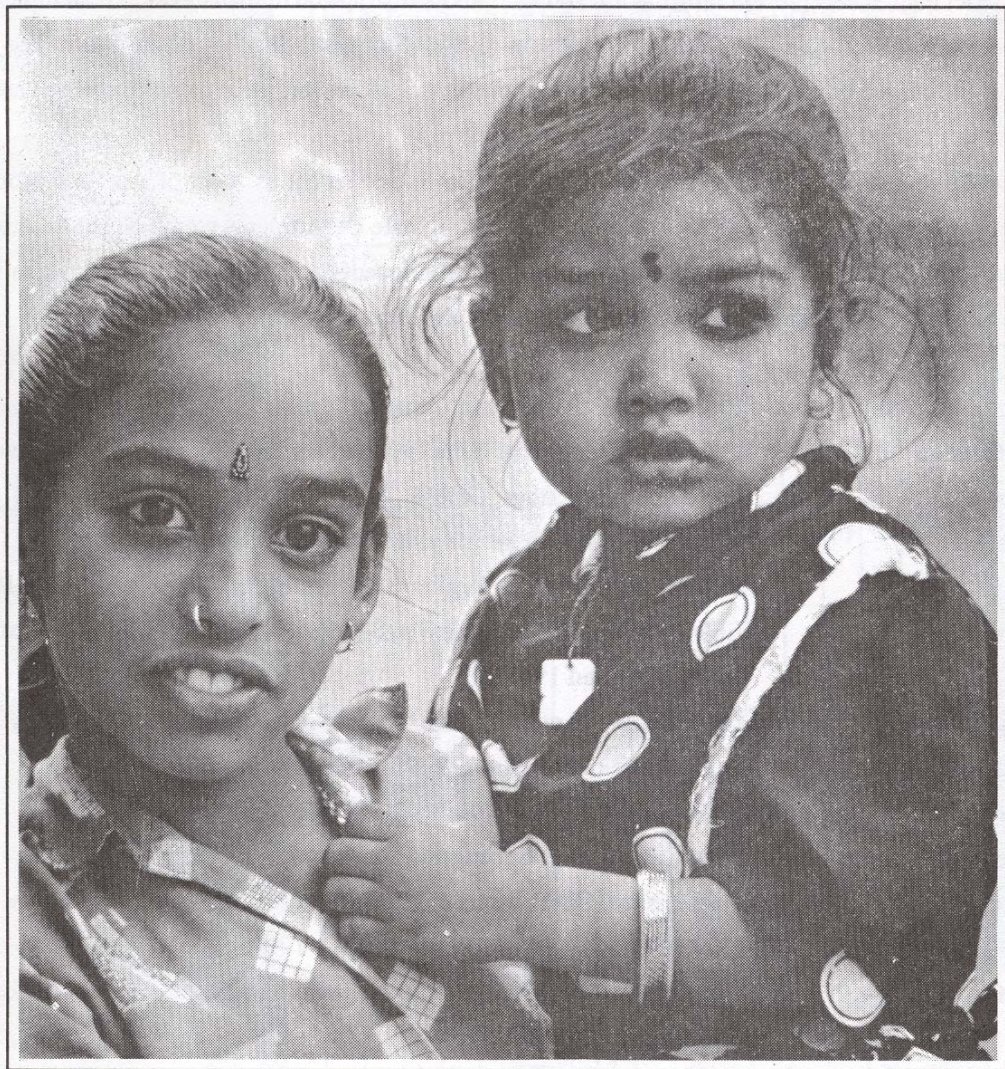
Source: India: The Road to Human Development, India Development Forum, Paris, 23-25 June 1997.

DISTRICT FACT SHEETS

District Fact Sheets present information and facts about districts on human development indicators and other related data. The fact sheets pertain to the 45 original districts of the State. The new districts carved out in the State have not been presented. However, information on which are the districts carved out are presented in the fact sheets.

The data information presented for the districts is not recent as most of its based on the Census conducted last in 1991, or on information from State Departments which is also four to five years old. Unlike State level surveys, there is very little recent survey based information available for Districts. The main sources for the District Fact Sheets are:

Demography	Primary Census Abstract, Census of India, 1991.
Education	C Series and Census of India 1991 and enrolment figures from Directorate of Public Instructions, GOMP
Health	Indicators based on Fertility Tables (F Series) of Census of India 1991, calculated by Office of Registrar General of India and Sanket- MPHRO.
Employment	Economics Table (B Series) And Primary Census Abstract, Census of India, 1981 and 1991.
Agriculture	Directorate of Agriculture & Agriculture Census Commissioner, GOMP
Irrigation	Department of irrigation, & Directorate of Agriculture, GOMP.
Land	Commissioner of Land Records, GOMP
Gender	Fertility Tables (F Series) and Census of India 1991.
Habitat	Data from GOMP, Land Records, Forest department, and Household Tables (HH Series) of Census of India 1991.
Infrastructure	Information from different Department and Directorate of Economics and Statistics, GOMP.



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BALAGHAT

HUMAN DEVELOPMENT INDICES - 1998

Human Development Index (HDI)	0.516
Rank in Madhya Pradesh : HDI	19
Gender Related Development Index (GDI)	0.661
Rank in Madhya Pradesh: GDI	3

POPULATION

	1981	1991
Population	1147810	1365870
Share of Madhya Pradesh	2.20%	2.06%
Urban Population	8.7%	9.5%
Population of Scheduled Castes (SC)	7.2%	8.3%
Population of Scheduled Tribes (ST)	21.8%	21.9%
Decadal Growth : 1981 to 1991(%)	19.0%	
Density of Population (per. sq. kms.)	124%	148%

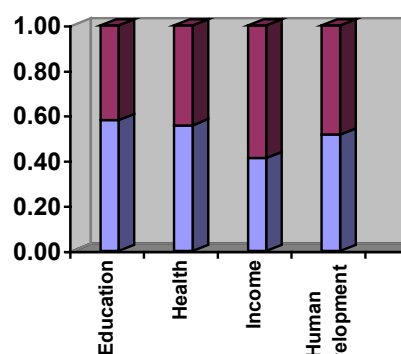
HEALTH

	1981	1991
Infant Mortality Rate	133	110
Life Expectancy (years)	51.3	55.9
	1976-81	1984-90
Crude Birth Rate	34.3	30.8

GENDER

	1981	1991
Life Expectancy of Females at Birth	n/a	55.6
Girl Child Mortality (birth to age 1 year)	n/a	147
Girl Child Mortality(up to age 5 years)	n/a	172
Total Fertility Rate	4.6	3.9
Gender Ratio: All	1006	1002
Rural	1015	1009
Urban	917	937
SC Gender Ratio	n/a	1024
ST Gender Ratio	n/a	1021
Workers Participation Rate - Female	47.0%	45.0%

Graph on Human Development



DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1251
Total Habitations	1910
Towns (Class I to VI)	6

EDUCATION

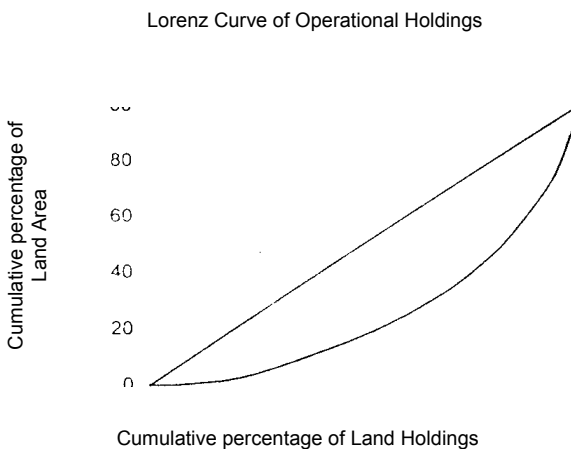
	1981	1991
Literacy:		
Male (%)	57.6%	67.6%
Female (%)	24.9%	38.9%
SC Literacy (%)	n/a	62.8%
ST Literacy (%)	n/a	35.1%
Access to Education		
Habitations with Primary Schools – 1998	10.0%	

BASIC AMENITIES

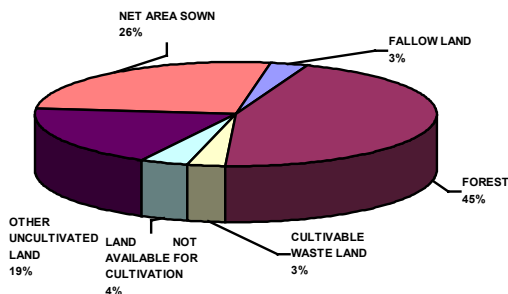
	1991		1991
Children as Main Workers	5.0%	Households Without Access to	
Children as Main Marginal Workers (%)	6.7%	Electricity (%)	70.7%
Child Mortality	167%	Safe Drinking Water (%)	60.1%
Use of Polluting Fuels in Households (%)	1.3%	Toilet Facilities (%)	92.9%
Non-Serviceable Kuchcha Houses	1.02%	All of the Three (%)	40.8%

BALAGHAT	
LAND OWNERSHIP	
Gini Coefficient of Operational Holdings:	0.720

FOOD	
Per Capita Food Production 91991) in kgs.	258.15
FPS/ lakh people (1996)	29.79
PDS Offtake per capita(1994/95) in kgs.	3.74



EMPLOYMENT			
	1991		1991
Worker Participation Rate:			
All	49.8%	Employment Rate of Growth (1981 to 1991)	1.28%
Rural	52.0%	Total Employment in Farm Sector (%)	82.1%
Urban	30.0%	Rural Employment in Non Farm Sector	14.0%
Share of Primary Sector (%)	83.5%	Agriculture Labour (%)	27.5%
Share of Secondary Sector (%)	7.8%	Precarious Employment	34.9%
Share of Tertiary Sector (%)	8.6%		



LAND USE AND AGRICULTURE	1991
Cereals Per Capita(Kg)	243.5
Pulses Per Capita (Kg)	14.6
Oilseeds Per Capita (Kg)	7.2
Average landholding (Ha)	1.5
Irrigated Area ('000 Ha)	120.1
Unirrigated Area ('000 Ha)	157.0
Fertilizer Consumption Per Hectare (Kg)	25.5
Cropping Intensity	128
Per Capita Forest Area (sq. km)	0.300

HABIT			
	1991		1991
Rate of Overcrowding	33.5%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)	27.93	Pucca(%)	7.9
Annual Rate of Afforestation (%)	0.00	Semi-Pucca(%)	89.0
		Kucha(%)	3.8

INFRASTRUCTURE/FACILITIES			
Middle Schools per lakh population (1996)	25.7	Pucca Roads per 100 sq. km (1994)	22.1
High Schools per lakh population (1996)	7.8	Number of Banks (per lakh population) (1996)	5.5706
Primary Health per lakh rural population (1996)	2.7	Villages with Drinking Water Facility – 1996 (%)	99.8
Population Serviced sub Health Center (1996)	4899	Telephone per lakh population (93-94)	309
Electrified Villages (%) (1995-96)	91.3	Population per Post Office (93-94)	6500

BASTAR

HUMAN DEVELOPMENT INDEX

Human Development Index (HDI)	0.514
Rank in Madhya Pradesh : HDI	21
Gender Related Development Index (GDI)	0.595
Rank in Madhya Pradesh: GDI	21

POPULATION

	1981	1991
Population	1842854	2271314
Share of Madhya Pradesh	3.53%	3.43%
Urban Population	6.1%	7.1%
Population of Scheduled Castes (SC)	5.5%	5.9%
Population of Scheduled Tribes (ST)	67.7%	67.4%
Decadal Growth : 1981 to 1991(%)	23.2%	
Density of Population (per. sq. kms.)	47	58

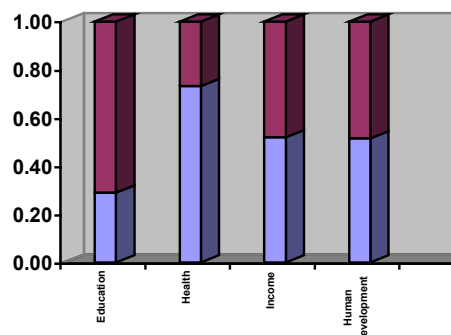
HEALTH

	1981	1991
Infant Mortality Rate	117	83
Life Expectancy (years)	58.1	62.1
	1976-81	1984-90
Crude Birth Rate	34.3	35.4

GENDER

	1981	1991
Life Expectancy of Females at Birth	n/a	62.7
Girl Child Mortality (birth to age 1 year)	n/a	86
Girl Child Mortality(up to age 5 years)	n/a	123
Total Fertility Rate	4.7	4.5
Gender Ratio: All	1002	1002
Rural	1009	1007
Urban	910	938
SC Gender Ratio	n/a	1001
ST Gender Ratio	n/a	1016
Workers Participation Rate - Female	42.0%	49.0%

Graph on Human Development Index



DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	3670
Total Habitations	8622
Towns (Class I to VI)	5
Bastar District has been divided into Bastar, Kanker and Dantewada w.e.f 25 th May 1998.	

EDUCATION

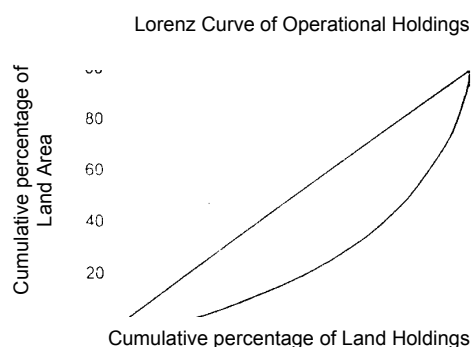
	1981	1991
Literacy:		
Male (%)	25.7%	34.5%
Female (%)	8.7%	15.3%
SC Literacy (%)	n/a	27.8%
ST Literacy (%)	n/a	15.5%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

BASIC AMENITIES

	1991		1991
Children as Main Workers	13.4%	Households Without Access to	
Children as Main Marginal Workers (%)	17.7%	Electricity (%)	75.7%
Child Mortality	129	Safe Drinking Water (%)	49.0%
Use of Polluting Fuels in Households (%)	0.9%	Toilet Facilities (%)	93.6%
Non-Serviceable Kuchcha Houses	4.44%	All of the Three (%)	39.7%

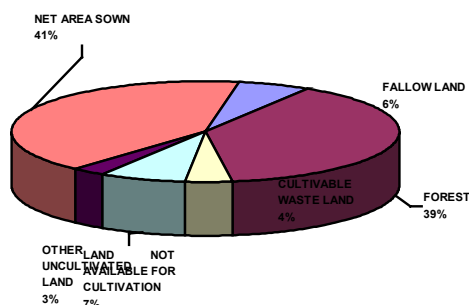
BASTAR

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings:	0.572



FOOD	
Per Capita Food Production 91991) in kgs.	300.93
FPS/ lakh people (1996)	34.44
PDS Offtake per capita(1994/95) in kgs.	12.89

EMPLOYMENT			
	1991		1991
Worker Participation Rate:			
All	53.6%	Employment Rate of Growth (1981 to 1991)	2.08%
Rural	55.0%	Total Employment in Farm Sector (%)	89.0%
Urban	31.0%	Rural Employment in Non Farm Sector	7.5%
Share of Primary Sector (%)	89.5%	Agriculture Labour (%)	14.7%
Share of Secondary Sector (%)	3.2%	Precarious Employment	16.1%
Share of Tertiary Sector (%)	7.2%		



LAND USE AND AGRICULTURE	1991
Cereals Per Capita(Kg)	289.0
Pulses Per Capita (Kg)	11.9
Oilseeds Per Capita (Kg)	6.6
Average landholding (Ha)	3.3
Irrigated Area ('000 Ha)	21.5
Unirrigated Area ('000 Ha)	843.9
Fertilizer Consumption Per Hectare (Kg)	5.2
Cropping Intensity	103
Per Capita Forest Area (sq. km)	0.950

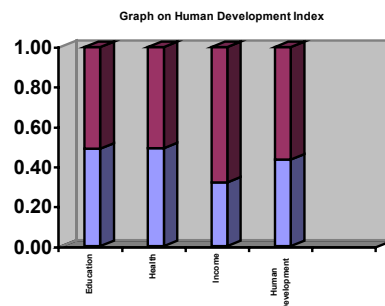
HABIT			
	1991		1991
Rate of Overcrowding	12.8%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)	10.09	Pucca(%)	7.4
Annual Rate of Afforestation (%)	0.00	Semi-Pucca(%)	71.3
		Kucha(%)	21.3

INFRASTRUCTURE/FACILITIES			
Middle Schools per lakh population (1996)	27.2	Pucca Roads per 100 sq. km (1994)	7.8
High Schools per lakh population (1996)	6.7	Number of Banks (per lakh population) (1996)	5.6711
Primary Health per lakh rural population (1996)	5.5	Villages with Drinking Water Facility – 1996 (%)	98.2%
Population Serviced sub Health Center (1996)	3414	Telephone per lakh population (93-94)	223
Electrified Villages (%) (1995-96)	79.9%	Population per Post Office (93-94)	4176

BETUL

HUMAN DEVELOPMENT INDICES - 1998

Human Development Index (HDI)	0.434
Rank in Madhya Pradesh : HDI	41
Gender Related Development Index (GDI)	0.600
Rank in Madhya Pradesh: GDI	17



POPULATION

	1981	1991
Population	925387	1181501
Share of Madhya Pradesh	1.77%	1.79%
Urban Population	15.3%	18.6%
Population of Scheduled Castes (SC)	10.5%	10.8%
Population of Scheduled Tribes (ST)	36.2%	37.5%
Decadal Growth : 1981 to 1991(%)	27.7%	
Density of Population (per. sq. kms.)	92	118

HEALTH

	1981	1991
Infant Mortality Rate	148	128
Life Expectancy (years)	48.6	51.9
	1976-81	1984-90
Crude Birth Rate	40.7	118

GENDER

	1981	1991
Life Expectancy of Females at Birth	n/a	51.7
Girl Child Mortality (birth to age 1 year)	n/a	141
Girl Child Mortality(up to age 5 years)	n/a	181
Total Fertility Rate	6.0	5.3
Gender Ratio: All	973	966
Rural	996	981
Urban	855	903
SC Gender Ratio	n/a	950
ST Gender Ratio	n/a	1002
Workers Participation Rate - Female	40.2%	40.0%

DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1324
Total Habitations	1724
Towns (Class I to VI)	6

EDUCATION

	1981	1991
Literacy:		
Male (%)	47.4%	57.4%
Female (%)	21.3%	33.9%
SC Literacy (%)	n/a	53.3%
ST Literacy (%)	n/a	17.2%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

BASIC AMENITIES

	1991		1991
Children as Main Workers	11.2%	Households Without Access to	
Children as Main Marginal Workers (%)	13.8%	Electricity (%)	53.2%
Child Mortality	180	Safe Drinking Water (%)	40.4%
Use of Polluting Fuels in Households (%)	8.6%	Toilet Facilities (%)	86.9%
Non-Serviceable Kuchcha Houses	1.86%	All of the Three (%)	24.0%

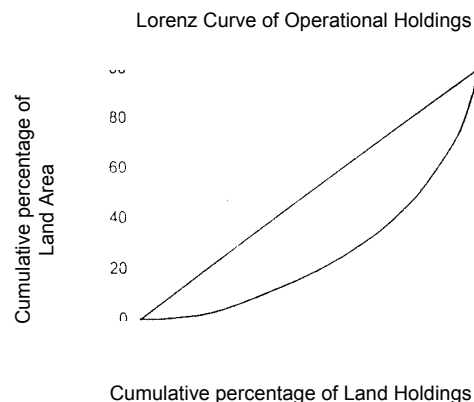
BETUL

LAND OWNERSHIP

Gini Coefficient of Operational Holdings:	0.544
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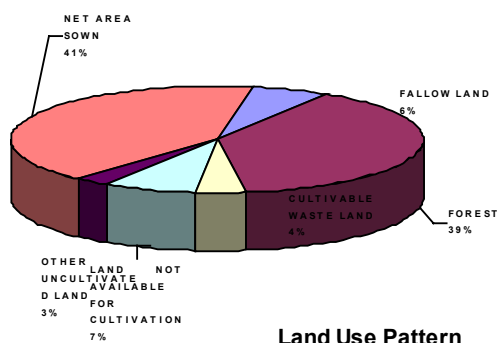
FOOD

Per Capita Food Production 91991) in kgs.	193.57
FPS/ lakh people (1996)	38.68
PDS Offtake per capita(1994/95) in kgs.	13.66



EMPLOYMENT

EMPLOYMENT			
	1991		1991
Worker Participation Rate:			
All	46.7%	Employment Rate of Growth (1981 to 1991)	2.20%
Rural	51.0%	Total Employment in Farm Sector (%)	82.5%
Urban	27.0%	Rural Employment in Non Farm Sector	9.0%
Share of Primary Sector (%)	84.8%	Agriculture Labour (%)	24.2%
Share of Secondary Sector (%)	4.7%	Precarious Employment	28.4%
Share of Tertiary Sector (%)	10.5%		



LAND USE AND AGRICULTURE

	1991
Cereals Per Capita(Kg)	167.8
Pulses Per Capita (Kg)	25.8
Oilseeds Per Capita (Kg)	118.4
Average landholding (Ha)	3.4
Irrigated Area ('000 Ha)	73.3
Unirrigated Area ('000 Ha)	341.2
Fertilizer Consumption Per Hectare (Kg)	20.2
Cropping Intensity	119
Per Capita Forest Area (sq. km)	0.340

HABITAT

	1991		1991
Rate of Overcrowding	31.2%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)		Pucca(%)	22.3
Annual Rate of Afforestation (%)	0.000	Semi-Pucca(%)	73.2
		Kucha(%)	4.4

INFRASTRUCTURE/FACILITIES

	1991		1991
Middle Schools per lakh population (1996)	30.6	Pucca Roads per 100 sq. km (1994)	12.9
High Schools per lakh population (1996)	11.5	Number of Banks (per lakh population) (1996)	50186
Primary Health per lakh rural population (1996)	3.2	Villages with Drinking Water Facility – 1996 (%)	99.7%
Population Serviced sub Health Center (1996)	4420	Telephone per lakh population (93-94)	377
Electrified Villages (%) (1995-96)	100.0%	Population per Post Office (93-94)	5769

BHIND

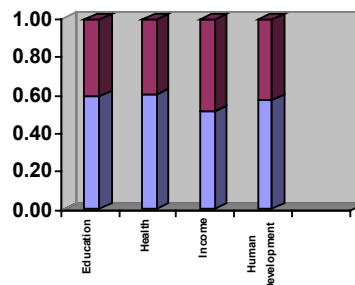
HUMAN DEVELOPMENT INDICES - 1998	
Human Development Index (HDI)	0.571
Rank in Madhya Pradesh : HDI	6
Gender Related Development Index (GDI)	0.428
Rank in Madhya Pradesh: GDI	45

POPULATION	1981	1991
Population	973816	129000
Share of Madhya Pradesh	1.87%	1.84%
Urban Population	17.1%	20.6%
Population of Scheduled Castes (SC)	21.2%	21.3%
Population of Scheduled Tribes (ST)	0.1%	1.0%
Decadal Growth : 1981 to 1991(%)	25.2%	
Density of Population (per. sq. kms.)	218	273

HEALTH	1981	1991
Infant Mortality Rate	139	102
Life Expectancy (years)	50.3	57.7
	1976-81	1984-90
Crude Birth Rate	40.2	37.4

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	53.3
Girl Child Mortality (birth to age 1 year)	n/a	113
Girl Child Mortality(up to age 5 years)	n/a	185
Total Fertility Rate	6.1	5.6
Gender Ratio: All	827	816
Rural	829	813
Urban	820	827
SC Gender Ratio	n/a	796
ST Gender Ratio	n/a	822
Workers Participation Rate - Female	2.7%	4.0%

Graph on Human Development Index



DISTRICT INFORMATION	
Total Inhabited Villages (in 1991)	876
Total Habitations	1601
Towns (Class I to VI)	11

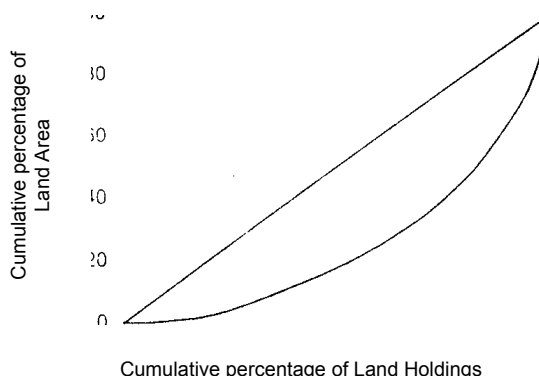
EDUCATION	1981	1991
Literacy:		
Male (%)	55.8%	66.2%
Female (%)	18.2%	28.2%
SC Literacy (%)	n/a	38.6%
ST Literacy (%)	n/a	32.0%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

BASIC AMENITIES			
	1991		1991
Children as Main Workers	1.5%	Households Without Access to	
Children as Main Marginal Workers (%)	1.7%	Electricity (%)	65.1%
Child Mortality	149	Safe Drinking Water (%)	63.1%
Use of Polluting Fuels in Households (%)	1.1%	Toilet Facilities (%)	88.4%
Non-Serviceable Kuchcha Houses	0.40%	All of the Three (%)	45.8%

BHIND

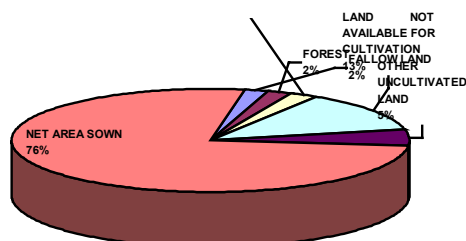
Lorenz Curve of Operational Holdings

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings:	0.514



FOOD	
Per Capita Food Production (1991) in kgs.	318.70
FPS/ lakh people (1996)	27.92
PDS Offtake per capita(1994/95) in kgs.	0.19

EMPLOYMENT			
	1991		1991
Worker Participation Rate:			
All	27.4%	Employment Rate of Growth (1981 to 1991)	2.14%
Rural	28.0%	Total Employment in Farm Sector (%)	79.8%
Urban	25.0%	Rural Employment in Non Farm Sector	10.8%
Share of Primary Sector (%)	79.9%	Agriculture Labour (%)	12.6%
Share of Secondary Sector (%)	4.3%	Precarious Employment	13.9%
Share of Tertiary Sector (%)	15.8%		



LAND USE AND AGRICULTURE	
Cereals Per Capita(Kg)	249
Pulses Per Capita (Kg)	69
Oilseeds Per Capita (Kg)	43
Average landholding (Ha)	2
Irrigated Area ('000 Ha)	99
Unirrigated Area ('000 Ha)	236
Fertilizer Consumption Per Hectare (Kg)	37
Cropping Intensity	10
Per Capita Forest Area (sq. km)	0.00

Land Use Pattern

HABIT			
	1991		1991
Rate of Overcrowding	26.1%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)	28.52	Pucca(%)	52
Annual Rate of Afforestation (%)	0.00	Semi-Pucca(%)	27
		Kucha(%)	20

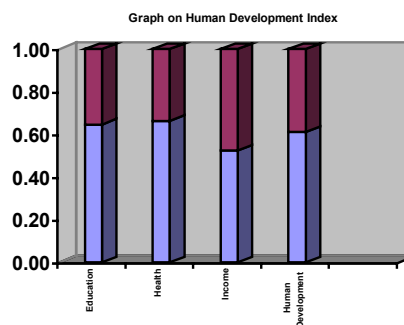
INFRASTRUCTURE/FACILITIES			
	1991		1991
Middle Schools per lakh population (1996)	44.6	Pucca Roads per 100 sq. km (1994)	24
High Schools per lakh population (1996)	17.5	Number of Banks (per lakh population) (1996)	4.472
Primary Health per lakh rural population (1996)	1.9	Villages with Drinking Water Facility – 1996 (%)	98.6%
Population Served sub Health Center (1996)	5696	Telephone per lakh population (93-94)	30
Electrified Villages (%) (1995-96)	98.8%	Population per Post Office (93-94)	503

HUMAN DEVELOPMENT INDICES - 1998	
Human Development Index (HDI)	0.611
Rank in Madhya Pradesh : HDI	3
Gender Related Development Index (GDI)	0.612
Rank in Madhya Pradesh: GDI	12

POPULATION	1981	1991
Population	894739	1351479
Share of Madhya Pradesh	1.71%	2.04%
Urban Population	76.2%	80.0%
Population of Scheduled Castes (SC)	12.6%	13.8%
Population of Scheduled Tribes (ST)	2.3%	3.0%
Decadal Growth : 1981 to 1991(%)	51.0%	
Density of Population (per. sq. kms.)	323	488

HEALTH	1981	1991
Infant Mortality Rate	91	70
Life Expectancy (years)	59.1	65.0
	1976-81	1984-90
Crude Birth Rate	39.6	38.6

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	65.3
Girl Child Mortality (birth to age 1 year)	n/a	98
Girl Child Mortality(up to age 5 years)	n/a	107
Total Fertility Rate	5.1	4.8
Gender Ratio: All	874	889
Rural	886	873
Urban	870	894
SC Gender Ratio	n/a	895
ST Gender Ratio	n/a	887
Workers Participation Rate – Female	12.0%	14.0%



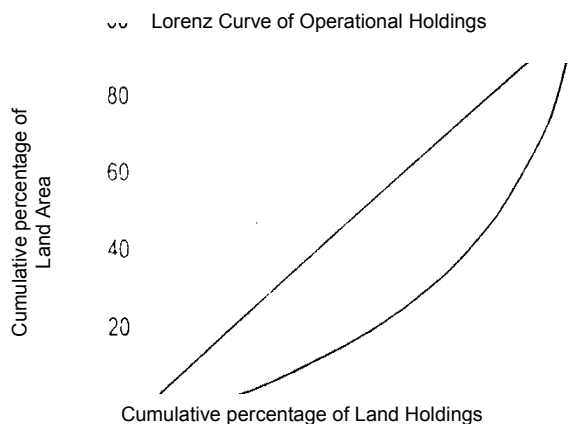
DISTRICT INFORMATION	
Total Inhabited Villages (in 1991)	512
Total Habitations	546
Towns (Class I to VI)	2

EDUCATION	1981	1991
Literacy:		
Male (%)	66.5%	73.1%
Female (%)	45.4%	54.2%
SC Literacy (%)	n/a	43.7%
ST Literacy (%)	n/a	44.4%
Access to Education		
Habitations with Primary Schools – 1998		100.0%

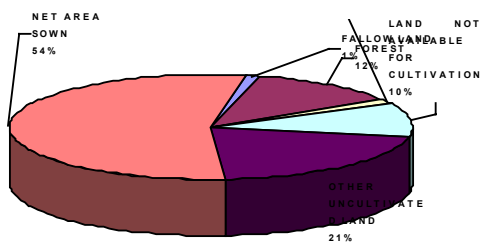
BASIC AMENITIES			
	1991		1991
Children as Main Workers	1.8%	Households Without Access to	
Children as Main Marginal Workers (%)	2.5%	Electricity (%)	21.5%
Child Mortality	105	Safe Drinking Water (%)	10.9%
Use of Polluting Fuels in Households (%)	30.0%	Toilet Facilities (%)	41.7%
Non-Serviceable Kuchcha Houses	3.11%	All of the Three (%)	4.5%

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings:	0.517

FOOD	
Per Capita Food Production (1991) in kgs.	108.99
FPS/ lakh people (1996)	21.19
PDS Offtake per capita(1994/95) in kgs.	1.36



EMPLOYMENT			
	1991		1991
Worker Participation Rate:			
All	31.8%	Employment Rate of Growth (1981 to 1991)	4.11%
Rural	43.0%	Total Employment in Farm Sector (%)	24.5%
Urban	29.0%	Rural Employment in Non Farm Sector	13.5%
Share of Primary Sector (%)	24.9%	Agriculture Labour (%)	9.2%
Share of Secondary Sector (%)	24.5%	Precarious Employment	10.4%
Share of Tertiary Sector (%)	50.6%		



Land Use Pattern

LAND USE AND AGRICULTURE	
Cereals Per Capita(Kg)	86
Pulses Per Capita (Kg)	22
Oilseeds Per Capita (Kg)	26
Average landholding (Ha)	3
Irrigated Area ('000 Ha)	30
Unirrigated Area ('000 Ha)	127
Fertilizer Consumption Per Hectare (Kg)	32
Cropping Intensity	12
Per Capita Forest Area (sq. km)	0.0

HABITAT			
	1991		1991
Rate of Overcrowding	36.4%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)	6.22	Pucca(%)	58
Annual Rate of Afforestation (%)	-0.01	Semi-Pucca(%)	33
		Kucha(%)	8

INFRASTRUCTURE/FACILITIES			
	1991		1991
Middle Schools per lakh population (1996)	35.3	Pucca Roads per 100 sq. km (1994)	30
High Schools per lakh population (1996)	13.5	Number of Banks (per lakh population) (1996)	9.33
Primary Health per lakh rural population (1996)	2.9	Villages with Drinking Water Facility – 1996 (%)	100.0
Population Serviced sub Health Center (1996)	5173	Telephone per lakh population (93-94)	258
Electrified Villages (%) (1995-96)	99.6%	Population per Post Office (93-94)	115

BILASPUR

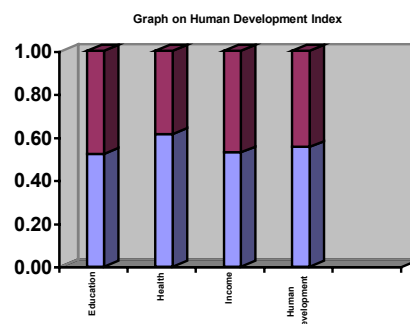
HUMAN DEVELOPMENT INDICES - 1998

Human Development Index (HDI)	0.555
Rank in Madhya Pradesh : HDI	10
Gender Related Development Index (GDI)	0.645
Rank in Madhya Pradesh: GDI	5

POPULATION	1981	1991
Population	2953366	3793566
Share of Madhya Pradesh	5.66%	5.73%
Urban Population	1.8%	17.0%
Population of Scheduled Castes (SC)	17.3%	18.1%
Population of Scheduled Tribes (ST)	23.4%	23.0%
Decadal Growth : 1981 to 1991(%)	28.4%	
Density of Population (per. sq. kms.)	148	191

HEALTH	1981	1991
Infant Mortality Rate	133	87
Life Expectancy (years)	51.4	61.0
	1976-81	1984-90
Crude Birth Rate	34.1	35.3

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	62.0
Girl Child Mortality (birth to age 1 year)	n/a	91
Girl Child Mortality(up to age 5 years)	n/a	118
Total Fertility Rate	4.7	4.7
Gender Ratio: All	993	978
Rural	1006	990
Urban	915	922
SC Gender Ratio	n/a	973
ST Gender Ratio	n/a	1003
Workers Participation Rate - Female	37.2%	37.0%



DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	3511
Total Habitations	4806
Towns (Class I to VI)	26
Bilaspur District has been divided into Bilaspur, Korba and Janjgir Champa w.e.f. 25 th May1998.	

EDUCATION

	1981	1991
Literacy:		
Male (%)	52.2%	62.9%
Female (%)	17.4%	27.3%
SC Literacy (%)	n/a	39.6%
ST Literacy (%)	n/a	29.9%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

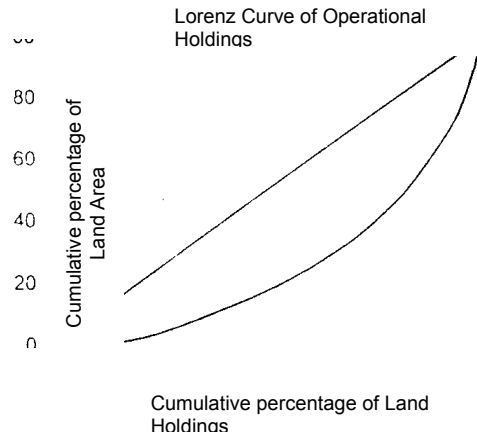
BASIC AMENITIES

	1991		1991
Children as Main Workers	4.7%	Households Without Access to	
Children as Main Marginal Workers (%)	6.5%	Electricity (%)	69.7%
Child Mortality	123	Safe Drinking Water (%)	46.4%
Use of Polluting Fuels in Households (%)	731%	Toilet Facilities (%)	87.5%
Non-Serviceable Kuchcha Houses	0.33%	All of the Three (%)	34.8%

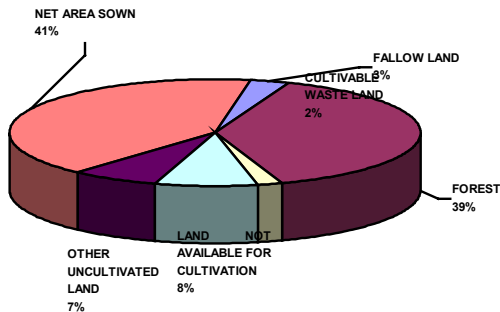
BILASPUR

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings:	0.600

FOOD	
Per Capita Food Production (1991) in kgs.	5984
FPS/ lakh people (1996)	28.66
PDS Offtake per capita(1994/95) in kgs.	5.00



EMPLOYMENT			
	1991		1991
Worker Participation Rate:			
All	44.7%	Employment Rate of Growth (1981 to 1991)	2.07%
Rural	48.0%	Total Employment in Farm Sector (%)	81.1%
Urban	30.0%	Rural Employment in Non Farm Sector	10.9%
Share of Primary Sector (%)	82.4%	Agriculture Labour (%)	24.6%
Share of Secondary Sector (%)	5.8%	Precarious Employment	27.3%
Share of Tertiary Sector (%)	11.8%		



LAND USE AND AGRICULTURE	1991
Cereals Per Capita(Kg)	26.4
Pulses Per Capita (Kg)	33.4
Oilseeds Per Capita (Kg)	3.5
Average landholding (Ha)	1.4
Irrigated Area ('000 Ha)	222.1
Unirrigated Area ('000 Ha)	606.1
Fertilizer Consumption Per Hectare (Kg)	29.8
Cropping Intensity	124
Per Capita Forest Area (sq. km)	0.210

HABITAT			
	1991		1991
Rate of Overcrowding	29.1%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)	14.25	Pucca(%)	24.3
Annual Rate of Afforestation (%)	0.000	Semi-Pucca(%)	73.3
		Kucha(%)	2.5

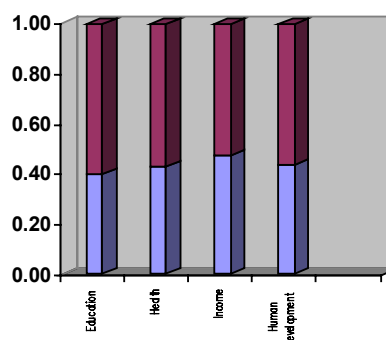
INFRASTRUCTURE/FACILITIES			
	1991		1991
Middle Schools per lakh population (1996)	19.5	Pucca Roads per 100 sq. km (1994)	20.8
High Schools per lakh population (1996)	6.7	Number of Banks (per lakh population) (1996)	5.0704
Primary Health per lakh rural population (1996)	3.1	Villages with Drinking Water Facility – (1996 (%))	99.6%
Population Served sub Health Center (1996)	5159	Telephone per lakh population (93-94)	427
Electrified Villages (%) (1995-96)	93.1%	Population per Post Office (93-94)	6195

CHHATARPUR

HUMAN DEVELOPMENT INDICES - 1998

Human Development Index (HDI)	0.435
Rank in Madhya Pradesh : HDI	40
Gender Related Development Index (GDI)	0.503
Rank in Madhya Pradesh: GDI	41

Graph on Human Development Index



POPULATION

	1981	1991
Population	886660	1158076
Share of Madhya Pradesh	1.70%	1.75%
Urban Population	15.6%	19.3%
Population of Scheduled Castes (SC)	22.9%	23.7%
Population of Scheduled Tribes (ST)	3.0%	3.8%
Decadal Growth : 1981 to 1991(%)	30.6%	
Density of Population (per. sq. kms.)	102	133

HEALTH

	1981	1991
Infant Mortality Rate	175	150
Life Expectancy (years)	44.0	47.3
	1976-81	1984-90
Crude Birth Rate	42.2	36.8

GENDER

	1981	1991
Life Expectancy of Females at Birth	n/a	44.4
Girl Child Mortality (birth to age 1 year)	n/a	149
Girl Child Mortality(up to age 5 years)	n/a	227
Total Fertility Rate	6.8	5.6
Gender Ratio: All	864	856
Rural	866	855
Urban	854	862
SC Gender Ratio	n/a	854
ST Gender Ratio	n/a	916
Workers Participation Rate - Female	22.7%	29.0%

DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1077
Total Habitations	1549
Towns (Class I to VI)	14

EDUCATION

	1981	1991
Literacy:		
Male (%)	36.0%	46.9%
Female (%)	12.9%	21.3%
SC Literacy (%)	n/a	21.3%
ST Literacy (%)	n/a	9.5%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

BASIC AMENITIES

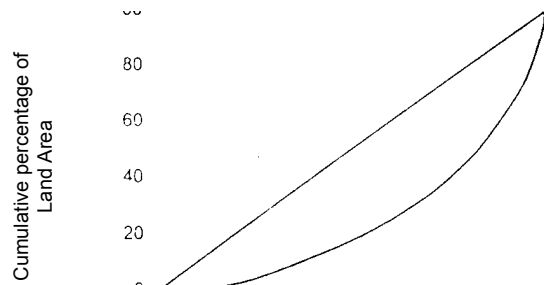
	1991		1991
Children as Main Workers	5.5%	Households Without Access to	
Children as Main Marginal Workers (%)	8.5%	Electricity (%)	68.3%
Child Mortality	199	Safe Drinking Water (%)	77.3%
Use of Polluting Fuels in Households (%)	0.9%	Toilet Facilities (%)	91.3%
Non-Serviceable Kuchcha Houses	0.22%	All of the Three (%)	55.5%

Lorenz Curve of Operational Holdings

CHHATA

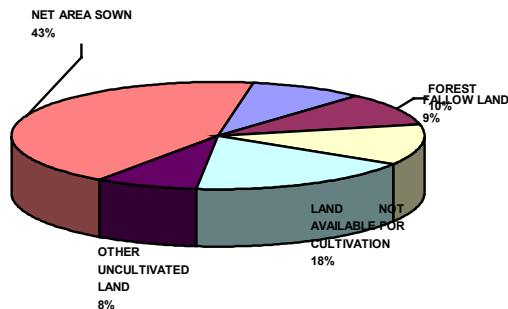
LAND OWNERSHIP	
Gini Coefficient of Operational Holdings:	0.511

FOOD	
Per Capita Food Production 91991) in kgs.	268.64
FPS/ lakh people (1996)	45.09
PDS Offtake per capita(1994/95) in kgs.	1.36



Cumulative percentage of Land Holdings

EMPLOYMENT			
	1991		1991
Worker Participation Rate:			
All	41.0%	Employment Rate of Growth (1981 to 1991)	2.55%
Rural	44.0%	Total Employment in Farm Sector (%)	82.5%
Urban	30.0%	Rural Employment in Non Farm Sector	10.0%
Share of Primary Sector (%)	82.6%	Agriculture Labour (%)	20.5%
Share of Secondary Sector (%)	6.0%	Precarious Employment	25.8%
Share of Tertiary Sector (%)	11.5%		



Land Use Pattern

LAND USE AND AGRICULTURE	1991
Cereals Per Capita(Kg)	205.9
Pulses Per Capita (Kg)	62.8
Oilseeds Per Capita (Kg)	15.6
Average landholding (Ha)	2.6
Irrigated Area ('000 Ha)	107.3
Unirrigated Area ('000 Ha)	248.6
Fertilizer Consumption Per Hectare (Kg)	22.0
Cropping Intensity	119
Per Capita Forest Area (sq. km)	0.170

HABIT			
	1991		1991
Rate of Overcrowding	27.0%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)	13.90%	Pucca(%)	30.6
Annual Rate of Afforestation (%)	0.00	Semi-Pucca(%)	68.8
		Kucha(%)	0.6

INFRASTRUCTURE/FACILITIES			
	1991		1991
Middle Schools per lakh population (1996)	23.1	Pucca Roads per 100 sq. km (1994)	16.8
High Schools per lakh population (1996)	9.7	Number of Banks (per lakh population) (1996)	5.2134
Primary Health per lakh rural population (1996)	4.1	Villages with Drinking Water Facility – 1996 (%)	100.0%
Population Serviced sub Health Center (1996)	5801	Telephone per lakh population (93-94)	331
Electrified Villages (%) (1995-96)	98.2%	Population per Post Office (93-94)	5532

CHHINDWARA

HUMAN DEVELOPMENT INDICES - 1998

Human Development Index (HDI)	0.529
Rank in Madhya Pradesh : HDI	17
Gender Related Development Index (GDI)	0.603
Rank in Madhya Pradesh: GDI	15

POPULATION

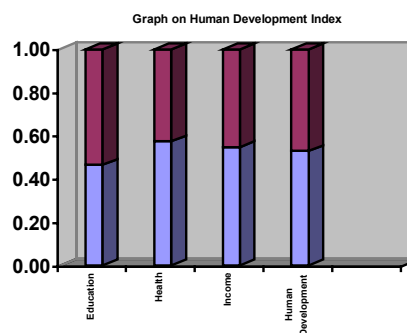
	1981	1991
Population	1233131	1568702
Share of Madhya Pradesh	2.36%	2.37
Urban Population	21.2%	23.1%
Population of Scheduled Castes (SC)	11.8%	12.2%
Population of Scheduled Tribes (ST)	33.4%	34.5%
Decadal Growth : 1981 to 1991(%)	27.2%	
Density of Population (per. sq. kms.)	104	133

HEALTH

	1981	1991
Infant Mortality Rate	131	103
Life Expectancy (years)	51.7	57.4
	1979-81	1984-90
Crude Birth Rate	35.6	37.7

GENDER

	1981	1991
Life Expectancy of Females at Birth	n/a	56.0
Girl Child Mortality (birth to age 1 year)	n/a	116
Girl Child Mortality(up to age 5 years)	n/a	137
Total Fertility Rate	5.2	5.2
Gender Ratio: All	965	953
Rural	984	967
Urban	899	906
SC Gender Ratio	n/a	930
ST Gender Ratio	n/a	998
Workers Participation Rate - Female	32.0%	34.0%



DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1904
Total Habitations	2431
Towns (Class I to VI)	22

EDUCATION

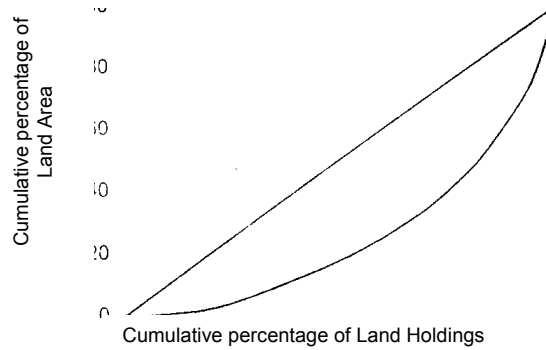
	1981	1991
Literacy:		
Male (%)	47.3%	56.6%
Female (%)	21.3%	32.5%
SC Literacy (%)	n/a	50.5%
ST Literacy (%)	n/a	21.3%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

BASIC AMENITIES

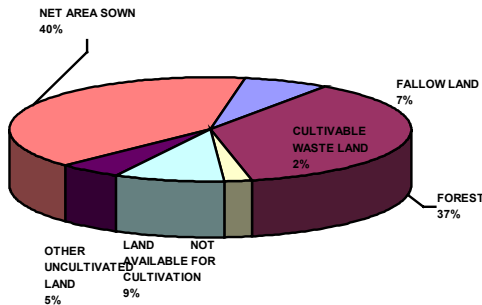
	1991		1991
Children as Main Workers	7.9%	Households Without Access to	
Children as Main Marginal Workers (%)	10.5%	Electricity (%)	33.7%
Child Mortality	142	Safe Drinking Water (%)	43.1%
Use of Polluting Fuels in Households (%)	15.0%	Toilet Facilities (%)	85.9%
Non-Serviceable Kuchcha Houses	1.66%	All of the Three (%)	18.4%

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings:	0.518

FOOD	
Per Capita Food Production (1991) in kgs.	320.20
FPS/ lakh people (1996)	29.93
PDS Offtake per capita(1994/95) in kgs.	5.40



EMPLOYMENT			
	1991		1991
Worker Participation Rate:			
All	43.5%	Employment Rate of Growth (1981 to 1991)	1.86%
Rural	48.0%	Total Employment in Farm Sector (%)	76.8%
Urban	28.0%	Rural Employment in Non Farm Sector	12.0%
Share of Primary Sector (%)	81.3%	Agriculture Labour (%)	25.9%
Share of Secondary Sector (%)	5.4%	Precarious Employment	33.0%
Share of Tertiary Sector (%)	13.4%		



Land Use Pattern

LAND USE AND AGRICULTURE	1991
Cereals Per Capita(Kg)	260.1
Pulses Per Capita (Kg)	60.1
Oilseeds Per Capita (Kg)	106.4
Average landholding (Ha)	3.0
Irrigated Area ('000 Ha)	72.5
Unirrigated Area ('000 Ha)	422.2
Fertilizer Consumption Per Hectare (Kg)	23.0
Cropping Intensity	114
Per Capita Forest Area (sq. km)	0.280

HABITAT			
	1991		1991
Rate of Overcrowding	30.0%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)	25.52	Pucca(%)	20.9
Annual Rate of Afforestation (%)	0.00	Semi-Pucca(%)	73.9
		Kucha(%)	5.2

INFRASTRUCTURE/FACILITIES			
	1991		1991
Middle Schools per lakh population (1996)	23.3	Pucca Roads per 100 sq. km (1994)	12.7
High Schools per lakh population (1996)	8.3	Number of Banks (per lakh population) (1996)	5.8214
Primary Health per lakh rural population (1996)	5.1	Villages with Drinking Water Facility – 1996 (%)	99.2%
Population Serviced sub Health Center (1996)	4571	Telephone per lakh population (93-94)	459
Electrified Villages (%) (1995-96)	99.3%	Population per Post Office (93-94)	6313

DAMOH

HUMAN DEVELOPMENT INDICES – 1998

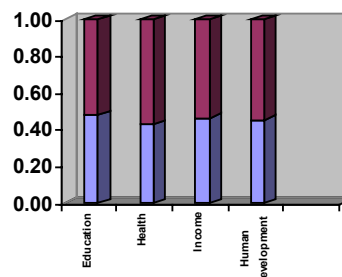
Human Development Index (HDI)	0.456
Rank in Madhya Pradesh : HDI	35
Gender Related Development Index (GDI)	0.561
Rank in Madhya Pradesh GDI	31

POPULATION	1981	1991
Population:	721453	898125
Share of Madhya Pradesh Population	1.38%	1.36%
Urban Population	14.4%	18.1%
Population of Scheduled Castes (SC)	20.5%	20.1%
Population of Scheduled Tribes (ST)	12.0%	12.4%
Decadal Growth: 1981 to 1991 (%)	24.5%	
Density of Population (per sq. kms.)	99	123

HEALTH	1981	1991
Infant Mortality Rate	173	123
Life Expectancy (year)	44.4	53.1
	1976-81	1984-90
Crude Birth Date	42.9	38.1

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	53.6
Girl Child Mortality (birth to age 1 year)	n/a	139
Girl Child Mortality (up to age 5 years)	n/a	173
Total Fertility Rate	6.2	5.1
Gender Ratio: All	925	905
Rural	931	908
Urban	894	895
SC Gender Ratio	n/a	885
ST Gender Ratio	n/a	951
Workers Participation Rate - Female	25.7%	28.0%

Graph on Human Development Index



DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1207
Total Habitations	1253
Towns (Class I to IV)	5

EDUCATION

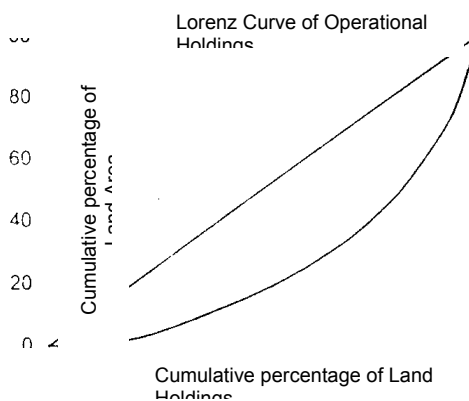
	1981	1991
Literacy:		
Male (%)	53.2%	60.5%
Female (%)	20.6%	30.5%
SC Literacy (%)	n/a	32.9%
ST Literacy (%)	n/a	21.9%
Access to Education		
Habitations with Primary Schools - 1998	100.0%	

BASIC AMENITIES

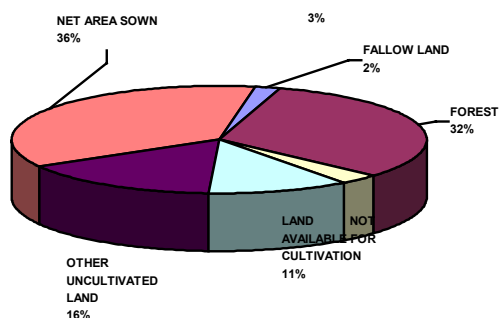
	1991	1993	
Children as Main Workers(%)	4.9%	Households Without Access to	
Children as Main & Marginal Workers (%)	6.4%	Electricity (%)	63.9%
Child Mortality	194	Safe Drinking Water (%)	61.6%
Use of Polluting fuels in Households (%)	0.9%	Toilet Facilities (%)	89.9%
Non-Serviceable Kuchcha Houses	0.62%	All of the Three (%)	43.7%

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings :	0.585

FOOD	
Per Capita Food Production (1991) in kgs.	238.16
FPS/lakh people (1996)	42.54
PDS Offtake per capita (1994/65) in kgs.	1.21



EMPLOYMENT			
	1991		1991
Worker Participation Rate :			
All	40.9%	Employment Rate of Growth (1981 to 1991)	2.50%
Rural	43.0%	Total Employment in Farm Sector (%)	63.7%
Urban	32.0%	Rural Employment in Non Farm Sector (%)	27.3%
Share of Primary Sector (%)	63.8%	Agriculture Labour (%)	26.1%
Share of Secondary Sector (%)	24.0%	Precarious Employment	42.4%
Share of Tertiary Sector (%)	12.1%		



Cereals Per Capita (Kg)	175.
Pulses Per Capita (Kg)	62.
Oilseeds per Capita (Kg)	17.
Average Landholding (Ha)	2.
Irrigated Area ('000 Ha)	34.
Unirrigated Area ('000 Ha)	251.
Fertilizer Consumption Per Hectare (Kg)	16.
Cropping Intensity	11.
Per Capita Forest Area (in sq. kms.)	0.34

[Land Use Pattern

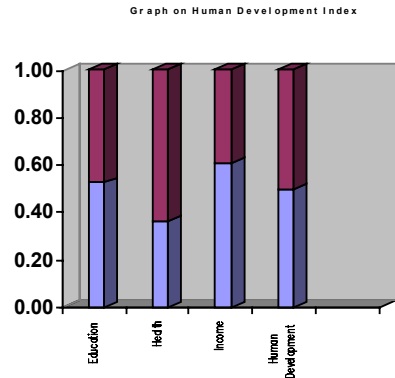
HABITAT			
	1991		1991
Rate of Overcrowding (%)	43.3%	Number of Houses Occupied :	
Population of Towns residing in Slums	--	Pucca (%)	59.
Annual Rate of A forestation (%)	0.00	Semi-Pucca (%)	39.
		Kutchra (%)	1.

INFRASTRUCUTRE/ FACILITIES			
Middle Schools per lakh population (1996)	19.7	Pucca Roads per 100 sq. km. (1994)	17.
High Schools per lakh population (1996)	6.4	Number of Banks (per lakh population) (1996)	6.087
Primary Health Centre per lakh rural population (1996)	1.9	Villages with Drinking Water Facility – 1996 (%)	96.9%
Population Service Sub Health Centre (1996)	4952	Telephone per lakh population (93-94)	26
Electrified Villages (%) (1995-96)	89.7%	Population per Post Office (93-94)	591

DATIA

HUMAN DEVELOPMENT INDICES - 1998

Human Development Index (HDI)	0.496
Rank in Madhya Pradesh : HDI	27
Gender Related Development Index (GDI)	0.537
Rank in Madhya Pradesh GDI	35



POPULATION	1981	1991
Population:	311893	396317
Share of Madhya Pradesh Population	0.60%	0.60%
Urban Population	19.6%	22.4%
Population of Scheduled Castes (SC)	24.6%	24.7%
Population of Scheduled Tribes (ST)	1.4%	1.7%
Decadal Growth: 1981 to 1991 (%)	27.1%	
Density of Population (per sq. kms.)	153	194

HEALTH	1981	1991
Infant Mortality Rate	176	115
Life Expectancy (year)	43.8	54.7
	1976-81	1984-90
Crude Birth Date	40.0	36.0

DISTRICT INFORMATION	
Total Inhabited Villages (in 1991)	403
Total Habitations	426
Towns (Class I to IV)	3

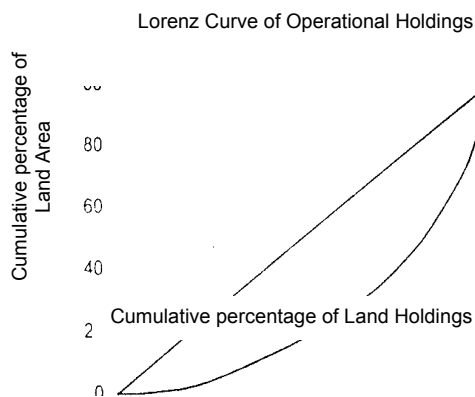
GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	52.5
Girl Child Mortality (birth to age 1 year)	n/a	141
Girl Child Mortality (up to age 5 years)	n/a	213
Total Fertility Rate	6.1	5.1
Gender Ratio: All	853	847
Rural	848	840
Urban	876	873
SC Gender Ratio	n/a	837
ST Gender Ratio	n/a	869
Workers Participation Rate - Female	11.6%	20.0%

EDUCATION	1981	1991
Literacy :		
Male (%)	50.4%	60.2%
Female (%)	15.1%	23.7%
SC Literacy (%)	n/a	33.1%
ST Literacy (%)	n/a	13.1%
Access to Education		
Habitations with Primary Schools - 1998	100.0%	

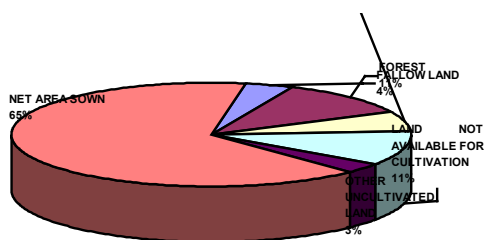
BASIC AMENITIES			
	1991		1993
Children as Main Workers(%)	2.9%	Households Without Access to	
Children as Main & Marginal Workers (%)	4.8%	Electricity (%)	47.8%
Child Mortality	178	Safe Drinking Water (%)	42.9%
Use of Polluting fuels in Households (%)	2.4%	Toilet Facilities (%)	83.6%
Non-Serviceable Kuchcha Houses	0.10%	All of the Three (%)	24.2%

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings :	0.517

FOOD	
Per Capita Food Production (1991) in kgs.	339.88
FPS/lakh people (1996)	29.94
PDS Offtake per capita (1994/65) in kgs.	0.54



EMPLOYMENT			
	1991		1991
Worker Participation Rate :			
All	36.8%	Employment Rate of Growth (1981 to 1991)	2.74%
Rural	40.0%	Total Employment in Farm Sector (%)	77.0%
Urban	27.0%	Rural Employment in Non Farm Sector (%)	10.5%
Share of Primary Sector (%)	77.1%	Agriculture Labour (%)	13.0%
Share of Secondary Sector (%)	6.4%	Precarious Employment	18.8%
Share of Tertiary Sector (%)	16.5%		



Land Use Pattern

LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	233.
Pulses Per Capita (Kg)	106.
Oilseeds per Capita (Kg)	18.2
Average Landholding (Ha)	2.8
Irrigated Area ('000 Ha)	42.2
Unirrigated Area ('000 Ha)	91.2
Fertilizer Consumption Per Hectare (Kg)	32.5
Cropping Intensity	106
Per Capita Forest Area (in sq. kms.)	0.070

HABITAT			
	1991		1991
Rate of Overcrowding (%)	15.6%	Number of Houses Occupied :	
Population of Towns residing in Slums (%)	--	Pucca (%)	60.
Annual Rate of Afforestation (%)	0.00	Semi-Pucca (%)	39.
		Kutcha (%)	0.

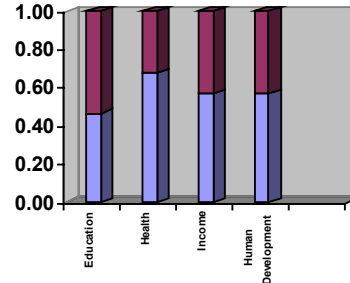
INFRASTRUCUTRE FACILITIES			
Middle Schools per lakh population (1996)	32.7	Pucca Roads per 100 sq. km. (1994)	25.
High Schools per lakh population (1996)	11.2	Number of Banks (per lakh population) (1996)	6.939
Primary Health Centre per lakh rural population (1996)	2.6	Villages with Drinking Water Facility – 1996 (%)	100.0%
Population Serviced Sub Health Centre (1996)	5865	Telephone per lakh population (93-94)	364
Electrified Villages (%) (1995-96)	98.5%	Population per Post Office (93-94)	4265

DEWAS

HUMAN DEVELOPMENT INDICES – 1998

Human Development Index (HDI)	0.569
Rank in Madhya Pradesh : HDI	7
Gender Related Development Index (GDI)	0.600
Rank in Madhya Pradesh GDI	18

Graph on Human Development Index



POPULATION	1981	1991
Population:	795309	1033807
Share of Madhya Pradesh Population	1.52%	1.56%
Urban Population	18.7%	25.9%
Population of Scheduled Castes (SC)	18.2%	18.2%
Population of Scheduled Tribes (ST)	13.8%	15.0%
Decadal Growth: 1981 to 1991 (%)	30.0%	
Density of Population (per sq. kms.)	113	147

HEALTH	1981	1991
Infant Mortality Rate	121	90
Life Expectancy (year)	53.6	60.2
	1976-81	1984-90
Crude Birth Date	37.8	35.9

DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1067
Total Habitations	1104
Towns (Class I to IV)	11

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	58.8
Girl Child Mortality (birth to age 1 year)	n/a	102
Girl Child Mortality (up to age 5 years)	n/a	139
Total Fertility Rate	5.5	4.9
Gender Ratio: All	929	924
Rural	936	933
Urban	897	899
SC Gender Ratio	n/a	921
ST Gender Ratio	n/a	962
Workers Participation Rate - Female	31.2%	30.0%

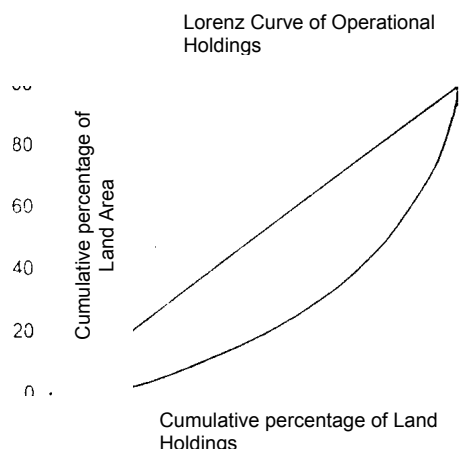
EDUCATION	1981	1991
Literacy :		
Male (%)	49.4%	61.1%
Female (%)	15.7%	25.6%
SC Literacy (%)	n/a	30.3%
ST Literacy (%)	n/a	15.5%
Access to Education		
Habitations with Primary Schools - 1998	100.0%	

BASIC AMENITIES

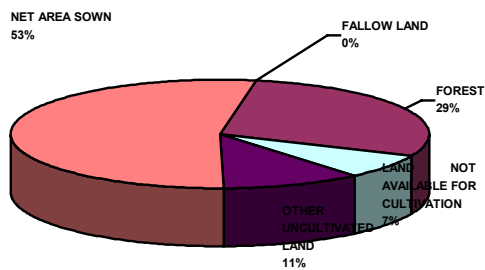
	1991		1993
Children as Main Workers(%)	4.8%	Households Without Access to	
Children as Main & Marginal Workers (%)	6.2%	Electricity (%)	35.0%
Child Mortality	129	Safe Drinking Water (%)	34.9%
Use of Polluting fuels in Households (%)	7.1%	Toilet Facilities (%)	79.7%
Non-Serviceable Kuchcha Houses	4.28%	All of the Three (%)	15.3%

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings :	0.535

FOOD	
Per Capita Food Production (1991) in kgs.	286.80
FPS/lakh people (1996)	30.68
PDS Offtake per capita (1994/65) in kgs.	1.45



EMPLOYMENT			
	1991		1991
Worker Participation Rate :			
All	41.0%	Employment Rate of Growth (1981 to 1991)	2.53%
Rural	45.0%	Total Employment in Farm Sector (%)	76.5%
Urban	31.0%	Rural Employment in Non Farm Sector (%)	10.4%
Share of Primary Sector (%)	76.6%	Agriculture Labour (%)	31.8%
Share of Secondary Sector (%)	10.3%	Precarious Employment	34.8%
Share of Tertiary Sector (%)	13.2%		



Land Use Pattern

LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	236.5
Pulses Per Capita (Kg)	50.3
Oilseeds per Capita (Kg)	145.5
Average Landholding (Ha)	4.6
Irrigated Area ('000 Ha)	96.5
Unirrigated Area ('000 Ha)	264.9
Fertilizer Consumption Per Hectare (Kg)	42.4
Cropping Intensity	122
Per Capita Forest Area (in sq. kms.)	0.240

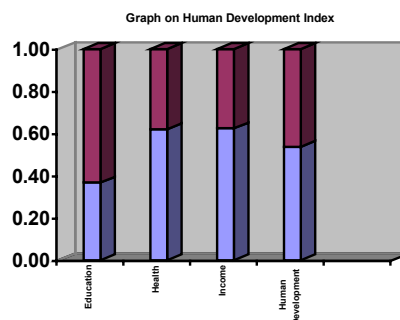
HABITAT				
	1991		1991	
Rate of Overcrowding (%)	45.3%	Number of Houses Occupied :		
Population of Towns residing in Slums (%)	28.63		Pucca (%)	33.6
Annual Rate of Afforestation (%)	0.00		Semi-Pucca (%)	59.3
			Kutcha (%)	7.1

INFRASTRUCUTRE/ FACILITIES			
Middle Schools per lakh population (1996)	20.9	Pucca Roads per 100 sq. km. (1994)	11.7
High Schools per lakh population (1996)	6.7	Number of Banks (per lakh population) (1996)	6.6176
Primary Health Centre per lakh rural population (1996)	3.2	Villages with Drinking Water Facility – 1996 (%)	100.0%
Population Serviced Sub Health Centre (1996)	4633	Telephone per lakh population (93-94)	740
Electrified Villages (%) (1995-96)	99.3%	Population per Post Office (93-94)	6479

DHAR

HUMAN DEVELOPMENT INDICES – 1998

Human Development Index (HDI)	0.537
Rank in Madhya Pradesh : HDI	76
Gender Related Development Index (GDI)	0.606
Rank in Madhya Pradesh GDI	14



POPULATION	1981	1991
Population:	1057469	1367412
Share of Madhya Pradesh Population	2.03%	2.07%
Urban Population	12.6%	13.1%
Population of Scheduled Castes (SC)	7.0%	6.9%
Population of Scheduled Tribes (ST)	52.1%	53.5%
Decadal Growth: 1981 to 1991 (%)	29.3%	
Density of Population (per sq. kms.)	130	168

HEALTH	1981	1991
Infant Mortality Rate	123	84
Life Expectancy (year)	53.2	61.7
	1976-81	1984-90
Crude Birth Date	39.4	37.4

DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1486
Total Habitations	3152
Towns (Class I to IV)	9

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	60.8
Girl Child Mortality (birth to age 1 year)	n/a	102
Girl Child Mortality (up to age 5 years)	n/a	127
Total Fertility Rate	5.7	5.0
Gender Ratio: All	966	951
Rural	974	960
Urban	915	892
SC Gender Ratio	n/a	940
ST Gender Ratio	n/a	977
Workers Participation Rate - Female	38.2%	40.0%

EDUCATION

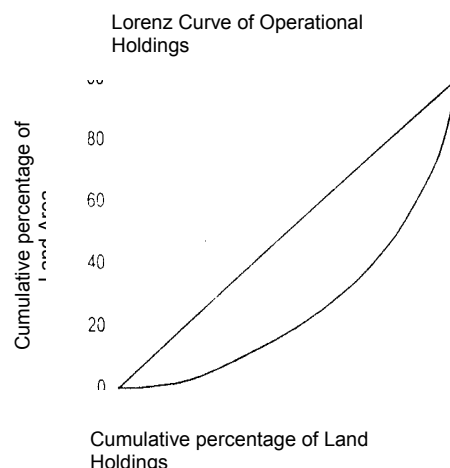
	1981	1991
Literacy :		
Male (%)	37.4%	47.6%
Female (%)	12.9%	20.7%
SC Literacy (%)	n/a	32.3%
ST Literacy (%)	n/a	16.2%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

BASIC AMENITIES

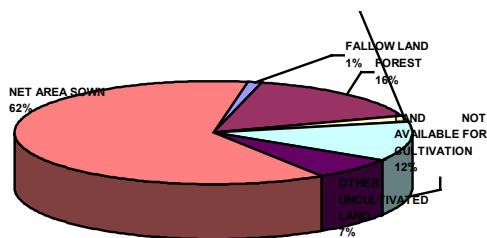
	1991	1993	
Children as Main Workers(%)	8.7%	Households Without Access to	
Children as Main & Marginal Workers (%)	11.4%	Electricity (%)	40.8%
Child Mortality	122	Safe Drinking Water (%)	27.0%
Use of Polluting fuels in Households (%)	5.5%	Toilet Facilities (%)	85.6%
Non-Serviceable Kuchcha Houses	1.14%	All of the Three (%)	15.3%

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings :	0.507

FOOD	
Per Capita Food Production (1991) in kgs.	275.26
FPS/lakh people (1996)	29.52
PDS Offtake per capita (1994/95) in kgs.	5.13



EMPLOYMENT			
		1991	1991
Worker Participation Rate :			
All	46.7%	Employment Rate of Growth (1981 to 1991)	2.51%
Rural	49.0%	Total Employment in Farm Sector (%)	84.1%
Urban	33.0%	Rural Employment in Non Farm Sector (%)	9.4%
Share of Primary Sector (%)	84.1%	Agriculture Labour (%)	24.1%
Share of Secondary Sector (%)	5.9%	Precarious Employment	25.9%
Share of Tertiary Sector (%)	10.0%		



Land Use Pattern

LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	237.5
Pulses Per Capita (Kg)	37.7
Oilseeds per Capita (Kg)	114.5
Average Landholding (Ha)	3.7
Irrigated Area ('000 Ha)	147.3
Unirrigated Area ('000 Ha)	353.8
Fertilizer Consumption Per Hectare (Kg)	53.4
Cropping Intensity	129
Per Capita Forest Area (in sq. kms.)	0.100

HABITAT			
		1991	1991
Rate of Overcrowding (%)	52.9%	Number of Houses Occupied :	
Population of Towns residing in Slums (%)	--	Pucca (%)	32.5
Annual Rate of Afforestation (%)	0.00	Semi-Pucca (%)	61.7
		Kutcha (%)	5.8

INFRASTRUCUTRE/ FACILITIES			
Middle Schools per lakh population (1996)	23.7	Pucca Roads per 100 sq. km. (1994)	22.9
High Schools per lakh population (1996)	7.5	Number of Banks (per lakh population) (1996)	6.9456
Primary Health Centre per lakh rural population (1996)	3.9	Villages with Drinking Water Facility – 1996 (%)	100.0%
Population Serviced Sub Health Centre (1996)	4443	Telephone per lakh population (93-94)	687
Electrified Villages (%) (1995-96)	99.7%	Population per Post Office (93-94)	7093

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HUMAN DEVELOPMENT INDICES - 1998

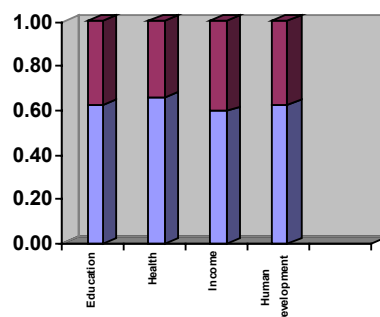
Human Development Index (HDI)	0.622
Rank in Madhya Pradesh : HDI	2
Gender Related Development Index (GDI)	0.702
Rank in Madhya Pradesh GDI	1

POPULATION	1981	1991
Population:	1890467	2397134
Share of Madhya Pradesh Population	3.62%	3.62%
Urban Population	31.8%	35.3%
Population of Scheduled Castes (SC)	11.8%	12.8%
Population of Scheduled Tribes (ST)	12.6%	12.4%
Decadal Growth: 1981 to 1991 (%)	26.8%	
Density of Population (per sq. kms.)	221	281

HEALTH	1981	1991
Infant Mortality Rate	128	75
Life Expectancy (year)	52.3	63.7
	1976-81	1984-90
Crude Birth Date	34.4	34.9

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	65.0
Girl Child Mortality (birth to age 1 year)	n/a	84
Girl Child Mortality (up to age 5 years)	n/a	115
Total Fertility Rate	4.5	4.2
Gender Ratio: All	980	967
Rural	1029	1010
Urban	883	891
SC Gender Ratio	n/a	982
ST Gender Ratio	n/a	1017
Workers Participation Rate - Female	39.2%	37.0%

Graph on Human Development Index



DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	180
Total Habitations	188
Towns (Class I to IV)	11

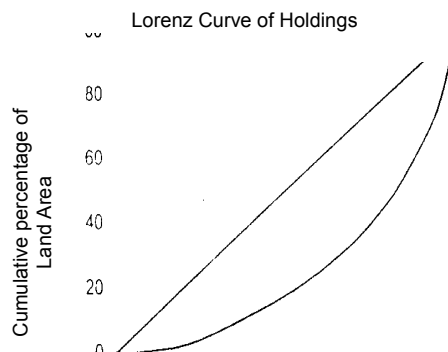
EDUCATION	1981	1991
Literacy :		
Male (%)	62.6%	74.1%
Female (%)	28.9%	42.8%
SC Literacy (%)	n/a	49.5%
ST Literacy (%)	n/a	50.6%
Access to Education		
Habitations with Primary Schools - 1998	100.0%	

BASIC AMENITIES

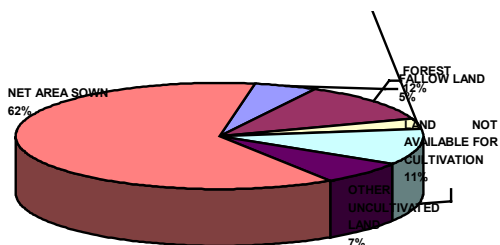
	1991		1993
Children as Main Workers(%)	4.8%	Households Without Access to	
Children as Main & Marginal Workers (%)	5.5%	Electricity (%)	57.8%
Child Mortality	122	Safe Drinking Water (%)	28.8%
Use of Polluting fuels in Households (%)	17.1%	Toilet Facilities (%)	80.7%
Non-Serviceable Kuchcha Houses	0.18%	All of the Three (%)	18.4%

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings :	0.581

FOOD	
Per Capita Food Production (1991) in kgs.	257.22
FPS/lakh people (1996)	22.48
PDS Offtake per capita (1994/65) in kgs.	7.46



EMPLOYMENT			
	1991		1991
Worker Participation Rate :			
All	43.9%	Employment Rate of Growth (1981 to 1991)	2.00%
Rural	51.0%	Total Employment in Farm Sector (%)	70.0%
Urban	30.0%	Rural Employment in Non Farm Sector (%)	10.5%
Share of Primary Sector (%)	71.4%	Agriculture Labour (%)	25.0%
Share of Secondary Sector (%)	13.1%	Precarious Employment	2.83%
Share of Tertiary Sector (%)	15.5%		



Land Use Pattern

LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	210.0
Pulses Per Capita (Kg)	47.2
Oilseeds per Capita (Kg)	3.5
Average Landholding (Ha)	2.0
Irrigated Area ('000 Ha)	154.2
Unirrigated Area ('000 Ha)	388.9
Fertilizer Consumption Per Hectare (Kg)	40.8
Cropping Intensity	139
Per Capita Forest Area (in sq. kms.)	0.070

HABITAT			
	1991		1991
Rate of Overcrowding (%)	22.9%	Number of Houses Occupied :	
Population of Towns residing in Slums (%)	19.71	Pucca (%)	29.2
Annual Rate of Afforestation (%)	16.71	Semi-Pucca (%)	68.8
		Kutchra (%)	2.0

NFRASTRUCUTRE/ FACILITIES			
Middle Schools per lakh population (1996)	24.0	Pucca Roads per 100 sq. km. (1994)	28.6
High Schools per lakh population (1996)	9.3	Number of Banks (per lakh population) (1996)	5.7051
Primary Health Centre per lakh rural population (1996)	2.8	Villages with Drinking Water Facility – 1996 (%)	100.0%
Population Serviced Sub Health Centre (1996)	4836	Telephone per lakh population (93-94)	425
Electrified Villages (%) (1995-96)	95.2%	Population per Post Office (93-94)	7698

EAST NIMAR

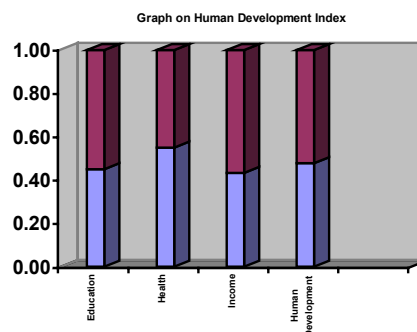
HUMAN DEVELOPMENT INDICES – 1998

Human Development Index (HDI)	0.478
Rank in Madhya Pradesh : HDI	31
Gender Related Development Index (GDI)	0.598
Rank in Madhya Pradesh GDI	19

POPULATION	1981	1991
Population:	1153580	1431662
Share of Madhya Pradesh Population	2.21%	2.16%
Urban Population	26.8%	27.5%
Population of Scheduled Castes (SC)	10.7%	11.4%
Population of Scheduled Tribes (ST)	25.7%	26.8%
Decadal Growth: 1981 to 1991 (%)	24.1%	
Density of Population (per sq. kms.)	107	133

HEALTH	1981	1991
Infant Mortality Rate	154	100
Life Expectancy (year)	47.7	58.1
	1976-81	1984-90
Crude Birth Date	39.7	38.9

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	58.6
Girl Child Mortality (birth to age 1 year)	n/a	131
Girl Child Mortality (up to age 5 years)	n/a	153
Total Fertility Rate	5.7	5.2
Gender Ratio: All	939	938
Rural	943	940
Urban	928	931
SC Gender Ratio	n/a	373
ST Gender Ratio	n/a	963
Workers Participation Rate - Female	31.2%	34.0%



DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1057
Total Habitations	1138
Towns (Class I to IV)	7

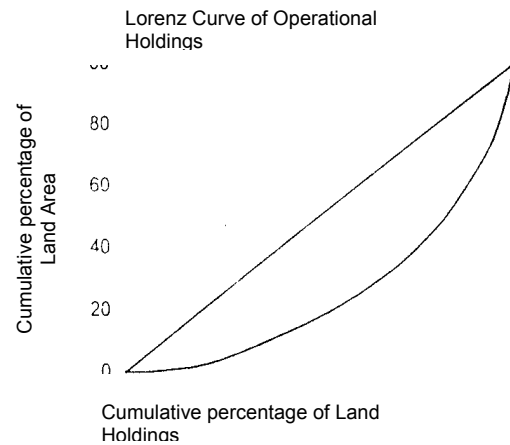
EDUCATION	1981	1991
Literacy :		
Male (%)	52.0%	58.5%
Female (%)	23.5%	31.5%
SC Literacy (%)	n/a	35.0%
ST Literacy (%)	n/a	15.5%
Access to Education		
Habitations with Primary Schools - 1998	100.0%	

BASIC AMENITIES

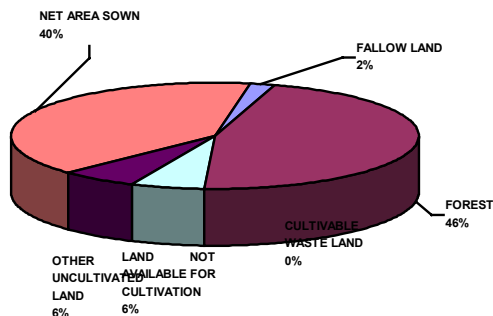
	1991		1993
Children as Main Workers(%)	8.5%	Households Without Access to	
Children as Main & Marginal Workers (%)	10.6%	Electricity (%)	40.0%
Child Mortality	151	Safe Drinking Water (%)	31.1%
Use of Polluting fuels in Households (%)	5.1%	Toilet Facilities (%)	82.1%
Non-Serviceable Kuchcha Houses	5.19%	All of the Three (%)	15.0%

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings :	0.484

FOOD	
Per Capita Food Production (1991) in kgs.	164.70
FPS/lakh people (1996)	28.53
PDS Offtake per capita (1994/65) in kgs.	5.81



EMPLOYMENT			
	1991		1991
Worker Participation Rate :			
All	43.7%	Employment Rate of Growth (1981 to 1991)	2.18%
Rural	49.0%	Total Employment in Farm Sector (%)	76.6%
Urban	29.0%	Rural Employment in Non Farm Sector (%)	8.8%
Share of Primary Sector (%)	76.7%	Agriculture Labour (%)	33.3%
Share of Secondary Sector (%)	9.8%	Precarious Employment	34.5%
Share of Tertiary Sector (%)	13.5%		



LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	142.1
Pulses Per Capita (Kg)	22.6
Oilseeds per Capita (Kg)	16.1
Average Landholding (Ha)	3.8
Irrigated Area ('000 Ha)	92.0
Unirrigated Area ('000 Ha)	356.7
Fertilizer Consumption Per Hectare (Kg)	56.1
Cropping Intensity	110
Per Capita Forest Area (in sq. kms.)	0.330

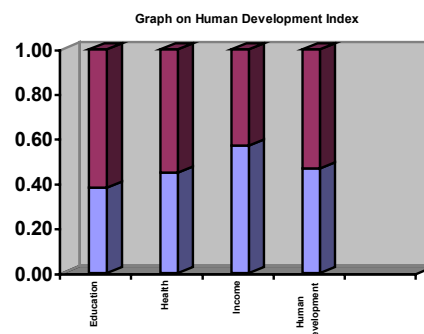
HABITAT			
	1991		1991
Rate of Overcrowding (%)	53.3%	Number of Houses Occupied :	
Population of Towns residing in Slums (%)	7.58	Pucca (%)	28.6
Annual Rate of Afforestation (%)	0.00	Semi-Pucca (%)	61.8
		Kutchha (%)	9.6

INFRASTRUCUTRE/ FACILITIES			
Middle Schools per lakh population (1996)	18.3	Pucca Roads per 100 sq. km. (1994)	16.5
High Schools per lakh population (1996)	5.7	Number of Banks (per lakh population) (1996)	6.5207
Primary Health Centre per lakh rural population (1996)	3.9	Villages with Drinking Water Facility – 1996 (%)	100.0%
Population Serviced Sub Health Centre (1996)	4259	Telephone per lakh population (93-94)	720
Electrified Villages (%) (1995-96)	98.7%	Population per Post Office (93-94)	6667

GUNA

HUMAN DEVELOPMENT INDICES - 1998

Human Development Index (HDI)	0.167
Rank in Madhya Pradesh : HDI	32
Gender Related Development Index (GDI)	0.473
Rank in Madhya Pradesh GDI	44



POPULATION	1981	1991
Population:	1001982	1310317
Share of Madhya Pradesh Population	1.92%	1.98%
Urban Population	14.1%	19.5%
Population of Scheduled Castes (SC)	18.2%	18.1%
Population of Scheduled Tribes (ST)	15.0	12.0%
Decadal Growth: 1981 to 1991 (%)	30.8%	
Density of Population (per sq. kms.)	91	118

HEALTH	1981	1991
Infant Mortality Rate	157	130
Life Expectancy (year)	47.1	51.5
	1976-81	1984-90
Crude Birth Date	42.0	40.5

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	48.7
Girl Child Mortality (birth to age 1 year)	n/a	144
Girl Child Mortality (up to age 5 years)	n/a	198
Total Fertility Rate	6.3	5.9
Gender Ratio: All	882	875
Rural	882	875
Urban	882	876
SC Gender Ratio	n/a	874
ST Gender Ratio	n/a	928
Workers Participation Rate - Female	16.3%	21.0%

DISTRICT INFORMATION

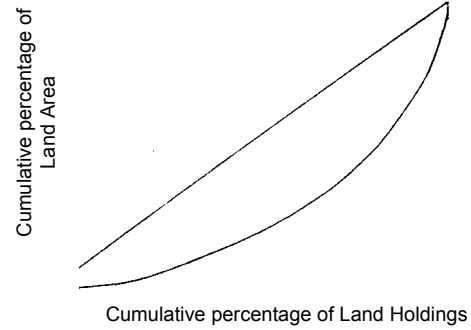
Total Inhabited Villages (in 1991)	2069
Total Habitations	2837
Towns (Class I to IV)	10

EDUCATION	1981	1991
Literacy :		
Male (%)	40.4%	48.9%
Female (%)	11.7%	18.0%
SC Literacy (%)	n/a	6.8%
ST Literacy (%)	n/a	15.5%
Access to Education		
Habitations with Primary Schools - 1998	100.0%	

BASIC AMENITIES

	1991		1993
Children as Main Workers(%)	3.7%	Households Without Access to	
Children as Main & Marginal Workers (%)	5.4%	Electricity (%)	56.6%
Child Mortality	195	Safe Drinking Water (%)	46.0%
Use of Polluting fuels in Households (%)	1.9%	Toilet Facilities (%)	88.2%
Non-Serviceable Kuchcha Houses	2.31%	All of the Three (%)	29.1%

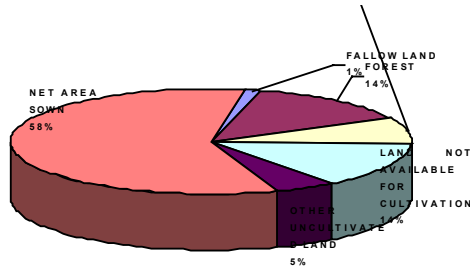
Lorenz Curve of Operational Holdings



LAND OWNERSHIP	
Gini Coefficient of Operational Holdings :	0.540

FOOD	
Per Capita Food Production (1991) in kgs.	312.98
FPS/lakh people (1996)	16.61
PDS Offtake per capita (1994/65) in kgs.	0.59

EMPLOYMENT					
		1991			1991
Worker Participation Rate :					
All	37.0%		Employment Rate of Growth (1981 to 1991)		2.35%
Rural	39.0%		Total Employment in Farm Sector (%)		79.0%
Urban	28.0%		Rural Employment in Non Farm Sector (%)		8.6%
Share of Primary Sector (%)	79.1%		Agriculture Labour (%)		18.8%
Share of Secondary Sector (%)	6.8%		Precarious Employment		21.3%
Share of Tertiary Sector (%)	14.1%				



Land Use Pattern

LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	215.3
Pulses Per Capita (Kg)	97.7
Oilseeds per Capita (Kg)	47.3
Average Landholding (Ha)	3.4
Irrigated Area ('000 Ha)	74.5
Unirrigated Area ('000 Ha)	549.0
Fertilizer Consumption Per Hectare (Kg)	12.1
Cropping Intensity	111
Per Capita Forest Area (in sq. kms.)	0.320

HABITAT					
		1991			1991
Rate of Overcrowding (%)					
		34.8%	Number of Houses Occupied :		
Population of Towns residing in Slums (%)					
		43.15	Pucca (%)		26.2
Annual Rate of Afforestation (%)					
		0.00	Semi-Pucca (%)		68.5
			Kutchha (%)		5.3

INFRASTRUCUTRE/ FACILITIES			
Middle Schools per lakh population (1996)	20.4	Pucca Roads per 100 sq. km. (1994)	9.6
High Schools per lakh population (1996)	5.3	Number of Banks (per lakh population) (1996)	5.6059
Primary Health Centre per lakh rural population (1996)	2.2	Villages with Drinking Water Facility – 1996 (%)	100.0%
Population Serviced Sub Health Centre (1996)	5145	Telephone per lakh population (93-94)	422
Electrified Villages (%) (1995-96)	95.1%	Population per Post Office (93-94)	7092

GWALIOR

HUMAN DEVELOPMENT INDICES - 1998

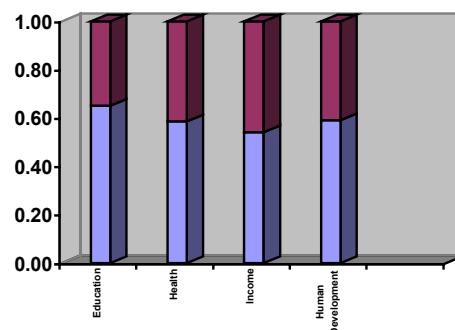
Human Development Index (HDI)	0.592
Rank in Madhya Pradesh : HDI	5
Gender Related Development Index (GDI)	0.579
Rank in Madhya Pradesh GDI	27

POPULATION	1981	1991
Population:	1107879	1412610
Share of Madhya Pradesh Population	2.12%	2.13%
Urban Population	55.0%	58.8%
Population of Scheduled Castes (SC)	20.5%	20.4%
Population of Scheduled Tribes (ST)	2.8%	2.9%
Decadal Growth: 1981 to 1991 (%)	27.5%	
Density of Population (per sq. kms.)	212	271

HEALTH	1981	1991
Infant Mortality Rate	133	70
Life Expectancy (year)	51.4	64.9
	1976-81	1984-90
Crude Birth Date	40.7	34.7

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	63.9
Girl Child Mortality (birth to age 1 year)	n/a	103
Girl Child Mortality (up to age 5 years)	n/a	126
Total Fertility Rate	5.8	4.9
Gender Ratio: All	845	833
Rural	818	818
Urban	867	843
SC Gender Ratio	n/a	820
ST Gender Ratio	n/a	892
Workers Participation Rate - Female	9.8%	11.0%

Graph on Human Development Index



DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	706
Total Habitations	962
Towns (Class I to IV)	9

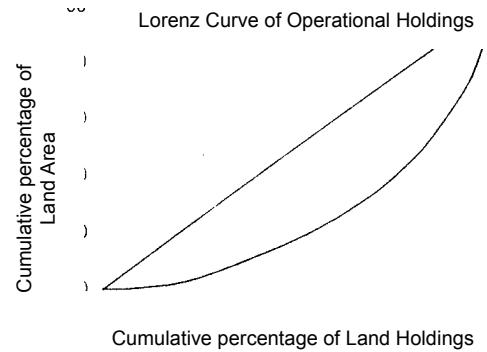
EDUCATION	1981	1991
Literacy :		
Male (%)	61.7%	70.8%
Female (%)	31.4%	41.7%
SC Literacy (%)	n/a	44.2%
ST Literacy (%)	n/a	19.4%
Access to Education		
Habitations with Primary Schools - 1998	100.0%	

BASIC AMENITIES

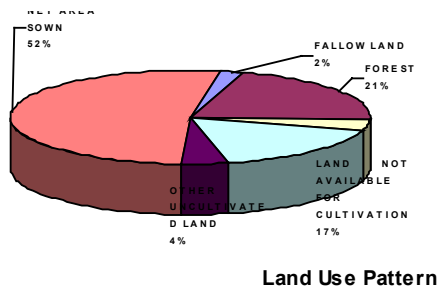
	1991		1993
Children as Main Workers (%)	2.3%	Households Without Access to Electricity (%)	30.4%
Children as Main & Marginal Workers (%)	2.9%	Safe Drinking Water (%)	33.6%
Child Mortality	119	Toilet Facilities (%)	59.5%
Use of Polluting fuels in Households (%)	12.7%	All of the Three (%)	15.8%
Non-Serviceable Kuchcha Houses	0.35%		

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings :	0.542

FOOD	
Per Capita Food Production (1991) in kgs.	200.83
FPS/lakh people (1996)	25.52
PDS Offtake per capita (1994/65) in kgs.	0.47



EMPLOYMENT			
	1991		1991
Worker Participation Rate :			
All	30.9%	Employment Rate of Growth (1981 to 1991)	2.24%
Rural	36.0%	Total Employment in Farm Sector (%)	46.6%
Urban	27.0%	Rural Employment in Non Farm Sector (%)	11.8%
Share of Primary Sector (%)	47.2%	Agriculture Labour (%)	10.2%
Share of Secondary Sector (%)	16.7%	Precarious Employment	24.1%
Share of Tertiary Sector (%)	36.1%		



LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	167.6
Pulses Per Capita (Kg)	33.2
Oilseeds per Capita (Kg)	50.0
Average Landholding (Ha)	2.7
Irrigated Area ('000 Ha)	100.9
Unirrigated Area ('000 Ha)	164.8
Fertilizer Consumption Per Hectare (Kg)	70.9
Cropping Intensity	108
Per Capita Forest Area (in sq. kms.)	0.100

HABITAT			
	1991		1991
Rate of Overcrowding (%)	24.8%	Number of Houses Occupied :	
Population of Towns residing in Slums (%)	11.09	Pucca (%)	69.3
Annual Rate of Afforestation (%)	0.00	Semi-Pucca (%)	26.3
		Kutchha (%)	4.4

INFRASTRUCTURE/ FACILITIES			
Middle Schools per lakh population (1996)	48.0	Pucca Roads per 100 sq. km. (1994)	19.3
High Schools per lakh population (1996)	20.9	Number of Banks (per lakh population) (1996)	7.1469
Primary Health Centre per lakh rural population (1996)	2.9	Villages with Drinking Water Facility – 1996 (%)	99.4%
Population Served Sub Health Centre (1996)	5074	Telephone per lakh population (93-94)	1856
Electrified Villages (%) (1995-96)	98.7%	Population per Post Office (93-94)	7801

HOSHANGABAD

HUMAN DEVELOPMENT INDICES - 1998

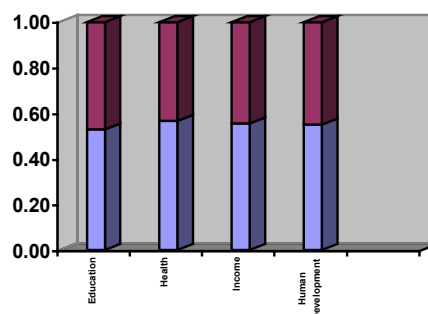
Human Development Index (HDI)	0.550
Rank in Madhya Pradesh : HDI	13
Gender Related Development Index (GDI)	0.573
Rank in Madhya Pradesh GDI	28

POPULATION	1981	1991
Population:	1003939	1267211
Share of Madhya Pradesh Population	1.92%	1.91%
Urban Population	25.1%	27.3%
Population of Scheduled Castes (SC)	15.6%	16.3%
Population of Scheduled Tribes (ST)	16.0%	17.4%
Decadal Growth: 1981 to 1991 (%)	26.2%	
Density of Population (per sq. kms.)	100	126

HEALTH	1981	1991
Infant Mortality Rate	164	109
Life Expectancy (year)	45.9	56.0
	1976-81	1984-90
Crude Birth Date	40.9	33.8

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	54.5
Girl Child Mortality (birth to age 1 year)	n/a	139
Girl Child Mortality (up to age 5 years)	n/a	183
Total Fertility Rate	6.0	4.7
Gender Ratio: All	908	899
Rural	921	904
Urban	869	885
SC Gender Ratio	n/a	900
ST Gender Ratio	n/a	936
Workers Participation Rate - Female	20.0%	23.0%

Graph on Human Development Index



DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1419
Total Habitations	1556
Towns (Class I to IV)	14

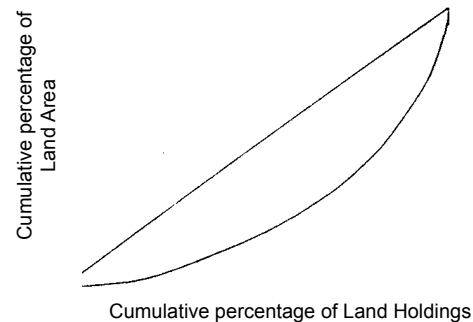
EDUCATION	1981	1991
Literacy :		
Male (%)	58.3%	65.8%
Female (%)	26.8%	37.6%
SC Literacy (%)	n/a	42.0%
ST Literacy (%)	n/a	20.6%
Access to Education		
Habitations with Primary Schools - 1998	100.0%	

BASIC AMENITIES

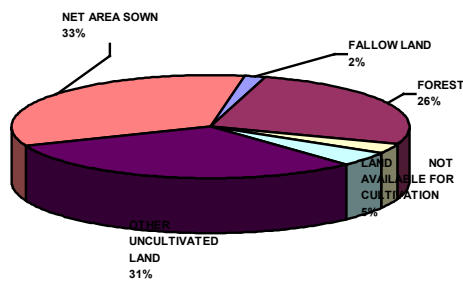
	1991		1993
Children as Main Workers(%)	4.3%	Households Without Access to	
Children as Main & Marginal Workers (%)	5.9%	Electricity (%)	46.8%
Child Mortality	179	Safe Drinking Water (%)	40.6
Use of Polluting fuels in Households (%)	4.3%	Toilet Facilities (%)	77.0%
Non-Serviceable Kuchcha Houses	30.9%	All of the Three (%)	17.7%

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings :	0.541

FOOD	
Per Capita Food Production (1991) in kgs.	338.93
FPS/lakh people (1996)	30.94
PDS Offtake per capita (1994/65) in kgs.	4.23



EMPLOYMENT			
	1991		1991
Worker Participation Rate :			
All	37.5%	Employment Rate of Growth (1981 to 1991)	2.16%
Rural	41.0%	Total Employment in Farm Sector (%)	71.3%
Urban	27.0%	Rural Employment in Non Farm Sector (%)	12.8%
Share of Primary Sector (%)	71.4%	Agriculture Labour (%)	32.7%
Share of Secondary Sector (%)	9.2%	Precarious Employment	39.8%
Share of Tertiary Sector (%)	19.3%		



Land Use Pattern

LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	234.1
Pulses Per Capita (Kg)	104.8
Oilseeds per Capita (Kg)	113.1
Average Landholding (Ha)	4.0
Irrigated Area ('000 Ha)	238.0
Unirrigated Area ('000 Ha)	217.0
Fertilizer Consumption Per Hectare (Kg)	87.3
Cropping Intensity	148
Per Capita Forest Area (in sq. kms.)	0.270

HABITAT			
	1991		1991
Rate of Overcrowding (%)	37.9%	Number of Houses Occupied :	
Population of Towns residing in Slums (%)	13.28	Pucca (%)	50.0
Annual Rate of Afforestation (%)	0.00	Semi-Pucca (%)	43.3
		Kutchha (%)	6.8

INFRASTRUCUTRE/ FACILITIES			
Middle Schools per lakh population (1996)	25.1	Pucca Roads per 100 sq. km. (1994)	12.4
High Schools per lakh population (1996)	8.4	Number of Banks (per lakh population) (1996)	7.0942
Primary Health Centre per lakh rural population (1996)	2.5	Villages with Drinking Water Facility – 1996 (%)	99.4%
Population Serviced Sub Health Centre (1996)	4994	Telephone per lakh population (93-94)	849
Electrified Villages (%) (1995-96)	90.4%	Population per Post Office (93-94)	5419

INDORE

HUMAN DEVELOPMENT INDICES - 1998

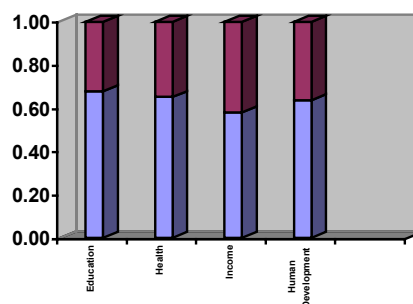
Human Development Index (HDI)	0.637
Rank in Madhya Pradesh : HDI	1
Gender Related Development Index (GDI)	.626
Rank in Madhya Pradesh GDI	7

POPULATION	1981	1991
Population:	1409473	1835915
Share of Madhya Pradesh Population	2.70%	2.77%
Urban Population	65.9%	69.4%
Population of Scheduled Castes (SC)	15.6%	16.7%
Population of Scheduled Tribes (ST)	4.7%	5.5%
Decadal Growth: 1981 to 1991 (%)	30.3%	
Density of Population (per sq. kms.)	362	471

HEALTH	1981	1991
Infant Mortality Rate	80	75
Life Expectancy (year)	61.3	63.9
	1976-81	1984-90
Crude Birth Date	35.0	31.2

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	61.9
Girl Child Mortality (birth to age 1 year)	n/a	69
Girl Child Mortality (up to age 5 years)	n/a	97
Total Fertility Rate	4.5	3.8
Gender Ratio: All	898	906
Rural	930	919
Urban	883	900
SC Gender Ratio	n/a	919
ST Gender Ratio	n/a	910
Workers Participation Rate - Female	15.4%	16.0%

Graph on Human Development Index



DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	616
Total Habitations	644
Towns (Class I to IV)	10

EDUCATION

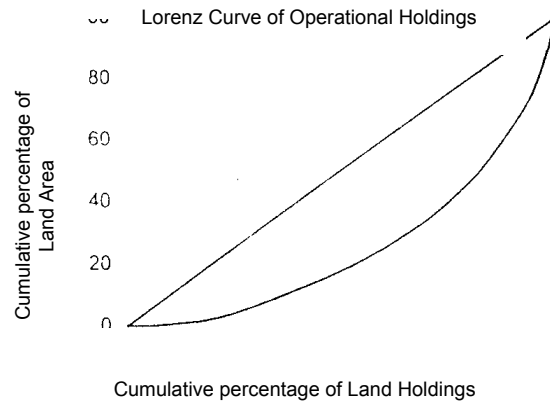
	1981	1991
Literacy :		
Male (%)	71.1%	78.0%
Female (%)	43.9%	53.33%
SC Literacy (%)	n/a	49.0%
ST Literacy (%)	n/a	26.0%
Access to Education		
Habitations with Primary Schools - 1998	100.0%	

BASIC AMENITIES

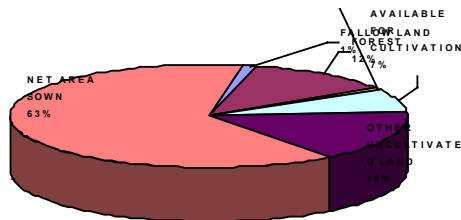
	1991	1993
Children as Main Workers(%)	2.7%	Households Without Access to
Children as Main & Marginal Workers (%)	3.1%	Electricity (%)
Child Mortality	94	24.4%
Use of Polluting fuels in Households (%)	20.9%	Safe Drinking Water (%)
Non-Serviceable Kuchcha Houses	1.78%	11.0%
		Toilet Facilities (%)
		51.6%
		All of the Three (%)
		2.6%

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings :	0.537

FOOD	
Per Capita Food Production (1991) in kgs.	177.57
FPS/lakh people (1996)	22.19
PDS Offtake per capita (1994/65) in kgs.	1.83



EMPLOYMENT			
	1991		1991
Worker Participation Rate :			
All	34.3%	Employment Rate of Growth (1981 to 1991)	3.00%
Rural	44.0%	Total Employment in Farm Sector (%)	34.2%
Urban	30.0%	Rural Employment in Non Farm Sector (%)	18.5%
Share of Primary Sector (%)	34.3%	Agriculture Labour (%)	14.8%
Share of Secondary Sector (%)	22.8%	Precarious Employment	17.1%
Share of Tertiary Sector (%)	42.9%		



Land Use Pattern

LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	148.
Pulses Per Capita (Kg)	29.5
Oilseeds per Capita (Kg)	102.9
Average Landholding (Ha)	3.
Irrigated Area ('000 Ha)	108.4
Unirrigated Area ('000 Ha)	152.5
Fertilizer Consumption Per Hectare (Kg)	68.8
Cropping Intensity	142
Per Capita Forest Area (in sq. kms.)	0.050

HABITAT			
	1991		1991
Rate of Overcrowding (%)	37.9%	Number of Houses Occupied :	
Population of Towns residing in Slums (%)	13.05%	Pucca (%)	52.6
Annual Rate of Afforestation (%)	-0.01	Semi-Pucca (%)	41.1
		Kutchra (%)	6.3

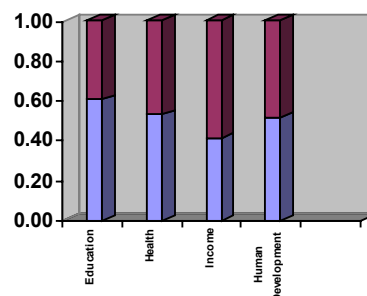
INFRASTRUCUTRE/ FACILITIES			
Middle Schools per lakh population (1996)	36.1	Pucca Roads per 100 sq. km. (1994)	31.6
High Schools per lakh population (1996)	10.2	Number of Banks (per lakh population) (1996)	8.5906
Primary Health Centre per lakh rural population (1996)	4.4	Villages with Drinking Water Facility – 1996 (%)	100.0%
Population Serviced Sub Health Centre (1996)	5469	Telephone per lakh population (93-94)	2996
Electrified Villages (%) (1995-96)	99.2%	Population per Post Office (93-94)	11653

JABALPUR

HUMAN DEVELOPMENT INDICES - 1998

Human Development Index (HDI)	0.515
Rank in Madhya Pradesh : HDI	20
Gender Related Development Index (GDI)	0.615
Rank in Madhya Pradesh GDI	10

Graph on Human Development Index



POPULATION	1981	1991
Population:	2198733	2649962
Share of Madhya Pradesh Population	4.21%	4.00%
Urban Population	45.0%	45.5%
Population of Scheduled Castes (SC)	12.2%	12.8%
Population of Scheduled Tribes (ST)	17.4%	17.9%
Decadal Growth: 1981 to 1991 (%)	20.5%	
Density of Population (per sq. kms.)	216	261

HEALTH	1981	1991
Infant Mortality Rate	151	101
Life Expectancy (year)	48.1	57.8
	1976-81	1984-90
Crude Birth Date	35.0	36.5

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	59.2
Girl Child Mortality (birth to age 1 year)	n/a	117
Girl Child Mortality (up to age 5 years)	n/a	145
Total Fertility Rate	5.3	4.6
Gender Ratio: All	914	915
Rural	963	939
Urban	856	888
SC Gender Ratio	n/a	923
ST Gender Ratio	n/a	963
Workers Participation Rate - Female	22.0%	23.0%

DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	2274
Total Habitations	2326
Towns (Class I to IV)	18
Jabalpur District has been divided into Jabalpur and Katni w.e.f. 25 th May 1998.	

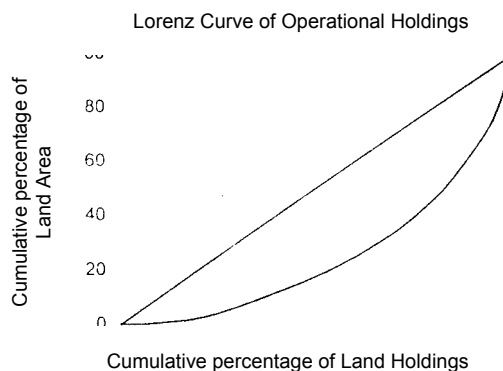
EDUCATION	1981	1991
Literacy :		
Male (%)	63.7%	71.9%
Female (%)	34.1%	45.0%
SC Literacy (%)	n/a	47.2%
ST Literacy (%)	n/a	26.6%
Access to Education		
Habitations with Primary Schools - 1998	100.0%	

BASIC AMENITIES

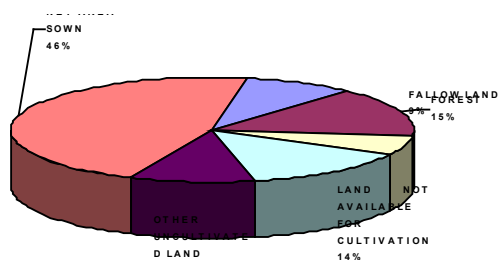
	1991	1993
Children as Main Workers(%)	2.9%	Households Without Access to Electricity (%)
Children as Main & Marginal Workers (%)	3.8%	
Child Mortality	147	Safe Drinking Water (%)
Use of Polluting fuels in Households (%)	11.5%	Toilet Facilities (%)
Non-Serviceable Kuchcha Houses	0.25%	All of the Three (%)

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings :	0.567

FOOD	
Per Capita Food Production (1991) in kgs.	152.27
FPS/lakh people (1996)	47.26
PDS Offtake per capita (1994/95) in kgs.	3.88



EMPLOYMENT			
	1991		1991
Worker Participation Rate :			
All	37.0%	Employment Rate of Growth (1981 to 1991)	1.74%
Rural	44.0%	Total Employment in Farm Sector (%)	55.4%
Urban	28.0%	Rural Employment in Non Farm Sector (%)	17.2%
Share of Primary Sector (%)	56.2%	Agriculture Labour (%)	24.7%
Share of Secondary Sector (%)	18.6%	Precarious Employment	31.7%
Share of Tertiary Sector (%)	25.2%		



Land Use Pattern

LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	116.5
Pulses Per Capita (Kg)	35.7
Oilseeds per Capita (Kg)	6.9
Average Landholding (Ha)	1.9
Irrigated Area ('000 Ha)	74.5
Unirrigated Area ('000 Ha)	381.2
Fertilizer Consumption Per Hectare (Kg)	53.1
Cropping Intensity	122
Per Capita Forest Area (in sq. kms.)	0.080

HABITAT			
	1991		1991
Rate of Overcrowding (%)	35.7%	Number of Houses Occupied :	
Population of Towns residing in Slums (%)	37.88	Pucca (%)	36.4
Annual Rate of Afforestation (%)	0.00	Semi-Pucca (%)	62.1
		Kutchra (%)	1.4

INFRASTRUCUTRE/ FACILITIES			
Middle Schools per lakh population (1996)	23.5	Pucca Roads per 100 sq. km. (1994)	22.4
High Schools per lakh population (1996)	11.2	Number of Banks (per lakh population) (1996)	6.8747
Primary Health Centre per lakh rural population (1996)	2.4	Villages with Drinking Water Facility – 1996 (%)	99.6%
Population Served Sub Health Centre (1996)	4457	Telephone per lakh population (93-94)	1173
Electrified Villages (%) (1995-96)	94.1%	Population per Post Office (93-94)	7072

JHABUA

HUMAN DEVELOPMENT INDICES – 1998

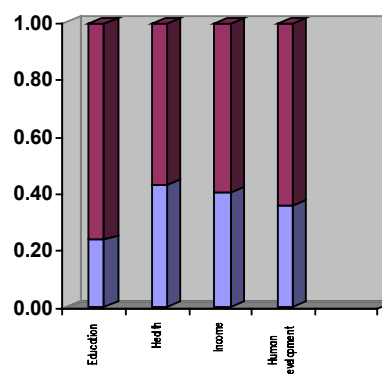
Human Development Index (HDI)	0.356
Rank in Madhya Pradesh : HDI	45
Gender Related Development Index (GDI)	0.521
Rank in Madhya Pradesh GDI	39

POPULATION	1981	1991
Population:	795168	1130405
Share of Madhya Pradesh Population	1.52%	1.71%
Urban Population	8.3%	8.7%
Population of Scheduled Castes (SC)	3.3%	3.1%
Population of Scheduled Tribes (ST)	83.5%	85.7%
Decadal Growth: 1981 to 1991 (%)	42.2%	
Density of Population (per sq. kms.)	117	167

HEALTH	1981	1991
Infant Mortality Rate	133	130
Life Expectancy (year)	51.3	51.5
	1976-81	1984-90
Crude Birth Date	42.7	39.4

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	48.4
Girl Child Mortality (birth to age 1 year)	n/a	96
Girl Child Mortality (up to age 5 years)	n/a	179
Total Fertility Rate	6.3	5.7
Gender Ratio: All	985	977
Rural	994	983
Urban	893	920
SC Gender Ratio	n/a	954
ST Gender Ratio	n/a	986
Workers Participation Rate - Female	48.7%	52.0%

Graph on Human Development Index



DISTRICT INFORMATION	
Total Inhabited Villages (in 1991)	1314
Total Habitations	3903
Towns (Class I to IV)	8

EDUCATION	1981	1991
Literacy :		
Male (%)	20.1%	26.3%
Female (%)	8.0%	11.5%
SC Literacy (%)	n/a	23.6%
ST Literacy (%)	n/a	10.9%
Access to Education		
Habitations with Primary Schools - 1998	100.0%	

BASIC AMENITIES			
	1991		1993
Children as Main Workers(%)	15.2%	Households Without Access to Electricity (%)	67.1%
Children as Main & Marginal Workers (%)	25.5%		
Child Mortality	169	Safe Drinking Water (%)	35.8%
Use of Polluting fuels in Households (%)	3.5%	Toilet Facilities (%)	91.2%
Non-Serviceable Kuchcha Houses	1.12%	All of the Three (%)	28.2%

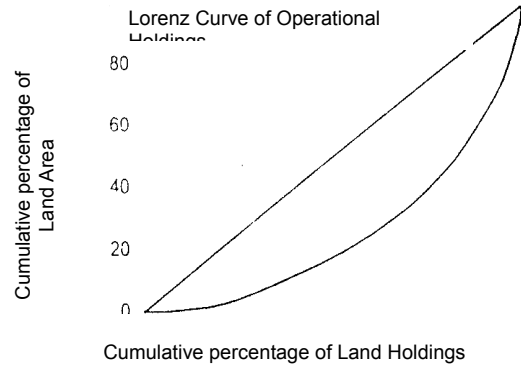
JHABUA

LAND OWNERSHIP

Gini Coefficient of Operational Holdings :	0.460
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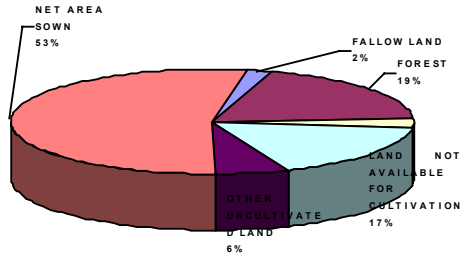
FOOD

Per Capita Food Production (1991) in kgs.	251.33
FPS/lakh people (1996)	19.66
PDS Offtake per capita (1994/65) in kgs.	11.19



EMPLOYMENT

	1991		1991
Worker Participation Rate :			
All	54.0%	Employment Rate of Growth (1981 to 1991)	2.92%
Rural	56.0%	Total Employment in Farm Sector (%)	90.4%
Urban	33.0%	Rural Employment in Non Farm Sector (%)	5.1%
Share of Primary Sector (%)	90.6%	Agriculture Labour (%)	5.6%
Share of Secondary Sector (%)	2.7%	Precarious Employment	7.2%
Share of Tertiary Sector (%)	6.7%		



Land Use Pattern

LAND USE AND AGRICULTURE

	1991
Cereals Per Capita (Kg)	207.0
Pulses Per Capita (Kg)	44.3
Oilseeds per Capita (Kg)	21.1
Average Landholding (Ha)	2.6
Irrigated Area ('000 Ha)	35.4
Unirrigated Area ('000 Ha)	323.0
Fertilizer Consumption Per Hectare (Kg)	19.5
Cropping Intensity	140
Per Capita Forest Area (in sq. kms.)	0.170

HABITAT

	1991		1991
Rate of Overcrowding (%)	57.3%	Number of Houses Occupied :	
Population of Towns residing in Slums (%)	--	Pucca (%)	30.0
Annual Rate of Afforestation (%)	0.00	Semi-Pucca (%)	66.2
		Kutchha (%)	3.8

INFRASTRUCUTRE/ FACILITIES

Middle Schools per lakh population (1996)	18.0	Pucca Roads per 100 sq. km. (1994)	25.7
High Schools per lakh population (1996)	5.0	Number of Banks (per lakh population) (1996)	4.3775
Primary Health Centre per lakh rural population (1996)	3.1	Villages with Drinking Water Facility – 1996 (%)	99.6%
Population Serviced Sub Health Centre (1996)	4296	Telephone per lakh population (93-94)	302
Electrified Villages (%) (1995-96)	97.5%	Population per Post Office (93-94)	7380

MANDLA

HUMAN DEVELOPMENT INDICES - 1998

Human Development Index (HDI)	0.449
Rank in Madhya Pradesh : HDI	38
Gender Related Development Index (GDI)	0.625
Rank in Madhya Pradesh: GDI	8

POPULATION

	1981	1991
Population	1037394	1291263
Share of Madhya Pradesh	1.99%	1.95%
Urban Population	7.1%	7.7%
Population of Scheduled Castes (SC)	5.2%	5.2%
Population of Scheduled Tribes (ST)	60.4%	60.8%
Decadal Growth : 1981 to 1991(%)	24.5%	
Density of Population (per. sq. kms.)	78	97

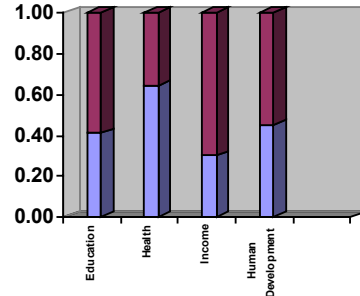
HEALTH

	1981	1991
Infant Mortality Rate	131	88
Life Expectancy (years)	51.7	60.9
	1976-81	1984-90
Crude Birth Rate	33.6	34.0

GENDER

	1981	1991
Life Expectancy of Females at Birth	n/a	61.5
Girl Child Mortality (birth to age 1 year)	n/a	104
Girl Child Mortality(up to age 5 years)	n/a	129
Total Fertility Rate	4.5	4.1
Gender Ratio: All	1003	988
Rural	1009	993
Urban	927	930
SC Gender Ratio	n/a	942
ST Gender Ratio	n/a	1011
Workers Participation Rate - Female	48.6%	47.0%

Graph on Human Development Index



DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	2117
Total Habitations	3246
Towns (Class I to VI)	5
Mandla District has been divided into Mandla and Dindori w.e.f. 25 th May 1998.	

EDUCATION

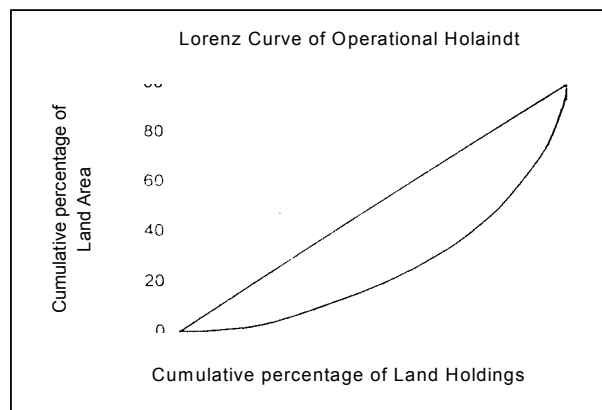
	1981	1991
Literacy:		
Male (%)	42.0%	52.2%
Female (%)	13.4%	22.2%
SC Literacy (%)	n/a	51.5%
ST Literacy (%)	n/a	27.2%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

BASIC AMENITIES

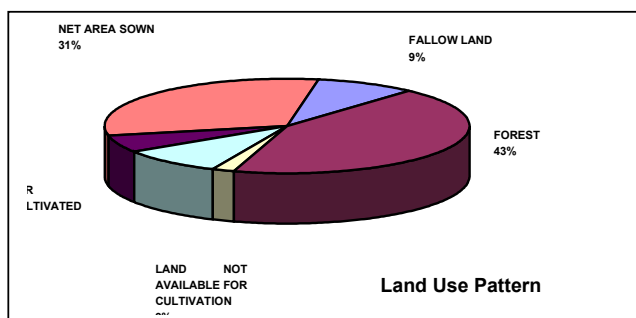
	1991		1991
Children as Main Workers	8.5%	Households Without Access to	
Children as Main Marginal Workers (%)	10.3%	Electricity (%)	69.4%
Child Mortality	132	Safe Drinking Water (%)	61.6%
Use of Polluting Fuels in Households (%)	0.9%	Toilet Facilities (%)	94.5%
Non-Serviceable Kuchcha Houses	1.21%	All of the Three (%)	47.3%

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings:	0.557

FOOD	
Per Capita Food Production (1991) in kgs.	236.44
FPS/ lakh people (1996)	34.70
PDS Offtake per capita(1994/95) in kgs.	8.09



EMPLOYMENT			
	1991		1991
Worker Participation Rate:			
All	51.2%	Employment Rate of Growth (1981 to 1991)	1.53%
Rural	53.0%	Total Employment in Farm Sector (%)	90.3%
Urban	30.0%	Rural Employment in Non Farm Sector	6.6%
Share of Primary Sector (%)	90.4%	Agriculture Labour (%)	24.3%
Share of Secondary Sector (%)	2.8%	Precarious Employment	27.5%
Share of Tertiary Sector (%)	6.9%		



LAND USE AND AGRICULTURE	1991
Cereals Per Capita(Kg)	208.5
Pulses Per Capita (Kg)	28.0
Oilseeds Per Capita (Kg)	37.6
Average landholding (Ha)	2.7
Irrigated Area ('000 Ha)	10.5
Unirrigated Area ('000 Ha)	423.4
Fertilizer Consumption Per Hectare (Kg)	5.3
Cropping Intensity	120
Per Capita Forest Area (sq. km)	0.520

HABITAT			
	1991		1991
Rate of Overcrowding	36.5%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)		Pucca(%)	23.3
Annual Rate of Afforestation (%)	0.00	Semi-Pucca(%)	71.6
		Kucha(%)	5.1

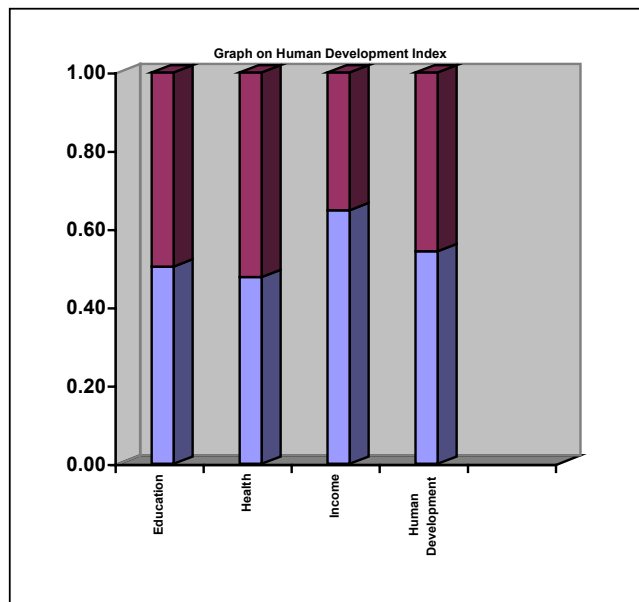
INFRASTRUCTURE/FACILITIES			
	1991		1991
Middle Schools per lakh population (1996)	30.6	Pucca Roads per 100 sq. km (1994)	17.9
High Schools per lakh population (1996)	8.0	Number of Banks (per lakh population) (1996)	5.4837
Primary Health per lakh rural population (1996)	4.5	Villages with Drinking Water Facility – 1996 (%)	99.5%
Population Serviced sub Health Center (1996)	3526	Telephone per lakh population (93-94)	189
Electrified Villages (%) (1995-96)	92.2%	Population per Post Office (93-94)	6327

MANDSAUR	
HUMAN DEVELOPMENT INDICES – 1998	
Human Development Index (HDI)	0.543
Rank in Madhya Pradesh : HDI	14
Gender Related Development Index (GDI)	0.611
Rank in Madhya Pradesh: GDI	13

POPULATION	1981	1991
Population	12163399	1555208
Share of Madhya Pradesh	2.42%	2.35%
Urban Population	20.3%	23.1%
Population of Scheduled Castes (SC)	15.6%	15.9%
Population of Scheduled Tribes (ST)	5.2%	4.8%
Decadal Growth : 1981 to 1991(%)	23.1%	
Density of Population (per. sq. kms.)	129	159

HEALTH	1981	1991
Infant Mortality Rate	140	104
Life Expectancy (years)	50.2	57.1
	1976-81	1984-90
Crude Birth Rate	38.3	32.0

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	56.8
Girl Child Mortality (birth to age 1 year)	n/a	112
Girl Child Mortality(up to age 5 years)	n/a	153
Total Fertility Rate	5.3	4.1
Gender Ratio: All	941	945
Rural	947	951
Urban	917	928
SC Gender Ratio	n/a	944
ST Gender Ratio	n/a	927
Workers Participation Rate - Female	34.7%	38.0%



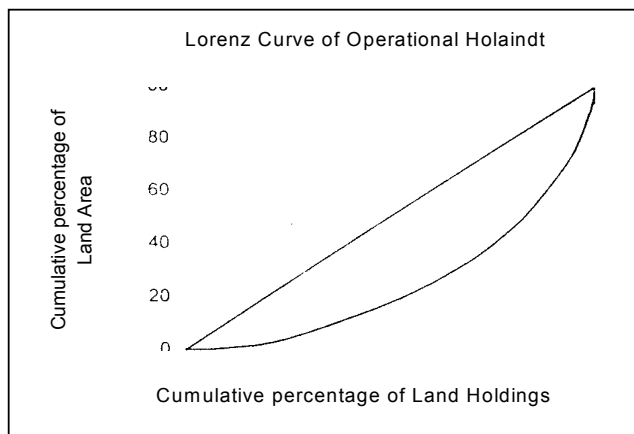
DISTRICT INFORMATION	
Total Inhabited Villages (in 1991)	1629
Total Habitations	1813
Towns (Class I to VI)	18
Mandsaur District has been divided into Mandsaur and Neemuch w.e.f. 6 th July 1998.	

EDUCATION	1981	1991
Literacy:		
Male (%)	57.1%	67.9%
Female (%)	18.4%	28.3%
SC Literacy (%)	n/a	35.1%
ST Literacy (%)	n/a	16.3%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

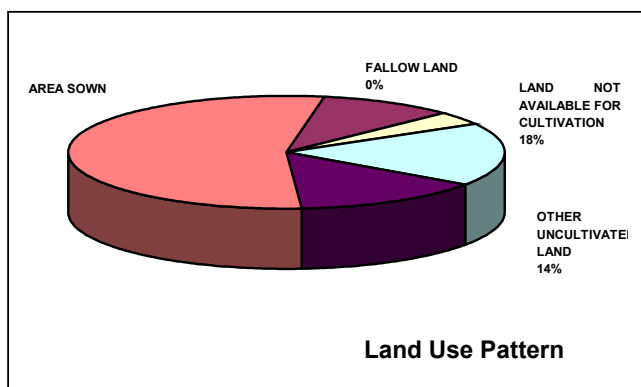
BASIC AMENITIES			
	1991		1991
Children as Main Workers	7.4%	Households Without Access to	
Children as Main Marginal Workers (%)	9.3%	Electricity (%)	38.5%
Child Mortality	150	Safe Drinking Water (%)	50.0%
Use of Polluting Fuels in Households (%)	6.5%	Toilet Facilities (%)	86.6%
Non-Serviceable Kuchcha Houses	0.42%	All of the Three (%)	25.2%

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings:	0.501

FOOD	
Per Capita Food Production 91991) in kgs.	397.76
FPS/ lakh people (1996)	29.79
PDS Offtake per capita(1994/95) in kgs.	0.75



EMPLOYMENT			
	1991		1991
Worker Participation Rate:			
All	46.6%	Employment Rate of Growth (1981 to 1991)	2.56%
Rural	51.0%	Total Employment in Farm Sector (%)	80.1%
Urban	32.0%	Rural Employment in Non Farm Sector	9.3%
Share of Primary Sector (%)	80.3%	Agriculture Labour (%)	19.5%
Share of Secondary Sector (%)	6.5%	Precarious Employment	22.2%
Share of Tertiary Sector (%)	13.2%		



LAND USE AND AGRICULTURE	1991
Cereals Per Capita(Kg)	322.7
Pulses Per Capita (Kg)	75.0
Oilseeds Per Capita (Kg)	64.6
Average landholding (Ha)	2.8
Irrigated Area ('000 Ha)	189.1
Unirrigated Area ('000 Ha)	346.6
Fertilizer Consumption Per Hectare (Kg)	65.9
Cropping Intensity	150
Per Capita Forest Area (sq. km)	0.150

HABITAT			
	1991		1991
Rate of Overcrowding	41.8%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)	14.13	Pucca(%)	41.8
Annual Rate of Afforestation (%)	0.00	Semi-Pucca(%)	54.7
		Kucha(%)	3.5

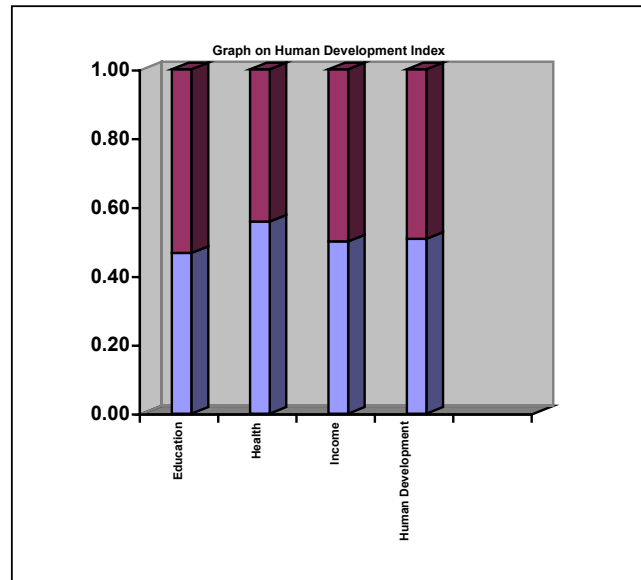
INFRASTRUCTURE/FACILITIES			
	1991		1991
Middle Schools per lakh population (1996)	28.2	Pucca Roads per 100 sq. km (1994)	16.6
High Schools per lakh population (1996)	8.1	Number of Banks (per lakh population) (1996)	6.0273
Primary Health per lakh rural population (1996)	3.6	Villages with Drinking Water Facility – 1996 (%)	100.0%
Population Serviced sub Health Center (1996)	4862	Telephone per lakh population (93-94)	4000
Electrified Villages (%) (1995-96)	98.9%	Population per Post Office (93-94)	5065

MORENA	
HUMAN DEVELOPMENT INDICES – 1998	
Human Development Index (HDI)	0.508
Rank in Madhya Pradesh : HDI	24
Gender Related Development Index (GDI)	0.475
Rank in Madhya Pradesh: GDI	43

POPULATION	1981	1991
Population	1303203	1710574
Share of Madhya Pradesh	2.50%	2.58%
Urban Population	13.7%	20.5%
Population of Scheduled Castes (SC)	20.1%	19.9%
Population of Scheduled Tribes (ST)	5.3%	5.6%
Decadal Growth : 1981 to 1991(%)	31.3%	
Density of Population (per. sq. kms.)	112	148

HEALTH	1981	1991
Infant Mortality Rate	143	100
Life Expectancy (years)	1976-81	1984-90
Crude Birth Rate	44.6	44.1

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	55.5
Girl Child Mortality (birth to age 1 year)	n/a	116
Girl Child Mortality(up to age 5 years)	n/a	163
Total Fertility Rate	6.8	6.6
Gender Ratio: All	834	826
Rural	835	826
Urban	827	826
SC Gender Ratio	n/a	813
ST Gender Ratio	n/a	929
Workers Participation Rate - Female	8.5%	12.0%



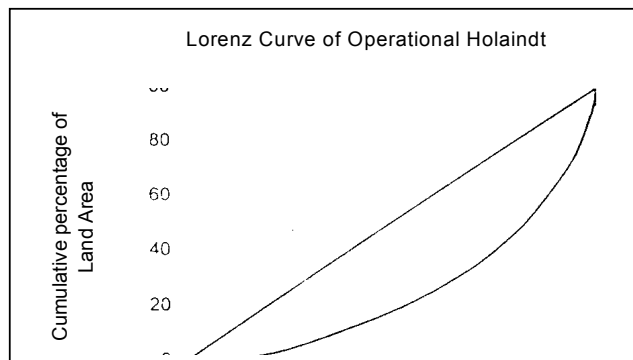
DISTRICT INFORMATION	
Total Inhabited Villages (in 1991)	1294
Total Habitations	2349
Towns (Class I to VI)	11

EDUCATION	1981	1991
Literacy:		
Male (%)	48.1%	58.0%
Female (%)	12.7%	20.8%
SC Literacy (%)	n/a	32.0%
ST Literacy (%)	n/a	7.0%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

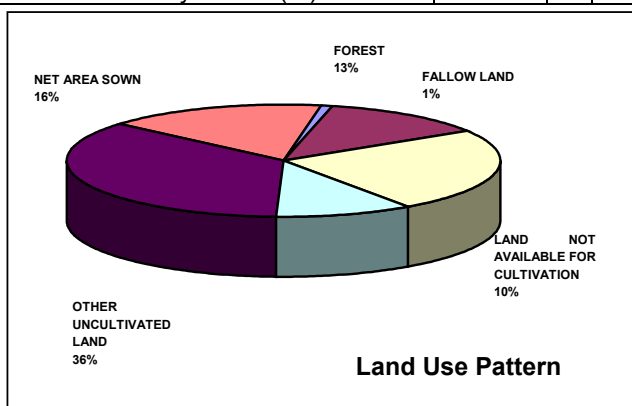
BASIC AMENITIES			
	1991		1991
Children as Main Workers	3.1%	Households Without Access to	
Children as Main Marginal Workers (%)	3.8%	Electricity (%)	51.0%
Child Mortality	138	Safe Drinking Water (%)	56.4%
Use of Polluting Fuels in Households (%)	1.5%	Toilet Facilities (%)	88.9%
Non-Serviceable Kuchcha Houses	1.58%	All of the Three (%)	32.3%

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings:	0.493

FOOD	
Per Capita Food Production 91991) in kgs.	229.75
FPS/ lakh people (1996)	14.59
PDS Offtake per capita(1994/95) in kgs.	0.67



EMPLOYMENT			
	1991		1991
Worker Participation Rate:			
All	31.5%	Employment Rate of Growth (1981 to 1991)	2.65%
Rural	33.0%	Total Employment in Farm Sector (%)	81.4%
Urban	25.0%	Rural Employment in Non Farm Sector	8.0%
Share of Primary Sector (%)	81.7%	Agriculture Labour (%)	8.8%
Share of Secondary Sector (%)	5.0%	Precarious Employment	10.4%
Share of Tertiary Sector (%)	13.4%		



LAND USE AND AGRICULTURE	1991
Cereals Per Capita(Kg)	205.7
Pulses Per Capita (Kg)	24.1
Oilseeds Per Capita (Kg)	162.1
Average landholding (Ha)	1.9
Irrigated Area ('000 Ha)	223.4
Unirrigated Area ('000 Ha)	194.0
Fertilizer Consumption Per Hectare (Kg)	87.7
Cropping Intensity	111
Per Capita Forest Area (sq. km)	0.290

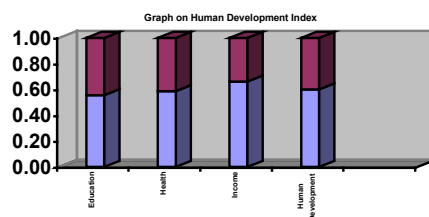
HABITAT			
	1991		1991
Rate of Overcrowding	40.2%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)	18.03	Pucca(%)	67.7
Annual Rate of Afforestation (%)	0.00	Semi-Pucca(%)	17.1
		Kucha(%)	15.1

INFRASTRUCTURE/FACILITIES			
	1991		1991
Middle Schools per lakh population (1996)	24.9	Pucca Roads per 100 sq. km (1994)	13.9
High Schools per lakh population (1996)	16.0	Number of Banks (per lakh population) (1996)	4.5924
Primary Health per lakh rural population (1996)	1.9	Villages with Drinking Water Facility – 1996 (%)	99.7%
Population Serviced sub Health Center (1996)	5245	Telephone per lakh population (93-94)	383
Electrified Villages (%) (1995-96)	94.5%	Population per Post Office (93-94)	7098

NARSIMHAPUR

HUMAN DEVELOPMENT INDICES – 1998

Human Development Index (HDI)	0.601
Rank in Madhya Pradesh : HDI	4
Gender Related Development Index (GDI)	0.595
Rank in Madhya Pradesh: GDI	22



POPULATION

	1981	1991
Population	650445	785496
Share of Madhya Pradesh	1.25%	1.19%
Urban Population	13.5%	14.9%
Population of Scheduled Castes (SC)	15.6%	16.6%
Population of Scheduled Tribes (ST)	12.9%	12.9%
Decadal Growth : 1981 to 1991(%)	20.8%	
Density of Population (per. sq. kms.)	127	153

DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1037
Total Habitations	1044
Towns (Class I to VI)	5

HEALTH

	1981	1991
Infant Mortality Rate	151	110
Life Expectancy (years)	48.1	55.9
	1976-81	1984-90
Crude Birth Rate	36.9	30.0

EDUCATION

	1981	1991
Literacy:		
Male (%)	54.5%	68.4%
Female (%)	26.4%	41.6%
SC Literacy (%)	n/a	44.0%
ST Literacy (%)	n/a	30.8%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

GENDER

	1981	1991
Life Expectancy of Females at Birth	n/a	53.9
Girl Child Mortality (birth to age 1 year)	n/a	121
Girl Child Mortality(up to age 5 years)	n/a	159
Total Fertility Rate	5.5	4.0
Gender Ratio: All	930	913
Rural	935	915
Urban	898	897
SC Gender Ratio	n/a	909
ST Gender Ratio	n/a	959
Workers Participation Rate - Female	23.0%	25.0%

BASIC AMENITIES

	1991		1991
Children as Main Workers	4.1%	Households Without Access to	
Children as Main Marginal Workers (%)	5.4%	Electricity (%)	53.8%
Child Mortality	148	Safe Drinking Water (%)	15.7%
Use of Polluting Fuels in Households (%)	1.9%	Toilet Facilities (%)	85.3%
Non-Serviceable Kuchcha Houses	0.77%	All of the Three (%)	9.6%

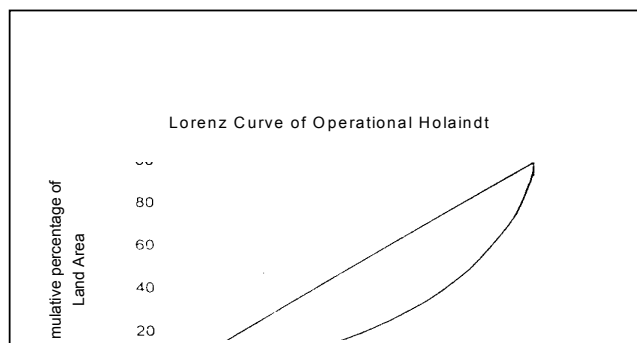
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LAND OWNERSHIP

Gini Coefficient of Operational Holdings:	0.506
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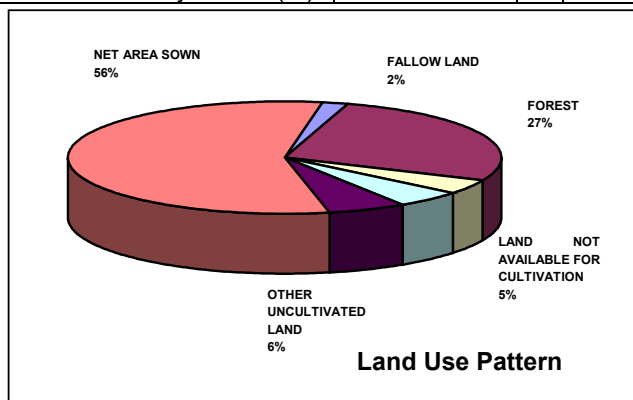
FOOD

Per Capita Food Production (1991) in kgs.	399.87
FPS/ lakh people (1996)	31.61
PDS Offtake per capita (1994/95) in kgs.	0.87



EMPLOYMENT

	1991		1991
Worker Participation Rate:			
All	39.6%	Employment Rate of Growth (1981 to 1991)	1.78%
Rural	41.0%	Total Employment in Farm Sector (%)	79.7%
Urban	29.0%	Rural Employment in Non Farm Sector	12.0%
Share of Primary Sector (%)	79.8%	Agriculture Labour (%)	38.9%
Share of Secondary Sector (%)	6.7%	Precarious Employment	45.6%
Share of Tertiary Sector (%)	13.5%		



LAND USE AND AGRICULTURE

	1991
Cereals Per Capita (Kg)	181.8
Pulses Per Capita (Kg)	218.1
Oilseeds Per Capita (Kg)	72.2
Average landholding (Ha)	2.7
Irrigated Area ('000 Ha)	76.7
Unirrigated Area ('000 Ha)	214.4
Fertilizer Consumption Per Hectare (Kg)	38.8
Cropping Intensity	126
Per Capita Forest Area (sq. km)	0.160

HABITAT

	1991		1991
Rate of Overcrowding	54.4%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)		Pucca(%)	31.6
Annual Rate of Afforestation (%)	0.00	Semi-Pucca(%)	66.2
		Kucha(%)	2.2

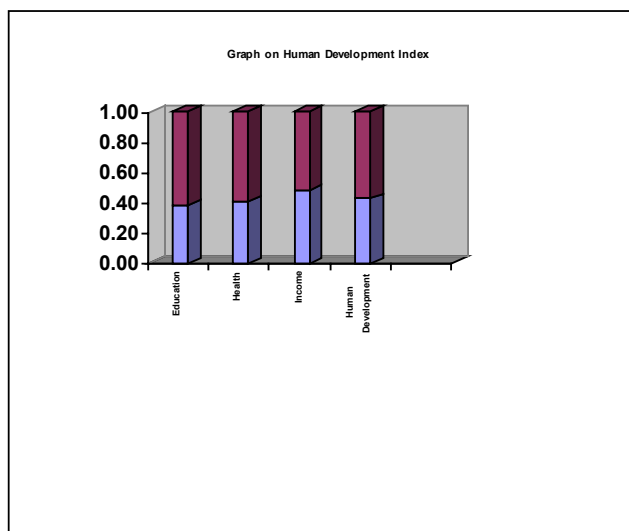
INFRASTRUCTURE/FACILITIES

	1991		1991
Middle Schools per lakh population (1996)	25.6	Pucca Roads per 100 sq. km (1994)	15.6
High Schools per lakh population (1996)	9.8	Number of Banks (per lakh population) (1996)	7.067
Primary Health per lakh rural population (1996)	3.2	Villages with Drinking Water Facility – 1996 (%)	86.5%
Population Served sub Health Center (1996)	5064	Telephone per lakh population (93-94)	544
Electrified Villages (%) (1995-96)	99.0%	Population per Post Office (93-94)	4495

PANNA

HUMAN DEVELOPMENT INDICES – 1998

Human Development Index (HDI)	0.426
Rank in Madhya Pradesh : HDI	43
Gender Related Development Index (GDI)	0.513
Rank in Madhya Pradesh: GDI	40



POPULATION

	1981	1991
Population	539978	687945
Share of Madhya Pradesh	1.03%	1.04%
Urban Population	7.8%	13.0%
Population of Scheduled Castes (SC)	20.4%	20.4%
Population of Scheduled Tribes (ST)	14.1%	14.9%
Decadal Growth : 1981 to 1991(%)	27.4%	
Density of Population (per. sq. kms.)	76	96

HEALTH

	1981	1991
Infant Mortality Rate	175	133
Life Expectancy (years)	44.1	50.8
	1976-81	1984-90
Crude Birth Rate	45.5	39.4

GENDER

	1981	1991
Life Expectancy of Females at Birth	n/a	48.8
Girl Child Mortality (birth to age 1 year)	n/a	129
Girl Child Mortality(up to age 5 years)	n/a	207
Total Fertility Rate	6.7	5.7
Gender Ratio: All	913	897
Rural	918	901
Urban	858	869
SC Gender Ratio	n/a	887
ST Gender Ratio	n/a	948
Workers Participation Rate - Female	25.4%	29.0%

DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	936
Total Habitations	1347
Towns (Class I to VI)	6

EDUCATION

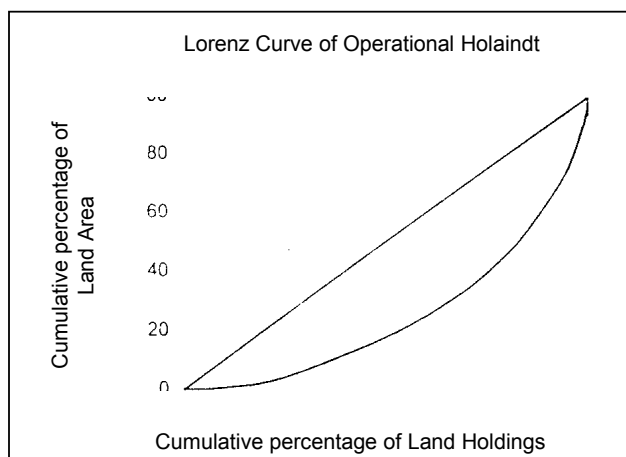
	1981	1991
Literacy:		
Male (%)	36.7%	46.3%
Female (%)	10.8%	19.34%
SC Literacy (%)	n/a	18.6%
ST Literacy (%)	n/a	11.3%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

BASIC AMENITIES

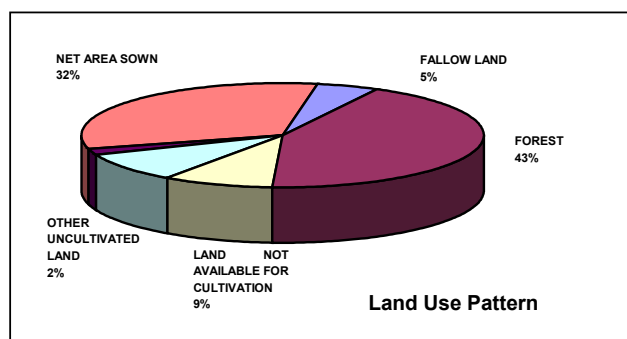
	1991		1991
Children as Main Workers	5.6%	Households Without Access to	
Children as Main Marginal Workers (%)	7.9%	Electricity (%)	79.2%
Child Mortality	204	Safe Drinking Water (%)	72.0%
Use of Polluting Fuels in Households (%)	0.8%	Toilet Facilities (%)	93.8%
Non-Serviceable Kuchcha Houses	0.25%	All of the Three (%)	59.6%

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings:	0.524

FOOD	
Per Capita Food Production 91991) in kgs.	278.80
FPS/ lakh people (1996)	40.68
PDS Offtake per capita(1994/95) in kgs.	0.42



EMPLOYMENT			
	1991		1991
Worker Participation Rate:			
All	41.6%	Employment Rate of Growth (1981 to 1991)	2.24%
Rural	43.0%	Total Employment in Farm Sector (%)	84.5%
Urban	31.0%	Rural Employment in Non Farm Sector	10.1%
Share of Primary Sector (%)	86.3%	Agriculture Labour (%)	27.0%
Share of Secondary Sector (%)	4.4%	Precarious Employment	31.3%
Share of Tertiary Sector (%)	9.3%		



LAND USE AND AGRICULTURE	
Cereals Per Capita(Kg)	219.1
Pulses Per Capita (Kg)	59.7
Oilseeds Per Capita (Kg)	14.1
Average landholding (Ha)	2.4
Irrigated Area ('000 Ha)	23.8
Unirrigated Area ('000 Ha)	203.4
Fertilizer Consumption Per Hectare (Kg)	21.3
Cropping Intensity	113
Per Capita Forest Area (sq. km)	0.509

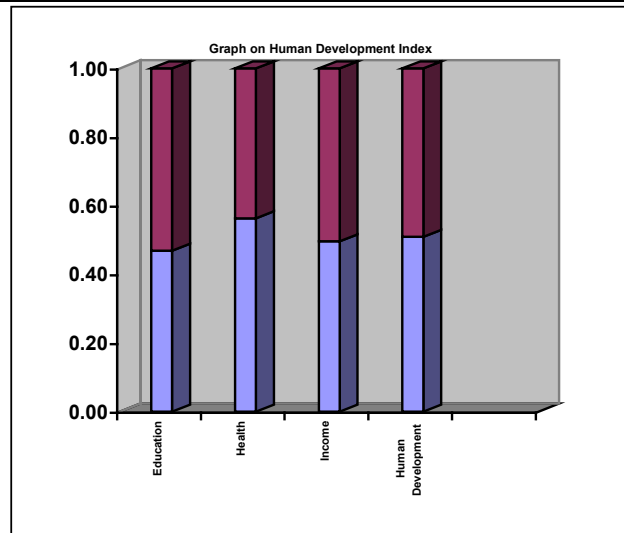
HABITAT			
	1991		1991
Rate of Overcrowding	38.6%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)		Pucca(%)	15.6
Annual Rate of Afforestation (%)	0.00	Semi-Pucca(%)	83.6
		Kucha(%)	1.1

INFRASTRUCTURE/FACILITIES			
Middle Schools per lakh population (1996)	19.3	Pucca Roads per 100 sq. km (1994)	12.4
High Schools per lakh population (1996)	8.0	Number of Banks (per lakh population) (1996)	5.924
Primary Health per lakh rural population (1996)	2.6	Villages with Drinking Water Facility – 1996 (%)	98.2%
Population Serviced sub Health Center (1996)	4969	Telephone per lakh population (93-94)	219
Electrified Villages (%) (1995-96)	96.6%	Population per Post Office (93-94)	4801

RAIGARH

HUMAN DEVELOPMENT INDICES – 1998

Human Development Index (HDI)	0.509
Rank in Madhya Pradesh : HDI	23
Gender Related Development Index (GDI)	0.620
Rank in Madhya Pradesh: GDI	9



POPULATION

	1981	1991
Population	1443197	1722291
Share of Madhya Pradesh	2.77%	2.60
Urban Population	8.4%	9.5%
Population of Scheduled Castes (SC)	10.7%	11.4%
Population of Scheduled Tribes (ST)	48.5%	47.7%
Decadal Growth : 1981 to 1991(%)	19.3%	
Density of Population (per. sq. kms.)	112	113

HEALTH

	1981	1991
Infant Mortality Rate	130	88
Life Expectancy (years)	51.9	60.7
	1976-81	1984-90
Crude Birth Rate	37.2	32.1

GENDER

	1981	1991
Life Expectancy of Females at Birth	n/a	61.5
Girl Child Mortality (birth to age 1 year)	n/a	107
Girl Child Mortality(up to age 5 years)	n/a	129
Total Fertility Rate	3.8	4.0
Gender Ratio: All	1006	1000
Rural	1016	1009
Urban	899	919
SC Gender Ratio	n/a	1000
ST Gender Ratio	n/a	1018
Workers Participation Rate - Female	36.9%	41.0%

DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	2197
Total Habitations	4251
Towns (Class I to VI)	7
Raigarh District has been divided into Raigarh and Jashpur w.e.f. 25 th May 1998.	

EDUCATION

	1981	1991
Literacy:		
Male (%)	45.4%	56.0%
Female (%)	16.5%	26.5%
SC Literacy (%)	n/a	34.1%
ST Literacy (%)	n/a	32.8%
Access to Education		
Habitations with Primary Schools – 1998		100.0%

BASIC AMENITIES

	1991		1991
Children as Main Workers	6.5%	Households Without Access to	
Children as Main Marginal Workers (%)	9.7%	Electricity (%)	73.8%
Child Mortality	131	Safe Drinking Water (%)	59.8%
Use of Polluting Fuels in Households (%)	0.7%	Toilet Facilities (%)	96.1%
Non-Serviceable Kuchcha Houses	0.18%	All of the Three (%)	47.9%

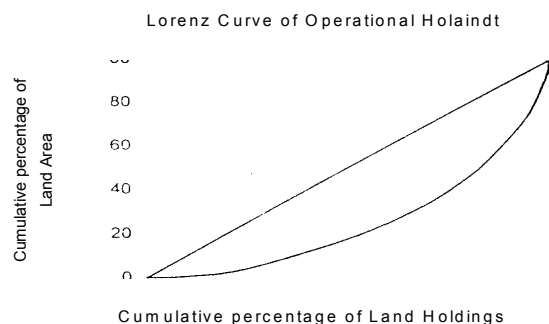
RAIGARH

LAND OWNERSHIP

Gini Coefficient of Operational Holdings:	0.561
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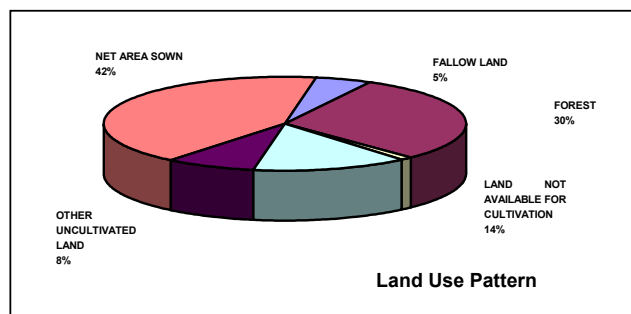
FOOD

Per Capita Food Production 91991) in kgs.	245.49
FPS/ lakh people (1996)	38.78
PDS Offtake per capita(1994/95) in kgs.	7.86



EMPLOYMENT

	1991		1991
Worker Participation Rate:			
All	49.2%	Employment Rate of Growth (1981 to 1991)	1.50%
Rural	51.0%	Total Employment in Farm Sector (%)	85.5%
Urban	31.0%	Rural Employment in Non Farm Sector	9.6%
Share of Primary Sector (%)	85.6%	Agriculture Labour (%)	24.2%
Share of Secondary Sector (%)	5.3%	Precarious Employment	27.9%
Share of Tertiary Sector (%)	9.1%		



LAND USE AND AGRICULTURE

1991

Cereals Per Capita(Kg)	233.7
Pulses Per Capita (Kg)	11.8
Oilseeds Per Capita (Kg)	13.6
Average landholding (Ha)	2.5
Irrigated Area ('000 Ha)	33.3
Unirrigated Area ('000 Ha)	512.5
Fertilizer Consumption Per Hectare (Kg)	33.1
Cropping Intensity	106
Per Capita Forest Area (sq. km)	0.350

HABITAT

	1991		1991
Rate of Overcrowding	36.2%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)	30.93	Pucca(%)	8.3
Annual Rate of Afforestation (%)	0.00	Semi-Pucca(%)	85.2
		Kucha(%)	6.6

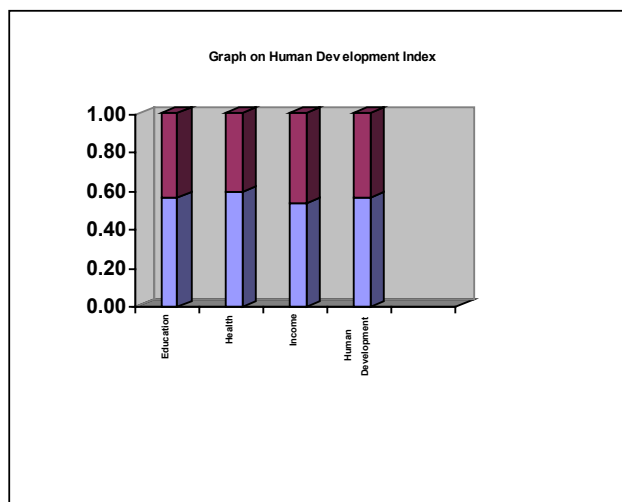
INFRASTRUCTURE/FACILITIES

	1991		1991
Middle Schools per lakh population (1996)	27.5	Pucca Roads per 100 sq. km (1994)	15.3
High Schools per lakh population (1996)	8.3	Number of Banks (per lakh population) (1996)	5.4744
Primary Health per lakh rural population (1996)	4.5	Villages with Drinking Water Facility – 1996 (%)	99.5%
Population Served sub Health Center (1996)	4433	Telephone per lakh population (93-94)	281
Electrified Villages (%) (1995-96)	90.0%	Population per Post Office (93-94)	4298

RAIPUR

HUMAN DEVELOPMENT INDICES – 1998

Human Development Index (HDI)	0.561
Rank in Madhya Pradesh : HDI	9
Gender Related Development Index (GDI)	0.662
Rank in Madhya Pradesh: GDI	2



POPULATION	1981	1991
Population	3079476	3908042
Share of Madhya Pradesh	5.90%	5.91%
Urban Population	17.2%	19.7%
Population of Scheduled Castes (SC)	13.8%	14.4%
Population of Scheduled Tribes (ST)	18.6%	18.3%
Decadal Growth : 1981 to 1991(%)	26.9%	
Density of Population (per. sq. kms.)	145	184

HEALTH	1981	1991
Infant Mortality Rate	132	91
Life Expectancy (years)	51.6	60.1
	1976-81	1984-90
Crude Birth Rate	34.4	34.5

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	59.8
Girl Child Mortality (birth to age 1 year)	n/a	122
Girl Child Mortality(up to age 5 years)	n/a	138
Total Fertility Rate	4.7	4.3
Gender Ratio: All	1009	993
Rural	1025	1007
Urban	937	941
SC Gender Ratio	n/a	999
ST Gender Ratio	n/a	1025
Workers Participation Rate - Female	42.9%	41.0%

DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	3869
Total Habitations	4005
Towns (Class I to VI)	15
Raipur District has been divided into Raipur, Dhamtari and Mahasamund w.e.f. 6 th July 1998.	

EDUCATION

	1981	1991
Literacy:		
Male (%)	54.6%	65.1%
Female (%)	20.3%	31.0%
SC Literacy (%)	n/a	37.4%
ST Literacy (%)	n/a	35.7%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

BASIC AMENITIES

	1991		1991
Children as Main Workers	6.1%	Households Without Access to	
Children as Main Marginal Workers (%)	7.6%	Electricity (%)	63.3%
Child Mortality	137	Safe Drinking Water (%)	46.1%
Use of Polluting Fuels in Households (%)	2.6%	Toilet Facilities (%)	89.3%
Non-Serviceable Kuchcha Houses	0.23%	All of the Three (%)	28.9%

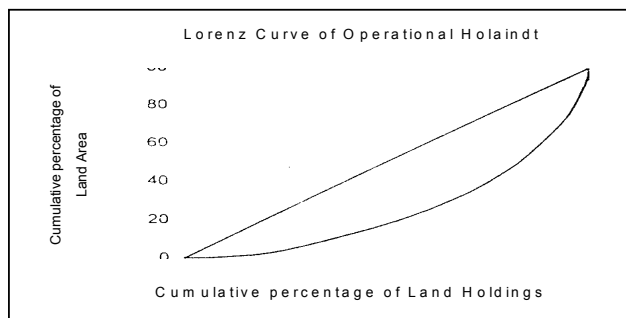
RAIPUR

LAND OWNERSHIP

Gini Coefficient of Operational Holdings:	0.573
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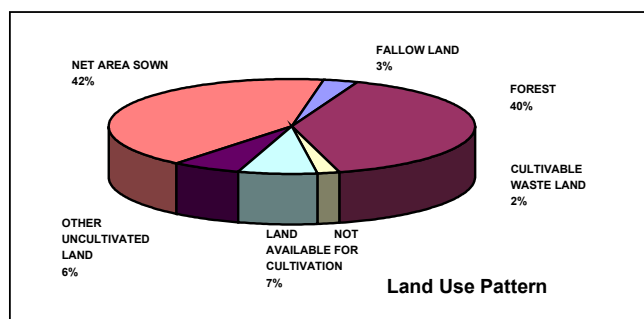
FOOD

Per Capita Food Production 91991) in kgs.	321.18
FPS/ lakh people (1996)	27.48
PDS Offtake per capita(1994/95) in kgs.	3.33



EMPLOYEMENT

	1991		1991
Worker Participation Rate:			
All	47.1%	Employment Rate of Growth (1981 to 1991)	2.00%
Rural	51.0%	Total Employment in Farm Sector (%)	80.0%
Urban	32.0%	Rural Employment in Non Farm Sector	9.9%
Share of Primary Sector (%)	80.2%	Agriculture Labour (%)	28.8%
Share of Secondary Sector (%)	7.2%	Precarious Employment	30.3%
Share of Tertiary Sector (%)	12.6%		



LAND USE AND AGRICULTURE

	1991
Cereals Per Capita(Kg)	302.3
Pulses Per Capita (Kg)	18.9
Oilseeds Per Capita (Kg)	3.3
Average landholding (Ha)	1.0
Irrigated Area ('000 Ha)	383.3
Unirrigated Area ('000 Ha)	553.0
Fertilizer Consumption Per Hectare (Kg)	54.8
Cropping Intensity	125
Per Capita Forest Area (sq. km)	0.180

HABITAT

	1991		1991
Rate of Overcrowding	24.6%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)	4.78	Pucca(%)	27.5
Annual Rate of Afforestation (%)	0.00	Semi-Pucca(%)	70.4
		Kucha(%)	2.2

INFRASTRUCTURE/FACILITIES

	1991		1991
Middle Schools per lakh population (1996)	21.6	Pucca Roads per 100 sq. km (1994)	24.3
High Schools per lakh population (1996)	7.7	Number of Banks (per lakh population) (1996)	5.1789
Primary Health per lakh rural population (1996)	2.4	Villages with Drinking Water Facility – 1996 (%)	100.0%
Population Serviced sub Health Center (1996)	5238	Telephone per lakh population (93-94)	643
Electrified Villages (%) (1995-96)	93.1%	Population per Post Office (93-94)	7026

RAISEN

HUMAN DEVELOPMENT INDICES – 1998

Human Development Index (HDI)	0.542
Rank in Madhya Pradesh : HDI	15
Gender Related Development Index (GDI)	0.521
Rank in Madhya Pradesh: GDI	38

POPULATION

	1981	1991
Population	710542	876461
Share of Madhya Pradesh	1.36%	1.35%
Urban Population	10.0%	15.7%
Population of Scheduled Castes (SC)	16.7%	16.6%
Population of Scheduled Tribes (ST)	15.4%	14.4%
Decadal Growth : 1981 to 1991(%)	23.4%	
Density of Population (per. sq. kms.)	84	104

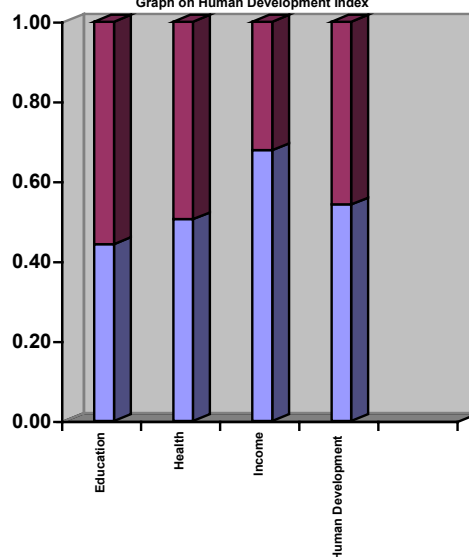
HEALTH

	1981	1991
Infant Mortality Rate	152	124
Life Expectancy (years)	48.0	52.8
	1976-81	1984-90
Crude Birth Rate	42.6	41.4

GENDER

	1981	1991
Life Expectancy of Females at Birth	n/a	53.7
Girl Child Mortality (birth to age 1 year)	n/a	159
Girl Child Mortality(up to age 5 years)	n/a	170
Total Fertility Rate	6.4	6.1
Gender Ratio: All	908	879
Rural	912	884
Urban	866	855
SC Gender Ratio	n/a	867
ST Gender Ratio	n/a	927
Workers Participation Rate - Female	19.5%	22.0%

Graph on Human Development Index



DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1430
Total Habitations	1459
Towns (Class I to VI)	9

EDUCATION

	1981	1991
Literacy:		
Male (%)	42.1%	54.0%
Female (%)	14.7%	25.5%
SC Literacy (%)	n/a	25.6%
ST Literacy (%)	n/a	14.9%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

BASIC AMENITIES

	1991		1991
Children as Main Workers	3.6%	Households Without Access to	
Children as Main Marginal Workers (%)	4.9%	Electricity (%)	54.6%
Child Mortality	179	Safe Drinking Water (%)	42.3%
Use of Polluting Fuels in Households (%)	3.1%	Toilet Facilities (%)	83.4%
Non-Serviceable Kuchcha Houses	1.52%	All of the Three (%)	26.7%

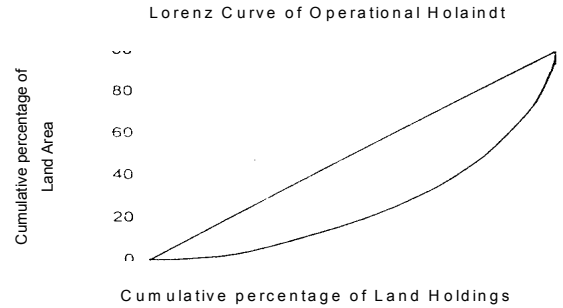
RAISEN

LAND OWNERSHIP

Gini Coefficient of Operational Holdings:	0.527
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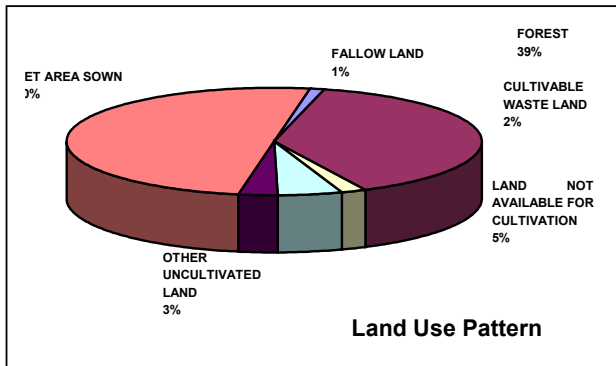
FOOD

Per Capita Food Production (1991) in kgs.	439.61
FPS/ lakh people (1996)	39.86
PDS Offtake per capita(1994/95) in kgs.	0.54



EMPLOYMENT

	1991		1991
Worker Participation Rate:			
All	37.4%	Employment Rate of Growth (1981 to 1991)	2.08%
Rural	39.0%	Total Employment in Farm Sector (%)	78.1%
Urban	30.0%	Rural Employment in Non Farm Sector	13.7%
Share of Primary Sector (%)	78.6%	Agriculture Labour (%)	37.6%
Share of Secondary Sector (%)	9.0%	Precarious Employment	41.4%
Share of Tertiary Sector (%)	12.3%		



LAND USE AND AGRICULTURE

	1991
Cereals Per Capita(Kg)	286.9
Pulses Per Capita (Kg)	152.7
Oilseeds Per Capita (Kg)	103.4
Average landholding (Ha)	4.1
Irrigated Area ('000 Ha)	82.0
Unirrigated Area ('000 Ha)	337.3
Fertilizer Consumption Per Hectare (Kg)	28.0
Cropping Intensity	122
Per Capita Forest Area (sq. km)	0.380

HABITAT

	1991		1991
Rate of Overcrowding	49.5%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)		Pucca(%)	34.1
Annual Rate of Afforestation (%)	0.00	Semi-Pucca(%)	63.1
		Kucha(%)	2.9

INFRASTRUCTURE/FACILITIES

	1991		1991
Middle Schools per lakh population (1996)	33.7	Pucca Roads per 100 sq. km (1994)	10
High Schools per lakh population (1996)	7.0	Number of Banks (per lakh population) (1996)	6.7802
Primary Health per lakh rural population (1996)	2.9	Villages with Drinking Water Facility – 1996 (%)	100.0%
Population Served sub Health Center (1996)	45.5	Telephone per lakh population (93-94)	444
Electrified Villages (%) (1995-96)	92.0%	Population per Post Office (93-94)	4540

RAJGARH

HUMAN DEVELOPMENT INDICES – 1998

Human Development Index (HDI)	0.458
Rank in Madhya Pradesh : HDI	33
Gender Related Development Index (GDI)	0.556
Rank in Madhya Pradesh: GDI	33

POPULATION

	1981	1991
Population	801384	992764
Share of Madhya Pradesh	1.54%	1.50%
Urban Population	13.1%	16.8%
Population of Scheduled Castes (SC)	10.7%	18.0%
Population of Scheduled Tribes (ST)	48.5%	3.3%
Decadal Growth : 1981 to 1991(%)	23.9%	
Density of Population (per. sq. kms.)	130	161

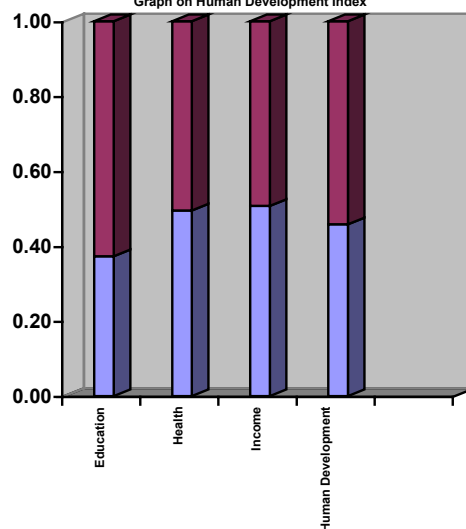
HEALTH

	1981	1991
Infant Mortality Rate	164	122
Life Expectancy (years)	45.9	53.3
	1976-81	1984-90
Crude Birth Rate	39.0	37.4

GENDER

	1981	1991
Life Expectancy of Females at Birth	n/a	51.4
Girl Child Mortality (birth to age 1 year)	n/a	144
Girl Child Mortality(up to age 5 years)	n/a	198
Total Fertility Rate	5.7	5.2
Gender Ratio: All	931	923
Rural	935	927
Urban	908	906
SC Gender Ratio	n/a	922
ST Gender Ratio	n/a	924
Workers Participation Rate - Female	29.4%	38.0%

Graph on Human Development Index



DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1666
Total Habitations	1728
Towns (Class I to VI)	12

EDUCATION

	1981	1991
Literacy:		
Male (%)	34.7%	46.7%
Female (%)	8.8%	15.6%
SC Literacy (%)	n/a	20.0%
ST Literacy (%)	n/a	20.3%
Access to Education		
Habitations with Primary Schools – 1998		100.0%

BASIC AMENITIES

	1991		1991
Children as Main Workers	7.2%	Households Without Access to	
Children as Main Marginal Workers (%)	11.2%	Electricity (%)	65.8%
Child Mortality	182	Safe Drinking Water (%)	43.0%
Use of Polluting Fuels in Households (%)	2.5%	Toilet Facilities (%)	90.0%
Non-Serviceable Kuchcha Houses	0.65%	All of the Three (%)	29.9%

RAJGARH

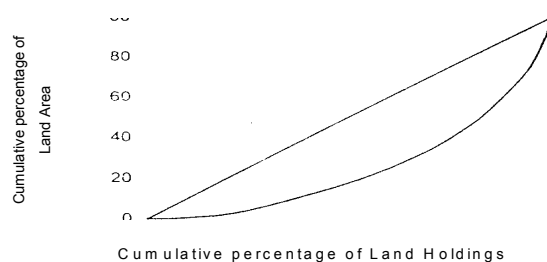
LAND OWNERSHIP

Gini Coefficient of Operational Holdings:	0.536
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FOOD

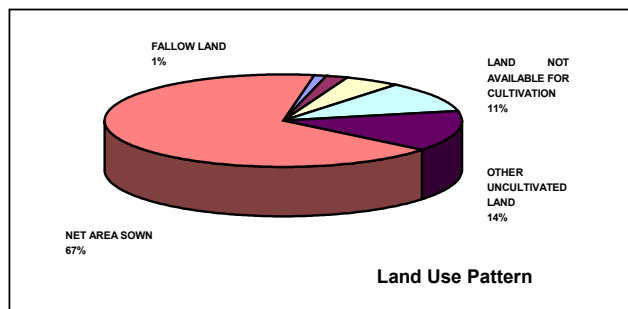
Per Capita Food Production 91991) in kgs.	282.04
FPS/ lakh people (1996)	27.84
PDS Offtake per capita(1994/95) in kgs.	0.44

Lorenz Curve of Operational Holdings



EMPLOYMENT

	1991		1991
Worker Participation Rate:			
All	47.0%	Employment Rate of Growth (1981 to 1991)	2.12
Rural	50.0%	Total Employment in Farm Sector (%)	82.
Urban	30.0%	Rural Employment in Non Farm Sector	9
Share of Primary Sector (%)	82.4%	Agriculture Labour (%)	21
Share of Secondary Sector (%)	6.6%	Precarious Employment	24
Share of Tertiary Sector (%)	11.1%		



LAND USE AND AGRICULTURE

	1991
Cereals Per Capita(Kg)	20
Pulses Per Capita (Kg)	7
Oilseeds Per Capita (Kg)	9
Average landholding (Ha)	
Irrigated Area ('000 Ha)	8
Unirrigated Area ('000 Ha)	31
Fertilizer Consumption Per Hectare (Kg)	2
Cropping Intensity	1
Per Capita Forest Area (sq. km)	0.

HABITAT

	1991		1991
Rate of Overcrowding	55.1%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)	30.93%	Pucca(%)	3
Annual Rate of Afforestation (%)	0.00	Semi-Pucca(%)	6
		Kucha(%)	

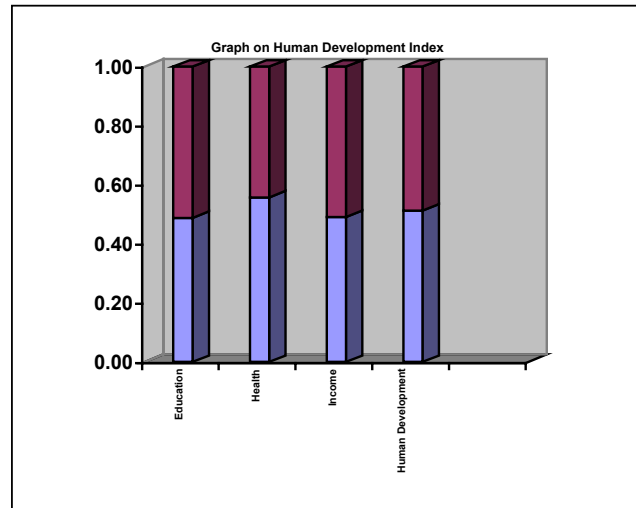
INFRASTRUCTURE/FACILITIES

	1991		1991
Middle Schools per lakh population (1996)	23.7	Pucca Roads per 100 sq. km (1994)	1
High Schools per lakh population (1996)	6.5	Number of Banks (per lakh population) (1996)	660
Primary Health per lakh rural population (1996)	3.4	Villages with Drinking Water Facility – 1996 (%)	100.
Population Serviced sub Health Center (1996)	5657	Telephone per lakh population (93-94)	
Electrified Villages (%) (1995-96)	98.4%	Population per Post Office (93-94)	6

RAJNANDGAON

HUMAN DEVELOPMENT INDICES – 1998

Human Development Index (HDI)	0.512
Rank in Madhya Pradesh : HDI	22
Gender Related Development Index (GDI)	0.645
Rank in Madhya Pradesh: GDI	4



POPULATION

	1981	1991
Population	1167501	1439951
Share of Madhya Pradesh	2.24%	2.18%
Urban Population	12.4%	15.7%
Population of Scheduled Castes (SC)	9.4%	10.3%
Population of Scheduled Tribes (ST)	25.3%	25.2%
Decadal Growth : 1981 to 1991(%)	23.3%	
Density of Population (per. sq. kms.)	105	129

HEALTH

	1981	1991
Infant Mortality Rate	147	97
Life Expectancy (years)	48.9	58.7
	1976-81	1984-90
Crude Birth Rate	35.5	34.2

GENDER

	1981	1991
Life Expectancy of Females at Birth	n/a	60.4
Girl Child Mortality (birth to age 1 year)	n/a	124
Girl Child Mortality(up to age 5 years)	n/a	145
Total Fertility Rate	5.0	1.2
Gender Ratio: All	1020	1012
Rural	1031	1021
Urban	945	966
SC Gender Ratio	n/a	1015
ST Gender Ratio	n/a	1039
Workers Participation Rate - Female	50.1%	50.0%

DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	2280
Total Habitations	2390
Towns (Class I to VI)	8
Rajnandgaon District has been divided by Rajnandgaon and Kawardha w.e.f. 6 th July 1998.	

EDUCATION

	1981	1991
Literacy:		
Male (%)	49.4%	61.3%
Female (%)	15.9%	27.8%
SC Literacy (%)	n/a	44.0%
ST Literacy (%)	n/a	35.6%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

BASIC AMENITIES

	1991		1991
Children as Main Workers	9.4%	Households Without Access to	
Children as Main Marginal Workers (%)	11.2%	Electricity (%)	62.6%
Child Mortality	150	Safe Drinking Water (%)	48.1%
Use of Polluting Fuels in Households (%)	1.6%	Toilet Facilities (%)	93.8%
Non-Serviceable Kuchcha Houses	0.98%	All of the Three (%)	31.6%

RAJNANDGAON

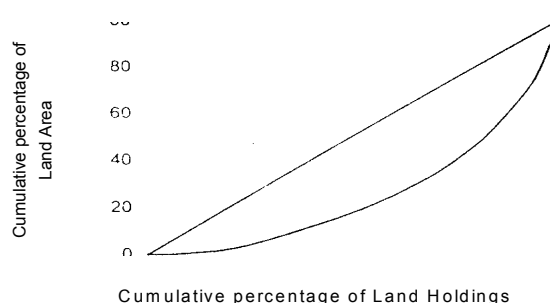
LAND OWNERSHIP

Gini Coefficient of Operational Holdings:	0.555
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FOOD

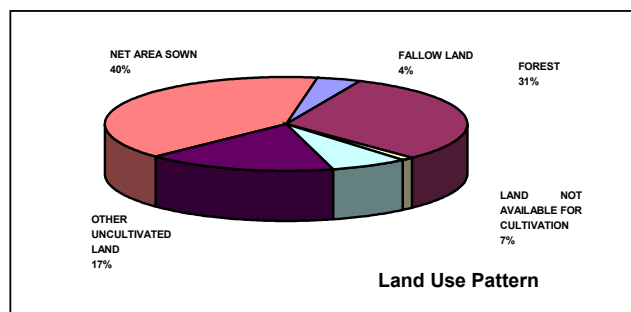
Per Capita Food Production 91991) in kgs.	294.52
FPS/ lakh people (1996)	31.58
PDS Offtake per capita(1994/95) in kgs.	5.24

Lorenz Curve of Operational Holdings



EMPLOYMENT

	1991		1991
Worker Participation Rate:			
All	52.4%	Employment Rate of Growth (1981 to 1991)	1.89%
Rural	56.0%	Total Employment in Farm Sector (%)	86.1%
Urban	34.0%	Rural Employment in Non Farm Sector	7.3%
Share of Primary Sector (%)	86.2%	Agriculture Labour (%)	20.3%
Share of Secondary Sector (%)	5.1%	Precarious Employment	21.8%
Share of Tertiary Sector (%)	8.7%		



LAND USE AND AGRICULTURE

	1991
Cereals Per Capita(Kg)	248.5
Pulses Per Capita (Kg)	46.0
Oilseeds Per Capita (Kg)	7.8
Average landholding (Ha)	2.4
Irrigated Area ('000 Ha)	58.4
Unirrigated Area ('000 Ha)	436.9
Fertilizer Consumption Per Hectare (Kg)	22.7
Cropping Intensity	122
Per Capita Forest Area (sq. km)	0.200

HABITAT

	1991		1991
Rate of Overcrowding	22.6%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)	9.11	Pucca (%)	14.4
Annual Rate of Afforestation (%)	0.00	Semi-Pucca (%)	82.8
		Kucha (%)	2.8

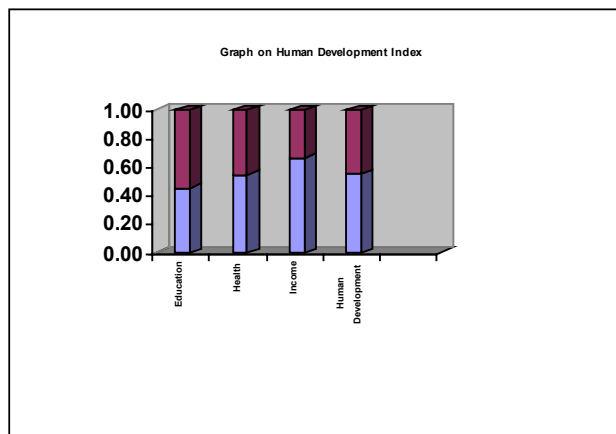
INFRASTRUCTURE/FACILITIES

	1991		1991
Middle Schools per lakh population (1996)	24.5	Pucca Roads per 100 sq. km (1994)	17
High Schools per lakh population (1996)	7.0	Number of Banks (per lakh population) (1996)	4.6274
Primary Health per lakh rural population (1996)	2.4	Villages with Drinking Water Facility – 1996 (%)	99.4%
Population Serviced sub Health Center (1996)	4786	Telephone per lakh population (93-94)	223
Electrified Villages (%) (1995-96)	91.6%	Population per Post Office (93-94)	7075

RATLAM

HUMAN DEVELOPMENT INDICES - 1998

Human Development Index (HDI)	0.553
Rank in Madhya Pradesh : HDI	11
Gender Related Development Index (GDI)	0.601
Rank in Madhya Pradesh: GDI	16



POPULATION

	1981	1991
Population	782729	971888
Share of Madhya Pradesh	1.50%	1.47%
Urban Population	30.7%	31.9%
Population of Scheduled Castes (SC)	14.0%	13.7%
Population of Scheduled Tribes (ST)	21.5%	23.3%
Decadal Growth : 1981 to 1991(%)	24.2%	
Density of Population (per. sq. kms.)	161	200

HEALTH

	1981	1991
Infant Mortality Rate	141	100
Life Expectancy (years)	49.9	57.9
	1976-81	1984-90
Crude Birth Rate	38.2	36.1

DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1053
Total Habitations	1267
Towns (Class I to VI)	9

GENDER

	1981	1991
Life Expectancy of Females at Birth	n/a	59.2
Girl Child Mortality (birth to age 1 year)	n/a	132
Girl Child Mortality(up to age 5 years)	n/a	151
Total Fertility Rate	5.3	4.7
Gender Ratio: All	948	948
Rural	956	956
Urban	928	932
SC Gender Ratio	n/a	941
ST Gender Ratio	n/a	972
Workers Participation Rate - Female	29.9%	37.0%

EDUCATION

	1981	1991
Literacy:		
Male (%)	49.8%	58.4%
Female (%)	21.4%	29.1%
SC Literacy (%)	n/a	32.2%
ST Literacy (%)	n/a	12.7%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

BASIC AMENITIES

	1991		1991
Children as Main Workers	8.3%	Households Without Access to	
Children as Main Marginal Workers (%)	12.1%	Electricity (%)	39.6%
Child Mortality	149	Safe Drinking Water (%)	16.9%
Use of Polluting Fuels in Households (%)	8.3%	Toilet Facilities (%)	74.5%
Non-Serviceable Kuchcha Houses	0.57%	All of the Three (%)	9.4%

RATLAM

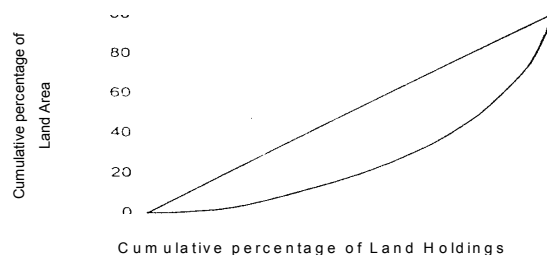
LAND OWNERSHIP

Gini Coefficient of Operational Holdings:	0.512
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FOOD

Per Capita Food Production 91991) in kgs.	281.72
FPS/ lakh people (1996)	27.97
PDS Offtake per capita(1994/95) in kgs.	3.34

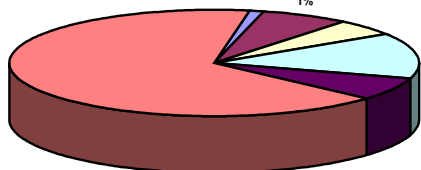
Lorenz Curve of Operational Holdings



EMPLOYMENT

	1991		1991
Worker Participation Rate:			
All	46.0%	Employment Rate of Growth (1981 to 1991)	2.98%
Rural	53.0%	Total Employment in Farm Sector (%)	74.1%
Urban	30.0%	Rural Employment in Non Farm Sector	7.9%
Share of Primary Sector (%)	74.2%	Agriculture Labour (%)	18.1%
Share of Secondary Sector (%)	9.1%	Precarious Employment	23.5%
Share of Tertiary Sector (%)	16.7%		

NET AREA SOWN
66%



Land Use Pattern

LAND USE AND AGRICULTURE

	1991
Cereals Per Capita(Kg)	208.3
Pulses Per Capita (Kg)	73.5
Oilseeds Per Capita (Kg)	83.5
Average landholding (Ha)	3.0
Irrigated Area ('000 Ha)	84.5
Unirrigated Area ('000 Ha)	232.4
Fertilizer Consumption Per Hectare (Kg)	59.8
Cropping Intensity	149
Per Capita Forest Area (sq. km)	0.130

HABITAT

	1991		1991
Rate of Overcrowding	43.6%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)	5.35	Pucca(%)	28.4
Annual Rate of Afforestation (%)	0.00	Semi-Pucca(%)	64.9
		Kucha(%)	6.8

INFRASTRUCTURE/FACILITIES

	1991		1991
Middle Schools per lakh population (1996)	29.0	Pucca Roads per 100 sq. km (1994)	16.6
High Schools per lakh population (1996)	10.0	Number of Banks (per lakh population) (1996)	6.6484
Primary Health per lakh rural population (1996)	3.7	Villages with Drinking Water Facility – 1996 (%)	100.0%
Population Serviced sub Health Center (1996)	4690	Telephone per lakh population (93-94)	1268
Electrified Villages (%) (1995-96)	100.0%	Population per Post Office (93-94)	5630

REWA

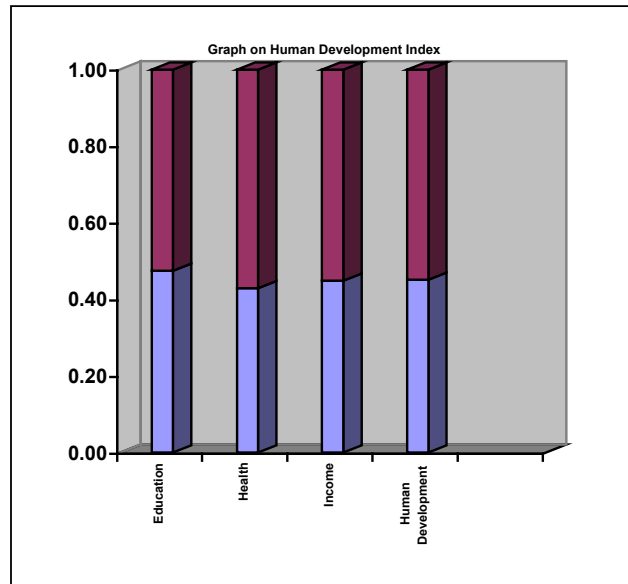
HUMAN DEVELOPMENT INDICES – 1998

Human Development Index (HDI)	0.451
Rank in Madhya Pradesh : HDI	36
Gender Related Development Index (GDI)	0.561
Rank in Madhya Pradesh: GDI	32

POPULATION	1981	1991
Population	1207583	1554987
Share of Madhya Pradesh	2.31%	2.35%
Urban Population	13.1%	15.2%
Population of Scheduled Castes (SC)	13.7	14.8%
Population of Scheduled Tribes (ST)	12.1%	12.4%
Decadal Growth : 1981 to 1991(%)	28.8%	
Density of Population (per. sq. kms.)	191	246

HEALTH	1981	1991
Infant Mortality Rate	155	128
Life Expectancy (years)	47.5	51.9
	1976-81	1984-90
Crude Birth Rate	40.6	39.2

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	49.9
Girl Child Mortality (birth to age 1 year)	n/a	127
Girl Child Mortality(up to age 5 years)	n/a	198
Total Fertility Rate	5.8	5.6
Gender Ratio: All	969	935
Rural	992	946
Urban	833	858
SC Gender Ratio	n/a	923
ST Gender Ratio	n/a	912
Workers Participation Rate - Female	29.1%	29.0%



DISTRICT INFORMATION	
Total Inhabited Villages (in 1991)	2352
Total Habitations	3051
Towns (Class I to VI)	12

EDUCATION	1981	1991
Literacy:		
Male (%)	48.3%	60.7%
Female (%)	14.0%	26.9%
SC Literacy (%)	n/a	21.8%
ST Literacy (%)	n/a	13.9%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

BASIC AMENITIES

	1991		1991
Children as Main Workers	4.0%	Households Without Access to	
Children as Main Marginal Workers (%)	5.5%	Electricity (%)	71.0%
Child Mortality	196	Safe Drinking Water (%)	72.5%
Use of Polluting Fuels in Households (%)	2.5%	Toilet Facilities (%)	92.4%
Non-Serviceable Kuchcha Houses	0.26%	All of the Three (%)	53.7%

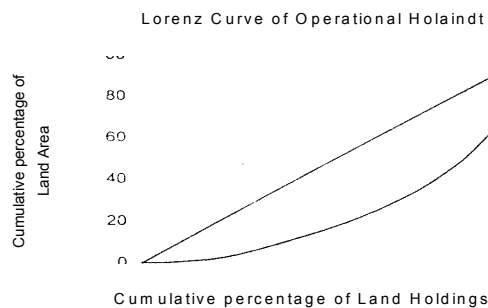
REWA

LAND OWNERSHIP

Gini Coefficient of Operational Holdings:	0.633
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FOOD

Per Capita Food Production 91991) in kgs.	260.97
FPS/ lakh people (1996)	36.21
PDS Offtake per capita(1994/95) in kgs.	0.82

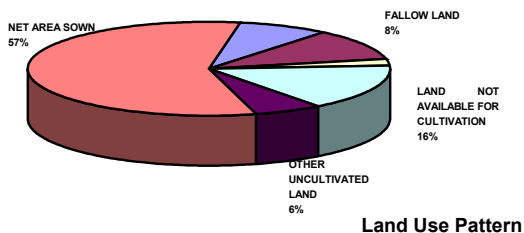


EMPLOYMENT

	1991		1991
Worker Participation Rate:			
All	37.7%	Employment Rate of Growth (1981 to 1991)	1.97%
Rural	39.0%	Total Employment in Farm Sector (%)	79.5%
Urban	30.0%	Rural Employment in Non Farm Sector	13.9%
Share of Primary Sector (%)	79.7%	Agriculture Labour (%)	36.9%
Share of Secondary Sector (%)	6.9%	Precarious Employment	41.2%
Share of Tertiary Sector (%)	13.4%		

LAND USE AND AGRICULTURE

	1991
Cereals Per Capita(Kg)	217.4
Pulses Per Capita (Kg)	43.5
Oilseeds Per Capita (Kg)	5.0
Average landholding (Ha)	2.4
Irrigated Area ('000 Ha)	53.9
Unirrigated Area ('000 Ha)	312.8
Fertilizer Consumption Per Hectare (Kg)	66.1
Cropping Intensity	130
Per Capita Forest Area (sq. km)	0.070



HABITAT

	1991		1991
Rate of Overcrowding	13.7%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)	19.40	Pucca(%)	12.8
Annual Rate of Afforestation (%)	0.00	Semi-Pucca(%)	85.8
		Kucha(%)	1.4

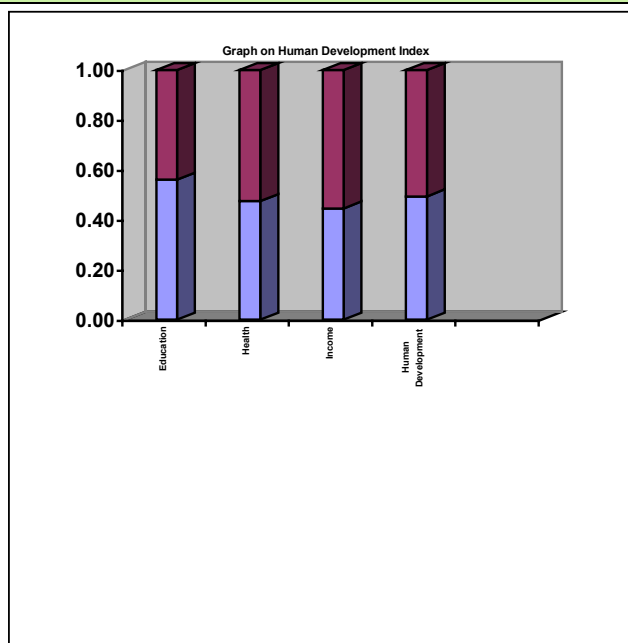
INFRASTRUCTURE/FACILITIES

	1991		1991
Middle Schools per lakh population (1996)	20.9	Pucca Roads per 100 sq. km (1994)	27.4
High Schools per lakh population (1996)	15.0	Number of Banks (per lakh population) (1996)	5.8939
Primary Health per lakh rural population (1996)	2.4	Villages with Drinking Water Facility – 1996 (%)	97.6%
Population Served sub Health Center (1996)	5470	Telephone per lakh population (93-94)	234
Electrified Villages (%) (1995-96)	88.1%	Population per Post Office (93-94)	4937

SAGAR

HUMAN DEVELOPMENT INDICES - 1998

Human Development Index (HDI)	0.494
Rank in Madhya Pradesh : HDI	29
Gender Related Development Index (GDI)	0.595
Rank in Madhya Pradesh: GDI	20



POPULATION

	1981	1991
Population	1323132	1647736
Share of Madhya Pradesh	2.54%	2.49%
Urban Population	27.9%	29.2%
Population of Scheduled Castes (SC)	20.8%	21.1%
Population of Scheduled Tribes (ST)	8.7%	8.5%
Decadal Growth : 1981 to 1991(%)	24.5%	
Density of Population (per sq. kms.)	129	161

HEALTH

	1981	1991
Infant Mortality Rate	160	116
Life Expectancy (years)	46.6	54.4
	1979-81	1984-90
Crude Birth Rate	43.2	39.2

GENDER

	1981	1991
Life Expectancy of Females at Birth	n/a	54.7
Girl Child Mortality (birth to age 1 year)	n/a	1.32
Girl Child Mortality(up to age 5 years)	n/a	169
Total Fertility Rate	6.4	5.5
Gender Ratio: All	891	881
Rural	899	884
Urban	871	874
SC Gender Ratio	n/a	869
ST Gender Ratio	n/a	931
Workers Participation Rate - Female	25.7%	26.0%

DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1836
Total Habitations	1923
Towns (Class I to VI)	13

EDUCATION

	1981	1991
Literacy:		
Male (%)	57.3%	67.0%
Female (%)	26.3%	37.8%
SC Literacy (%)	n/a	41.1%
ST Literacy (%)	n/a	20.1%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

BASIC AMENITIES

	1991		1991
Children as Main Workers	3.9%		Households Without Access to
Children as Main Marginal Workers (%)	5.3%		Electricity (%)
Child Mortality	172		Safe Drinking Water (%)
Use of Polluting Fuels in Households (%)	3.2%		Toilet Facilities (%)
Non-Serviceable Kuchcha Houses	0.70%		All of the Three (%)
			35.1%

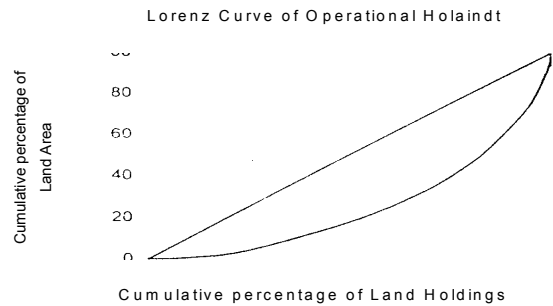
SAGAR

LAND OWNERSHIP

Gini Coefficient of Operational Holdings:	0.566
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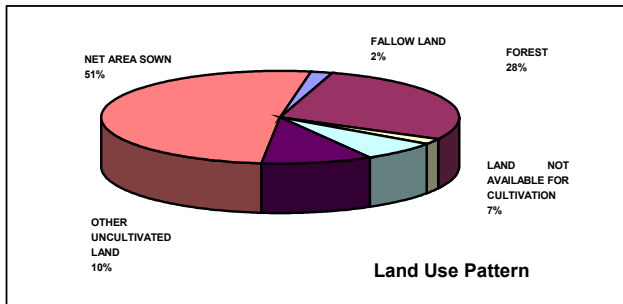
FOOD

Per Capita Food Production 91991) in kgs.	215.87
FPS/ lakh people (1996)	35.66
PDS Offtake per capita(1994/95) in kgs.	0.48



EMPLOYMENT

	1991		1991
Worker Participation Rate:			
All	39.1%	Employment Rate of Growth (1981 to 1991)	2.15%
Rural	42.0%	Total Employment in Farm Sector (%)	57.0%
Urban	33.0%	Rural Employment in Non Farm Sector	27.0%
Share of Primary Sector (%)	57.4%	Agriculture Labour (%)	22.7%
Share of Secondary Sector (%)	25.6%	Precarious Employment	22.7%
Share of Tertiary Sector (%)	17.0%		



LAND USE AND AGRICULTURE

	1991
Cereals Per Capita(Kg)	164.5
Pulses Per Capita (Kg)	51.3
Oilseeds Per Capita (Kg)	44.8
Average landholding (Ha)	2.9
Irrigated Area ('000 Ha)	73.9
Unirrigated Area ('000 Ha)	444.6
Fertilizer Consumption Per Hectare (Kg)	26.9
Cropping Intensity	115
Per Capita Forest Area (sq. km)	0.170

HABITAT

	1991		1991
Rate of Overcrowding	41.0%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)	15.27	Pucca(%)	49.6
Annual Rate of Afforestation (%)	0.00	Semi-Pucca(%)	48.4
		Kucha(%)	2.0

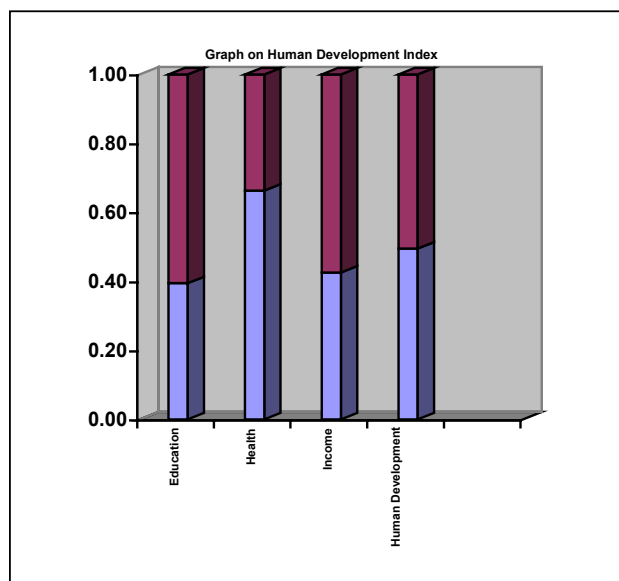
INFRASTRUCTURE/FACILITIES

	1991		1991
Middle Schools per lakh population (1996)	20.5	Pucca Roads per 100 sq. km (1994)	15.5
High Schools per lakh population (1996)	7.2	Number of Banks (per lakh population) (1996)	5.7647
Primary Health per lakh rural population (1996)	2.6	Villages with Drinking Water Facility – 1996 (%)	98.6%
Population Served sub Health Center (1996)	5262	Telephone per lakh population (93-94)	494
Electrified Villages (%) (1995-96)	93.4%	Population per Post Office (93-94)	7353

SARGUJA

HUMAN DEVELOPMENT INDICES – 1998

Human Development Index (HDI)	0.495
Rank in Madhya Pradesh : HDI	28
Gender Related Development Index (GDI)	0.613
Rank in Madhya Pradesh: GDI	11



POPULATION

	1981	1991
Population	1633476	2082630
Share of Madhya Pradesh	3.13%	3.15%
Urban Population	8.7%	12.1%
Population of Scheduled Castes (SC)	5.5%	5.5%
Population of Scheduled Tribes (ST)	54.8%	53.7%
Decadal Growth : 1981 to 1991(%)	27.5%	
Density of Population (per. sq. kms.)	73	93

HEALTH

	1981	1991
Infant Mortality Rate	126	76
Life Expectancy (years)	52.6	63.6
	1976-81	1984-90
Crude Birth Rate	33.4	33.4

GENDER

	1981	1991
Life Expectancy of Females at Birth	n/a	63.8
Girl Child Mortality (birth to age 1 year)	n/a	95
Girl Child Mortality(up to age 5 years)	n/a	112
Total Fertility Rate	4.4	4.3
Gender Ratio: All	962	956
Rural	973	969
Urban	862	865
SC Gender Ratio	n/a	957
ST Gender Ratio	n/a	975
Workers Participation Rate - Female	32.9%	38.0%

DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	2412
Total Habitations	5144
Towns (Class I to VI)	16
Surguja District has been divided into Surguja and Koriya w.e.f. 25 th May 1998.	

EDUCATION

	1981	1991
Literacy:		
Male (%)	29.8%	42.1%
Female (%)	9.3%	17.4%
SC Literacy (%)	n/a	25.2%
ST Literacy (%)	n/a	19.5%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

BASIC AMENITIES

	1991		1991
Children as Main Workers	6.9%	Households Without Access to	
Children as Main Marginal Workers (%)	11.1%	Electricity (%)	78.1%
Child Mortality	113	Safe Drinking Water (%)	72.3%
Use of Polluting Fuels in Households (%)	10.2%	Toilet Facilities (%)	92.3%
Non-Serviceable Kuchcha Houses	0.09%	All of the Three (%)	60.5%

SARGUJA

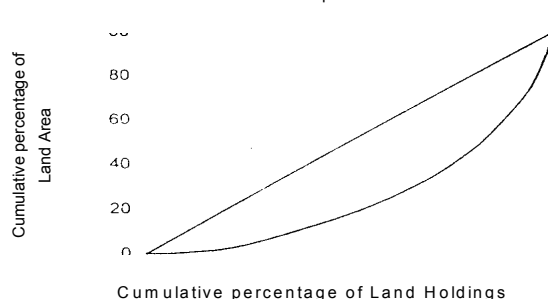
LAND OWNERSHIP

Gini Coefficient of Operational Holdings:	0.536
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FOOD

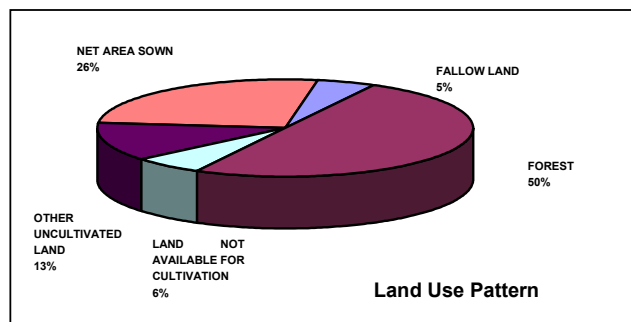
Per Capita Food Production 91991) in kgs.	265.05
FPS/ lakh people (1996)	42.90
PDS Offtake per capita(1994/95) in kgs.	8.26

Lorenz Curve of Operational Holdings



EMPLOYEMENT

	1991		1991
Worker Participation Rate:			
All	47.4%	Employment Rate of Growth (1981 to 1991)	1.91%
Rural	50.0%	Total Employment in Farm Sector (%)	84.3%
Urban	26.0%	Rural Employment in Non Farm Sector	8.5%
Share of Primary Sector (%)	89.0%	Agriculture Labour (%)	16.9%
Share of Secondary Sector (%)	2.7%	Precarious Employment	19.3%
Share of Tertiary Sector (%)	8.3%		



LAND USE AND AGRICULTURE

	1991
Cereals Per Capita(Kg)	250.2
Pulses Per Capita (Kg)	14.8
Oilseeds Per Capita (Kg)	13.1
Average landholding (Ha)	
Irrigated Area ('000 Ha)	23.9
Unirrigated Area ('000 Ha)	570.0
Fertilizer Consumption Per Hectare (Kg)	13.0
Cropping Intensity	109
Per Capita Forest Area (sq. km)	0.580

HABITAT

	1991		1991
Rate of Overcrowding	21.7%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)		Pucca(%)	8.4
Annual Rate of Afforestation (%)	0.00	Semi-Pucca(%)	90.4
		Kucha(%)	1.25

INFRASTRUCTURE/FACILITIES

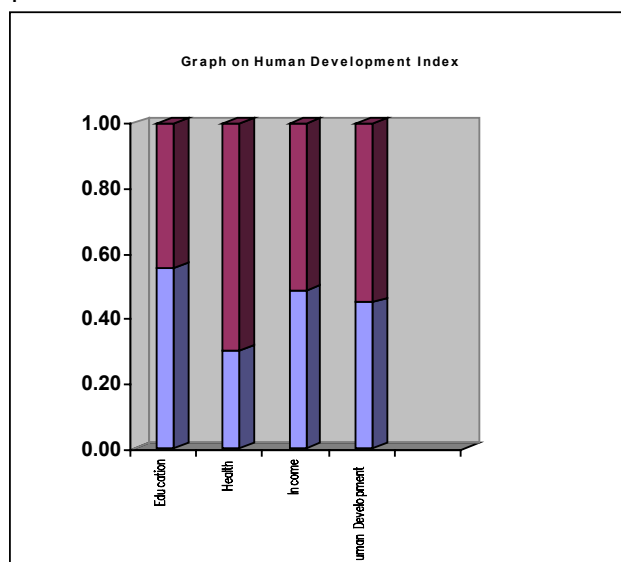
	1991		1991
Middle Schools per lakh population (1996)	26.7	Pucca Roads per 100 sq. km (1994)	11.4
High Schools per lakh population (1996)	7.5	Number of Banks (per lakh population) (1996)	5.9534
Primary Health per lakh rural population (1996)	4.6	Villages with Drinking Water Facility – 1996 (%)	9439%
Population Serviced sub Health Center (1996)	3417	Telephone per lakh population (93-94)	192
Electrified Villages (%) (1995-96)	87.5%	Population per Post Office (93-94)	4298

SATNA

HUMAN DEVELOPMENT INDICES – 1998

Human Development Index (HDI)	0.448
Rank in Madhya Pradesh : HDI	39
Gender Related Development Index (GDI)	0.568
Rank in Madhya Pradesh: GDI	30

POPULATION	1981	1991
Population	1153387	1465384
Share of Madhya Pradesh	2.21%	2.21%
Urban Population	16.2%	19.7%
Population of Scheduled Castes (SC)	16.4%	17.8%
Population of Scheduled Tribes (ST)	13.7%	13.8%
Decadal Growth : 1981 to 1991(%)	27.1%	
Density of Population (per. sq. kms.)	154	195



HEALTH	1981	1991
Infant Mortality Rate	175	143
Life Expectancy (years)	44.0	48.7
	1976-81	1984-90
Crude Birth Rate	41.2	40.5

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	47.4
Girl Child Mortality (birth to age 1 year)	n/a	147
Girl Child Mortality(up to age 5 years)	n/a	207
Total Fertility Rate	5.9	5.5
Gender Ratio: All	936	918
Rural	953	929
Urban	853	875
SC Gender Ratio	n/a	833
ST Gender Ratio	n/a	933
Workers Participation Rate - Female	29.8%	30.0%

DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1784
Total Habitations	2462
Towns (Class I to VI)	11

EDUCATION	1981	1991
Literacy:		
Male (%)	48.8%	60.0%
Female (%)	16.3%	27.8%
SC Literacy (%)	n/a	25.9%
ST Literacy (%)	n/a	13.0%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

BASIC AMENITIES

	1981		1991
Children as Main Workers	4.4%	Households Without Access to	
Children as Main Marginal Workers (%)	5.8%	Electricity (%)	62.5%
Child Mortality	20.	Safe Drinking Water (%)	69.5%
Use of Polluting Fuels in Households (%)	3.3%	Toilet Facilities (%)	90.7%
Non-Serviceable Kuchcha Houses	0.17%	All of the Three (%)	46.9%

SATNA

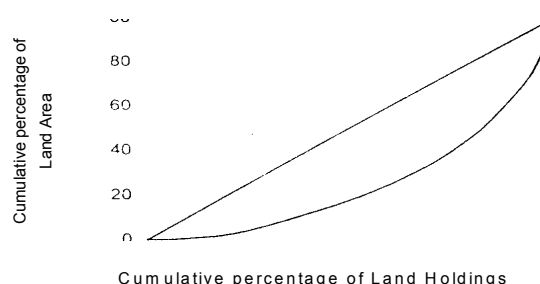
LAND OWNERSHIP

Gini Coefficient of Operational Holdings:	0.584
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FOOD

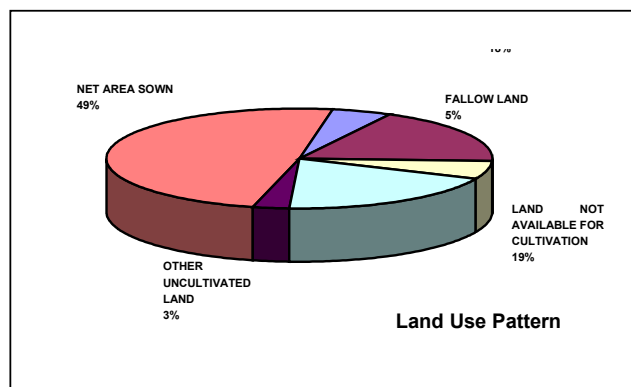
Per Capita Food Production 91991) in kgs.	225.33
FPS/ lakh people (1996)	47.37
PDS Offtake per capita(1994/95) in kgs.	1.15

Lorenz Curve of Operational Holaindt



EMPLOYMENT

	1991		1991
Worker Participation Rate:			
All	40.3%	Employment Rate of Growth (1981 to 1991)	1.87%
Rural	42.0%	Total Employment in Farm Sector (%)	73.1%
Urban	32.0%	Rural Employment in Non Farm Sector	17.6%
Share of Primary Sector (%)	47.2%	Agriculture Labour (%)	29.2%
Share of Secondary Sector (%)	12.7%	Precarious Employment	30.8%
Share of Tertiary Sector (%)	13.1%		



LAND USE AND AGRICULTURE

	1991
Cereals Per Capita(Kg)	193.1
Pulses Per Capita (Kg)	32.3
Oilseeds Per Capita (Kg)	7.2
Average landholding (Ha)	2.0
Irrigated Area ('000 Ha)	52.4
Unirrigated Area ('000 Ha)	311.5
Fertilizer Consumption Per Hectare (Kg)	45.7
Cropping Intensity	122.
Per Capita Forest Area (sq. km)	0.150

HABITAT

	1991		1991
Rate of Overcrowding	15.6%	Number of Houses Occupied:	
Population of Towns residing in Slums (%)	5.34	Pucca(%)	20.7
Annual Rate of Afforestation (%)	0.00	Semi-Pucca(%)	78.3
		Kucha(%)	1.0

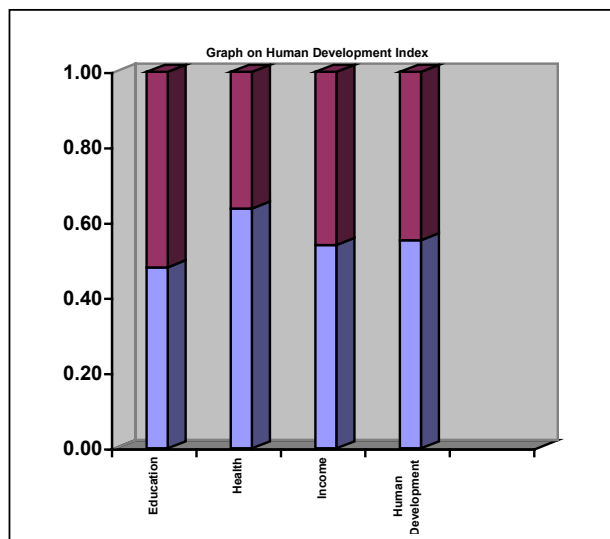
INFRASTRUCTURE/FACILITIES

	1991		1991
Middle Schools per lakh population (1996)	24.6	Pucca Roads per 100 sq. km (1994)	27.6
High Schools per lakh population (1996)	13.1	Number of Banks (per lakh population) (1996)	6.2359
Primary Health per lakh rural population (1996)	3.6	Villages with Drinking Water Facility – 1996 (%)	99.8%
Population Serviced sub Health Center (1996)	5029	Telephone per lakh population (93-94)	310
Electrified Villages (%) (1995-96)	90.1%	Population per Post Office (93-94)	5399

SEHORE

HUMAN DEVELOPMENT INDICES - 1998

Human Development Index (HDI)	0.553
Rank in Madhya Pradesh : HDI	12
Gender Related Development Index (GDI)	0.580
Rank in Madhya Pradesh GDI	26



POPULATION	1981	1991
Population:	657381	841358
Share of Madhya Pradesh Population	1.26%	1.27%
Urban Population	13.3%	18.0%
Population of Scheduled Castes (SC)	20.3%	20.3%
Population of Scheduled Tribes (ST)	9.1%	10.2%
Decadal Growth: 1981 to 1991 (%)	28.0%	
Density of Population (per sq. kms.)	101	129

HEALTH	1981	1991
Infant Mortality Rate	170	122
Life Expectancy (year)	44.9	53.2
	1976-81	1984-90
Crude Birth Date	40.8	36.0

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	54.9
Girl Child Mortality (birth to age 1 year)	n/a	117
Girl Child Mortality (up to age 5 years)	n/a	195
Total Fertility Rate	6.2	5.2
Gender Ratio: All	907	898
Rural	913	901
Urban	871	884
SC Gender Ratio	n/a	893
ST Gender Ratio	n/a	932
Workers Participation Rate – Female	25.7%	32.0%

DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1009
Total Habitations	1082
Towns (Class I to IV)	7

EDUCATION	1981	1991
Literacy :		
Male (%)	44.1%	56.9%
Female (%)	12.1%	22.0%
SC Literacy (%)	n/a	27.2%
ST Literacy (%)	n/a	16.5%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

BASIC AMENITIES

	1991		1993
Children as Main Workers(%)	4.7%	Households Without Access to	
Children as Main & Marginal Workers (%)	6.6%	Electricity (%)	46.7%
Child Mortality	178	Safe Drinking Water (%)	44.1%
Use of Polluting fuels in Households (%)	2.84%	Toilet Facilities (%)	83.4%
Non-Serviceable Kuchcha Houses	2.84%	All of the Three (%)	83.4%

SEHORE

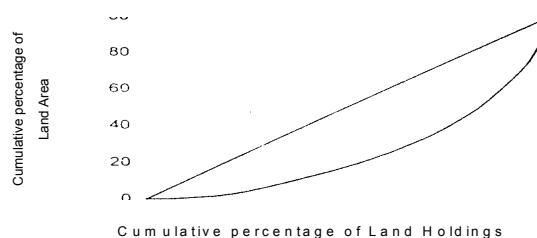
LAND OWNERSHIP

Gini Coefficient of Operational Holdings : 0.523

FOOD

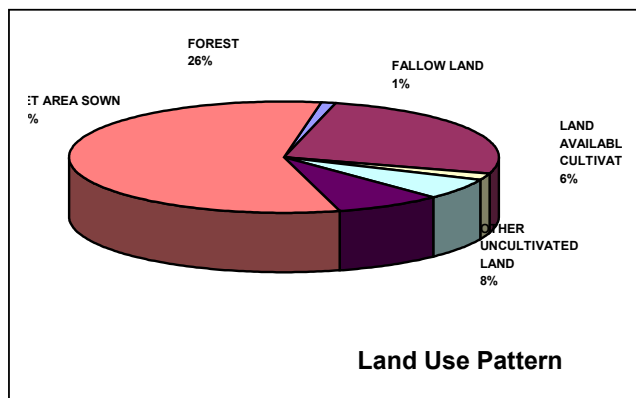
Per Capita Food Production (1991) in kgs.	390.56
FPS/lakh people (1996)	22.85
PDS Offtake per capita (1994/65) in kgs.	1.36

Lorenz Curve of Operational Holdings



EMPLOYMENT

	1991		1991
Worker Participation Rate :			
All	42.0%	Employment Rate of Growth (1981 to 1991)	2.87%
Rural	45.0%	Total Employment in Farm Sector (%)	81.4%
Urban	29.0%	Rural Employment in Non Farm Sector (%)	9.6%
Share of Primary Sector (%)	81.4%	Agriculture Labour (%)	30.7%
Share of Secondary Sector (%)	5.9%	Precarious Employment	33.5%
Share of Tertiary Sector (%)	12.6%		



LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	288.0
Pulses Per Capita (Kg)	102.6
Oilseeds per Capita (Kg)	216.7
Average Landholding (Ha)	4.1
Irrigated Area ('000 Ha)	89.8
Unirrigated Area ('000 Ha)	279.0
Fertilizer Consumption Per Hectare (Kg)	33.8
Cropping Intensity	128
Per Capita Forest Area (in sq. kms.)	0.210

HABITAT

	1991		1991
Rate of Overcrowding (%)	46.3%	Number of Houses Occupied :	
Population of Towns residing in Slums	1.34	Pucca (%)	38.4
Annual Rate of Afforestation (%)	0.00	Semi-Pucca (%)	56.6
		Kutcha (%)	4.9

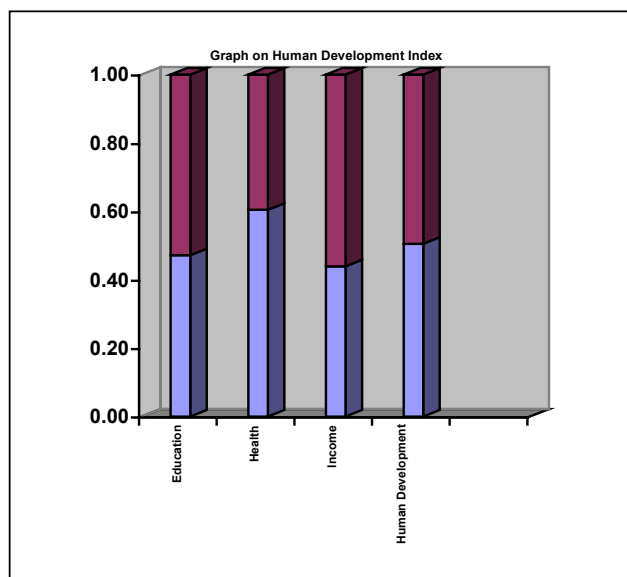
INFRASTRUCTURE/ FACILITIES

Middle Schools per lakh population (1996)	26.6	Pucca Roads per 100 sq. km. (1994)	12
High Schools per lakh population (1996)	7.7	Number of Banks (per lakh population) (1996)	2.9884
Primary Health Centre per lakh rural population (1996)	2.4	Villages with Drinking Water Facility – 1996 (%)	100.0%
Population Serviced Sub Health Centre (1996)	5062	Telephone per lakh population (93-94)	520
Electrified Villages (%) (1995-96)	99.1%	Population per Post Office (93-94)	5317

SEONI

HUMAN DEVELOPMENT INDICES – 1998

Human Development Index (HDI)	0.505
Rank in Madhya Pradesh : HDI	25
Gender Related Development Index (GDI)	0.634
Rank in Madhya Pradesh GDI	6



POPULATION	1981	1991
Population:	809713	1000831
Share of Madhya Pradesh Population	1.55%	1.51%
Urban Population	7.7%	9.5%
Population of Scheduled Castes (SC)	10.6%	10.8%
Population of Scheduled Tribes (ST)	36.4%	37.0%
Decadal Growth: 1981 to 1991 (%)	23.0%	
Density of Population (per sq. kms.)	92	114

HEALTH	1981	1991
Infant Mortality Rate	133	98
Life Expectancy (year)	51.3	58.5
	1976-81	1984-90
Crude Birth Date	35.1	33.5

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	58.3
Girl Child Mortality (birth to age 1 year)	n/a	118
Girl Child Mortality (up to age 5 years)	n/a	148
Total Fertility Rate	5.0	4.3
Gender Ratio: All	982	974
Rural	990	980
Urban	899	920
SC Gender Ratio	n/a	949
ST Gender Ratio	n/a	1005
Workers Participation Rate - Female	42.4%	44.0%

DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1585
Total Habitations	1728
Towns (Class I to IV)	4

EDUCATION	1981	1991
Literacy :		
Male (%)	47.0%	57.5%
Female (%)	18.9%	31.1%
SC Literacy (%)	n/a	50.3%
ST Literacy (%)	n/a	26.6%
Access to Education		
Habitations with Primary Schools - 1998	100.0%	

BASIC AMENITIES

	1991		1993
Children as Main Workers(%)	8.2%	Households Without Access to	
Children as Main & Marginal Workers (%)	10.7%	Electricity (%)	53.7%
Child Mortality	152	Safe Drinking Water (%)	53.5%
Use of Polluting fuels in Households (%)	1.0%	Toilet Facilities (%)	92.3%
Non-Serviceable Kuchcha Houses	0.42%	All of the Three (%)	30.9%

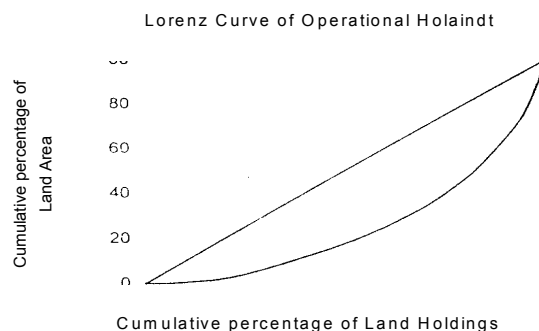
SEONI

LAND OWNERSHIP

Gini Coefficient of Operational Holdings : 0.562

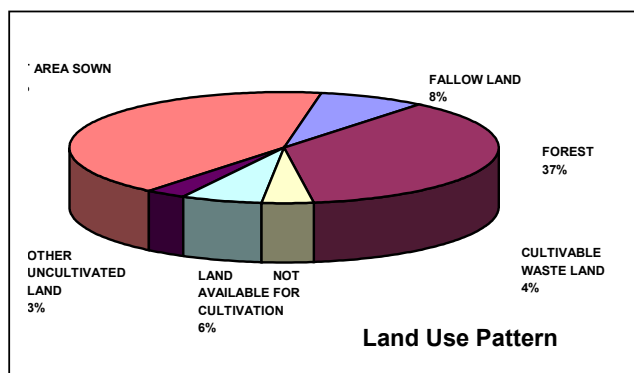
FOOD

Per Capita Food Production (1991) in kgs.	272.67
FPS/lakh people (1996)	32.57
PDS Offtake per capita (1994/65) in kgs.	5.59



EMPLOYMENT

	1991		1991
Worker Participation Rate :			
All	49.2%	Employment Rate of Growth (1981 to 1991)	1.76%
Rural	51.0%	Total Employment in Farm Sector (%)	87.3%
Urban	28.0%	Rural Employment in Non Farm Sector (%)	8.3%
Share of Primary Sector (%)	87.3%	Agriculture Labour (%)	33.8%
Share of Secondary Sector (%)	3.4%	Precarious Employment	37.5%
Share of Tertiary Sector (%)	9.3%		



LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	228.8
Pulses Per Capita (Kg)	43.9
Oilseeds per Capita (Kg)	70.5
Average Landholding (Ha)	3.0
Irrigated Area ('000 Ha)	43.8
Unirrigated Area ('000 Ha)	333.8
Fertilizer Consumption Per Hectare (Kg)	11.7
Cropping Intensity	114
Per Capita Forest Area (in sq. kms.)	0.280

HABITAT

	1991		1991	
Rate of Overcrowding (%)	36.1%	Number of Houses Occupied :		
Population of Towns residing in Slums	8.30		Pucca (%)	16.4
Annual Rate of Afforestation (%)	0.00		Semi-Pucca (%)	80.2
		Kutchha (%)	3.5	

INFRASTRUCTURE/ FACILITIES

Middle Schools per lakh population (1996)	24.5	Pucca Roads per 100 sq. km. (1994)	15
High Schools per lakh population (1996)	6.2	Number of Banks (per lakh population) (1996)	6.291
Primary Health Centre per lakh rural population (1996)	3.2	Villages with Drinking Water Facility – 1996 (%)	99.8%
Population Served Sub Health Centre (1996)	4495	Telephone per lakh population (93-94)	320
Electrified Villages (%) (1995-96)	95.2%	Population per Post Office (93-94)	5402

SHAHDOL

HUMAN DEVELOPMENT INDICES - 1998

Human Development Index (HDI)	0.431
Rank in Madhya Pradesh : HDI	42
Gender Related Development Index (GDI)	0.547
Rank in Madhya Pradesh GDI	34

POPULATION

	1981	1991
Population:	1345125	1743869
Share of Madhya Pradesh Population	2.58%	2.63%
Urban Population	17.8%	21.1%
Population of Scheduled Castes (SC)	7.1%	7.7%
Population of Scheduled Tribes (ST)	47.5%	46.3%
Decadal Growth: 1981 to 1991 (%)	29.6%	
Density of Population (per sq. kms.)	96	124

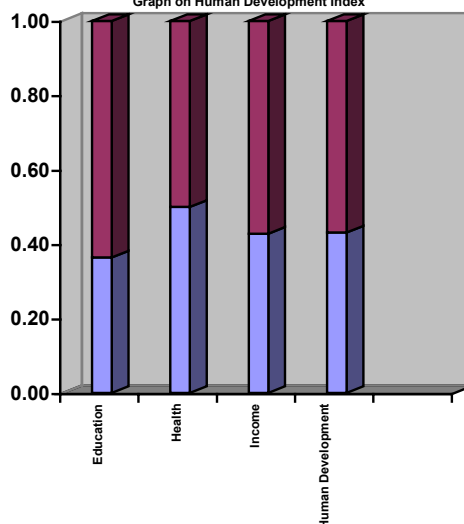
HEALTH

	1981	1991
Infant Mortality Rate	155	110
Life Expectancy (year)	47.4	55.9
	1976-81	1984-90
Crude Birth Date	35.6	38.6

GENDER

	1981	1991
Life Expectancy of Females at Birth	n/a	56.8
Girl Child Mortality (birth to age 1 year)	n/a	111
Girl Child Mortality (up to age 5 years)	n/a	154
Total Fertility Rate	4.9	5.0
Gender Ratio: All	948	940
Rural	969	961
Urban	858	868
SC Gender Ratio	n/a	936
ST Gender Ratio	n/a	977
Workers Participation Rate - Female	30.3%	33.0%

Graph on Human Development Index



DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1961
Total Habitations	4010
Towns (Class I to IV)	20
Shahdol District has been divided into Shahdol and Umariya w.e.f. 6 th July 1998	

EDUCATION

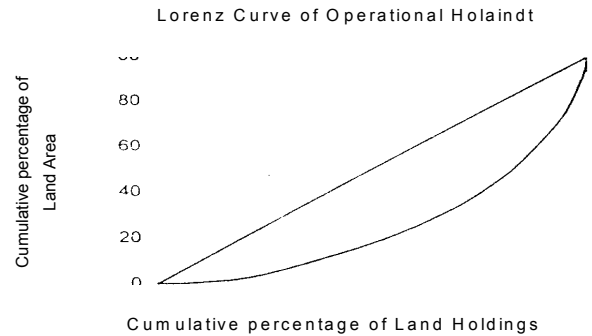
	1981	1991
Literacy :		
Male (%)	36.3%	48.4%
Female (%)	10.8%	20.1%
SC Literacy (%)	n/a	28.4%
ST Literacy (%)	n/a	17.6%
Access to Education		
Habitations with Primary Schools - 1998	100.0%	

BASIC AMENITIES

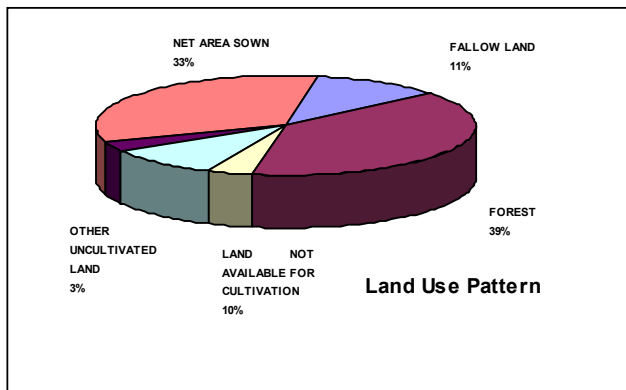
	1991		1993
Children as Main Workers(%)	5.6%	Households Without Access to	
Children as Main & Marginal Workers (%)	7.9%	Electricity (%)	65.6%
Child Mortality	760	Safe Drinking Water (%)	73.2%
Use of Polluting fuels in Households (%)	13.3%	Toilet Facilities (%)	89.5%
Non-Serviceable Kuchcha Houses	0.30%	All of the Three (%)	52.7%

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings :	0.590

FOOD	
Per Capita Food Production (1991) in kgs.	179.26
FPS/lakh people (1996)	42.59
PDS Offtake per capita (1994/65) in kgs.	9.83



EMPLOYMENT			
	1991		1991
Worker Participation Rate :			
All	43.5%	Employment Rate of Growth (1981 to 1991)	2.25%
Rural	47.0%	Total Employment in Farm Sector (%)	79.3%
Urban	29.0%	Rural Employment in Non Farm Sector (%)	10.5%
Share of Primary Sector (%)	85.0%	Agriculture Labour (%)	25.4%
Share of Secondary Sector (%)	4.9%	Precarious Employment	30.1%
Share of Tertiary Sector (%)	10.1%		



LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	165.3
Pulses Per Capita (Kg)	14.0
Oilseeds per Capita (Kg)	11.8
Average Landholding (Ha)	2.4
Irrigated Area ('000 Ha)	18.0
Unirrigated Area ('000 Ha)	451.0
Fertilizer Consumption Per Hectare (Kg)	6.8
Cropping Intensity	113
Per Capita Forest Area (in sq. kms.)	0.320

HABITAT				
	1991		1991	
Rate of Overcrowding (%)	25.8%	Number of Houses Occupied :		
Population of Towns residing in Slums	--		Pucca (%)	17.6
Annual Rate of Afforestation (%)	0.00		Semi-Pucca (%)	80.3
			Kutcha (%)	2.1

INFRASTRUCUTRE/ FACILITIES			
Middle Schools per lakh population (1996)	29.5	Pucca Roads per 100 sq. km. (1994)	15.4
High Schools per lakh population (1996)	12.0	Number of Banks (per lakh population) (1996)	5.2881
Primary Health Centre per lakh rural population (1996)	3.8	Villages with Drinking Water Facility – 1996 (%)	97.8%
Population Serviced Sub Health Centre (1996)	4125	Telephone per lakh population (93-94)	238
Electrified Villages (%) (1995-96)	90.5%	Population per Post Office (93-94)	6157

SHAJAPUR

HUMAN DEVELOPMENT INDICES – 1998

Human Development Index (HDI)	0.519
Rank in Madhya Pradesh : HDI	18
Gender Related Development Index (GDI)	0.573
Rank in Madhya Pradesh GDI	29

POPULATION

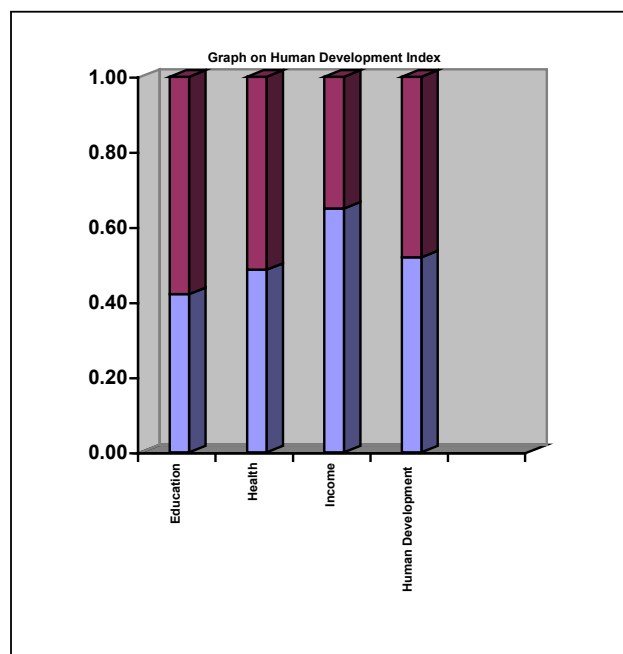
	1981	1991
Population:	840247	1033248
Share of Madhya Pradesh Population	1.61%	1.56%
Urban Population	14.8%	17.7%
Population of Scheduled Castes (SC)	22.1	22.3%
Population of Scheduled Tribes (ST)	2.2%	2.4%
Decadal Growth: 1981 to 1991 (%)	23.0%	
Density of Population (per sq. kms.)	136	167

HEALTH

	1981	1991
Infant Mortality Rate	160	105
Life Expectancy (year)	46.6	56.9
	1976-81	1984-90
Crude Birth Date	38.5	35.9

GENDER

	1981	1991
Life Expectancy of Females at Birth	n/a	57.7
Girl Child Mortality (birth to age 1 year)	n/a	118
Girl Child Mortality (up to age 5 years)	n/a	184
Total Fertility Rate	5.7	5.0
Gender Ratio: All	929	918
Rural	934	920
Urban	904	910
SC Gender Ratio	n/a	913
ST Gender Ratio	n/a	889
Workers Participation Rate - Female	31.6%	35.0%



DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1068
Total Habitations	1192
Towns (Class I to IV)	12

EDUCATION

	1981	1991
Literacy :		
Male (%)	45.7%	57.0%
Female (%)	11.4%	19.8%
SC Literacy (%)	n/a	22.9%
ST Literacy (%)	n/a	24.9%
Access to Education		
Habitations with Primary Schools - 1998	100.0%	

BASIC AMENITIES

	1991		1993
Children as Main Workers(%)	6.0%	Households Without Access to	
Children as Main & Marginal Workers (%)	8.4%	Electricity (%)	45.2%
Child Mortality	168	Safe Drinking Water (%)	37.9%
Use of Polluting fuels in Households (%)	3.0%	Toilet Facilities (%)	87.3%
Non-Serviceable Kuchcha Houses	1.06%	All of the Three (%)	19.8%

SHAJAPUR

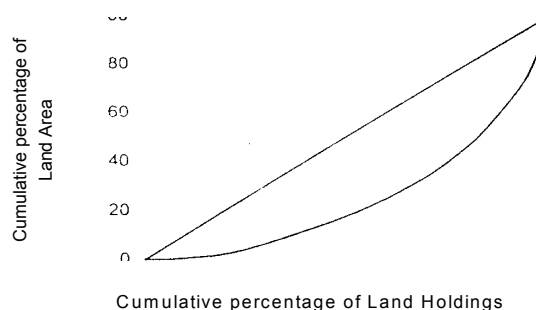
LAND OWNERSHIP

Gini Coefficient of Operational Holdings :	0.542
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FOOD

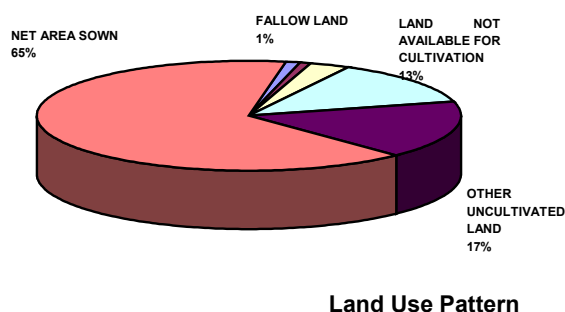
Per Capita Food Production (1991) in kgs.	391.87
FPS/lakh people (1996)	26.82
PDS Offtake per capita (1994/95) in kgs.	0.28

Lorenz Curve of Operational Holdings



EMPLOYMENT

	1991		1991
Worker Participation Rate :			
All	44.7%	Employment Rate of Growth (1981 to 1991)	2.62%
Rural	48.0%	Total Employment in Farm Sector (%)	82.8%
Urban	31.0%	Rural Employment in Non Farm Sector (%)	9.6%
Share of Primary Sector (%)	82.9%	Agriculture Labour (%)	30.8%
Share of Secondary Sector (%)	5.8%	Precarious Employment	34.7%
Share of Tertiary Sector (%)	11.3%		



LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	309.0
Pulses Per Capita (Kg)	82.8
Oilseeds per Capita (Kg)	156.3
Average Landholding (Ha)	3.7
Irrigated Area ('000 Ha)	118.8
Unirrigated Area ('000 Ha)	312.3
Fertilizer Consumption Per Hectare (Kg)	43.8
Cropping Intensity	130
Per Capita Forest Area (in sq. kms.)	0.006

HABITAT

	1991		1991	
Rate of Overcrowding (%)	48.8%	Number of Houses Occupied :		
Population of Towns residing in Slums	--		Pucca (%)	33.1
Annual Rate of Afforestation (%)	0.00		63.0	56.6
		Kutcha (%)	3.9	

INFRASTRUCTURE/ FACILITIES

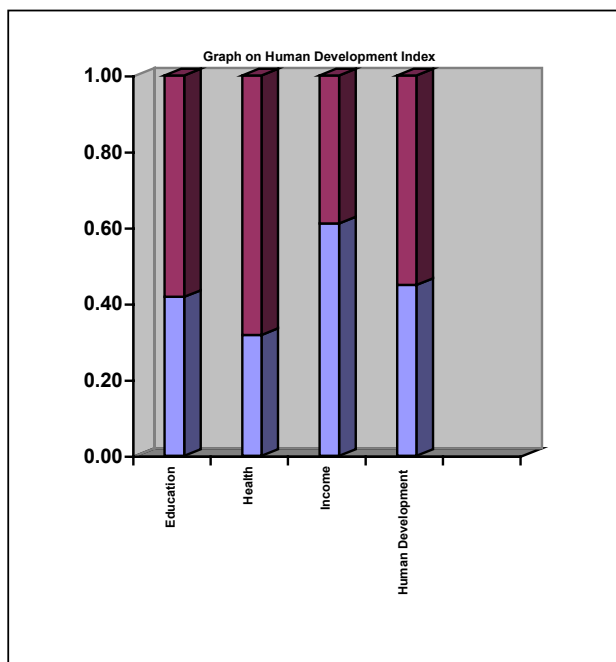
Middle Schools per lakh population (1996)	26.5	Pucca Roads per 100 sq. km. (1994)	20.8
High Schools per lakh population (1996)	7.7	Number of Banks (per lakh population) (1996)	6.1093
Primary Health Centre per lakh rural population (1996)	2.5	Villages with Drinking Water Facility – 1996 (%)	100.0%
Population Served Sub Health Centre (1996)	5421	Telephone per lakh population (93-94)	629
Electrified Villages (%) (1995-96)	99.3%	Population per Post Office (93-94)	6067

HUMAN DEVELOPMENT INDICES – 1998	
Human Development Index (HDI)	0.449
Rank in Madhya Pradesh : HDI	37
Gender Related Development Index (GDI)	0.488
Rank in Madhya Pradesh GDI	42

POPULATION	1981	1991
Population:	865930	1132977
Share of Madhya Pradesh Population	1.66%	1.71%
Urban Population	12.8%	15.2%
Population of Scheduled Castes (SC)	19.02	19.4%
Population of Scheduled Tribes (ST)	10.0%	11.3%
Decadal Growth: 1981 to 1991 (%)	30.8%	
Density of Population (per sq. kms.)	84	110

HEALTH	1981	1991
Infant Mortality Rate	178	164
Life Expectancy (year)	43.6	44.5
	1976-81	1984-90
Crude Birth Date	40.6	35.7

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	41.4
Girl Child Mortality (birth to age 1 year)	n/a	139
Girl Child Mortality (up to age 5 years)	n/a	234
Total Fertility Rate	6.4	5.4
Gender Ratio: All	855	849
Rural	856	848
Urban	848	853
SC Gender Ratio	N/a	840
ST Gender Ratio	N/a	950
Workers Participation Rate – Female	20.5%	30.0%



DISTRICT INFORMATION	
Total Inhabited Villages (in 1991)	1327
Total Habitations	1801
Towns (Class I to IV)	7

EDUCATION	1981	1991
Literacy :		
Male (%)	38.7%	47.5%
Female (%)	10.2%	15.6%
SC Literacy (%)	n/a	23.8%
ST Literacy (%)	n/a	6.6%
Access to Education		
Habitations with Primary Schools - 1998	100.0%	

BASIC AMENITIES			
	1991		1993
Children as Main Workers(%)	5.6%	Households Without Access to Electricity (%)	55.9%
Children as Main & Marginal Workers (%)	8.0%	Safe Drinking Water (%)	44.9%
Child Mortality	200	Toilet Facilities (%)	90.1%
Use of Polluting fuels in Households (%)	2.3%	All of the Three (%)	29.2%
Non-Serviceable Kuchcha Houses	1.09%		

SHIVPURI

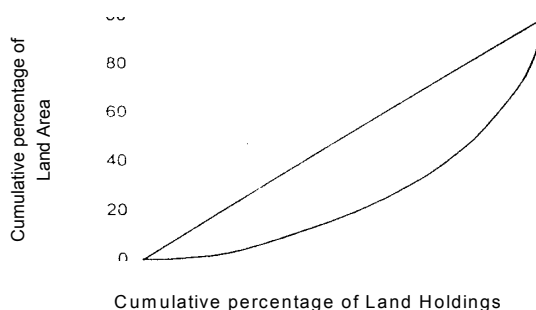
LAND OWNERSHIP

Gini Coefficient of Operational Holdings :	0.487
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FOOD

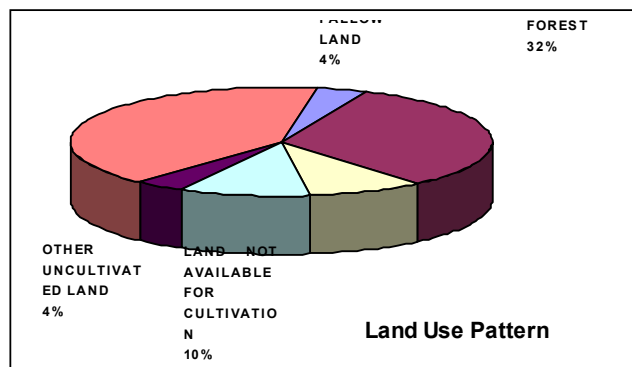
Per Capita Food Production (1991) in kgs.	325.43
FPS/lakh people (1996)	20.49
PDS Offtake per capita (1994/65) in kgs.	0.75

Lorenz Curve of Operational Holdings



EMPLOYMENT

	1991		1991
Worker Participation Rate :			
All	42.5%	Employment Rate of Growth (1981 to 1991)	3.16%
Rural	45.0%	Total Employment in Farm Sector (%)	83.5%
Urban	28.0%	Rural Employment in Non Farm Sector (%)	8.3%
Share of Primary Sector (%)	84.6%	Agriculture Labour (%)	12.3%
Share of Secondary Sector (%)	3.8%	Precarious Employment	14.4%
Share of Tertiary Sector (%)	11.6%		



LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	272.6
Pulses Per Capita (Kg)	52.8
Oilseeds per Capita (Kg)	61.4
Average Landholding (Ha)	3.0
Irrigated Area ('000 Ha)	106.6
Unirrigated Area ('000 Ha)	290.3
Fertilizer Consumption Per Hectare (Kg)	18.6
Cropping Intensity	118
Per Capita Forest Area (in sq. kms.)	0.290

HABITAT

	1991		1991
Rate of Overcrowding (%)	36.9%	Number of Houses Occupied :	
Population of Towns residing in Slums	11.16	Pucca (%)	74.2
Annual Rate of Afforestation (%)	0.00	63.0	21.6
		Kutchra (%)	4.2

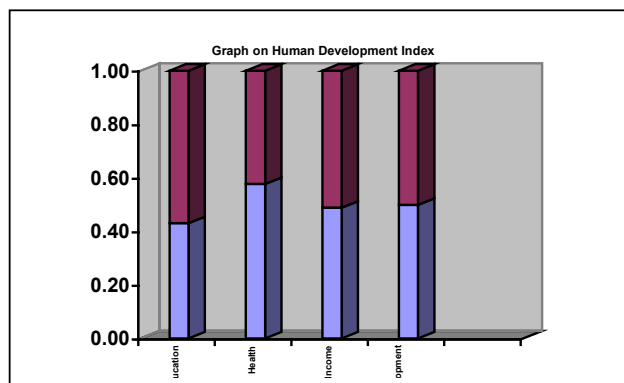
INFRASTRUCTURE/ FACILITIES

Middle Schools per lakh population (1996)	23.8	Pucca Roads per 100 sq. km. (1994)	11.9
High Schools per lakh population (1996)	8.1	Number of Banks (per lakh population) (1996)	5.0156
Primary Health Centre per lakh rural population (1996)	1.4	Villages with Drinking Water Facility – 1996 (%)	99.8%
Population Served Sub Health Centre (1996)	5448	Telephone per lakh population (93-94)	366
Electrified Villages (%) (1995-96)	96.8%	Population per Post Office (93-94)	5419

HUMAN DEVELOPMENT INDICES – 1998	
Human Development Index (HDI)	0.499
Rank in Madhya Pradesh : HDI	26
Gender Related Development Index (GDI)	0.586
Rank in Madhya Pradesh GDI	24

POPULATION	1981	1991
Population:	990467	1373434
Share of Madhya Pradesh Population	1.90%	2.08%
Urban Population	2.0%	6.5%
Population of Scheduled Castes (SC)	10.8%	11.4%
Population of Scheduled Tribes (ST)	31.3%	30.4%
Decadal Growth: 1981 to 1991 (%)	38.7%	
Density of Population (per sq. kms.)	94	130

HEALTH	1981	1991
Infant Mortality Rate	147	105
Life Expectancy (year)	48.8	56.8
	1976-81	1984-90
Crude Birth Date	38.7	36.0
GENDER	1981	1991
Life Expectancy of Females at Birth	N/a	56.5
Girl Child Mortality (birth to age 1 year)	N/a	106
Girl Child Mortality (up to age 5 years)	N/a	163
Total Fertility Rate	5.7	6.0
Gender Ratio: All	951	922
Rural	956	934
Urban	738	767
SC Gender Ratio	n/a	940
ST Gender Ratio	n/a	945
Workers Participation Rate – Female	32.8%	34.0%



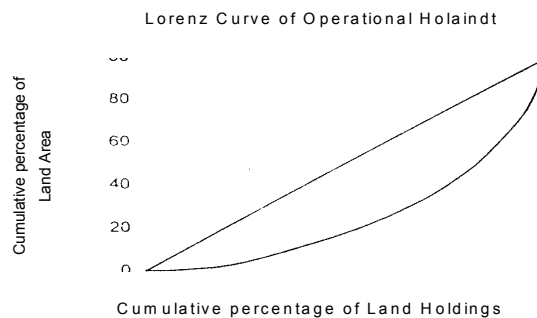
DISTRICT INFORMATION	
Total Inhabited Villages (in 1991)	1834
Total Habitations	2762
Towns (Class I to IV)	6

EDUCATION	1981	1991
Literacy :		
Male (%)	30.6%	43.2%
Female (%)	6.0%	13.6%
SC Literacy (%)	n/a	14.6%
ST Literacy (%)	n/a	12.5%
Access to Education		
Habitations with Primary Schools - 1998	100.0%	

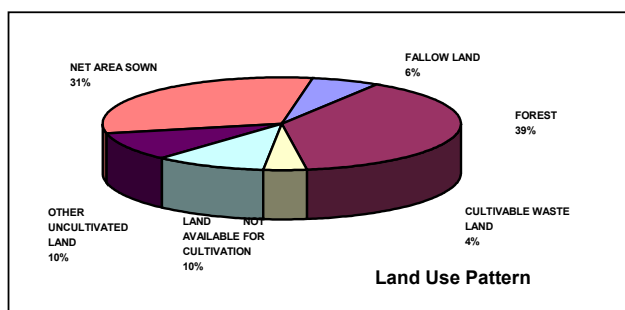
BASIC AMENITIES			
	1991		1993
Children as Main Workers(%)	5.6%	Households Without Access to	
Children as Main & Marginal Workers (%)	8.5%		Electricity (%)
Child Mortality	165	Safe Drinking Water (%)	70.6%
Use of Polluting fuels in Households (%)	5.8%	Toilet Facilities (%)	93.1%
Non-Serviceable Kuchcha Houses	0.16%	All of the Three (%)	56.5%

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings :	0.611

FOOD	
Per Capita Food Production (1991) in kgs.	196.01
FPS/lakh people (1996)	42.18
PDS Offtake per capita (1994/65) in kgs.	7.57



EMPLOYMENT			
		1991	1991
Worker Participation Rate :			
All	43.0%	Employment Rate of Growth (1981 to 1991)	2.26%
Rural	44.0%	Total Employment in Farm Sector (%)	85.3%
Urban	31.0%	Rural Employment in Non Farm Sector (%)	10.8%
Share of Primary Sector (%)	87.5%	Agriculture Labour (%)	24.1%
Share of Secondary Sector (%)	4.3%	Precarious Employment	28.1%
Share of Tertiary Sector (%)	8.2%		



LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	159.0
Pulses Per Capita (Kg)	37.0
Oilseeds per Capita (Kg)	9.4
Average Landholding (Ha)	2.3
Irrigated Area ('000 Ha)	27.3
Unirrigated Area ('000 Ha)	335.1
Fertilizer Consumption Per Hectare (Kg)	9.2
Cropping Intensity	125
Per Capita Forest Area (in sq. kms.)	0.320

HABITAT			
		1991	1991
Rate of Overcrowding (%)	11.0%	Number of Houses Occupied :	
Population of Towns residing in Slums	--	Pucca (%)	9.9
Annual Rate of Afforestation (%)	0.00	Semi-Pucca (%)	88.4
		Kutchra (%)	1.6

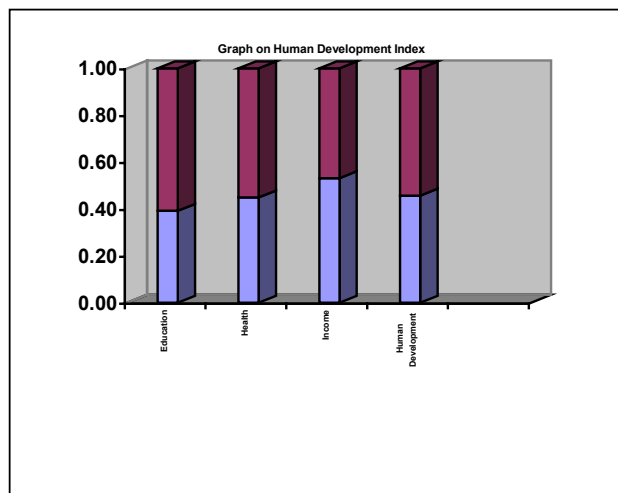
INFRASTRUCUTRE/ FACILITIES			
Middle Schools per lakh population (1996)	21.6	Pucca Roads per 100 sq. km. (1994)	18.4
High Schools per lakh population (1996)	8.2	Number of Banks (per lakh population) (1996)	5.4412
Primary Health Centre per lakh rural population (1996)	2.8	Villages with Drinking Water Facility – 1996 (%)	98.9%
Population Serviced Sub Health Centre (1996)	2149	Telephone per lakh population (93-94)	147
Electrified Villages (%) (1995-96)	98.5%	Population per Post Office (93-94)	7432

TIKAMGARH

HUMAN DEVELOPMENT INDICES – 1998

Human Development Index (HDI)	0.457
Rank in Madhya Pradesh : HDI	34
Gender Related Development Index (GDI)	0.532
Rank in Madhya Pradesh GDI	36

POPULATION	1981	1991
Population:	736981	940829
Share of Madhya Pradesh Population	1.41%	1.42%
Urban Population	12.1%	16.9%
Population of Scheduled Castes (SC)	21.7%	22.8%
Population of Scheduled Tribes (ST)	4.2%	4.1%
Decadal Growth: 1981 to 1991 (%)	27.7%	
Density of Population (per sq. kms.)	146	186



HEALTH	1981	1991
Infant Mortality Rate	182	132
Life Expectancy (year)	42.9	51.0
	1976-81	1984-90
Crude Birth Date	44.5	43.2

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	46.5
Girl Child Mortality (birth to age 1 year)	n/a	153
Girl Child Mortality (up to age 5 years)	n/a	205
Total Fertility Rate	7.0	6.2
~	883	871
Rural	882	868
Urban	886	887
SC Gender Ratio	n/a	856
ST Gender Ratio	n/a	934
Workers Participation Rate – Female	28.1%	33.0%

DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	862
Total Habitations	1375
Towns (Class I to IV)	12

EDUCATION

	1981	1991
Literacy :		
Male (%)	35.6%	47.5%
Female (%)	10.6%	20.0%
SC Literacy (%)	n/a	27.8%
ST Literacy (%)	n/a	13.0%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

BASIC AMENITIES

	1991		1993
Children as Main Workers(%)	5.0%	Households Without Access to	
Children as Main & Marginal Workers (%)	7.7%	Electricity (%)	70.0%
Child Mortality	187	Safe Drinking Water (%)	75.0%
Use of Polluting fuels in Households (%)	0.6%	Toilet Facilities (%)	93.8%
Non-Serviceable Kuchcha Houses	0.02%	All of the Three (%)	56.2%

TIKAMGARH

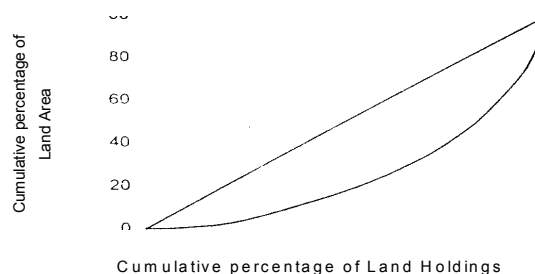
LAND OWNERSHIP

Gini Coefficient of Operational Holdings :	0.473
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FOOD

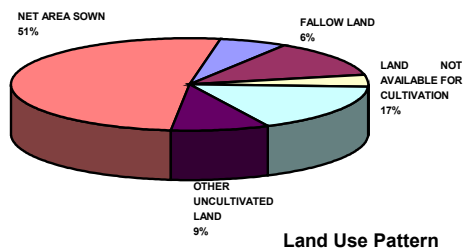
Per Capita Food Production (1991) in kgs.	379.77
FPS/lakh people (1996)	40.61
PDS Offtake per capita (1994/65) in kgs.	1.26

Lorenz Curve of Operational Holdings



EMPLOYMENT

	1991		1991
Worker Participation Rate :			
All	42.8%	Employment Rate of Growth (1981 to 1991)	2.56%
Rural	45.0%	Total Employment in Farm Sector (%)	86.3%
Urban	31.0%	Rural Employment in Non Farm Sector (%)	8.0%
Share of Primary Sector (%)	86.4%	Agriculture Labour (%)	11.7%
Share of Secondary Sector (%)	4.6%	Precarious Employment	15.1%
Share of Tertiary Sector (%)	9.0%		



LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	334.0
Pulses Per Capita (Kg)	45.8
Oilseeds per Capita (Kg)	36.2
Average Landholding (Ha)	1.9
Irrigated Area ('000 Ha)	122.2
Unirrigated Area ('000 Ha)	121.8
Fertilizer Consumption Per Hectare (Kg)	39.4
Cropping Intensity	141

HABITAT

	1991		1991
Rate of Overcrowding (%)	26.6%	Number of Houses Occupied :	
Population of Towns residing in Slums	--	Pucca (%)	67.6
Annual Rate of Afforestation (%)	-0.02	Semi-Pucca (%)	32.2
		Kutcha (%)	0.2

INFRASTRUCTURE/ FACILITIES

Middle Schools per lakh population (1996)	21.1	Pucca Roads per 100 sq. km. (1994)	23.7
High Schools per lakh population (1996)	11.0	Number of Banks (per lakh population) (1996)	5.3621
Primary Health Centre per lakh rural population (1996)	2.3	Villages with Drinking Water Facility – 1996 (%)	98.7%
Population Served Sub Health Centre (1996)	5507	Telephone per lakh population (93-94)	177
Electrified Villages (%) (1995-96)	98.4%	Population per Post Office (93-94)	5421

UJJAIN

HUMAN DEVELOPMENT INDICES – 1998

Human Development Index (HDI)	0.565
Rank in Madhya Pradesh : HDI	8
Gender Related Development Index (GDI)	0.585
Rank in Madhya Pradesh GDI	25

POPULATION

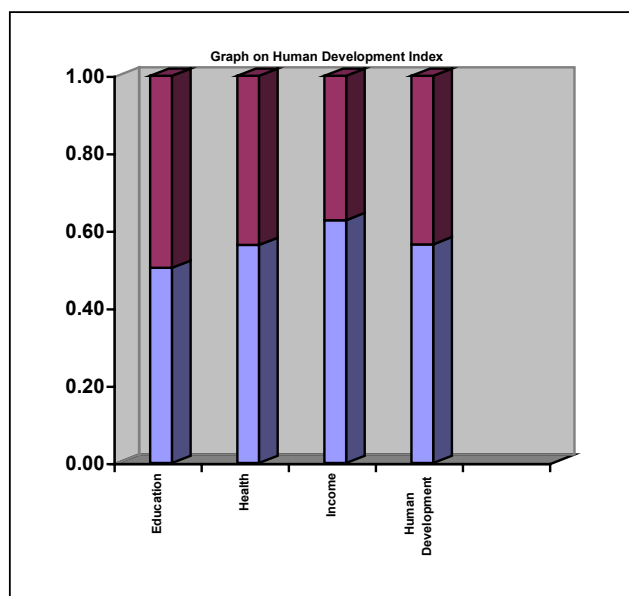
	1981	1991
Population:	1117002	1383086
Share of Madhya Pradesh Population	2.14%	2.09%
Urban Population	37.5%	39.5%
Population of Scheduled Castes (SC)	24.1%	24.6%
Population of Scheduled Tribes (ST)	1.9%	2.1%
Decadal Growth: 1981 to 1991 (%)	23.8%	
Density of Population (per sq. kms)	183	227

HEALTH

	1981	1991
Infant Mortality Rate	121	99
Life Expectancy (year)	53.5	58.3
	1976-81	1984-90
Crude Birth Date	37.2	31.4

GENDER

	1981	1991
Life Expectancy of Females at Birth	n/a	56.6
Girl Child Mortality (birth to age 1 year)	n/a	74
Girl Child Mortality (up to age 5 years)	n/a	756
Total Fertility Rate	5.3	4.2
Gender Ratio: All	926	929
Rural	941	936
Urban	902	918
SC Gender Ratio	n/a	930
ST Gender Ratio	n/a	915
Workers Participation Rate – Female	23.6%	26.0%



DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1092
Total Habitations	1137
Towns (Class I to IV)	7

EDUCATION

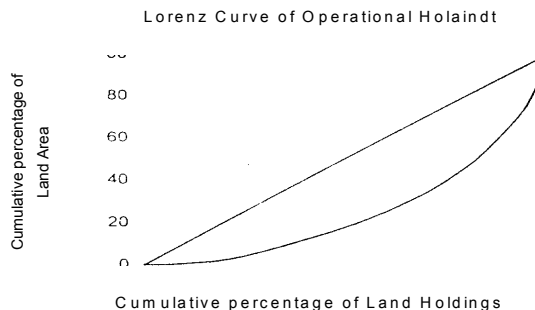
	1981	1991
Literacy :		
Male (%)	54.9%	64.3%
Female (%)	24.0%	32.6%
SC Literacy (%)	n/a	29.6%
ST Literacy (%)	n/a	25.7%
Access to Education		
Habitations with Primary Schools - 1998	100.0%	

BASIC AMENITIES

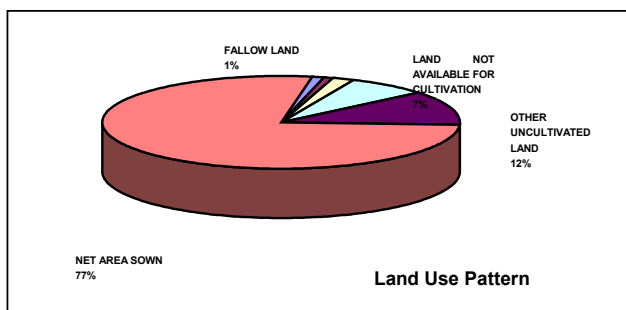
	1991	1993
Children as Main Workers(%)	5.0%	Households Without Access to Electricity (%)
Children as Main & Marginal Workers (%)	6.6%	36.7%
Child Mortality	147	Safe Drinking Water (%)
Use of Polluting fuels in Households (%)	12.3%	18.2%
Non-Serviceable Kuchcha Houses	0.68%	Toilet Facilities (%)
		68.3%
		All of the Three (%)
		9.0%

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings :	0.536

FOOD	
Per Capita Food Production (1991) in kgs.	380.38
FPS/lakh people (1996)	34.02
PDS Offtake per capita (1994/65) in kgs.	1.49



EMPLOYMENT				
	1991			1991
Worker Participation Rate :				
All	39.8%		Employment Rate of Growth (1981 to 1991)	2.41%
Rural	47.0%		Total Employment in Farm Sector (%)	65.8%
Urban	29.0%		Rural Employment in Non Farm Sector (%)	9.8%
Share of Primary Sector (%)	65.9%		Agriculture Labour (%)	23.8%
Share of Secondary Sector (%)	13.6%		Precarious Employment	26.8%
Share of Tertiary Sector (%)	20.5%			



LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	296.7
Pulses Per Capita (Kg)	83.7
Oilseeds per Capita (Kg)	207.0
Average Landholding (Ha)	4.3
Irrigated Area ('000 Ha)	147.2
Unirrigated Area ('000 Ha)	317.5
Fertilizer Consumption Per Hectare (Kg)	54.2
Cropping Intensity	143
Per Capita Forest Area (in sq. kms.)	0.002

HABITAT				
	1991			1991
Rate of Overcrowding (%)	42.5%		Number of Houses Occupied :	
Population of Towns residing in Slums	17.03%		Pucca (%)	35.3
Annual Rate of Afforestation (%)	0.00		Semi-Pucca (%)	55.6
			Kutchha (%)	9.2

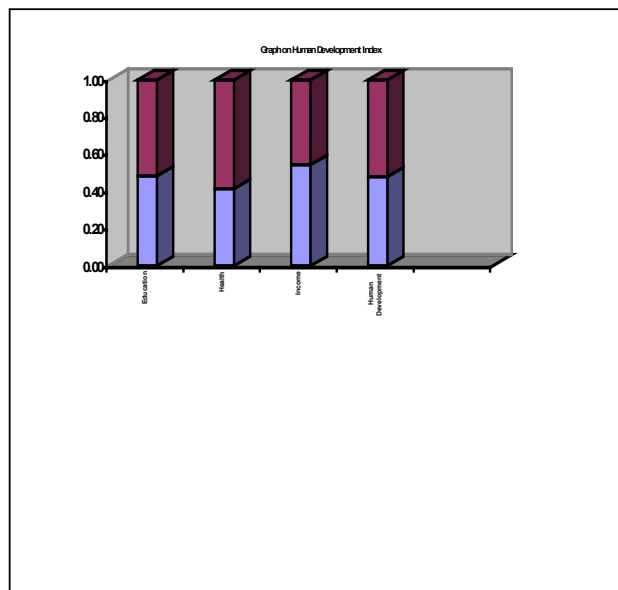
INFRASTRUCTURE/ FACILITIES				
Middle Schools per lakh population (1996)	30.4		Pucca Roads per 100 sq. km. (1994)	17.2
High Schools per lakh population (1996)	8.7		Number of Banks (per lakh population) (1996)	7.7321
Primary Health Centre per lakh rural population (1996)	2.3		Villages with Drinking Water Facility – 1996 (%)	100.0%
Population Served Sub Health Centre (1996)	5416		Telephone per lakh population (93-94)	1214
Electrified Villages (%) (1995-96)	100.0%		Population per Post Office (93-94)	7240

HUMAN DEVELOPMENT INDICES – 1998	
Human Development Index (HDI)	0.481
Rank in Madhya Pradesh : HDI	30
Gender Related Development Index (GDI)	0.523
Rank in Madhya Pradesh GDI	37

POPULATION	1981	1991
Population:	783098	970388
Share of Madhya Pradesh Population	1.50%	1.47%
Urban Population	17.0%	20.1%
Population of Scheduled Castes (SC)	20.4%	20.3%
Population of Scheduled Tribes (ST)	4.3%	4.4%
Decadal Growth: 1981 to 1991 (%)	23.9%	
Density of Population (per sq. kms)	106	132

HEALTH	1981	1991
Infant Mortality Rate	158	124
Life Expectancy (year)	46.9	52.7
	1976-81	1984-90
Crude Birth Date	43.4	38.2

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	51.3
Girl Child Mortality (birth to age 1 year)	n/a	102
Girl Child Mortality (up to age 5 years)	n/a	198
Total Fertility Rate	6.5	5.6
Gender Ratio: All	881	874
Rural	883	872
Urban	869	881
SC Gender Ratio	n/a	865
ST Gender Ratio	n/a	916
Workers Participation Rate - Female	14.0%	21.0%



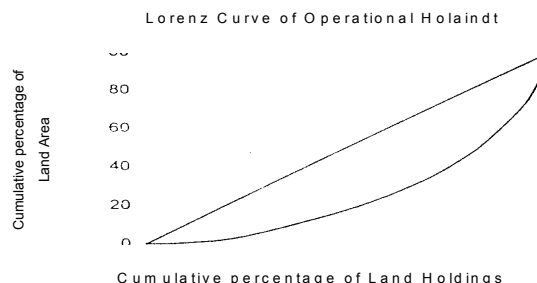
DISTRICT INFORMATION	
Total Inhabited Villages (in 1991)	1519
Total Habitations	1847
Towns (Class I to IV)	5

EDUCATION	1981	1991
Literacy :		
Male (%)	45.6%	58.0%
Female (%)	16.5%	27.8%
SC Literacy (%)	n/a	28.0%
ST Literacy (%)	n/a	13.4%
Access to Education		
Habitations with Primary Schools - 1998	100.0%	

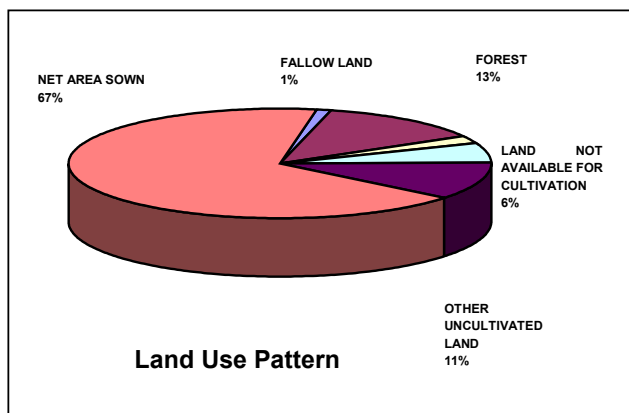
BASIC AMENITIES			
	1991		1993
Children as Main Workers(%)	3.9%	Households Without Access to	
Children as Main & Marginal Workers (%)	5.5%	Electricity (%)	62.4%
Child Mortality	191	Safe Drinking Water (%)	53.9%
Use of Polluting fuels in Households (%)	2.6%	Toilet Facilities (%)	85.0%
Non-Serviceable Kuchcha Houses	1.41%	All of the Three (%)	38.9%

LAND OWNERSHIP	
Gini Coefficient of Operational Holdings :	0.555

FOOD	
Per Capita Food Production (1991) in kgs.	409.63
FPS/lakh people (1996)	32.60
PDS Offtake per capita (1994/65) in kgs.	0.73



EMPLOYMENT			
	1991		1991
Worker Participation Rate :			
All	37.5%	Employment Rate of Growth (1981 to 1991)	2.62%
Rural	40.0%	Total Employment in Farm Sector (%)	78.0%
Urban	28.0%	Rural Employment in Non Farm Sector (%)	10.3%
Share of Primary Sector (%)	79.3%	Agriculture Labour (%)	33.3%
Share of Secondary Sector (%)	6.2%	Precarious Employment	36.3%
Share of Tertiary Sector (%)	14.6%		



LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	264.
Pulses Per Capita (Kg)	145.
Oilseeds per Capita (Kg)	60.
Average Landholding (Ha)	5.
Irrigated Area ('000 Ha)	71.
Unirrigated Area ('000 Ha)	448.
Fertilizer Consumption Per Hectare (Kg)	29.
Cropping Intensity	11.
Per Capita Forest Area (in sq. kms.)	0.12

HABITAT			
	1991		1991
Rate of Overcrowding (%)	31.8%	Number of Houses Occupied :	
Population of Towns residing in Slums	5.95	Pucca (%)	24.
Annual Rate of Afforestation (%)	0.00	Semi-Pucca (%)	72.
		Kutcha (%)	3.

INFRASTRUCUTRE/ FACILITIES			
Middle Schools per lakh population (1996)	24.5	Pucca Roads per 100 sq. km. (1994)	11.
High Schools per lakh population (1996)	6.9	Number of Banks (per lakh population) (1996)	4.99
Primary Health Centre per lakh rural population (1996)	2.8	Villages with Drinking Water Facility – 1996 (%)	99.9%
Population Served Sub Health Centre (1996)	5920	Telephone per lakh population (93-94)	54
Electrified Villages (%) (1995-96)	92.5%	Population per Post Office (93-94)	631

WEST NIMAR

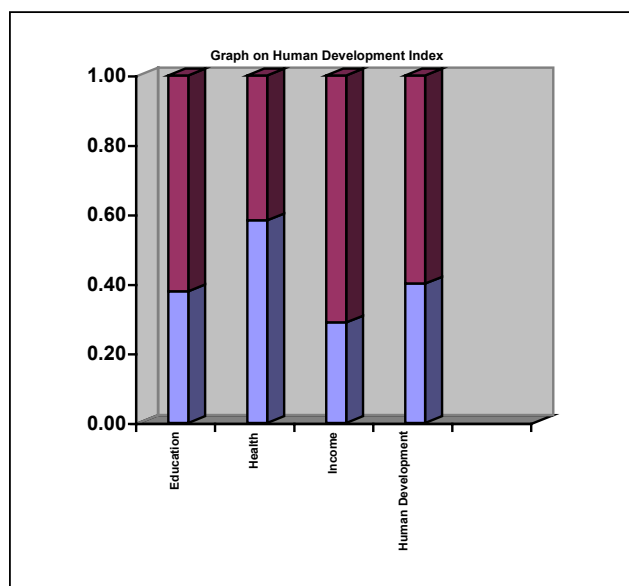
HUMAN DEVELOPMENT INDICES – 1998

Human Development Index (HDI)	0.401
Rank in Madhya Pradesh : HDI	44
Gender Related Development Index (GDI)	0.587
Rank in Madhya Pradesh GDI	23

POPULATION	1981	1991
Population:	1630943	2028145
Share of Madhya Pradesh Population	3.12%	3.06%
Urban Population	14.8%	15.1%
Population of Scheduled Castes (SC)	10.2%	9.8%
Population of Scheduled Tribes (ST)	43.3%	46.2%
Decadal Growth: 1981 to 1991 (%)	24.4%	
Density of Population (per sq. kms.)	121	151

HEALTH	1981	1991
Infant Mortality Rate	129	104
Life Expectancy (year)	52.2	57.1
	1976-81	1984-90
Crude Birth Date	39.7	37.2

GENDER	1981	1991
Life Expectancy of Females at Birth	n/a	26.2
Girl Child Mortality (birth to age 1 year)	n/a	124
Girl Child Mortality (up to age 5 years)	n/a	156
Total Fertility Rate	5.9	5.1
Gender Ratio: All	954	950
Rural	962	956
Urban	907	917
SC Gender Ratio	n/a	941
ST Gender Ratio	n/a	973
Workers Participation Rate - Female	34.2%	39.0%



DISTRICT INFORMATION

Total Inhabited Villages (in 1991)	1914
Total Habitations	3493
Towns (Class I to IV)	14
West Moar (khargone) District has been divided into Khargone (West Nimar) and Barwani w.e.f. 25 th May 1998.	

EDUCATION	1981	1991
Literacy :		
Male (%)	41.8%	48.0%
Female (%)	15.3%	23.2%
SC Literacy (%)	n/a	32.4%
ST Literacy (%)	n/a	14.1%
Access to Education		
Habitations with Primary Schools – 1998	100.0%	

BASIC AMENITIES

	1991	1993	
Children as Main Workers(%)	9.8%	Households Without Access to Electricity (%)	
Children as Main & Marginal Workers (%)	12.6%		46.5%
Child Mortality	158	Safe Drinking Water (%)	33.1%
Use of Polluting fuels in Households (%)	3.9%	Toilet Facilities (%)	88.5%
Non-Serviceable Kuchcha Houses	1.96%	All of the Three (%)	20.5%

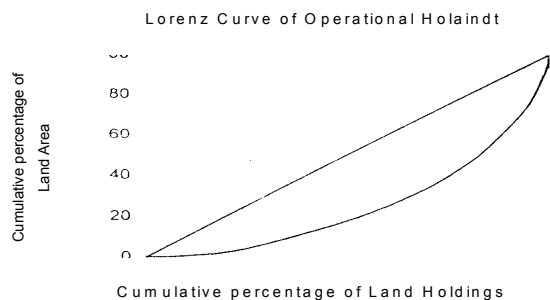
WEST NIMAR

LAND OWNERSHIP

Gini Coefficient of Operational Holdings :	0.471
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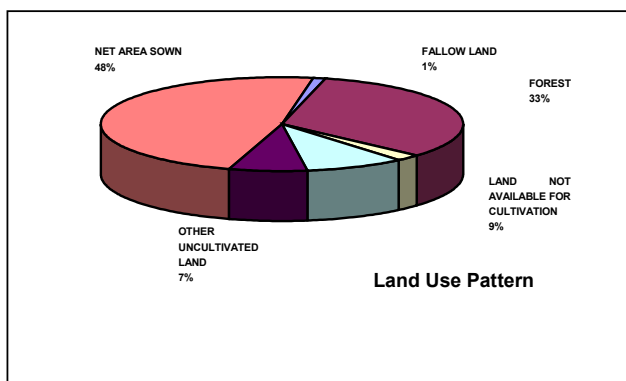
FOOD

Per Capita Food Production (1991) in kgs.	207.58
FPS/lakh people (1996)	23.92
PDS Offtake per capita (1994/65) in kgs.	7.16



EMPLOYMENT

	1991		1991
Worker Participation Rate :			
All	45.9%	Employment Rate of Growth (1981 to 1991)	2.65%
Rural	49.0%	Total Employment in Farm Sector (%)	84.8%
Urban	31.0%	Rural Employment in Non Farm Sector (%)	8.0%
Share of Primary Sector (%)	84.8%	Agriculture Labour (%)	28.8%
Share of Secondary Sector (%)	4.8%	Precarious Employment	31.1%
Share of Tertiary Sector (%)	10.4%		



LAND USE AND AGRICULTURE	1991
Cereals Per Capita (Kg)	190.5
Pulses Per Capita (Kg)	17.1
Oilseeds per Capita (Kg)	19.9
Average Landholding (Ha)	3.7
Irrigated Area ('000 Ha)	164.4
Unirrigated Area ('000 Ha)	464.2
Fertilizer Consumption Per Hectare (Kg)	54.3
Cropping Intensity	110
Per Capita Forest Area (in sq. kms.)	0.240

HABITAT

	1991		1991
Rate of Overcrowding (%)	54.9%	Number of Houses Occupied :	
Population of Towns residing in Slums	10.62	Pucca (%)	23.2
Annual Rate of Afforestation (%)	0.00	Semi-Pucca (%)	71.3
		Kutchha (%)	5.5

INFRASTRUCUTRE/ FACILITIES

Middle Schools per lakh population (1996)	20.1	Pucca Roads per 100 sq. km. (1994)	23.2
High Schools per lakh population (1996)	5.9	Number of Banks (per lakh population) (1996)	5.35
Primary Health Centre per lakh rural population (1996)	4.6	Villages with Drinking Water Facility – 1996 (%)	98.4%
Population Serviced Sub Health Centre (1996)	4179	Telephone per lakh population (93-94)	549
Electrified Villages (%) (1995-96)	92.5%	Population per Post Office (93-94)	7110



GENERAL TABLES

- GL 1 Estimates of Rural and Urban Poverty in Districts
- GL 2 Employment, Literacy and Gender Ratio of Scheduled Castes in Madhya Pradesh
- GL 3 Employment, Literacy and Gender Ratio of Scheduled Tribes of Madhya Pradesh
- GL 4 Road Network in Madhya Pradesh, 1996
- GL 5 Selected People's Institutions in Madhya Pradesh, 1996

The General tables present derived poverty estimates for the districts. The Planning Commission has not accepted any final poverty estimates based on the 1993/94 expenditure survey conducted by the National Sample Survey Organisation. However, some sub-state poverty estimates have been assessed by NSSO in a publication and we have attempted to derive district poverty estimates from these regional estimates. These are presented in table GL 1. Other tables presented results of the primary census abstract for scheduled castes and tribes, and relevant information on roads and people's institutions in Madhya Pradesh.

GL 1: Estimates for Poverty (Head Count Ratio) in Districts of Madhya Pradesh, 1993-94

District	NSS Region	Regional Poverty-Head Count Ratio		Estimated Poverty from NSS Estimates		
		Rural	Urban	Head Count Ratio (HCR)		
				Rural	Urban	Total
SHIVPURI	North	10.1%	43.3%	10.0%	46.9%	16.1%
DATIA	North	10.1%	43.3%	9.5%	42.8%	17.5%
GUNA	North	10.1%	43.3%	9.2%	48.4%	18.1%
RATLAM	Malwa Plateau	15.2%	44.0%	12.4%	33.1%	19.1%
UJJAIN	Malwa Plateau	15.2%	44.0%	11.2%	33.1%	20.1%
MORENA	North	10.1%	43.3%	11.0%	49.3%	20.5%
TIKAMGARH	Vindhya	22.8%	48.9%	13.6%	52.3%	21.3%
SHAJAPUR	Malwa Plateau	15.2%	44.0%	14.0%	52.0%	21.3%
BHIND	North	10.1%	43.3%	12.8%	51.5%	21.5%
DHAR	Malwa Plateau	15.2%	44.0%	18.0%	46.4%	21.8%
NARSIMHAPUR	South Central	33.2%	49.2%	18.9%	43.6%	22.8%
PANNA	Vindhya	22.8%	48.9%	18.3%	51.1%	23.8%
MANDSAUR	Malwa Plateau	15.2%	44.0%	11.5%	61.9%	23.9%
GWALIOR	North	10.1%	43.3%	7.7%	35.0%	24.2%
CHHATARPUR	Vindhya	22.8%	48.9%	17.3%	52.5%	24.9%
BASTAR	Chattisgarh	25.7%	42.2%	24.0%	39.5%	25.2%
RAIPUR	Chattisgarh	25.7%	42.2%	21.5%	43.6%	26.2%
DEWAS	Malwa Plateau	15.2%	44.0%	17.1%	48.3%	26.5%
DURG	Chattisgarh	25.7%	42.2%	21.6%	39.5%	28.2%
RAIGARH	Chattisgarh	25.7%	42.2%	26.3%	49.0%	28.2%
RAJNANDGAON	Chattisgarh	25.7%	42.2%	24.4%	48.4%	28.6%
RAJGARH	Malwa Plateau	15.2%	44.0%	21.5%	59.6%	28.7%
SATNA	Vindhya	22.8%	23.4%	23.4%	48.5%	28.8%
REWA	Vindhya	22.8%	48.9%	25.9%	47.5%	29.4%
JHABUA	Malwa Plateau	15.2%	44.0%	30.2%	41.6%	31.2%
CHHINDWARA	South Central	33.2%	49.2%	23.1%	56.9%	31.2%
INDORE	Malwa Plateau	15.2%	44.0%	11.3%	41.5%	32.8%
BILASPUR	Chattisgarh	25.7%	42.2%	31.6%	41.0%	33.3%
SHAHNOL	Vindhya	22.8%	48.9%	28.6%	49.7%	33.4%
SEHORE	Central	34.0%	51.5%	28.7%	54.3%	34.0%
RAISEN	Central	34.0%	51.5%	28.0%	59.1%	34.1%
VIDISHA	Central	34.0%	51.5%	29.2%	52.6%	34.3%
SIDHI	Vindhya	22.8%	48.6%	36.1%	38.7%	36.4%
BHOPAL	Central	34.0%	51.5%	25.2%	39.0%	36.5%
SARGUJA	Chattisgarh	25.7%	42.2%	35.6%	41.7%	36.5%
SEONI	South Central	33.5%	49.5%	35.3%	49.0%	36.8%
HOSHANGABAD	South Western	55.1%	55.9%	34.5%	52.8%	36.7%
JABALPUR	South Central	33.2%	49.2%	39.3%	45.6%	42.2%
BALAGHAT	South Central	33.2%	49.2%	43.3%	63.5%	45.3%
EAST NIMAR	South Western	55.1%	55.9%	48.5%	53.7%	50.0%
SAGAR	Central	34.0%	51.5%	44.7%	68.1%	51.7%
MANDLA	South Central	33.2%	49.2%	53.9%	50.9%	53.7%
DAMOH	Central	34.0%	51.5%	49.3%	78.8%	55.3%
BETUL	South Western	55.1%	55.9%	66.9%	60.2%	65.6%
WEST NIMAR	South Western	55.1%	55.9%	78.6%	58.9%	75.6%

Source: "Counting the Poor", Amaresh Dubey, Subhashish Gangopadhy, Sarvekshana Analytical Report No. 1
GOI
MPHDRO - Sanket

GL 2 - Employment, Literacy and Gender Ratio of Scheduled Castes in Madhya Pradesh

District	Population of SC to Total			SC of All Main Workers			Urbanisation Rate in SCs
	All	Rural	Urban	All	Rural	Urban	
DATIA	24.7%	27.2%	15.9%	26.8%	29.1%	16.8%	14.4%
UJJAIN	24.6%	30.3%	15.8%	27.7%	32.9%	16.2%	25.5%
CHHATARPUR	23.7%	25.1%	17.8%	25.5%	26.5%	20.1%	14.5%
TIKAMGARH	22.8%	23.4%	19.5%	23.7%	24.2%	20.5%	14.5%
SHAJAPUR	22.3%	24.6%	11.7%	26.1%	28.0%	13.6%	9.2%
BHIND	21.3%	22.2%	18.1%	21.6%	22.3%	18.9%	17.5%
SAGAR	21.1%	21.5%	20.31%	23.7%	23.8%	23.4%	27.9%
GWALIOR	20.4%	23.8%	18.1%	21.2%	24.5%	18.5%	51.9%
PANNA	20.4%	21.0%	16.6%	22.8%	23.1%	19.7%	10.6%
VIDISHA	20.3%	21.7%	14.9%	23.4%	24.9%	16.2%	14.7%
SEHORE	20.3%	21.7%	13.8%	22.6%	23.8%	15.0%	12.2%
DAMOH	20.1%	20.1%	19.8%	23.0%	22.9%	23.3%	17.9%
MORENA	19.9%	19.9%	20.0%	20.0%	19.9%	20.4%	20.6%
SHIVPURI	19.4%	19.9%	16.5%	20.2%	20.6%	16.7%	13.0%
DEWAS	18.2%	19.6%	14.2%	20.1%	21.5%	15.0%	20.2%
BILASPUR	18.1%	19.1%	13.2%	18.6%	19.2%	14.1%	12.4%
GUNA	18.1%	18.8%	15.1%	19.6%	20.0%	15.9%	16.3%
RAJGARH	18.0%	18.7%	14.5%	19.5%	20.1%	16.1%	13.6%
SATNA	17.8%	18.2%	16.3%	20.9%	21.1%	19.5%	18.0%
INDORE	16.7%	19.8%	15.3%	17.4%	20.7%	15.5%	63.6%
NARSIMHAPUR	16.6%	17.1%	13.6%	18.1%	18.5%	14.6%	12.2%
RAISEN	16.6%	17.6%	11.1%	18.4%	19.8%	12.2%	10.6%
HOSHANGABAD	16.3%	16.8%	14.8%	17.1%	17.8%	14.8%	24.9%
MANDSAUR	15.9%	17.4%	10.9%	17.5%	18.7%	11.7%	15.9%
REWA	14.8%	15.4%	11.5%	18.5%	18.9%	15.2%	11.8%
RAIPUR	14.4%	15.1%	11.8%	14.7%	15.0%	12.9%	16.2%
BHOPAL	13.8%	21.7%	11.8%	14.9%	23.2%	12.3%	68.5%
RATLAM	13.7%	15.2%	10.6%	15.6%	16.9%	11.5%	24.6%
JABALPUR	12.8%	12.5%	13.2%	13.0%	13.1%	12.7%	46.9%
DURG	12.8%	13.5%	11.4%	12.8%	13.1%	11.6%	31.5%
CHHINDWARA	12.2%	11.4%	14.9%	11.2%	10.7%	14.1%	28.3%
EAST NIMAR	11.4%	12.3%	9.1%	12.3%	13.0%	9.8%	22.1%
RAIGARH	11.4%	11.1%	13.7%	11.9%	11.7%	14.4%	11.4%
SIDHI	11.4%	11.5%	9.2%	12.3%	12.5%	8.9%	5.2%
BETUL	10.8%	9.6%	16.1%	9.9%	9.2%	14.9%	27.7%
SEONI	10.8%	10.8%	10.4%	10.1%	10.1%	10.9%	9.1%
RAJNANDGAON	10.3%	9.6%	13.7%	9.9%	9.3%	15.2%	21.0%
WEST NIMAR	9.8%	9.8%	9.8%	10.9%	10.8%	11.8%	15.1%
BALAGHAT	8.3%	8.2%	9.1%	8.4%	8.3%	9.6%	10.4%
SHAHDOL	7.7%	7.2%	9.6%	7.4%	6.9%	9.8%	26.2%
DHAR	6.9%	6.9%	7.5%	7.2%	7.1%	8.2%	14.2%
BASTARE	5.9%	5.5%	10.3%	5.5%	5.2%	11.6%	12.5%
SARGUJA	5.5%	5.1%	8.6%	5.4%	5.2%	8.1%	18.8%
MANDLA	5.2%	5.0%	8.2%	4.4%	4.2%	7.9%	12.1%
JHABUA	3.1%	2.8%	5.9%	2.8%	2.6%	5.9%	16.8%
MADHYA PRADESH	14.5%	14.8%	13.7%	15.0%	15.1%	14.4%	21.9%

Source: Census of Madhya Pradesh, 1991, Primary Census Abstract

GL 2 - Employment, Literacy and Gender Ratio of Scheduled Castes in Madhya Pradesh

District	Gender Ratio			Literacy				
	All	Rural	Urban	All	Male	Female	Rural	Urban
DATIA	837	835	848	33.1%	51.4%	10.8%	31.0%	45.4%
UJJAIN	930	937	913	29.6%	44.7%	13.4%	21.3%	53.6%
CHHATARPUR	854	853	862	21.3%	32.4%	8.1%	18.5%	37.8%
TIKAMGARH	856	854	867	27.8%	41.2%	12.0%	25.3%	42.9%
SHAJAPUR	913	913	904	22.9%	37.4%	7.0%	20.9%	42.0%
BHIND	796	795	801	38.6%	57.4%	14.7%	37.3%	45.0%
SAGAR	869	866	878	41.1%	56.1%	23.5%	34.1%	59.0%
GWALIOR	820	813	826	44.2%	61.1%	23.3%	34.3%	53.2%
PANNA	8887	889	872	18.6%	28.5%	7.2%	16.8%	33.0%
VIDISHA	865	864	873	28.0%	40.3%	13.5%	24.3%	49.3%
SEHORE	893	893	893	27.2%	42.5%	10.0%	24.1%	49.4%
DAMOH	885	887	875	32.9%	46.7%	17.1%	28.0%	55.4%
MORENA	813	814	807	32.0%	50.3%	9.1%	29.9%	40.0%
SHIVPURI	840	835	873	23.8%	37.6%	7.0%	20.6%	44.9%
DEWAS	921	925	907	30.3%	47.3%	11.9%	26.0%	47.5%
BILASPUR	973	979	937	39.6%	59.4%	18.8%	37.6%	53.3%
GUNA	874	8714	890	23.0%	36.3%	7.6%	19.1%	43.4%
RAJGARH	922	923	916	20.0%	32.7%	6.2%	17.0%	39.2%
SATNA	922	925	906	25.9%	40.7%	9.8%	27.1%	34.4%
INDORE	919	925	915	49.0%	64.0%	32.4%	32.9%	58.0%
NARSIMHAPUR	909	911	895	44.0%	58.8%	27.8%	41.5%	61.5%
RAISEN	867	867	863	25.6%	36.9%	12.5%	22.3%	53.6%
HOSHANGABAD	900	898	906	42.0%	58.2%	24.0%	34.7%	63.5%
MANDSAUR	944	946	933	35.1%	45.5%	14.6%	31.4%	54.7%
REWA	923	924	916	21.8%	35.4%	6.9%	20.3%	32.7%
RAIPUR	999	1004	975	37.4%	55.9%	18.9%	36.1%	44.2%
BHOPAL	895	877	903	43.7%	56.8%	28.8%	24.8%	52.2%
RATLAM	941	946	926	32.2%	47.9%	15.5%	23.7%	58.0%
JABALPUR	923	941	904	47.2%	62.7%	30.3%	36.2%	59.3%
DURG	982	1006	931	49.5%	67.2%	31.5%	45.5%	58.2%
CHHINDWARA	930	941	902	50.5%	64.4%	35.8%	44.7%	64.7%
EAST NIMAR	919	919	918	34.0%	49.5%	19.1%	33.3%	40.9%
RAIGARH	1000	1005	964	34.1%	50.8%	17.5%	32.4%	47.2%
SIDHI	940	945	854	14.6%	24.8%	3.4%	13.4%	34.8%
BETUL	950	960	924	53.3%	67.4%	38.4%	14.3%	68.9%
SEONI	949	953	912	50.3%	65.2%	34.5%	48.5%	68.0%
RAJNANDGAON	1015	1016	1015	44.0%	60.7%	27.7%	39.3%	61.2%
WEST NIMAR	941	939	950	32.4%	48.5%	15.2%	30.1%	45.4%
BALAGHAT	1024	1027	998	62.8%	79.2%	47.0%	61.7%	72.3%
SHAHDOL	936	953	891	28.4%	43.3%	12.2%	22.5%	45.1%
DHAR	940	944	920	32.3%	49.5%	14.0%	29.2%	51.1%
BASTARE	1001	1003	988	27.8%	39.1%	16.6%	28.6%	43.0%
SARGUJA	957	970	904	25.2%	36.8%	12.9%	19.6%	49.2%
MANDLA	942	943	933	51.5%	69.8%	32.1%	48.1%	75.4%
JHABUA	954	961	923	23.6%	33.5%	13.3%	18.0%	50.6%
MADHYA PRADESH	915	919	900	35.4%	50.5%	18.1%	30.2%	52.3%

Source: Census of Madhya Pradesh, 1991, Primary Census Abstract

GL 2 - Employment, Literacy and Gender Ratio of Scheduled Castes in Madhya Pradesh

District	Worker Participation Rate				SC Agriculture Labour in Main Workers			
	Total	Male	Female	Rural	Urban	All	Rural	Urban
DATIA	40%	52%	26%	42%	31%	23.4%	25.4%	8.2%
UJJAIN	45%	52%	37%	50%	30%	48.7%	57.1%	11.0%
CHHATARPUR	44%	52%	35%	46%	35%	33.4%	33.1%	35.7%
TIKAMGARH	44%	50%	38%	46%	32%	16.9%	16.8%	17.9%
SHAJAPUR	51%	50%	47%	52%	37%	64.3%	66.0%	42.8%
BHIND	28%	55%	7%	29%	26%	28.8%	29.7%	24.1%
SAGAR	44%	45%	35%	46%	39%	29.9%	38.7%	4.6%
GWALIOR	33%	51%	15%	38%	28%	16.6%	26.7%	5.6%
PANNA	46%	47%	36%	47%	38%	45.4%	46.7%	32.1%
VIDISHA	44%	55%	32%	46%	31%	55.9%	61.5%	11.2%
SEHORE	46%	54%	42%	48%	32%	53.4%	56.4%	23.6%
DAMOH	47%	51%	38%	48%	38%	38.1%	43.9%	5.5%
MORENA	32%	54%	14%	33%	26%	15.3%	16.0%	12.3%
SHIVPURI	44%	47%	33%	46%	29%	16.6%	17.6%	7.6%
DEWAS	45%	53%	39%	48%	33%	59.8%	65.6%	28.4%
BILASPUR	45%	50%	41%	47%	33%	30.9%	32.1%	19.1%
GUNA	39%	49%	24%	41%	30%	31.8%	36.0%	6.4%
RAJGARH	49%	52%	44%	52%	33%	50.5%	53.1%	29.8%
SATNA	46%	54%	41%	48%	39%	51.1%	55.4%	28.0%
INDORE	36%	51%	22%	45%	31%	31.3%	62.8%	6.0%
NARSIMHAPUR	43%	49%	34%	45%	32%	61.0%	65.8%	15.3%
RAISEN	42%	51%	31%	43%	33%	58.1%	61.6%	21.1%
HOSHANGABAD	39%	52%	28%	43%	28%	50.4%	60.4%	6.8%
MANDSAUR	51%	49%	47%	54%	35%	38.5%	40.9%	19.9%
REWA	46%	55%	43%	47%	40%	71.1%	74.6%	41.2%
RAIPUR	48%	48%	44%	50%	35%	33.9%	37.2%	10.8%
BHOPAL	35%	52%	21%	46%	30%	22.6%	56.0%	2.8%
RATLAM	51%	47%	46%	57%	34%	41.7%	47.8%	12.4%
JABALPUR	37%	56%	26%	46%	27%	35.4%	52.4%	5.7%
DURG	44%	48%	39%	50%	31%	28.4%	35.2%	4.9%
CHHINDWARA	39%	49%	30%	44%	26%	30.6%	36.1%	10.2%
EAST NIMAR	46%	47%	40%	51%	31%	52.3%	58.6%	18.3%
RAIGARH	49%	52%	42%	51%	32%	42.4%	45.1%	13.2%
SIDHI	45%	56%	38%	46%	30%	38.1%	39.2%	13.0%
BETUL	42%	52%	35%	48%	25%	30.7%	36.2%	5.3%
SEONI	47%	49%	42%	48%	29%	39.0%	40.7%	15.2%
RAJNANDGAON	51%	52%	49%	54%	38%	24.7%	26.8%	13.6%
WEST NIMAR	48%	52%	45%	50%	38%	65.1%	68.3%	42.2%
BALAGHAT	49%	52%	46%	51%	32%	24.8%	26.3%	6.3%
SHAHDOL	41%	51%	31%	45%	30%	26.9%	31.4%	9.2%
DHAR	47%	51%	42%	48%	36%	61.5%	65.6%	30.5%
BASTARE	51%	58%	45%	54%	36%	29.6%	31.5%	12.2%
SARGUJA	45%	54%	36%	50%	25%	29.4%	33.3%	3.1%
MANDLA	44%	50%	37%	46%	29%	26.3%	28.0%	7.1%
JHABUA	50%	54%	46%	54%	32%	17.1%	18.7%	6.9%
MADHYA PRADESH	43%	51%	35%	47%	31%	38.3%	43.6%	12.8%

Source: Census of Madhya Pradesh, 1991, Primary Census Abstract

GL 2 - Employment, Literacy and Gender Ratio of Scheduled Castes in Madhya Pradesh

District	Population of ST to Total			ST in Main Workers			Urbanisation Rate in STs
	All	Rural	Urban	All	Rural	Urban	
JHABUA	85.7%	91.1%	28.0%	87.9%	91.9%	29.8%	2.8%
BASTAR	67.4%	71.2%	17.7%	71.4%	74.1%	18.5%	1.9%
MANDLA	60.8%	64.9%	12.3%	66.5%	69.1%	15.6%	1.6%
SARGUJA	53.7%	59.2%	13.2%	57.6%	61.8%	14.2%	3.0%
DHAR	53.5%	59.4%	14.0%	56.1%	60.7%	16.0%	3.4%
RAIGARH	47.7%	51.2%	14.6%	49.6%	52.1%	15.5%	2.9%
SHAHNOLA	46.3%	54.3%	16.6%	54.3%	60.5%	20.2%	7.6%
WEST NIMAR	46.2%	53.0%	8.1%	47.5%	52.3%	10.0%	2.6%
BETUL	37.5%	44.6%	6.6%	44.1%	49.0%	7.4%	3.3%
SEONI	37.0%	40.2%	6.3%	42.8%	45.2%	7.4%	1.6%
CHHINDWARA	34.5%	42.1%	9.0%	39.6%	45.7%	9.6%	6.1%
SIDHI	30.4%	32.0%	8.0%	35.1%	36.6%	9.6%	1.7%
EAST NIMAR	26.8%	36.1%	2.2%	31.4%	38.3%	2.9%	2.3%
RAJNANDGAON	25.2%	28.8%	5.5%	28.0%	30.5%	6.4%	3.5%
RATLAM	23.2%	32.7%	3.1%	26.0%	32.7%	4.1%	4.2%
BILASPUR	23.0%	26.3%	6.9%	25.2%	27.6%	8.0%	5.1%
BALAGHAT	21.9%	23.2%	9.6%	24.0%	24.9%	11.4%	4.2%
RAIPUR	18.3%	21.6%	4.8%	20.7%	23.2%	5.6%	5.2%
JABALPUR	17.9%	28.0%	5.8%	23.4%	33.3%	6.8%	14.7%
HOSHANGABAD	17.4%	22.2%	4.5%	21.5%	26.0%	5.2%	7.1%
DEWAS	15.0%	18.5%	5.1%	17.4%	20.2%	6.5%	8.8%
PANNA	14.9%	16.4%	4.9%	17.5%	18.8%	7.2%	4.3%
RAISEN	14.4%	16.4%	3.9%	17.5%	19.5%	4.5%	4.2%
SATNA	13.8%	16.0%	4.7%	18.4%	20.7%	6.7%	6.7%
NARSIMHAPUR	12.9%	14.1%	4.5%	16.1%	17.5%	5.5%	5.2%
DURG	12.4%	16.1%	5.8%	14.6%	17.1%	6.8%	16.4%
REWA	12.4%	13.6%	6.1%	17.1%	18.3%	8.9%	7.4%
DAMOH	12.4%	14.8%	1.6%	14.3%	16.5%	1.9%	2.4%
GUNA	12.0%	14.0%	3.7%	14.2%	16.1%	5.2%	6.0%
SHIVPURI	11.3%	12.8%	2.9%	12.8%	14.0%	3.8%	3.9%
SEHORE	10.2%	11.5%	4.0%	12.0%	13.1%	5.0%	7.1%
SAGAR	8.5%	11.3%	1.5%	10.5%	13.5%	1.8%	5.3%
MORENA	5.6%	6.8%	0.7%	7.2%	8.5%	0.7%	2.4%
INDORE	5.5%	12.1%	2.6%	7.1%	13.8%	3.1%	32.7%
MANDSAUR	4.8%	5.7%	1.8%	6.1%	6.8%	2.9%	8.8%
VIDISHA	4.4%	5.2%	1.1%	5.4%	6.2%	1.3%	4.9%
TIKAMGARH	4.1%	4.6%	1.8%	4.8%	5.1%	2.6%	7.5%
CHHATARPUR	3.8%	4.5%	0.8%	4.5%	5.1%	1.2%	4.3%
RAJGARH	3.3%	3.7%	1.4%	3.6%	3.9%	1.8%	7.3%
BHOPAL	3.0%	4.3%	2.7%	3.7%	5.2%	3.2%	72.0%
GWALIOR	2.9%	5.2%	1.3%	3.9%	6.8%	1.5%	25.7%
SHAJAPUR	2.4%	2.7%	0.9%	2.9%	3.2%	1.2%	6.8%
UJJAIN	2.1%	2.6%	1.4%	2.6%	2.9%	1.8%	25.4%
DATIA	1.7%	1.9%	0.9%	2.4%	2.7%	1.1%	11.7%
BHIND	1.0%	0.8%	1.5%	1.3%	1.2%	1.8%	31.9%
MADHYA PRADESH	23.3%	28.8%	4.9%	27.4%	32.1%	5.8%	4.9%

Source: Census of Madhya Pradesh, 1991, Primary Census Abstract

GL 2 - Employment, Literacy and Gender Ratio of Scheduled Castes in Madhya Pradesh

District	Gender Ratio			Literacy				
	All	Rural	Urban	All	Male	Female	Rural	Urban
JHABUA	986	988	908	10.9%	16.9%	4.7%	9.9%	43.7%
BASTAR	1016	1018	919	15.5%	23.8%	7.2%	14.7%	52.4%
MANDLA	1011	1013	900	27.2%	41.6%	13.0%	26.7%	57.1%
SARGUJA	975	977	918	19.5%	29.6%	9.0%	18.6%	48.6%
DHAR	977	982	865	16.2%	24.8%	7.4%	15.4%	36.8%
RAIGARH	1018	1022	904	32.8%	46.1%	19.8%	32.0%	58.5%
SHAHDOL	977	981	928	17.6%	28.4%	6.3%	16.8%	26.5%
WEST NIMAR	973	976	863	14.1%	20.9%	7.1%	13.4%	39.3%
BETUL	1002	1005	918	17.2%	26.1%	8.4%	16.3%	45.3%
SEONI	1005	1007	899	26.6%	38.9%	17.4%	26.0%	59.5%
CHHINDWARA	998	1001	946	21.3%	31.5%	11.0%	19.3%	50.2%
SIDHI	945	974	832	12.5%	21.1%	3.2%	12.3%	25.7%
EAST NIMAR	963	966	837	16.4%	26.0%	6.3%	15.7%	44.2%
RAJNANDGAON	1039	1041	997	35.6%	51.8%	20.1%	34.8%	56.7%
RATLAM	972	977	856	12.7%	20.5%	4.5%	11.5%	39.0%
BILASPUR	1003	1008	922	29.9%	46.4%	13.4%	28.6%	54.0%
BALAGHAT	1021	1023	956	35.1%	48.9%	21.6%	34.1%	56.7%
RAIPUR	1025	1031	933	35.7%	54.8%	17.2%	35.0%	49.5%
JABALPUR	963	973	906	26.6%	39.4%	13.3%	23.2%	46.0%
HOSHANGABAD	936	941	874	20.6%	30.4%	10.0%	17.9%	54.9%
DEWAS	962	967	920	15.5%	24.5%	6.1%	13.6%	34.8%
PANNA	948	949	917	11.3%	18.8%	4.4%	11.3%	11.2%
RAISEN	927	930	856	14.9%	22.9%	6.0%	14.0%	35.0%
SATNA	933	936	896	13.0%	21.4%	3.9%	12.6%	18.1%
NARSIMHAPUR	959	963	886	30.8%	42.6%	18.4%	29.4%	55.4%
DURG	1017	1042	899	50.6%	68.7%	32.9%	48.9%	59.4%
REWA	912	914	880	13.9%	23.0%	3.9%	13.5%	19.3%
DAMOH	951	953	898	21.9%	32.7%	10.5%	21.5%	40.2%
GUNA	928	931	875	6.8%	11.2%	1.9%	5.9%	20.6%
SHIVPURI	950	951	941	6.6%	11.3%	1.5%	6.2%	14.6%
SEHORE	932	940	830	16.5%	25.5%	6.7%	14.6%	39.9%
SAGAR	931	935	865	20.1%	29.4%	9.9%	18.9%	41.4%
MORENA	929	931	823	7.0%	12.1%	1.4%	6.5%	25.7%
INDORE	910	931	869	26.0%	35.4%	15.6%	17.0%	43.9%
MANDSAUR	927	929	902	16.3%	26.1%	5.6%	15.3%	26.2%
VIDISHA	916	921	827	13.4%	20.4%	5.7%	11.6%	48.5%
TIKAMGARH	934	934	927	13.0%	19.1%	6.4%	12.8%	15.7%
CHHATARPUR	916	917	880	9.5%	15.0%	3.4%	8.7%	27.5%
RAJGARH	924	929	853	20.3%	33.0%	6.4%	18.6%	42.2%
BHOPAL	887	892	885	44.4%	52.1%	35.4%	12.9%	55.8%
GWALIOR	892	915	831	19.4%	27.6%	10.1%	8.7%	48.6%
SHAJAPUR	889	893	839	24.9%	39.1%	8.9%	23.2%	47.5%
UJJAIN	915	940	847	25.7%	38.4%	11.7%	21.5%	38.1%
DATIA	869	861	939	13.1%	18.5%	6.6%	10.6%	31.4%
BHIND	822	808	852	32.0%	45.9%	14.6%	29.6%	37.2%
MADHYA PRADESH	985	989	901	21.5%	32.2%	10.6%	20.2%	44.7%

Source: Census of Madhya Pradesh, 1991, Primary Census Abstract

GL 2 - Employment, Literacy and Gender Ratio of Scheduled Castes in Madhya Pradesh

District	Worker Participation Rate				Agriculture Labour in MW-ST			
	Total	Male	Female	Rural	Urban	All	Rural	Urban
JHABUA	56%	57%	56%	57%	38%	5.9%	5.8%	9.2%
BASTAR	57%	61%	54%	58%	34%	13.2%	13.2%	17.4%
MANDLA	56%	58%	54%	56%	38%	23.6%	23.3%	45.0%
SARGUJA	52%	60%	44%	53%	29%	18.8%	19.0%	5.9%
DHAR	51%	52%	49%	51%	39%	24.5%	23.9%	44.5%
RAIGARH	53%	60%	47%	54%	34%	22.9%	23.1%	15.2%
SHAHDOL	51%	58%	44%	53%	36%	34.7%	35.0%	31.3%
WEST NIMAR	50%	53%	46%	50%	39%	25.2%	24.7%	47.7%
BETUL	56%	58%	53%	57%	31%	32.2%	32.5%	17.2%
SEONI	56%	58%	53%	56%	33%	38.2%	38.4%	27.3%
CHHINDWARA	52%	57%	47%	53%	30%	30.0%	30.5%	19.6%
SIDHI	51%	56%	45%	51%	38%	35.6%	35.7%	32.1%
EAST NIMAR	52%	56%	48%	53%	37%	45.5%	45.6%	39.1%
RAJNANDGAON	58%	58%	59%	59%	39%	17.2%	17.0%	23.8%
RATLAM	54%	56%	52%	54%	41%	22.0%	21.9%	23.5%
BILASPUR	51%	57%	45%	52%	35%	26.8%	27.0%	22.4%
BALAGHAT	55%	58%	53%	56%	36%	33.4%	33.7%	23.3%
RAIPUR	55%	58%	51%	55%	38%	34.3%	34.8%	22.4%
JABALPUR	49%	56%	42%	52%	34%	50.1%	53.5%	21.8%
HOSHANGABAD	49%	56%	41%	50%	32%	55.9%	58.0%	18.5%
DEWAS	47%	52%	42%	48%	40%	52.5%	52.6%	50.5%
PANNA	49%	56%	41%	49%	45%	50.1%	50.1%	50.1%
RAISEN	46%	56%	35%	46%	35%	59.0%	59.6%	42.1%
SATNA	53%	57%	48%	53%	46%	61.3%	61.8%	53.9%
NARSIMHAPUR	49%	57%	42%	50%	36%	56.9%	58.2%	27.2%
DURG	52%	53%	50%	55%	35%	24.8%	27.0%	8.2%
REWA	50%	53%	47%	51%	46%	83.8%	84.7%	71.0%
DAMOH	49%	56%	41%	49%	38%	46.9%	47.5%	15.2%
GUNA	46%	54%	37%	47%	39%	38.4%	39.8%	16.7%
SHIVPURI	48%	54%	42%	49%	39%	40.6%	41.5%	17.0%
SEHORE	49%	54%	43%	50%	36%	50.0%	50.6%	40.9%
SAGAR	50%	56%	43%	50%	39%	54.3%	55.6%	24.9%
MORENA	45%	53%	37%	45%	35%	33.8%	33.8%	30.0%
INDORE	45%	51%	37%	49%	36%	50.0%	61.8%	18.1%
MANDSAUR	58%	60%	56%	58%	51%	46.1%	46.4%	43.0%
VIDISHA	48%	56%	39%	49%	33%	67.2%	69.2%	16.1%
TIKAMGARH	49%	55%	42%	49%	44%	41.2%	40.6%	48.9%
CHHATARPUR	51%	56%	44%	51%	44%	45.9%	45.7%	51.1%
RAJGARH	50%	54%	45%	50%	39%	42.1%	42.4%	37.5%
BHOPAL	39%	51%	25%	52%	34%	18.8%	47.9%	3.8%
GWALIOR	43%	52%	32%	46%	32%	50.2%	61.0%	9.7%
SHAJAPUR	52%	88%	48%	53%	40%	55.6%	57.1%	30.1%
UJJAIN	48%	54%	40%	51%	38%	48.6%	56.5%	19.5%
DATIA	51%	57%	44%	53%	32%	52.6%	56.5%	10.4%
BHIND	36%	52%	16%	40%	29%	21.3%	20.7%	23.3%
MADHYA PRADESH	53%	57%	48%	54%	36%	29.3%	29.6%	25.2%

Source: Census of Madhya Pradesh, 1991, Primary Census Abstract

GL 3 - Employment, Literacy and Gender Ratio of Scheduled Castes in Madhya Pradesh

District	Share of States STs	Major Tribes	Other Tribes
JHABUA	6.3%	Bhil	
BASTAR	9.9%	Gond, Bhatra, Halba	Pardhi
MANDLA	5.1%	Baiga, Gond	Bharia, Agaria, Kol Pardhan
SARGUJA	7.3%	Gond, Kawar, Oraon	Bharia, Agaria, Nagasia, Khairwar, Dhanwar, Korwa
DHAR	4.7%	Bhil	
RAIGARH	5.3%	Gond, Oraon, Kawar, Sawar	Bharia, Binjhar, Dhanwar, Kharia, Korwa, Majhi, Nagasia
SHAHDOL	5.2%	Gond, Baiga	Bhaira, Panika, Kol, Bhumia, Agaria, Kawar, Pao
WEST NIMAR	6.1%	Bhil	Korku
BETUL	2.9%	Gond	Korku
SEONI	2.4%	Gond	Bharia, Pardhan
CHHINDWARA	3.5%	Gond	Bharia, Mawasi, Halba, Pardhan
SIDHI	2.7%	Gond, Baiga	Kol, Panika, Ageria, Biar
EAST NIMAR	2.5%	Bhil	Gond, Korku
RAJNANDGAON	2.4%	Gond, Kawar, Halba	Baiga
RATLAM	1.5%	Bhil	
BILASPUR	5.7%	Gond, Kawar	Dhanwar, Binjhar, Sawar, Bhaina, Oraon, Majhar
BALAGHAT	1.9%	Gond	Binjhar, Halba, Baiga
RAIPUR	4.6%	Gond, Kawar	Binjhar, Saur, Sawar, Halba, Bhunjia
JABALPUR	3.1%	Gond, Bharia	Kol, Baiga
HOSHANGABAD	1.4%	Gond	Bhil, Korku
DEWAS	1.0%	Bhil, Gond	Korku
PANNA	0.7%	Gond, Bharia (Bhumia)	Saur, Sonr
RAISEN	0.8%	Gond	Bhil, Keer
SATNA	1.3%	Gond, Kol	Bharia
NARSIMHAPUR	0.7%	Gond	Bharia
DURG	1.9%	Gond, Halba	Kawar
REWA	1.3%	Kol	Gond
DAMOH	0.7%	Gond	Saur, Sonr
GUNA	1.0%	Sahariya	Bhil, Bhilala, Gond
SHIVPURI	1.0%	Sahariya	Bhil, Bhilala
SEHORE	0.8%	Gond, Bhil	Keer, Korku
SAGAR	0.6%	Gond, Sonr, Saur	Sahariya
MORENA	0.9%	Sahariya	
INDORE	0.6%	Bhil	
MANDSAUR	0.7%	Bhil	
VIDISHA	0.5%	Sahariya	Gond, Bhil
TIKAMGARH	0.3%	Sonr	Saur, Sahariya
CHHATARPUR	0.3%	Saur, Gond, Sonr	Khairwar
RAJGARH	0.3%	Bhil	
BHOPAL	0.2%	Gond, Bhil	Keer
GWALIOR	0.3%	Sahariya	Bhil, Bhilala
SHAJAPUR	0.2%	Bhil	
UJJAIN	0.2%	Bhil	Gond
DATIA	0.0%	Sahariya	
BHIND	0.1%	Negligible	
MADHYA PRADESH		Primitive Tribes in MP :	Sahariya, Bharia, Maria, Baiga
		Criminal Tribes in MP :	Kanjar, Pardhi, Banchara, Bedia

Source: Census of Madhya Pradesh, 1991, Primary Census Abstract

GL 4 - Road Network in Madhya Pradesh, 1996

District	National Highway (Km)	State Highway (Km)	Pucca Roads (Km)	Kuccha Roads (Km)	Pucca Rural Roads (Km)	Koccha Rural Roads (Km)	Rural Roads (Km)	Road Length per 100 sq Km (in Km)	Rural Roads per Village (in Km)
DURG	61.0	125.2	511.6	0.0	1794.9	3595.6	5390.5	70.3	3.0
RAIPUR	277.0	510.9	634.3	0.0	3837.6	6660.8	10498.4	69.2	2.7
INDORE	76.8	138.6	165.1	16.0	862.2	1019.7	1881.9	58.2	3.0
BALAGHAT	0.0	267.9	413.5	0.0	1411.1	2066.3	3477.4	52.0	2.7
BILASPUR	0.0	658.9	486.9	15.0	2987.4	4664.7	7652.1	51.7	2.2
SATNA	101.3	263.8	338.2	9.2	1518.7	2136.1	3654.8	51.2	2.0
SIDHI	0.0	178.2	272.4	82.9	1605.3	2771.0	4376.3	50.0	2.4
REWA	159.9	122.7	276.0	6.8	1263.5	1699.0	2962.5	49.6	1.3
WEST NIMAR	86.1	317.7	446.8	11.0	2438.8	2473.1	4911.9	48.5	2.3
JHABUA	0.0	171.8	404.3	0.0	1164.2	1689.8	2854.0	44.6	2.2
RAJNANDGAON	83.4	250.7	314.4	0.0	1339.8	2299.7	3639.5	44.4	1.6
TIKAMGARH	0.0	217.0	220.8	1.0	811.2	966.9	1778.1	40.4	2.1
JABALPUR	218.0	268.7	410.9	0.0	1527.7	1784.5	3312.2	37.5	1.5
MANDLA	0.0	590.8	488.0	0.0	1378.1	1762.0	3140.1	35.5	1.5
EAST NIMAR	0.0	285.9	403.4	8.2	1137.5	1189.9	2327.4	34.8	2.2
RAIGARH	0.0	479.1	172.9	1.2	1324.5	2146.5	3471.0	33.8	1.6
SEONI	166.7	135.1	196.4	0.0	811.7	1273.4	2085.1	33.3	1.3
DAMOH	0.0	190.3	422.7	1.7	734.6	928.4	1663.0	32.4	1.8
GWALIOR	69.2	88.0	278.4	0.0	691.0	865.9	1556.9	31.8	2.2
BHIND	0.0	273.1	117.5	2.8	624.2	706.0	1330.2	31.3	1.5
DATIA	0.0	145.0	265.6	0.4	252.8	275.8	528.6	27.8	1.3
SHAHDOL	0.0	538.6	550.8	2.1	1427.6	2285.7	3413.3	27.7	1.9
DHAR	28.5	267.3	405.1	0.0	1052.9	1175.8	2228.7	27.5	1.5
SHAJAPUR	30.6	118.0	425.6	1.5	737.3	845.2	1582.5	26.2	1.5
CHHATARPUR	0.0	308.2	105.2	63.4	820.4	1344.0	2164.4	26.1	2.0
NARSIMHAPUR	165.0	102.1	129.1	2.4	497.4	674.0	1171.4	26.1	1.1
HOSHANGABAD	0.0	329.9	179.5	0.0	811.8	1111.4	1923.2	25.7	1.4
MANDSAUR	0.0	152.3	479.5	0.0	1004.5	1121.8	2126.3	24.3	1.4
CHHINDWARA	214.5	320.2	297.8	0.0	881.5	1418.6	2300.1	23.7	1.2
BETUL	0.0	246.00	399.7	1.4	699.2	1034.1	1733.3	23.1	1.3
SARGUJA	0.0	652.6	378.1	20.2	1542.7	2624.5	4167.2	23.0	1.7
BASTAR	431.8	323.2	561.4	23.0	1946.2	3364.7	5310.9	21.4	1.4
RATLAM	0.0	87.0	276.0	14.0	443.2	484.7	927.9	19.5	0.9
SAGAR	153.7	312.0	644.7	21.5	605.2	839.9	1445.1	17.7	0.8
MORENA	44.1	384.1	217.0	0.0	971.2	1039.7	2010.9	17.5	1.6
BHOPAL	39.4	108.4	506.0	0.0	206.9	206.9	413.8	17.2	0.8
DEWAS	43.9	162.4	194.7	0.0	419.5	599.9	1019.4	16.9	1.0
PANNA	0.0	140.9	407.4	10.0	398.9	580.9	979.8	16.8	1.0
UJJAIN	17.6	146.4	457.4	0.0	425.9	482.9	908.8	15.4	0.8
RAJGARH	214.5	65.5	239.6	2.0	365.0	541.5	906.5	15.4	0.5
SHIVPURI	202.0	186.3	374.5	5.5	490.9	578.8	1069.7	12.3	0.8
SEHORE	29.2	219.4	243.3	0.0	300.6	376.6	677.2	11.1	0.7
GUNA	109.4	282.8	278.5	20.9	541.4	622.8	1164.2	10.8	0.6
VIDISHA	0.0	327.9	260.5	47.1	317.4	408.4	725.8	10.1	0.5
RAISEN	166.4	190.1	300.6	16.9	207.4	312.0	519.4	7.2	0.4
MADHYA PRADESH	3190	11651	15647	408.1	46631.8	67049.9	113682	31.3	1.6

Note: CC - Cement Concrete, BT - Bitumen Tar
Source : Sakak Sankhyaki, Madhya Pradesh, 1996

GL 5 - Selected People's Institutions in Madhya Pradesh, 1996

District	Animal Husbandry Society	Antayavsai & Society	Canteen & Student Cooperative	Cold Storage Society	Collective Agricultural Society	Contract Labour Society	Cooperative Press	Cooperative Sugar Mills	Cotton, Fruit & Vegetable Society	DWCRA Groups	Electricity Society
Rewa	0	0	10	0	4	2	1	0	0	0	1
Shahdol	0	1	0	0	0	3	1	0	0	3	0
West Nimar	0	1	0	0	0	6	0	0	1	0	0
Sarguja	0	1	0	0	0	0	1	0	0	5	0
Tikamgarh	3	1	0	0	2	2	1	0	0	0	1
Durg	0	1	43	0	5	85	4	0	0	0	0
Bilaspur	1	1	0	0	9	20	0	0	0	20	0
Damoh	0	0	3	0	0	9	1	0	1	0	0
Shivpuri	0	1	0	0	0	0	1	0	0	1	1
Panna	0	0	0	0	0	6	0	0	0	0	0
Mandsaur	0	2	44	240	0	55	0	7	32	6	1
Sagar	0	1	0	1	1	11	2	0	0	0	1
Raigarh	0	1	2	0	0	2	0	0	0	6	0
Mandla	0	1	0	0	0	0	0	0	0	4	1
Raipur	0	1	0	0	0	0	3	0	5	12	1
Balaghat	0	0	0	0	0	0	0	0	0	17	0
Jabalpur	0	1	6	0	7	20	6	0	0	0	0
Gwalior	2	1	0	0	6	38	0	0	0	0	0
Sindhi	0	1	0	0	2	7	0	0	0	2	1
Guna	0	1	0	0	0	25	1	0	0	7	1
Jhabua	0	1	1	0	0	0	3	0	0	0	0
East Nimar	0	1	0	0	0	25	4	1	8	3	1
Betu;	0	0	0	0	0	1	0	0	2	3	1
Satna	0	3	1	0	0	4	1	0	0	1	1
Rajnandgaon	0	1	0	0	1	0	3	0	0	0	0
Dhar	0	0	0	0	1	7	0	0	0	1	1
Chhindwara	2	1	0	0	0	1	0	0	1	0	0
Narsimha	0	1	2	0	0	1	2	0	1	0	0
Bastar	0	1	8	0	0	20	2	0	2	12	1
Bhind	0	1	0	0	0	15	3	0	3	0	1
Datia	1	1	0	0	0	19	1	0	0	0	0
Morena	0	1	0	0	0	26	13	1	13	0	0
Bhopal	0	0	0	0	0	57	4	0	4	0	0
Seoni	0	0	0	0	0	1	0	0	0	6	1
Chhatarpur	0	1	0	0	1	94	1	0	0	0	2
Hoshangabad	0	1	0	0	0	5	0	0	0	19	0
Indore	0	0	0	3	0	0	0	1	0	1	0
Vishisha	0	1	0	0	0	30	0	0	0	17	0
Ratlam	0	0	1	1	0	6	0	0	0	3	0
Raisen	0	0	0	0	0	7	1	0	0	1	0
Rajgarh	0	1	0	0	0	0	0	0	0	9	0
Sehore	0	1	0	0	3	10	3	0	0	1	1
Dewas	0	1	0	0	11	3	3	0	2	0	0
Ujjain	3	1	0	0	7	3	5	0	4	4	0
Shajapur	1	1	0	0	0	3	1	0	3	2	0
Madhya Pradesh	13	37	121	245	60	629	72	10	82	166	19

Source: Department of Co-operative, GoMP, NCC

GL 5 - Selected People's Institutions in Madhya Pradesh, 1996

DISTRICT	Employees Credit Society	Environment & seed Society	Fisheries Society	Forest Labour Society	Forest Product Society	Forest Society	FSS	General Marketing Society	Grain Bank	Housing Society	Industrial Society
REWA	2	0	15	23	0	0	22	6	0	10	24
SHAHDOL	13	0	24	2	94	0	1	8	0	3	5
WEST NIMAR	29	12	48	40	13	44	0	13	0	27	10
SARGUJA	8	3	33	0	115	58	0	6	0	4	9
TIKAMGARH	1	0	59	0	25	0	0	4	0	13	3
DURG	40	0	81	2	17	34	0	9	3	40	19
BILASPUR	29	0	128	0	132	32	10	18	0	27	70
DAMOH	11	0	14	18	0	0	12	0	0	16	11
SHIVPURI	13	0	21	40	0	0	14	6	0	22	8
PANNA	1	0	15	4	33	0	0	3	0	4	10
MANDSAUR	0	0	3	0	53	1	0	1	5	0	14
SAGAR	11	0	21	2	46	0	1	5	0	30	44
RAIGARH	8	0	36	0	136	34	0	5	0	4	66
MANDLA	3	1	52	1	51	50	0	2	0	7	14
RAIPUR	21	0	130	0	198	46	340	30	0	103	97
BALAGHAT	6	0	34	0	62	6	0	7	0	5	20
JABALPUR	62	0	57	0	57	1	21	8	0	203	113
GWALIOR	40	0	8	4	0	0	16	5	0	157	58
SINDHI	5	0	17	0	126	0	4	2	0	6	21
GUNA	5	0	14	54	29	0	0	7	0	13	18
JHABUA	4	1	32	11	12	24	0	6	0	17	122
EAST NIMAR	19	4	10	0	21	0	0	8	0	74	33
BETU;	5	0	11	27	0	0	0	9	0	0	0
SATNA	4	0	131	0	0	43	10	4	0	5	0
RAJNANDGAON	14	0	26	18	85	40	10	6	0	23	28
DHAR	12	0	50	2	14	42	0	7	1	27	21
CHHINDWARA	23	0	24	0	30	54	15	7	0	41	28
NARSIMHA	4	0	10	22	0	0	14	4	0	9	12
BASTAR	4	0	47	0	297	0	2	12	0	16	20
BHIND	0	0	4	0	0	0	1	6	0	23	26
DATIA	5	0	2	1	0	0	5	2	0	10	8
MORENA	12	3	10	0	17	0	22	7	0	17	66
BHOPAL	131	0	16	0	8	0	1	2	0	638	96
SEONI	6	0	25	0	45	0	10	5	0	16	16
CHHATARPUR	2	0	64	5	75	0	0	5	0	7	25
HOSHANGABAD	15	1	57	2	21	0	0	6	0	30	51
INDORE	258	0	0	0	3	16	0	9	0	546	64
VISHISHA	12	1	14	0	13	0	0	2	1	27	10
RATLAM	32	0	4	29	0	0	10	4	0	91	2
RAISEN	8	0	16	0	49	47	10	7	10	14	14
RAJGARH	6	0	4	0	4	4	0	7	0	7	10
SEHORE	5	0	19	15	0	0	14	5	0	19	10
DEWAS	12	0	16	2	29	0	12	5	0	79	13
UJJAIN	32	0	16	18	6	1	10	5	0	121	16
SHAJAPUR	24	0	17	0	2	4	0	4	0	20	17
MADHYA PRADESH	957	26	1435	342	1918	581	587	289	11	2571	1342

Source: Department of Co-operative, GoMP, NCC

GL 5 Selected People's Institutions in Madhya Pradesh, 1996

District	Irrigation Society	Labour Unions	LAMPS	Milk Society	MPCS	Nagrik Bank	NCC	Oil Seed Society	Other Credit Society	Other Manufacturing Cooperatives	Other Non Credit Cooperatives
Rewa	1	29	3	15	3	0	10	0	0	10	24
Shahdol	1	39	88	46	1	0	10	0	0	3	5
West Nimar	4	25	0	56	1	2	6	2	0	27	10
Sarguja	1	19	0	34	2	0	6	0	0	4	9
Tikamgarh	0	10	9	0	0	1	5	0	0	13	3
Durg	3	85	0	29	9	3	23	0	3	40	19
Bilaspur	0	97	50	22	2	2	17	0	0	27	70
Damoh	0	10	0	18	0	1	5	31	0	16	11
Shivpuri	0	25	4	61	0	1	9	0	0	22	8
Panna	0	6	4	0	0	0	4	0	0	4	10
Mandsaur	0	40	1	0	8	1	12	11	5	0	14
Sagar	0	19	13	28	0	1	18	60	0	30	44
Raigarh	3	23	53	79	1	0	9	0	0	4	66
Mandla	1	4	87	71	1	1	7	0	0	7	14
Raipur	2	126	0	123	0	2	23	0	0	103	97
Balaghat	8	32	0	55	1	0	6	0	0	5	20
Jabalpur	1	186	23	53	0	1	34	31	0	203	113
Gwalior	0	128	0	41	8	2	27	52	0	157	58
Sindhi	0	19	38	61	0	0	4	1	0	6	21
Guna	5	25	8	74	4	0	5	17	0	13	18
Jhabua	5	15	72	98	3	0	6	1	0	17	122
East Nimar	1	49	53	34	0	3	17	23	0	74	33
Betu;	2	22	0	125	0	1	5	94	0	0	0
Satna	17	55	12	2	0	0	11	0	0	5	0
Rajnandgaon	0	32	32	59	0	0	6	0	0	23	28
Dhar		67	79	145	0	1	5	59	1	27	21
Chhindwara	1	37	27	86	0	2	9	105	0	41	28
Narsimha	1	10	11	27	1	0	7	85	0	9	12
Bastar	0	23	164	78	6	0	27	0	0	16	20
Bhind	0	24	0	189	0	1	4	65	0	23	26
Datia	0	10	0	56	0	1	5	0	0	10	8
Morena	6	13	0	221	2	1	5	144	0	17	66
Bhopal	0	286	0	27	0	3	27	45	0	638	96
Seoni	52	6	22	85	3	0	5	69	0	16	16
Chhatarpur	0	17	0	9	3	1	9	0	0	7	25
Hoshangabad	0	32	0	38	13	0	16	121	0	30	51
Indore	0	247	0	143	0	12	30	125	0	546	64
Vishisha	0	17	0	22	0	1	6	121	1	27	10
Ratlam	0	58	18	172	1	1	9	48	0	91	2
Raisen	0	92	16	0	0	0	5	62	1	14	14
Rajgarh	0	16	0	50	0	1	3	116	0	7	10
Sehore	0	13	0	120	0	1	4	124	0	19	10
Dewas	3	50	20	153	2	2	2	85	0	79	13
Ujjain	8	126	0	298	0	3	14	100	0	121	16
Shajapur	1	18	0	357	0	2	3	79	0	20	17
Madhya Pradesh	130	2282	907	3460	75	55	480	1876	11	2571	1342

Source: Department of Co-operatives, GoMP, NCC

GL 5 - Selected People's Institutions in Madhya Pradesh, 1996

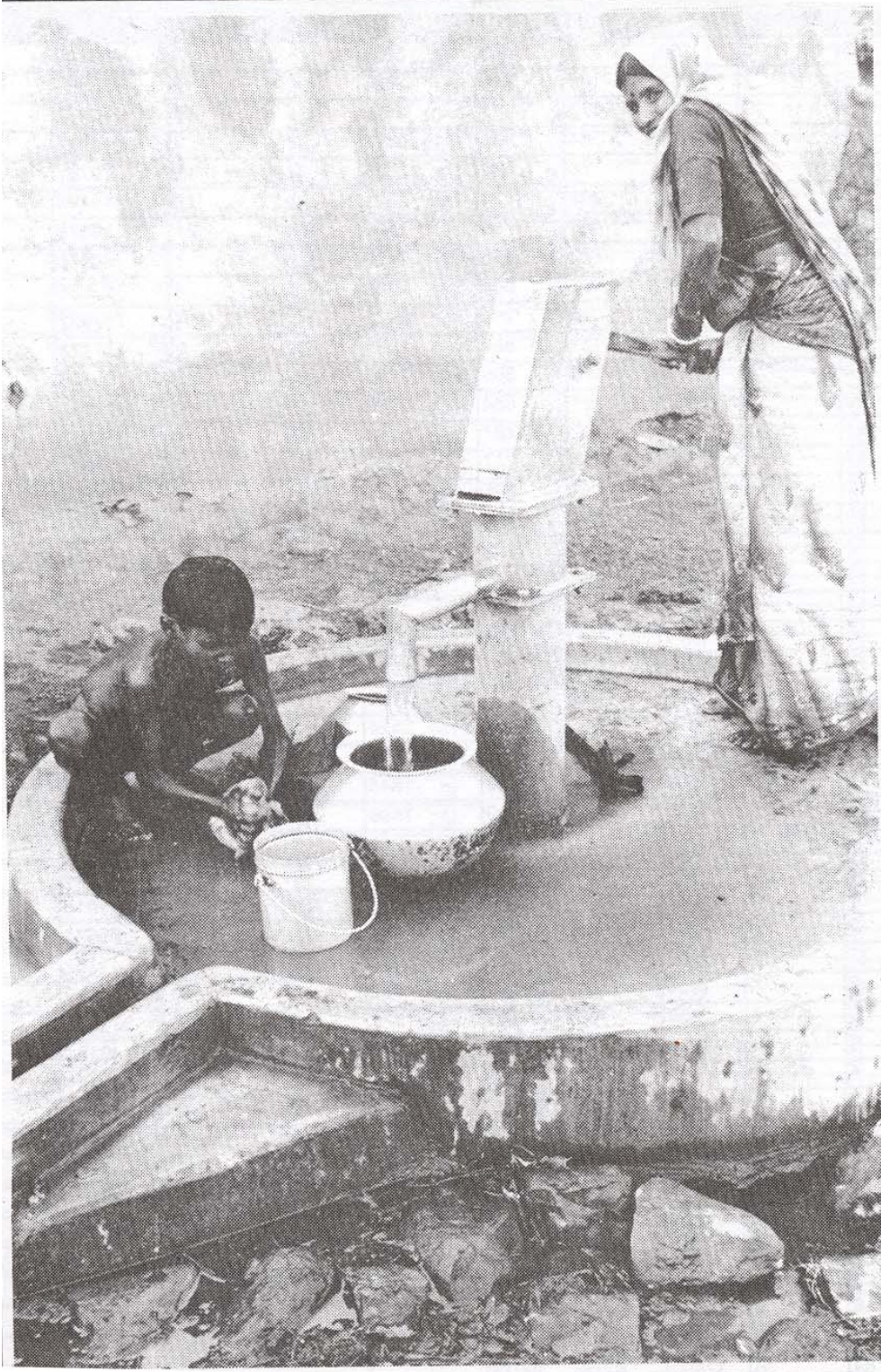
District	PACS	Poultry Societies	Prakriya Societies	Primary Minor Forest Cooperative	Primary Store House	RESHAM Society	Retail Society	Rikshaw Puller Union	Springing Mills Society	Transport Unions
Rewa	123	0	2	21	38	0	1	0	0	3
Shahdol	12	0	0	94	42	0	2	0	0	0
West Nimar	183	1	1	13	21	0	1	0	1	1
Sarguja	105	0	0	115	23	2	2	0		7
Tikamgarh	78	0	0	25	28	0	0	0	0	2
Durg	182	7	3	17	104	0	2	0	0	8
Bilaspur	238	0	0	132	228	7	1	0	0	14
Damoh	90	0	0	18	30	0	1	0	0	2
Shivpuri	112	5	0	35	16	0	1	0	0	0
Panna	84	0	0	33	4	0	1	0	0	3
Mandsaur	192	0	0	3	18	2	0	2	0	0
Sagar	164	2	0	46	68	0	1	0	0	3
Raigarh	43	0	0	4	36	7	0	0	0	15
Mandla	0	0	0	51	13	3	0	0	0	6
Raipur	0	4	0	125	85	1	1	0	0	8
Balaghat	126	0	0	60	12	1	1	0	0	2
Jabalpur	77	3	0	57	722	0	4	0	0	2
Gwalior	83	0	1	4	241	0	1	0	0	6
Sindhi	51	0	0	126	22	0	0	0	0	0
Guna	140	0	0	29	31	1	1	0	0	3
Jhabua	0	2	0	12	12	0	1	0	0	0
East Nimar	110	3	1	21	101	0	2	0	3	10
Betu;	91	1	0	27	27	0	0	0	26	16
Satna	137	0	27	42	0	0	0	2	12	24
Rajnandgaon	93	1	0	85	22	0	1	0	0	8
Dhar	16	3	1	13	4	1	1	0	0	2
Chhindwara	103	0	1	30	84	0	1	0	0	2
Narsimha	79	0	0	21	13	5	0	0	0	0
Bastar	0	1	0	202	0	4	2	0	0	14
Bhind	166	0	0	0	25	0	1	0	0	4
Datia	50	0	2	1	9	0	1	0	0	1
Morena	114	0	16	17	85	0	1	5	0	0
Bhopal	34	5	0	8	479	1	1	0	0	5
Seoni	25	0	0	44	0	0	0	0	0	3
Chhatarpur	113	0	0	76	23	0	1	0	0	3
Hoshangabad	162	0	0	21	60	0	1	0	0	3
Indore	120	0	0	3	695	2	1	0	0	12
Vishisha	154	0	2	13	10	0	1	2	0	2
Ratlam	75	0	0	3	50	0	1	0	0	0
Raisen	87	0	0	49	10	0	0	0	0	0
Rajgarh	140	0	0	136	11	1	0	0	0	3
Sehore	82	1	0	15	9	6	0	0	0	2
Dewas	91	0	0	29	32	0	1	0	0	7
Ujjain	164	0	1	1	395	0	1	0	0	5
Shajapur	146	0	1	1	20	0	0	0	0	9
Madhya Pradesh	4435	39	59	1878	3948	44	40	11	42	220

Source: Department of Co-operatives, GoMP, NCC

GL 5 - Selected People's Institutions in Madhya Pradesh, 1996

District	Union	Weavers Society	Womens Society	Total	Defunct Society	GRAND Total	People per Institution	Non Governmental Agonies/ Voluntary Agencies	People per NGO	Total of Economic Political and Organised Bodies	Persons per Economic Political Organised Body
Rewa	0	6	0	380	163	543	3168	2	862042	299	5754
Shahdol	0	3	2	497	149	646	2995	6	322451	418	4628
West Nimar	0	11	0	599	172	771	2870	18	122939	486	4553
Sarguja	0	12	0	575	64	639	3592	4	573789	522	4397
Tikamgarh	0	26	0	289	73	362	2866	13	79797	245	4234
Durg	0	19	0	913	208	1121	2351	18	146443	642	4106
Bilaspur	0	41	0	1362	418	1780	2356	21	199674	1040	4032
Damoh	0	4	2	314	82	396	2476	7	140052	246	3985
Shivpuri	0	8	0	407	197	604	2089	24	52566	337	3744
Panna	0	4	0	221	34	255	2972	1	757922	204	3715
Mandsaur	0	13	0	729	131	860	1965	9	187778	461	3666
Sagar	0	4	0	629	176	805	2235	26	69188	491	3664
Raigarh	0	20	0	593	91	684	2702	2	924249	529	3494
Mandla	0	11	2	445	42	487	2894	4	352357	410	3438
Raipur	0	41	0	1529	218	1747	2461	35	122824	1260	3412
Balaghat	0	19	0	483	143	626	2339	10	146428	446	3283
Jabalpur	3	79	3	1928	261	2189	1304	12	237950	882	3237
Gwalior	0	32	0	961	180	1141	1364	107	14550	487	3197
Sindhi	0	11	0	530	31	561	2790	5	313058	490	3194
Guna	0	11	0	529	89	618	2360	19	76777	465	3137
Jhabua	0	6	3	471	167	638	2039	16	81325	420	3098
East Nimar	1	76	5	473	108	851	1834	11	141894	505	3091
Betu;	0	0	1	498	102	600	2171	15	86853	424	3073
Satna	0	44	0	598	41	639	2524	8	201852	532	3031
Rajnandgaon	0	17	0	612	114	726	2157	4	391493	537	2916
Dhar	0	7	0	602	218	820	1848	14	108249	541	2801
Chhindwara	0	68	0	787	123	910	1898	18	95958	619	2790
Narsimha	0	0	0	346	32	378	2241	5	169413	305	2777
Bastar	0	17	1	989	311	1300	1900	13	189954	917	2693
Bhind	0	9	0	571	257	828	1611	43	31013	507	2630
Datia	0	9	0	202	48	250	1745	15	29078	166	2628
Morena	0	37	13	901	76	977	1952	45	42382	740	2577
Bhopal	16	7	0	1904	161	2065	772	216	7379	619	2575
Seoni	0	6	0	458	108	566	1925	4	272341	425	2575
Chhatarpur	0	9	1	554	93	647	1992	9	143181	503	2563
Hoshangabad	0	4	0	679	191	870	1599	35	39741	550	2562
Indore	1	0	0	2364	44	2408	847	64	31885	809	2529
Vishisha	0	1	0	487	109	598	1774	31	34106	425	2522
Ratlam	0	9	0	635	69	704	1505	19	55778	445	2488
Raisen	0	5	0	501	170	671	1421	25	38129	456	2382
Rajgarh	0	25	3	557	229	786	1376	16	67597	522	2090
Sehore	0	20	0	503	148	651	1426	20	46432	456	2072
Dewas	0	3	0	710	185	895	1283	10	114816	574	2036
Ujjain	0	6	0	1445	192	1637	920	19	79289	868	2000
Shajapur	0	24	0	770	60	830	1352	10	112234	695	1736
Madhya Pradesh	21	784	36	32800	6278	39078		1028			1615

Source: Department of Co-operatives, GoMP



HABITAT

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These tables attempt to give abroad picture of the status of the habitat of Madhya Pradesh. A large amount of data regarding houses and household access to amenities has been released by the census for the year 1991. These tables present relevant information from this data.

HA1- Forest Cover in Madhya Pradesh

District	Forest Area Assessment -1993(in sq. Kms.)					Forest Area Assessment -1997(in sq. kms.)					Per Capita Forest Area in	
	Dense forest of total area	% dense forest cover area to their total geographical area	Open forest	Total	% of Forest Cover to Geographic Area	Geographic Area	Dense Forest	Open Forest	Total Forest	Change compared to 1993	1981 Census	1991 Census
BASTAR	18893	48.3	3501	22394	57.25%	39114	15851	7287	23138	744.00	1.180	0.950
PANNA	743	10.41	2204	2947	41.30%	7135	895	1814	2709	-238.00	0.750	0.590
SARGUJA	10488	46.95	1618	12106	54.20%	22337	8148	3395	11543	-563.00	0.740	0.580
MANDLA	4750	35.8	613	5363	40.42%	13269	4628	1092	7520	357.00	0.730	0.520
RAISEN	1568	18.52	979	2547	30.09%	8466	1659	932	2591	44.00	0.480	0.380
RAIGARH	3313	25.63	1175	4488	34.73%	12924	2945	1685	4630	142.00	0.490	0.350
DAMOH	934	12.78	2200	3134	42.90%	7306	721	2257	2978	-156.00	0.430	0.340
BETUL	2906	28.94	654	3560	35.45%	10043	2964	635	3599	39.00	0.430	0.340
EAST MINAR	2694	24.99	1432	4126	38.28%	10779	2327	1081	3408	-718.00	0.410	0.330
GUNA	1025	9.26	1593	2618	23.66%	11065	458	1514	1972	-646.00	0.430	0.320
SHADHOOL	3052	21.78	1334	4386	37.19%	14028	1991	2186	4177	-209.00	0.410	0.320
SIDHI	3217	30.56	689	3915	53.29%	10526	2409	1614	4023	108.00	0.440	0.320
BALAGHAT	4590	49.73	328	4918	39.63%	9229	3921	849	4770	-148.00	0.350	0.300
MORENA	1937	16.71	2658	4595	24.35%	11594	1779	1624	4403	-192.00	0.380	0.290
SHIVPURI	921	8.96	1582	2503	37.41%	10278	931	1400	2331	-172.00	0.380	0.290
CHHINDWARA	3029	25.64	1391	4420	34.16%	11815	2709	1965	4674	254.00	0.350	0.280
SEONI	2340	26.72	652	2992	33.38%	8758	2151	1020	3171	179.00	0.340	0.280
HOSHANGABAD	2590	25.8	760	3350	26.03%	10037	2829	459	3288	-62.00	0.340	0.270
DEWAS	1232	17.55	595	1827	21.83%	7020	1103	535	1638	-189.00	0.360	0.240
EAST MINAR	1275	9.48	1661	2936	20.33%	13450	957	1061	2018	-918.00	0.310	0.240
SEHORE	584	8.88	753	1337	34.87%	6578	589	759	1348	11.00	0.260	0.210
BILASPUR	5825	29.28	1114	6939	35.78%	19897	5091	1316	6407	-532.00	0.270	0.210
RAJNANDGAON	3246	29.17	753	3981	32.24%	11127	2854	908	3762	-219.00	0.250	0.200
RAIPUR	5115	24.06	1739	6851	18.58%	21258	4518	1721	6239	-615.00	0.230	0.180
CHHATERPUR	1414	16.28	200	1614	22.96%	8687	844	715	1559	-55.00	0.220	0.170
SAGAR	1552	15.13	802	2354	15.54%	10252	1276	1388	2664	310.00	0.210	0.170
JHABUA	568	8.38	486	1054	24.12%	6782	364	459	823	-231.00	0.240	0.170
NARSIMHAPUR	664	12.94	574	1238	22.61%	5133	773	572	1345	107.00	0.210	0.160
SATNA	359	4.78	1337	1696	12.64%	7502	554	1052	1604	-92.00	0.190	0.150
MANDSAUR	485	4.95	753	1238	5.25%	9791	465	726	1191	-47.00	0.180	0.150
RATLAM	34	0.7	221	255	31.16%	4861	0	164	164	-91.00	0.150	0.130
VIDISHA	533	7.23	437	970	23.59%	7371	240	547	787	-183.00	0.150	0.120
GWALIOR	403	7.73	827	1230	6.91%	5214	559	845	1404	174.00	0.120	0.100
DHAR	78	0.96	485	563	5.21%	8153	120	514	634	71.00	0.130	0.100
TIKAMGARH	76	1.5	187	263	20.98%	5048	46	173	219	-44.00	0.100	0.080
JABALPUR	1494	14.7	638	2132	3.09%	10160	1087	916	2003	-129.00	0.110	0.080
DATIA	14	0.67	49	63	8.77%	2038	40	53	93	30.00	0.090	0.070
REWA	383	6.11	171	554	8.46%	6314	206	354	560	6.00	0.080	0.070
DURG	579	6.78	143	722	13.65%	8537	453	263	716	-6.00	0.090	0.070
INDORE	345	8.63	187	532	6.04%	3898	225	199	424	-108.00	0.060	0.050
RAJGARH	225	3.66	147	372	8.55%	6154	20	104	124	-248.00	0.040	0.030
BHOPAL	47	1.7	190	237	1.64%	2772	40	257	297	60.00	0.050	0.030
BHINDI	17	0.38	56	73	1.64%	4459	5	42	47	-26.00	0.008	0.006
SHAJAPUR	-	-	-	-	--	6196	0	0	0	--	0.008	0.006
UJJAIN	-	-	-	-	--	6091	0	1	1	--	0.004	0.002
MADHYA PRADESH	95537		39859	135396	30.53%	443446	82745	48450	131195	-4201.00	0.300	0.230

Source: Environment planning and Co-operation Organisation(EPCO), Madhya Pradesh 1996 third Environmental Status Report of Madhya Pradesh

HA2-- Selected Information on Urban Slums and Towns

District	SLUMS			
	Name of Town(s)	% of Population of Town residing in Slums	Area of Slums (sq km)	Density of population in Slums (persons/sq. km.)
SEHORE	Sehore	1.34	0.50	14000
RAIPUR	Raipur, Dhartari	4.78	9.60	1961
SATNA	Satna	5.34	3.00	1611
RATLAM	Ratlam	5.35	0.62	12282
VIDISHA	Vidisha	5.95	2.30	1696
BHOPAL	Bhopal	6.22	0.57	73268
EAST MINAR	East Nimar, Burhnapur	7.58	4.35	8417
SEONE	Seoni	8.30	2.00	2242
RAJNANGAON	Rajnandgaon	9.11	0.34	23156
BASTAR WEST NIMAR GWALIOR	jagadalpur	10.09	0.27	19174
SHIVPURI	West Nimar	10.62	3.10	1806
INDORE	Gwalior	11.09	0.96	62292
HOSHANGABAD	Shivpuri	11.09	2.08	4062
CHHATARPUR	Indore, Mhow	11.16	19.42	6062
MANDSAUR	Itarsi	13.05	1.00	8302
SAGAR	Chhatarpur	13.28	5.75	1256
DURG	Mandsaur, Neemuch	13.90	0.58	34960
UJJAIN	Sagar	14.13	5.85	4188
MORENA	Durg, Dallirajahara	15.27	11.15	2547
REWA	Ujjain, Nagda	16.71	5.99	9544
BILASPUR	Morena	17.06	5.95	2118
CHHINDWARA	Rewa	18.03	14.60	1338
BALAGHAT	Bilashpur, Korba	19.40	6.28	3534
BHIND	Chhindwara	21.09	0.17	112841
DEWAS	Balaghat	25.52	3.80	3643
RAJGARH	Bhind	27.93	7.45	2852
RAIGARH	Dewas	28.52	5.61	4260
JABALPUR	Rajgarh	28.63	3.32	6340
GUNA	Raigarh	30.93	3.32	6340
DAMOH	Jabalpur, Murwara	30.93	11.43	22932
SHADHOL	Guna	37.88	13.90	1394
SIDHI	---	43.25	---	---
SHAJAPUR	---	----	---	--
JHABUA	----	--	--	--
DHAR	-----	---	----	---
RAISEN	-----	---	--	--
BETUL	-----	--	---	--
NARSIMHAPUR	-----	--	---	---
MANDLA	-----	--	-	---
SARGUJA	----	--	--	--
DATIA	-----	---	---	---
TIKAMGARH	-----	---	---	--
PANNA	-----	--	---	---
MADHYA PRADESH	-----	---	-----	---

Source: Environment Planning and Co-ordination Organisation (EPCO). Madhya Pradesh, 1996 Third Environment status Report of Madhya Pradesh

HA3- Households Occupying Pucca, Semi-pucca and Kucca Houses, 1991

District	Pucca			Semi Pucca			Kutcha		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	urban
Tikamgarh	67.59	67.54	67.87	32.20	32.25	31.92	0.21		0.22
Datia	60.21	56.43	72.65	39.31	43.21	26.49	0.48	0.21	0.86
Chhatarpur	30.58	23.64	61.01	68.81	75.64	38.89	0.60	0.36	0.11
Satna	20.74	13.05	51.01	78.25	85.96	47.90	1.01	0.72	1.08
Panna	15.64	10.89	48.71	83.26	87.95	50.71	1.09	0.99	0.58
Sarguja	8.38	2.05	51.91	90.44	96.66	47.60	1.19	1.17	0.49
damoh	59.39	57.75	67.24	39.33	40.78	32.35	1.29	1.29	4.41
Rewa	12.81	6.69	45.53	85.78	91.82	53.58	1.40	1.47	0.89
	36.42	12.12	67.01	62.14	85.97	32.14	1.44	1.50	0.86
Jabalpur	9.93	5.49	57.84	88.43	93.48	33.94	1.64	1.91	8.22
Sindhi	29.19	15.05	51.35	68.84	82.51	47.42	1.97	1.03	1.24
Durg	49.57	39.42	76.69	48.43	58.24	22.20	2.00	2.44	1.11
Sagar	17.64	8.27	51.80	80.28	39.24	47.62	2.08	2.33	0.58
Shahdol	27.47	20.93	55.33	70.38	76.59	43.93	2.15	2.49	0.74
Raipur	31.61	25.50	66.83	66.22	72.10	32.29	2.17	2.48	0.88
Narsimhapur	36.96	32.39	59.23	60.82	65.19	39.40	2.24	2.40	1.37
Rajgarh	24.28	17.85	55.48	73.27	79.45	43.40	2.46	2.42	1.29
Bilaspur	14.42	7.88	49.37	82.82	89.01	49.75	2.76	2.70	0.89
Rajnandgaon	34.08	28.60	61.25	63.06	68.43	36.39	2.86	3.11	2.36
Raisen	24.08	14.14	63.88	72.80	82.37	34.49	3.12	2.96	1.63
Vidisha	16.39	12.33	56.35	80.15	83.90	43.23	3.46	3.50	0.42
Seoni	41.81	33.72	69.48	54.70	62.63	27.63	3.48	3.77	2.90
Mandsaur	7.25	3.63	42.59	88.98	92.38	55.79	3.77	3.66	1.62
Balaghat	30.02	26.64	61.53	66.16	69.36	36.32	3.82	3.99	2.15
Jhabua	33.11	28.45	54.91	62.98	67.04	17.70	3.91	4.00	1.13
Shajapur	74.19	73.16	80.01	21.59	22.27	14.35	4.23	4.51	2.29
Shivpuri	69.32	47.49	84.11	26.26	43.85	34.54	4.41	4.56	1.53
Gwalior	22.34	12.53	59.96	73.24	83.34	37.03	4.41	8.66	5.50
Betul	38.44	33.44	60.14	56.62	61.14	46.19	4.93	4.13	2.83
Sehore	23.28	20.89	52.88	71.59	73.64	40.66	5.13	5.42	0.93
Mandla	20.86	9.31	57.56	73.90	84.35	44.06	5.24	5.47	1.78
Chhindwara	26.17	19.57	52.76	68.53	74.61	46.27	5.30	6.34	3.18
Guna	23.23	18.24	50.04	71.26	75.91	39.59	5.51	5.82	3.69
West Nimar	32.49	28.68	57.13	61.69	65.11	29.89	5.81	5.85	3.28
Dhar	52.55	22.85	66.10	41.14	65.80	64.35	6.31	6.21	4.01
Indore	8.28	5.67	35.18	85.15	87.17	32.48	6.57	11.35	0.48
Raigarh	28.36	12.35	63.94	64.86	79.43	20.11	6.78	7.16	3.58
Ratlam	49.95	39.07	77.50	43.26	52.39	36.08	6.79	8.22	2.38
Hoshangabad	33.63	24.20	58.63	59.30	68.06	22.79	7.07	8.53	5.28
Dewas	58.03	15.42	68.12	33.87	80.65	29.37	8.10	7.74	9.09
Bhopal	35.26	13.78	67.93	55.55	72.76	39.49	9.19	3.94	2.70
Ujjain	28.57	18.89	56.73	61.79	69.45	8.69	9.64	13.46	3.77
East Nimar	67.71	63.02	85.13	17.14	19.42	18.50	15.14	11.66	6.18
Morena	52.00	46.05	73.93	27.91	30.60	46.17	20.09	17.56	7.57
Bhind	7.39	3.94	48.13	71.28	73.41	35.25	21.32	23.49	5.70
Bastar	7.39	20.93	62.15	64.87	73.79	17.69	4.66	22.65	2.61
Madhya Pradesh	30.47	3.94	72.75	30.95	35.65		27.44	5.28	9.56
India	41.61	30.59	72.75	3095	35.65	17..69	27.44	33.76	9.56

Source: Census of India 1991, Madhya Pradesh, Housing and Amenities (A database for District Cities and Towns)

HA 3-- Households Occupying Pucca, Semi-Pucca and Kucca Houses, 1991

District	Serviceable Kutcha			Non-Serviceable Kutcha		
	Total	Rural	Urban	Total	Rural	Urban
Tikamgarh	0.18	0.18	0.22	0.02	0.03	0.00
Datia	0.38	0.24	0.83	0.10	0.12	.03
Chhatarpur	0.39	0.45	0.11	0.22	0.27	0.00
Satna	0.84	0.79	1.3	0.17	0.20	0.05
Panna	0.09	0.90	0.49	0.25	0.27	0.09
Sarguja	0.66	1.18	0.47	0.09	0.10	0.02
damoh	1.14	0.74	0.33	0.62	0.73	0.08
Rewa	1.19	1.2	.83	0.26	0.30	0.06
	1.48	1.58	0.71	0.25	0.34	0.15
Jabalpur	1.79	0.97	7.03	0.16	0.70	1.19
Sindhi	1.30	2.29	10.1	0.18	0.15	0.22
Durg	1.78	1.51	0.75	0.70	0.83	0.36
Sagar	1.92	2.21	.55	0.30	0.37	0.03
Shahdol	1.40	2.23	0.56	0.23	0.25	0.17
Raipur	1.60	1.56	0.48	0.77	0.84	0.40
Narsimhapur	2.12	1.75	0.83	0.65	0.67	0.54
Rajgarh	1.77	2.33	1.10	0.33	0.36	0.18
Bilaspur	1.34	1.99	.62	0.98	1.12	0.27
Rajnandgaon	1.71	1.46	0.77	1.52	1.51	1.59
Raisen	3.04	1.94	.81	1.41	1.56	0.82
Vidisha	3.06	3.31	0.36	0.42	0.46	0.06
Seoni	2.75	3.19	2.61	0.42	0.46	0.29
Mandsaur	2.70	2.89	1.37	1.02	1.10	0.25
Balaghat	2.85	2.82	1.55	1.12	1.18	0.60
Jhabua	3.13	3.32	0.67	1.06	1.19	0.45
Shajapur	4.07	3.32	2.06	1.09	1.25	0.23
Shivpuri	2.09	8.01	1.39	0.35	0.64	0.14
Gwalior	3.92	2.38	3.24	1.86	1.76	2.26
Betul	3.58	2.24	1.47	2.84	3.18	1.36
Sehore	2.99	4.19	0.56	1.21	1.28	0.38
Mandla	3.56	4.28	1.56	1.66	2.06	0.41
Chhindwara	4.67	3.36	1.50	2.31	2.46	1.68
Guna	4.53	3.78	2.35	1.96	2.07	1.35
West Nimar	6.39	5.13	1.68	1.14	1.07	1.60
Dhar	6.21	8.85	2.56	1.17	2.50	1.46
Indore	3.71	6.96	0.48	0.18	0.20	0.00
Raigarh	2.79	7.65	3.02	0.57	0.57	0.56
Ratlam	4.99	4.74	1.10	3.09	3.80	1.28
Hoshangabad	8.51	2.97	2.32	4.28	4.78	2.97
Dewas	4.45	1.78	5.75	3.11	2.16	3.34
Bhopal	13.56	12.54	2.39	0.68	0.92	0.31
Ujjain	19.69	5.29	2.03	5.19	6.37	1.75
East Nimar	16.88	15.62	5.93	1.58	1.94	0.75
Morena	3.55	23.12	7.03	0.40	0.37	0.25
Bhind	19.86	17.95	4.28	4.44	4.70	0.54
Bastar	19.86	4.07	1.82	1.11	1.20	1.42
Madhya Pradesh	19.86	24.52	6.68	7.58	9.24	0.79
India	19.86	24.52	6.68	7.58	9.24	2.88

Source: Census of India, 1991, Madhya Pradesh, Housing and Amenities(A database for District Cities and Towns)

HA 4 - Types of Read Materials Used in Houses - 1991

District	Grass Leaves, Reeds, Thatch, Wood, Mud, Unburnt Bricks			Tiles, Slate, Shingle			Corrugated Zinc or Other Metal Sheets			Asbestos Cement Sheet		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
TIKAMGARH	0.4%	0.4%	0.6%	85.7%	90.6%	57.9%	0.3%	0.1%	1.1%	0.3%	0.2%	0.8%
CHAATARPUR	0.7%	0.8%	0.4%	83.8%	90.2%	53.1%	0.4%	0.1%	1.6%	0.5%	0.3%	1.2%
DATIA	1.0%	0.8%	1.8%	58.1%	66.2%	28.5%	1.1%	0.6%	3.1%	0.2%	0.1%	0.5%
GUNA	1.0%	0.8%	1.8%	58.1%	66.2%	28.5%	1.1%	0.6%	3.1%	0.2%	0.1%	0.5%
PANNA	1.2%	1.2%	1.0%	86.9%	91.4%	52.9%	0.5%	0.4%	1.2%	0.6%	0.6%	0.7%
SATNA	1.2%	1.2%	1.3%	80.0%	89.4%	44.5%	1.2%	0.6%	3.4%	0.7%	0.4%	1.8%
SARGUJA	1.2%	1.3%	0.5%	90.2%	95.8%	55.3%	0.4%	0.2%	1.3%	2.0%	0.5%	11.2%
REWA	1.5%	1.6%	1.0%	87.2%	93.4%	55.8%	0.8%	0.6%	2.0%	0.4%	0.2%	1.5%
SIDHI	1.6%	1.0%	6.7%	86.3%	92.6%	29.7%	0.4%	0.3%	4.5%	1.5%	0.7%	9.1%
JABALPUR	1.7%	2.1%	1.1%	72.0%	91.7%	47.7%	1.5%	0.5%	2.8%	2.2%	0.5%	4.3%
DAMOH	1.9%	2.1%	0.6%	86.4%	91.7%	60.7%	1.2%	0.5%	5.0%	0.4%	0.2%	1.6%
DURG	2.3%	2.7%	1.5%	76.1%	91.4%	50.7%	1.2%	0.5%	2.5%	2.2%	0.7%	5.4%
RAIPUR	2.4%	2.7%	0.6%	85.3%	90.7%	62.2%	0.9%	0.7%	1.7%	0.7%	0.5%	1.5%
SAGAR	2.4%	2.9%	1.3%	76.7%	87.1%	48.2%	1.5%	0.6%	4.1%	0.8%	0.2%	2.4%
SHAHNOL	2.6%	3.1%	0.6%	82.5%	90.8%	54.4%	0.6%	0.3%	3.0%	3.0%	0.3%	9.6%
NARSIMHAPUR	2.6%	2.9%	1.3%	85.7%	87.0%	59.0%	1.3%	0.4%	6.5%	0.6%	0.5%	1.0%
BILASPUR	2.6%	2.9%	1.6%	85.7%	88.1%	58.6%	1.6%	1.1%	3.5%	1.7%	0.3%	4.5%
RAJNANDGAON	3.0%	3.4%	1.1%	87.6%	91.4%	67.8%	0.9%	0.3%	3.8%	0.9%	1.0%	3.1%
VIDISHA	3.1%	3.5%	1.5%	74.2%	83.0%	35.3%	1.0%	0.3%	4.0%	0.5%	0.5%	1.3%
RAJGARH	3.2%	3.5%	1.5%	74.6%	81.4%	44.0%	4.9%	2.7%	14.7%	0.5%	0.3%	1.6%
RAISEN	3.4%	3.4%	2.6%	77.3%	82.9%	50.9%	1.8%	0.9%	6.1%	1.2%	1.0%	4.9%
JHABUA	3.9%	4.0%	3.3%	72.9%	77.0%	37.3%	3.9%	2.0%	20.2%	1.1%	0.9%	2.8%
MANDSAUR	4.0%	4.2%	3.2%	58.8%	69.5%	22.7%	8.4%	6.2%	15.9%	0.7%	0.4%	1.8%
WEST NIMAR	4.2%	4.2%	4.4%	43.8%	45.8%	33.1%	16.5%	13.9%	30.8%	1.0%	0.8%	2.0%
SEONI	4.3%	4.6%	0.6%	85.3%	87.8%	60.4%	0.6%	0.2%	4.8%	0.4%	0.5%	2.9%
BALAGHAT	4.7%	5.0%	2.1%	90.0%	92.0%	71.4%	0.7%	0.4%	3.5%	0.6%	0.3%	3.2%
GWALIOR	5.2%	9.7%	1.4%	29.8%	52.6%	9.9%	0.7%	0.2%	1.1%	0.2%	0.3%	0.7%
SHAJAPUR	5.4%	6.1%	1.7%	71.1%	76.9%	43.4%	7.1%	4.3%	19.9%	0.7%	0.5%	1.7%
BETUL	5.4%	5.4%	5.3%	71.9%	77.3%	49.8%	1.8%	1.4%	3.3%	2.0%	0.6%	7.4%
SEHORE	5.8%	6.3%	3.1%	71.6%	77.4%	43.2%	6.1%	3.3%	19.6%	1.1%	0.8%	2.7%
DHAR	6.0%	6.4%	3.1%	58.9%	64.2%	25.4%	18.9%	16.0%	37.3%	2.4%	2.2%	3.5%
HOSHANGABAD	6.2%	7.7%	2.4%	64.9%	72.5%	45.8%	5.3%	2.4%	12.8%	1.5%	0.7%	3.7%
RAIGARH	6.4%	7.0%	0.6%	54.4%	89.7%	69.5%	0.6%	0.2%	3.5%	0.4%	0.3%	1.5%
DEWAS	6.6%	7.3%	4.9%	51.2%	60.3%	24.3%	16.8%	12.4%	29.8%	1.5%	1.0%	3.0%
INDORE	6.9%	11.6%	4.6%	18.7%	39.6%	8.3%	35.5%	32.0%	37.2%	3.7%	6.0%	2.5%
SHIVPURI	7.1%	7.7%	3.0%	46.9%	52.1%	12.7%	0.5%	0.2%	2.2%	0.5%	0.5%	0.6%
RATLAM	7.1%	8.6%	3.6%	48.1%	63.2%	13.2%	21.5%	16.7%	32.6%	2.2%	1.5%	3.8%
BHOPAL	7.4%	4.7%	8.1%	25.5%	83.0%	10.6%	12.2%	2.2%	14.7%	10.5%	1.7%	12.8%
CHHINDWARA	7.6%	9.2%	2.0%	75.9%	80.9%	29.2%	1.6%	0.6%	4.7%	3.5%	1.1%	11.6%
EAST NIMAR	9.3%	11.0%	4.0%	37.7%	44.1%	17.8%	28.4%	22.7%	45.9%	1.5%	0.8%	3.7%
MANDLA	9.3%	9.9%	1.6%	80.4%	81.8%	62.0%	0.7%	0.2%	7.1%	0.6%	0.5%	2.9%
UJJAIN	10.2%	14.1%	3.8%	39.8%	55.1%	14.9%	25.8%	22.3%	31.7%	1.9%	1.3%	3.0%
MORENA	14.9%	17.5%	5.6%	23.5%	28.0%	6.9%	0.7%	0.3%	2.4%	0.6%	0.7%	0.5%
BHIND	20.6%	23.8%	7.6%	29.5%	33.1%	15.2%	0.4%	0.2%	1.5%	0.2%	0.2%	0.2%
BASTAR	21.1%	22.6%	4.7%	65.4%	66.1%	57.8%	1.7%	1.4%	4.6%	1.3%	0.8%	6.7%
MADHYA PRADESH	5.2%	5.9%	2.8%	68.5%	77.8%	37.1%	5.2%	3.3%	11.7%	1.5%	0.7%	4.2%

Source: Census of India, 1991, Household Tables for Madhya Pradesh (HH Series), Sanket-MPHDRO

HA 4 - Types of Read Materials Used in Houses - 1991

District	Brick Stone and Lime			Stone			Concrete RBC/RCC			All Other Materials Not Stated		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
TIKAMGARH	4.3%	3.3%	10.2%	3.5%	2.8%	7.4%	4.8%	1.9%	21.0%	0.7%	0.6%	1.0%
CHAATARPUR	7.7%	4.8%	21.8%	0.9%	0.3%	2.1%	5.0%	2.2%	18.2%	1.0%	0.9%	1.5%
DATIA	28.1%	22.6%	48.3%	9.8%	8.8%	13.4%	0.8%	0.1%	3.3%	0.8%	0.7%	1.0%
GUNA	28.1%	22.6%	48.3%	9.8%	8.8%	13.4%	0.8%	0.1%	3.3%	0.8%	0.7%	1.0%
PANNA	6.7%	4.0%	26.4%	1.1%	0.5%	5.9%	0.6%	0.3%	2.7%	2.5%	1.6%	9.2%
SATNA	12.1%	6.2%	34.5%	0.7%	0.5%	1.8%	2.7%	0.6%	10.2%	1.4%	1.1%	2.6%
SARGUJA	0.7%	0.3%	2.9%	0.1%	0.0%	0.3%	4.8%	1.2%	27.8%	0.6%	0.6%	0.7%
REWA	4.1%	2.3%	13.3%	0.9%	0.6%	2.7%	4.1%	0.5%	21.1%	0.9%	0.6%	2.5%
SIDHI	2.2%	2.0%	4.0%	0.5%	0.4%	1.8%	5.8%	2.0%	40.6%	1.3%	1.0%	3.5%
JABALPUR	6.4%	2.7%	11.0%	1.0%	0.3%	1.9%	12.9%	0.6%	27.7%	2.3%	1.4%	3.4%
DAMOH	5.6%	2.3%	21.3%	0.8%	0.7%	1.4%	1.7%	0.6%	7.5%	1.9%	1.9%	1.6%
DURG	0.9%	0.9%	0.9%	0.1%	0.0%	0.1%	15.6%	3.1%	36.3%	1.6%	1.0%	2.7%
RAIPUR	1.1%	0.8%	2.2%	0.2%	0.2%	0.3%	7.3%	2.5%	27.7%	2.2%	1.9%	3.4%
SAGAR	7.1%	3.2%	17.9%	3.9%	2.1%	8.6%	4.4%	1.0%	13.6%	3.1%	2.8%	3.8%
SHAHDOL	4.1%	1.8%	11.9%	0.6%	0.2%	2.0%	5.3%	1.8%	17.0%	1.1%	1.0%	1.2%
NARSIMHAPUR	2.1%	1.4%	6.4%	0.6%	0.3%	2.4%	4.6%	1.7%	19.9%	5.2%	5.5%	3.6%
BILASPUR	1.3%	0.9%	2.8%	0.1%	0.1%	0.1%	8.1%	4.1%	26.3%	1.9%	1.7%	2.6%
RAJNANDGAON	0.9%	0.6%	2.5%	0.0%	0.0%	0.2%	3.8%	1.2%	17.6%	2.8%	2.6%	4.1%
VIDISHA	10.3%	5.0%	33.8%	6.8%	5.2%	13.4%	1.7%	0.3%	7.7%	2.4%	2.3%	3.0%
RAJGARH	10.9%	7.4%	26.7%	3.1%	2.6%	5.8%	1.1%	0.5%	4.0%	1.7%	1.7%	1.5%
RAISEN	2.7%	2.2%	5.3%	2.1%	1.6%	4.5%	5.2%	2.2%	19.7%	6.3%	6.4%	5.7%
JHABUA	2.1%	1.5%	7.9%	0.8%	0.3%	4.9%	2.1%	0.7%	14.3%	13.2%	13.6	9.4%
MANDSAUR	15.8%	12.1%	28.2%	8.1%	5.7%	16.3%	3.0%	1.0%	9.5%	1.2%	0.9%	2.4%
WEST NIMAR	2.9%	2.0%	7.8%	0.7%	0.4%	2.4%	2.8%	1.2%	11.0%	28.0%	31.7%	8.5%
SEONI	0.9%	0.4%	5.4%	0.1%	0.1%	0.5%	2.8%	1.0%	20.5%	5.2%	5.2%	4.8%
BALAGHAT	0.4%	0.3%	1.9%	0.0%	0.0%	0.1%	2.4%	1.0%	15.4%	1.2%	1.0%	2.4%
GWALIOR	31.0%	23.0%	37.9%	23.8%	12.0%	34.0%	4.4%	0.5%	7.8%	4.6%	1.7%	7.2%
SHAJAPUR	8.9%	7.2%	16.8%	2.5%	2.1%	4.5%	2.6%	1.2%	9.5%	1.8%	1.7%	2.4%
BETUL	0.4%	0.4%	0.5%	0.1%	0.1%	0.2%	6.6%	1.4%	27.9%	11.7%	13.3%	5.2%
SEHORE	3.2%	2.6%	6.0%	1.0%	0.8%	1.7%	4.1%	1.4%	17.6%	7.2%	7.4%	6.0%
DHAR	2.9%	2.1%	7.8%	1.3%	0.9%	3.8%	3.3%	1.8%	12.6%	6.4%	6.3%	6.5%
HOSHANGABAD	1.6%	0.7%	3.9%	0.6%	0.3%	1.3%	8.3%	1.6%	25.4%	11.6%	14.3%	4.8%
RAIGARH	0.9%	0.6%	3.5%	0.1%	0.0%	0.3%	2.3%	0.8%	16.3%	1.6%	1.3%	4.7%
DEWAS	4.0%	2.7%	7.9%	1.7%	0.9%	4.3%	5.3%	1.0%	18.1%	12.8%	14.5%	7.7%
INDORE	2.7%	1.5%	3.4%	2.3%	1.1%	2.8%	25.9%	3.5%	37.0%	4.4%	4.7%	4.2%
SHIVPURI	18.4%	17.6%	23.9%	21.5%	17.7%	46.2%	0.5%	0.3%	2.0%	4.6%	3.9%	9.3%
RATLAM	11.0%	5.1%	24.5%	2.5%	0.8%	6.6%	4.3%	0.7%	12.8%	3.2%	3.4%	2.8%
BHOPAL	2.3%	2.1%	2.4%	1.1%	0.9%	1.1%	37.2%	2.1%	46.3%	3.9%	3.3%	4.0%
CHHINDWARA	0.6%	0.5%	1.0%	0.1%	0.1%	0.2%	5.3%	2.0%	16.1%	5.5%	5.6%	5.2%
EAST NIMAR	3.7%	2.4%	7.9%	0.5%	1.2%	1.3%	4.8%	1.5%	14.9%	14.2%	17.3%	4.5%
MANDLA	0.6%	0.4%	3.0%	0.1%	0.0%	0.9%	1.4%	0.4%	14.5%	6.9%	6.8%	8.2%
UJJAIN	10.7%	4.1%	21.4%	3.4%	1.1%	7.3%	6.4%	0.8%	15.6%	1.7%	1.3%	2.4%
MORENA	39.6%	35.3%	55.6%	15.5%	13.2%	23.8%	0.9%	0.6%	2.0%	4.3%	4.6%	3.2%
BHIND	37.2%	33.5%	51.7%	9.8%	7.9%	17.3%	0.5%	0.5%	0.7%	1.8%	0.8%	5.7%
BASTAR	0.4%	0.2%	1.8%	0.3%	0.3%	0.4%	2.2%	0.7%	18.9%	7.7%	7.9%	5.0%
MADHYA PRADESH	6.2%	4.4%	12.6%	2.6%	1.8%	5.4%	6.2%	1.4%	22.1%	4.5%	4.7%	3.9%

Source: Census of India, 1991, Household Tables for Madhya Pradesh (HH Series), Sanket-MPHDRO

HA 5 - Ownership Status and Size of Households in Madhya Pradesh 1991

DISTRICT	Owned Houses			Rented Houses			Households with 1-2 Persons		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
BHIND	95.8%	99.0%	83.8%	3.9%	0.7%	15.6	8.7%	8.0%	11.1%
MORENA	94.5%	98.4%	80.0%	4.9%	1.1%	19.2	9.3%	8.8%	11.1%
TIKAMGARH	96.2%	98.4%	84.5%	3.3%	1.2%	14.6%	13.0%	12.8%	13.6%
REWA	95.5%	98.4%	80.2%	4.0%	1.3%	18.5%	14.8%	14.1%	18.5%
DATIA	93.5%	97.9%	78.9%	5.5%	1.4%	19.1%	12.0%	11.4%	13.9%
GWALIOR	81.4%	97.7%	70.4%	17.1%	1.5%	27.7%	10.9%	10.2%	11.4%
RAJGARH	93.7%	97.9%	73.5%	5.5%	1.5%	25.0%	10.2%	9.3%	14.5%
CHHATARPUR	94.1%	97.8%	77.9%	5.3%	1.7%	20.9%	14.1%	13.9%	15.0%
SHIVPURI	93.6%	97.6%	71.2%	5.5%	1.8%	26.9%	13.3%	13.2%	13.9%
GUNA	91.1%	96.9%	67.8%	7.6%	2.1%	30.1%	11.6%	10.8%	14.7%
PANNA	94.8%	97.3%	77.3%	4.5%	2.2%	21.0%	15.3%	15.0%	17.4%
VIDISHA	90.5%	95.8%	69.5%	7.6%	2.3%	29.1%	13.2%	13.0%	13.8%
SATNA	92.3%	96.8%	74.2%	6.8%	2.4%	24.0%	15.2%	14.4%	18.2%
SEHORE	91.2%	95.8%	71.2%	6.8%	2.4%	26.1%	11.2%	10.7%	13.6%
UJJAIN	81.1%	96.5%	57.5%	17.5%	2.4%	40.5%	11.4%	10.2%	13.2%
JABALPUR	80.1%	96.3%	59.8%	18.2%	2.5%	37.9%	14.6%	15.3%	13.8%
RAIGARH	93.9%	96.3%	69.2%	4.8%	2.5%	28.3%	15.8%	15.5%	19.8%
BHOPAL	64.1%	93.7%	57.0%	33.1%	2.6%	40.3%	13.8%	13.8%	13.8%
SHAJAPUR	92.0%	96.5%	70.9%	6.9%	2.6%	27.2%	11.2%	10.7%	13.5%
NARSIMHAPUR	88.9%	94.1%	72.5%	6.0%	2.8%	24.7%	12.8%	12.6%	13.7%
DURG	81.6%	95.0%	60.7%	16.3%	2.8%	37.6%	15.9%	15.1%	17.0%
DEWAS	87.5%	94.9%	67.9%	10.2%	2.9%	29.8%	11.3%	10.1%	14.3%
RATLAM	85.8%	96.3%	62.5%	12.9%	2.9%	35.2%	11.4%	10.7%	13.0%
RAISEN	89.5%	94.2%	65.8%	8.0%	3.0%	32.7%	13.7%	12.9%	18.1%
SAGAR	87.6%	95.1%	67.5%	10.5%	3.1%	30.5%	15.0%	15.4%	13.8%
RAIPUR	90.4%	94.7%	71.9%	7.4%	3.1%	26.0%	15.1%	14.9%	15.7%
SIDHI	90.8%	95.3%	42.4%	7.1%	3.1%	50.1%	15.9%	14.7%	28.5%
JHABUA	93.1%	96.4%	61.9%	6.3%	3.1%	36.0%	7.2%	6.3%	14.9%
RAJNANDGAON	91.2%	95.3%	69.2%	7.2%	3.2%	28.4%	15.7%	15.1%	18.5%
DAMOH	91.0%	95.1%	76.0%	6.6%	3.3%	22.7%	16.3%	16.4%	15.4%
SARGUJA	88.3%	95.9%	49.8%	8.7%	3.4%	45.7%	16.0%	15.6%	18.3%
SHAHDOL	92.6%	95.7%	61.6%	10.2%	3.4%	35.0%	17.2%	16.7%	19.3%
MANDLA	92.6%	94.8%	65.6%	6.0%	3.8%	33.2%	14.1%	13.8%	16.9%
BASTAR	92.5%	95.3%	59.9%	6.7%	4.0%	38.1%	13.8%	13.4%	18.9%
HOSHANGABAD	83.5%	93.6%	58.1%	14.1%	4.0%	39.5%	13.7%	13.2%	14.9%
BALAGHAT	91.3%	94.6%	58.9%	7.0%	4.1%	35.4%	12.7%	12.4%	16.1%
INDORE	70.9%	91.6%	61.5%	25.9%	4.5%	35.6%	11.7%	11.0%	12.0%
MANDSAUR	88.4%	94.6%	67.0%	10.5%	4.5%	31.0%	12.4%	12.1%	13.7%
SEONI	89.8%	92.4%	64.2%	7.2%	4.5%	33.4%	12.6%	12.2%	16.4%
BILASPUR	89.4%	94.2%	66.2%	9.2%	4.6%	31.3%	16.1%	15.7%	17.7%
BETUL	86.8%	93.8%	59.9%	11.9%	4.9%	38.8%	12.0%	11.2%	15.1%
DHAR	89.2%	93.4%	62.0%	9.0%	5.2%	33.2%	10.4%	9.6%	15.7%
EAST NIMAR	84.8%	91.0%	66.7%	11.6%	5.4%	29.6%	11.3%	11.5%	10.9%
WEST NIMAR	88.5%	92.7%	66.3%	9.9%	5.9%	31.3%	9.5%	8.8%	13.2%
CHHINDWARA	82.7%	90.7%	57.2%	13.2%	6.0%	39.0%	12.5%	11.8%	14.7%
MADHYA PRADESH	88.3%	83.5%	65.0%	10.0%	2.9%	32.5%	13.5%	11.5%	14.8%

Source: Census of India, 1991, Madhya Pradesh Household Tables (HH Series), Sanket -MPHDRO

HA 5 - Ownership Status and Size of Households in Madhya Pradesh 1991

DISTRICT	Household with 3-5 Persons			Households with 6-8 Persons			Households with 9+ Persons		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
BHIND	29.3%	28.3%	33.2%	34.1%	34.4%	32.8%	27.9%	29.3%	22.9%
MORENA	31.5%	31.0%	33.4%	34.1%	34.4%	33.3%	25.1%	25.9%	22.2%
TIKAMGARH	36.7%	37.0%	34.7%	33.4%	33.3%	33.9%	17.0%	16.8%	17.8%
REWA	35.7%	35.3%	37.6%	30.3%	30.7%	28.4%	19.2%	19.9%	15.5%
DATIA	35.6%	35.7%	35.1%	33.5%	33.6%	33.3%	18.9%	19.2%	17.7%
GWALIOR	37.1%	32.6%	40.1%	32.7%	34.2%	31.6%	19.4%	23.0%	16.9%
RAJGARH	40.3%	40.5%	39.4%	34.3%	34.8%	31.8%	15.2%	15.4%	14.3%
CHHATARPUR	35.4%	95.7%	35.3%	33.6%	33.6%	35.8%	16.9%	17.1%	15.9%
SHIVPURI	37.7%	37.7%	37.2%	33.3%	33.4%	32.8%	15.7%	15.7%	16.1%
GUNA	36.8%	36.4%	38.7%	33.4%	34.1%	30.6%	18.1%	18.7%	16.0%
PANNA	43.1%	43.7%	38.8%	31.0%	31.0%	30.9%	10.6%	10.3%	12.9%
VIDISHA	39.2%	38.7%	41.3%	33.2%	33.7%	31.2%	14.3%	14.5%	13.6%
SATNA	39.3%	39.2%	40.0%	30.1%	30.4%	29.0%	15.4%	16.0%	12.8%
SEHORE	37.7%	37.4%	39.1%	35.1%	35.7%	32.6%	15.9%	16.2%	14.7%
UJJAIN	42.6%	41.6%	44.1%	31.9%	33.2%	29.9%	14.1%	15.0%	12.8%
JABALPUR	46.3%	46.9%	45.5%	29.1%	28.9%	29.5%	10.0%	8.9%	11.2%
RAIGARH	48.7%	49.2%	42.7%	27.2%	27.2%	27.0%	8.3%	8.1%	10.5%
BHOPAL	46.1%	39.1%	47.8%	29.9%	33.6%	29.0%	10.2%	13.5%	9.4%
SHAJAPUR	40.3%	40.4%	39.7%	33.4%	33.9%	31.2%	15.1%	15.0%	15.6%
NARSIMHAPUR	42.1%	41.8%	43.4%	31.6%	31.7%	31.4%	13.5%	13.9%	11.5%
DURG	44.4%	41.7%	48.6%	29.0%	30.0%	27.6%	10.7%	13.2%	6.8%
DEWAS	40.9%	39.5%	44.6%	32.8%	34.4%	28.7%	15.0%	16.0%	12.4%
RATLAM	44.5%	44.6%	44.3%	31.7%	33.0%	287.8%	12.14%	11.8%	13.9%
RAISEN	38.6%	38.1%	40.9%	32.9%	33.7%	28.7%	14.8%	15.3%	12.4%
SAGAR	38.9%	39.2%	38.0%	31.6%	31.5%	31.9%	14.6%	13.9%	16.3%
RAIPUR	43.5%	43.5%	43.3%	29.3%	29.4%	28.6%	12.2%	12.1%	12.4%
SIDHI	38.8%	38.4%	42.6%	31.1%	31.9%	20.3%	14.3%	14.9%	7.3%
JHABUA	36.3%	35.4%	44.2%	37.7%	38.6%	29.5%	18.9%	19.7%	11.4%
RAJNANDGAON	42.4%	42.6%	41.5%	29.7%	29.9%	28.3%	12.2%	12.3%	11.6%
DAMOH	44.3%	45.0%	40.9%	29.5%	29.2%	31.2%	10.0%	9.4%	12.4%
SARGUJA	44.8%	45.0%	42.7%	29.4%	29.4%	29.2%	9.9%	9.9%	9.7%
SHAHDOL	43.3%	43.9%	41.3%	29.3%	29.2%	29.4%	10.3%	10.2%	10.0%
MANDLA	48.7%	49.1%	43.4%	28.5%	28.4%	29.8%	8.8%	8.7%	9.9%
BASTAR	48.2%	48.0%	50.1%	29.9%	30.3%	25.1%	8.1%	8.3%	6.0%
HOSHANGABAD	40.5%	39.1%	44.2%	32.9%	33.9%	30.1%	12.9%	13.8%	10.5%
BALAGHAT	47.6%	47.8%	45.3%	30.7%	30.9%	29.3%	9.0%	9.0%	9.3%
INDORE	44.5%	42.0%	45.7%	29.7%	32.3%	28.6%	14.0%	14.7%	13.7%
MANDSAUR	42.5%	42.6%	42.3%	31.6%	32.2%	29.7%	13.5%	13.2%	14.3%
SEONI	44.5%	44.8%	42.3%	32.3%	32.5%	30.1%	10.5%	10.5%	11.2%
BILASPUR	42.3%	41.9%	44.0%	29.5%	29.8%	27.9%	12.2%	12.5%	10.4%
BETUL	38.0%	36.4%	44.1%	36.0%	37.1%	32.0%	14.0%	15.3%	8.9%
DHAR	40.5%	40.1%	42.8%	33.6%	34.3%	28.5%	14.6%	15.9%	13.1%
EAST NIMAR	40.8%	41.3%	39.2%	33.2%	33.3%	32.9%	14.7%	13.9%	17.0%
WEST NIMAR	38.2%	37.7%	40.8%	34.1%	34.7%	31.1%	18.2%	18.8%	14.8%
CHHINDWARA	41.2%	41.0%	42.1%	34.8%	35.3%	35.3%	11.4%	11.9%	9.9%
MADHYA PRADESH	41.7%	37.2%	42.9%	31.3%	27.8%	34.8%	13.5%	12.1%	12.5%

Source: Census of India, 1991, Madhya Pradesh Household Tables (HH Series), Sanket-MPHDRO

HA 5 - Distribution of Person per room in Madhya Pradesh - 1991

District	All		Urban		Rural	
	Gini Coefficient of House Size	Persons per Room	Gini Coefficient of House Size	Persons per Room	Gini Coefficient of House Size	Persons per Room
WEST NIMAR	0.2868	3.66	0.2886	3.27	0.2846	
BASTAR	0.2885	1.80	0.3124	1.72	0.2958	2.74
REWA	0.1961	1.80	0.3171	1.76	0.2897	1.91
RAIPUR	0.1962	1.95	0.3288	2.17	0.3090	1.80
SIDHI	0.1986	1.66	0.3171	1.64	0.2968	2.17
SATNA	0.3047	1.80	0.3195	1.89	0.3004	1.67
RAJNANDGAON	0.3092	2.13	0.3297	2.09	0.3039	1.78
RAIGARH	0.3097	2.56	0.3346	2.25	0.3051	2.14
DURG	0.3132	2.16	0.3217	2.24	0.3059	2.60
BHIND	0.3139	2.31	0.3262	2.14	0.3093	2.11
TIKAMGARH	0.3190	2.24	0.3306	2.10	0.3154	2.36
SHAHNOL	0.3228	2.17	0.3291	1.93	0.3183	2.27
CHHATARPUR	0.3248	2.31	0.3281	2.09	0.3222	2.24
GWALIOR	0.3250	2.17	0.3346	2.20	0.3098	2.13
BILASPUR	0.3250	2.33	0.3373	2.07	0.3196	2.39
GUNA	0.3293	2.52	0.3291	2.32	0.3271	2.58
SARGUJA	0.3305	1.98	0.3246	1.82	0.3307	2.01
PANNA	0.3308	2.66	0.3419	2.48	0.3279	2.69
VIDISHA	0.3328	2.44	0.3378	2.26	0.3294	2.49
RAJGARH	0.3335	3.48	0.3453	2.66	0.3273	3.60
BETUL	0.3357	2.55	0.3196	2.09	0.3330	2.69
CHHINDWARA	0.3364	2.41	0.3292	2.04	0.3314	2.55
MORENA	0.3382	2.74	0.3344	2.31	0.3329	2.89
MANDSAUR	0.3407	2.78	0.3345	2.26	0.3333	2.98
SEHORE	0.3424	3.07	0.3497	2.43	0.3316	3.26
MANDLA	0.3450	2.44	0.3282	1.88	0.3383	2.52
DEWAS	0.3451	2.99	0.3457	2.43	0.3313	3.26
DAMOH	0.3480	2.81	0.3566	2.54	0.3432	2.89
SHAJAPUR	0.3481	3.04	0.3416	2.48	0.3302	3.29
UJJAIN	0.3481	2.80	0.3332	2.24	0.3293	3.32
SAGAR	0.3505	2.73	0.3447	2.38	0.3463	2.90
SHIVPURI	0.3506	2.49	0.3369	2.21	0.3489	2.56
JABALPUR	0.3513	2.43	0.3404	2.19	0.3487	2.68
BALAGHAT	0.3516	2.32	0.3222	1.79	0.3507	2.40
BHOPAL	0.3526	2.52	0.3519	2.43	0.3288	2.99
RAISEN	0.3545	3.09	0.3537	2.52	0.3463	3.25
EAST NIMAR	0.3547	3.27	0.3715	2.83	0.3383	3.49
RATLAM	0.3568	2.74	0.3386	2.13	0.3418	3.14
JHABUA	0.3579	3.66	0.3564	2.12	0.3391	3.93
INDORE	0.3580	2.51	0.3463	2.27	0.3440	3.22
SEONI	0.3584	2.46	0.3359	1.95	0.3552	2.54
HOSHANGABAD	0.3602	2.63	0.3311	2.12	0.3567	2.90
DHAR	0.3627	3.25	0.3538	2.33	0.3495	3.46
DATIA	0.4253	3.32	0.3163	1.99	0.2948	1.83
NARSIMHAPUR	0.5349	2.18	0.3711	2.39	0.3434	3.42
MADHYA PRADESH	0.3455	2.42	0.3409	2.21	0.3440	2.49

Source: Census of India, 1991, Madhya Pradesh, Sanket-MPHDRO

HA 7 -Households by Number of Rooms - 1991

Districts	Households Without Exclusive Room			Households With One Room			Households With Two Rooms			Households With Three Rooms		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
SIDHI	0.01%	0.01%	0.00%	13.0%	12.2%	20.9%	26.1%	25.7%	29.9%	20.0%	19.4%	26.1%
REWA	0.02%	0.02%	0.04%	14.9%	14.7%	16.0%	26.1%	25.6%	28.5%	18.7%	18.7%	18.7%
SATNA	0.02%	0.02%	0.03%	18.9%	17.3%	22.1%	27.0%	26.1%	30.6%	18.3%	18.4%	18.1%
DATIA	0.2%	0.02%	0.00%	15.1%	14.0%	19.0%	23.4%	22.0%	27.9%	22.2%	22.9%	20.0%
BHIND	0.00%	0.00%	0.00%	18.0%	17.8%	18.6%	30.3%	30.1%	31.1%	2.3%	21.0%	17.3%
GWALIOR	0.01%	0.01%	0.01%	22.3%	19.3%	24.3%	29.4%	25.5%	32.0%	19.4%	21.1%	18.2%
TIKAMGARH	0.00%	0.00%	0.00%	26.1%	27.4%	22.7%	30.3%	30.3%	30.3%	18.5%	18.8%	16.9%
SARGUJA	0.04%	0.04%	0.03%	24.1%	25.4%	14.6%	29.9%	29.4%	33.1%	24.3%	23.9%	27.4%
MORENA	0.00%	0.00%	0.01%	23.8%	36.3%	24.7%	31.8%	30.5%	33.0%	14.4%	14.3%	14.5%
SHIVPURI	0.01%	0.01%	0.02%	38.6%	40.6%	27.3%	28.6%	27.9%	32.3%	13.8%	13.5%	15.3%
GUNA	0.00%	0.00%	0.00%	33.6%	34.1%	30.4%	31.5%	30.2%	32.5%	15.7%	15.6%	16.0%
RAJNANDGAON	0.00%	0.00%	0.00%	26.0%	25.5%	28.7%	35.6%	33.7%	33.2%	19.5%	20.0%	17.1%
CHHATARPUR	0.01%	0.01%	0.00%	25.8%	26.9%	21.1%	32.6%	32.6%	32.8%	20.2%	20.3%	19.6%
BASTAR	0.03%	0.03%	0.01%	12.9%	12.8%	13.9%	40.4%	40.5%	39.8%	25.3%	25.4%	23.7%
RAIPUR	0.05%	0.06%	0.02%	27.6%	26.6%	29.0%	32.2%	33.4%	32.5%	20.3%	20.8%	18.1%
SHAHDOL	0.01%	0.02%	0.01%	30.6%	35.4%	20.3%	32.7%	32.3%	34.0%	18.3%	17.0%	23.0%
VIDISHA	0.00%	0.00%	0.00%	32.4%	32.8%	30.8%	34.6%	35.0%	32.9%	15.2%	15.3%	15.0%
INDORE	0.01%	0.00%	0.01%	37.8%	52.1%	31.3%	30.0%	30.6%	29.7%	16.9%	10.1%	20.0%
DURG	0.01%	0.01%	0.01%	25.9%	23.4%	29.8%	36.1%	32.6%	41.7%	20.5%	22.6%	17.4%
BILASPUR	0.06%	0.06%	0.04%	32.2%	35.1%	27.8%	34.0%	34.1%	33.6%	17.6%	17.5%	18.1%
SAGAR	0.00%	0.00%	0.00%	43.1%	47.8%	30.7%	32.3%	31.6%	34.0%	11.8%	10.4%	15.5%
JABALPUR	0.01%	0.01%	0.01%	39.2%	49.6%	26.1%	30.7%	24.7%	38.2%	17.2%	17.5%	16.8%
RATLAM	0.01%	0.00%	0.01%	44.6%	52.7%	26.6%	30.9%	30.4%	31.8%	12.5%	9.6%	18.7%
MANDSAUR	0.00%	0.00%	0.00%	43.2%	47.3%	29.1%	33.5%	33.2%	34.4%	11.6%	10.3%	15.8%
UJJAIN	0.01%	0.00%	0.01%	42.3%	51.4%	28.5%	33.5%	33.1%	34.1%	12.7%	9.3%	17.9%
BALAGHAT	0.00%	0.00%	0.00%	34.7%	36.6%	16.2%	26.8%	27.0%	25.6%	25.8%	25.1%	32.6%
SEONI	0.00%	0.00%	0.00%	37.2%	38.9%	20.2%	29.4%	29.4%	29.6%	20.3%	19.5%	27.7%
MANDLA	0.00%	0.00%	0.00%	40.3%	41.8%	21.6%	32.5%	32.6%	31.6%	15.1%	14.5%	21.7%
BHOPAL	0.00%	0.00%	0.00%	39.6%	46.2%	38.0%	32.4%	34.5%	31.9%	15.8%	11.2%	16.8%
SEHORE	0.01%	0.01%	0.02%	44.7%	47.6%	31.8%	34.3%	34.5%	33.8%	11.6%	10.4%	17.1%
HOSHANGABAD	0.00%	0.01%	0.00%	37.3%	43.4%	21.9%	30.7%	29.4%	34.0%	23.3%	21.0%	29.2%
RAISEN	0.00%	0.00%	0.00%	50.9%	52.8%	41.8%	30.4%	30.3%	31.8%	10.1%	9.4%	13.5%
PANNA	0.00%	0.00%	0.00%	42.4%	43.0%	38.0%	35.6%	33.7%	32.9%	13.7%	13.6%	14.4%
NARSIMHAPUR	0.00%	0.00%	0.00%	56.5%	60.0%	36.3%	27.2%	26.3%	32.8%	8.8%	7.9%	13.9%
DEWAS	0.00%	0.00%	0.00%	44.1%	47.3%	35.6%	35.6%	35.8%	34.9%	11.6%	10.4%	14.8%
DAMOH	0.00%	0.00%	0.00%	48.6%	50.6%	38.6%	33.5%	33.2%	34.7%	9.8%	9.2%	12.6%
CHHINDWARA	0.00%	0.00%	0.00%	28.1%	31.0%	18.7%	32.2%	31.4%	34.8%	28.4%	29.0%	26.6%
SHAJAPUR	0.00%	0.00%	0.00%	48.1%	51.4%	32.5%	33.6%	33.1%	36.1%	9.6%	8.5%	14.4%
RAIGHAR	0.00%	0.00%	0.00%	42.4%	43.3%	35.9%	35.0%	33.2%	33.4%	13.1%	13.0%	14.2%
DHAR	0.00%	0.00%	0.00%	52.0%	54.4%	36.1%	31.6%	31.9%	29.8%	9.0%	7.9%	16.3%
BETUL	0.00%	0.00%	0.01%	27.1%	29.7%	17.2%	33.1%	34.5%	37.7%	28.2%	26.9%	33.4%
RAJGARH	0.00%	0.00%	0.00%	54.6%	57.6%	29.5%	31.3%	30.6%	34.5%	7.6%	6.6%	12.2%
EAST NIMAR	0.00%	0.00%	0.00%	30.3%	57.6%	41.0%	30.5%	29.6%	33.2%	9.5%	8.5%	12.6%
JHABUA	0.01%	0.00%	0.06%	52.3%	54.9%	28.4%	34.6%	35.0%	30.2%	7.9%	6.5%	21.0%
WEST NIMAR	0.00%	0.00%	0.00%	51.1%	51.4%	49.6%	37.3%	37.7%	35.5%	8.3%	8.0%	10.1%
MADHYA PRADESH	0.01%	0.01%	0.01%	34.3%	36.0%	28.4%	32.3%	31.8%	33.7%	17.1%	16.6%	18.4%

Source: Census of India, 1991, Household Tables for Madhya Pradesh (HH Series)

HA 7 -Households by Nu11.4mber of Rooms - 1991

Districts	Households With Four Rooms			Households With Five Room			Households With Six Rooms			Households With Unspecified Rooms		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
SIDHI	14.7%	15.0%	11.0%	8.7%	9.1%	4.3%	17.5%	18.4%	7.7%	0.1%	0.1%	0.1%
REWA	14.6%	14.4%	15.9%	8.2%	8.4%	7.4%	17.2%	18.0%	13.2%	0.2%	0.2%	0.2%
SATNA	13.8%	13.9%	13.0%	7.7%	8.2%	5.8%	14.8%	16.0%	10.3%	0.1%	0.1%	0.1%
DATIA	15.8%	16.0%	15.1%	9.4%	10.2%	6.7%	13.9%	14.8%	11.0%	0.1%	0.1%	0.1%
BHIND	14.6%	14.5%	15.0%	7.2%	7.4%	6.4%	9.6%	9.1%	11.5%	0.1%	0.1%	0.2%
GWALIOR	13.6%	15.6%	12.3%	64.9%	7.9%	5.5%	8.6%	10.4%	7.4%	0.3%	0.3%	0.3%
TIKAMGARH	11.5%	11.3%	12.9%	5.3%	5.1%	6.7%	7.5%	7.0%	0.3%	0.2%	0.2%	0.3%
SARGUJA	10.7%	10.2%	14.2%	4.6%	4.7%	4.4%	6.3%	6.3%	6.2%	0.1%	0.1%	0.0%
MORENA	9.1%	8.4%	12.1%	4.1%	3.7%	5.6%	6.3%	5.3%	10.0%	0.5%	0.6%	0.2%
SHIVPURI	8.4%	7.8%	11.4%	3.9%	3.8%	4.5%	6.1%	5.6%	8.8%	0.7%	0.8%	0.3%
GUNA	9.5%	9.3%	10.6%	4.0%	4.0%	4.0%	5.5%	5.4%	6.3%	0.4%	0.4%	0.2%
RAJNANDGAON	10.4%	10.5%	9.5%	4.7%	4.7%	4.6%	5.4%	5.2%	6.6%	0.3%	0.3%	0.3%
CHHATARPUR	11.4%	11.1%	12.3%	4.7%	4.6%	5.4%	5.2%	4.4%	8.8%	0.2%	0.2%	0.1%
BASTAR	11.3%	11.3%	11.3%	4.6%	4.7%	3.9%	5.2%	5.0%	7.1%	0.2%	0.2%	0.2%
RAIPUR	9.6%	9.4%	10.3%	4.5%	4.5%	4.4%	5.1%	5.0%	5.6%	0.1%	0.1%	0.2%
SHAHNOL	9.6%	8.8%	12.8%	3.9%	3.8%	4.5%	4.8%	4.6%	5.5%	0.1%	0.1%	0.0%
VIDISHA	9.1%	8.9%	10.1%	3.6%	3.6%	3.7%	4.4%	4.1%	7.3%	0.3%	0.4%	0.1%
INDORE	7.6%	4.0%	9.2%	3.0%	1.1%	3.9%	4.7%	1.4%	5.8%	0.3%	0.7%	0.2%
DURG	9.0%	10.9%	6.0%	3.8%	4.9%	2.2%	4.4%	5.4%	2.8%	0.2%	0.2%	0.2%
BILASPUR	8.4%	8.0%	10.1%	3.5%	3.3%	4.3%	4.0%	3.6%	2.9%	0.2%	0.2%	0.2%
SAGAR	6.3%	5.3%	9.2%	2.6%	2.0%	4.1%	3.7%	2.7%	6.4%	0.2%	0.2%	0.2%
JABALPUR	6.5%	4.2%	9.5%	2.6%	1.7%	3.8%	3.6%	2.1%	5.5%	0.2%	0.2%	0.2%
RATLAM	5.9%	3.9%	10.4%	2.4%	1.4%	4.7%	3.5%	1.6%	7.7%	0.3%	0.3%	0.1%
MANDSAUR	6.3%	5.0%	10.4%	2.2%	1.8%	3.7%	3.0%	2.0%	6.5%	0.3%	0.4%	0.1%
UJJAIN	5.9%	3.5%	9.6%	2.2%	1.1%	3.9%	3.0%	1.1%	5.8%	0.3%	0.4%	0.1%
BALAGHAT	7.2%	6.6%	13.6%	2.4%	2.1%	4.6%	3.0%	2.5%	7.3%	0.1%	0.2%	0.1%
SEONI	7.6%	7.2%	11.4%	2.5%	2.3%	4.5%	2.3%	1.9%	6.5%	0.8%	0.8%	0.1%
MANDLA	6.3%	5.9%	11.3%	2.3%	2.1%	5.0%	2.3%	1.8%	8.8%	1.2%	1.3%	0.3%
BHOPAL	7.2%	4.5%	7.9%	2.4%	1.2%	2.7%	2.3%	1.6%	2.5%	0.3%	0.7%	0.2%
SEHORE	5.5%	4.6%	9.3%	1.5%	1.2%	2.8%	2.1%	1.5%	5.1%	0.2%	0.2%	0.1%
HOSHANGABAD	4.4%	3.1%	7.8%	1.5%	1.0%	2.8%	2.1%	1.2%	4.4%	0.6%	0.9%	0.0%
RAISEN	4.4%	3.8%	7.0%	1.5%	1.3%	2.6%	2.0%	1.7%	3.7%	0.6%	0.7%	0.2%
PANNA	5.8%	5.6%	7.2%	2.2%	2.0%	3.7%	2.0%	1.8%	3.6%	0.2%	0.2%	0.2%
NARSIMHAPUR	3.7%	3.0%	7.9%	1.3%	1.0%	3.1%	2.0%	1.4%	6.0%	0.4%	0.5%	0.1%
DEWAS	4.7%	3.7%	7.3%	1.5%	1.1%	2.6%	1.9%	0.9%	4.6%	0.7%	0.8%	0.2%
DAMOH	4.5%	4.0%	7.1%	1.4%	1.1%	2.9%	1.9%	1.5%	4.0%	0.3%	0.4%	0.1%
CHHINDWARA	7.0%	5.5%	11.6%	2.1%	1.7%	3.4%	1.9%	1.0%	4.7%	0.4%	0.4%	0.2%
SHAJAPUR	4.7%	3.8%	8.7%	1.5%	1.2%	3.2%	1.9%	1.2%	4.9%	0.6%	0.7%	0.1%
RAIGHAR	5.2%	4.9%	8.2%	2.0%	1.9%	3.8%	1.8%	1.6%	4.4%	0.2%	0.2%	0.1%
DHAR	3.4%	2.7%	7.6%	1.2%	0.8%	3.5%	1.7%	1.0%	6.2%	1.1%	1.2%	0.5%
BETUL	5.8%	5.7%	6.3%	1.7%	1.6%	2.1%	1.6%	1.2%	3.0%	0.4%	0.4%	0.4%
RAJGARH	3.6%	2.8%	7.6%	1.1%	0.8%	2.3%	1.4%	1.0%	3.8%	0.5%	0.6%	0.1%
EAST NIMAR	3.5%	2.4%	6.7%	1.1%	0.7%	2.5%	1.3%	0.6%	3.2%	0.7%	0.7%	0.9%
JHABUA	2.6%	1.8%	9.7%	0.7%	0.4%	3.6%	1.1%	0.5%	6.9%	0.7%	0.8%	0.1%
WEST NIMAR	2.1%	1.9%	3.1%	0.5%	0.5%	0.8%	0.54%	0.4%	0.8%	0.1%	0.1%	0.2%
MADHYA PRADESH	8.0%	7.5%	9.7%	4.5%	3.3%	3.9%	4.7%	4.3%	5.7%	0.3%	0.4%	0.2%

Source: Census of India, 1991, Household Tables for Madhya Pradesh (HH Series)

HA 8 - Households with Access to Electricity, Safe Drinking Water and Toilet Facilities - 1991

District	Households With Four Rooms			Households With Five Room			Households With Six Rooms		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
INDORE	75.61	61.51	82.04	88.99	90.09	88.49	48.41	11.46	65.25
BHOPAL	78.52	48.39	85.66	89.13	72.85	92.98	58.28	3.70	71.20
UJJAIN	63.29	49.52	84.52	81.82	75.24	91.84	31.68	4.74	72.61
RATLAM	60.42	50.61	82.23	63.08	77.50	95.49	25.54	4.88	71.74
NARSIMHAPUR	46.25	41.59	73.09	84.30	83.08	91.31	14.72	8.03	53.31
EAST NIMAR	60.02	55.06	74.45	68.87	61.35	90.77	17.94	5.63	53.75
DEWAS	64.99	6.24	77.58	65.12	59.10	81.09	20.25	5.78	58.63
DHAR	59.22	56.51	76.74	72.97	70.53	88.69	14.36	7.81	56.74
GWALIOR	69.58	51.74	81.66	66.44	38.04	85.68	40.47	4.36	64.92
HOSHANGABAD	53.20	45.50	72.70	59.41	49.88	83.54	23.05	8.71	59.36
CHHINDWARA	66.32	62.36	78.91	56.87	53.32	68.16	14.13	4.46	44.88
DRUG	42.24	30.74	60.27	71.19	63.02	84.00	19.33	3.32	44.43
JABALPUR	50.36	28.35	78.05	67.02	56.76	79.92	26.80	2.65	57.19
SHAJAUUR	54.75	51.31	7.86	62.14	57.22	85.13	12.66	4.09	52.74
WEST NIMAR	53.51	39.91	72.99	66.91	63.18	76.97	11.56	4.34	52.31
SEHORE	53.33	47.86	77.08	55.88	50.71	78.28	16.60	5.87	50.31
BETUL	46.81	39.61	74.42	59.65	53.57	82.94	13.12	3.68	63.19
DATIA	52.22	48.12	65.66	57.12	51.07	76.97	16.42	3.34	49.43
MANDSAUR	61.51	6.17	79.74	50.04	46.59	76.50	13.44	3.63	59.34
RAISEN	45.42	40.06	72.01	57.75	51.90	86.76	16.57	8.53	46.98
JHABUA	32.87	27.97	78.48	64.20	61.58	88.51	8.79	2.97	56.44
GUNA	43.42	36.59	70.93	54.07	48.64	75.83	11.77	2.60	62.97
SHIVPURI	44.12	39.13	72.51	55.07	50.99	78.28	9.93	2.62	48.70
RAIPUR	36.66	30.73	61.88	53.90	47.50	81.11	10.73	3.48	51.58
RAJGARH	34.22	28.15	63.93	56.98	53.77	72.71	9.99	1.85	41.64
SEONI	46.29	43.46	74.14	46.53	43.54	75.97	7.73	2.87	49.88
RAJNANDGAON	37.39	33.55	57.86	51.91	47.19	77.09	6.17	1.13	55.65
MORENA	48.97	43.07	70.86	43.60	34.73	76.48	11.11	1.92	33.11
BILASPUR	30.51	24.72	57.50	53.59	48.79	76.93	12.49	6.00	45.17
SAGAR	47.29	37.47	73.74	43.08	33.37	69.02	15.60	3.07	44.05
VIDISHA	37.60	28.83	72.71	46.09	36.41	34.82	15.03	3.23	62.27
BASTAR	24.33	21.40	58.83	50.97	48.04	85.35	6.46	3.05	46.52
BALAGHAT	29.31	25.39	66.52	39.89	38.73	51.20	7.09	3.32	43.84
DAMOH	36.14	29.22	62.29	38.39	32.52	86.50	10.06	3.02	43.81
BHIND	34.90	28.99	56.66	36.91	26.62	74.82	11.56	2.91	43.42
SATNA	37.51	31.23	62.25	30.53	23.76	57.17	9.27	1.93	38.18
MANDLA	30.58	27.16	72.84	38.45	35.55	74.34	5.45	1.99	48.23
RAIGARH	26.22	23.24	56.90	40.20	36.73	76.89	3.89	1.14	32.25
SHAH DOL	34.43	25.40	67.38	26.85	18.23	58.28	10.50	2.84	38.47
REWA	28.97	22.15	65.41	27.54	22.61	53.86	7.63	1.57	39.96
CHHATARPUR	31.72	24.31	64.19	22.75	18.59	40.97	8.86	1.74	39.00
TIKAMGARH	29.98	25.37	54.16	25.04	21.33	44.50	8.21	1.09	33.05
SIDHI	28.81	24.96	70.57	29.38	25.71	68.92	6.86	3.01	43.36
PANNA	20.83	15.55	57.57	27.97	24.68	50.87	6.19	1.66	37.69
SARGUJA	21.95	13.63	79.23	27.66	21.83	67.77	7.72	2.14	46.12
MADHYA PRADESH	43.30	34.49	72.52	53.41	45.56	79.45	15.07	3.64	53.00

Source: Census of India, 1991, Madhya Pradesh, Housing and Amenities (A Database on Housing and Amenities for District Cities and Towns)

HA 8 - Households with Access to Electricity, Safe Drinking Water and Toilet Facilities - 1991

District	All the three facilities			None of the three facilities		
	Total%	Rural%	Urban%	Total%	Rural%	Urban%
INDORE	41.44	8.49	56.46	2.55	3.42	2.16
BHOPAL	53.07	2.16	65.12	4.45	15.92	1.73
UJJAIN	27.77	3.09	65.29	9.00	13.97	1.43
RATLAM	22.64	3.44	65.30	9.44	13.40	0.66
NARSIMHAPUR	13.03	6.83	48.77	9.58	10.69	3.17
EAST NIMAR	14.97	3.64	47.91	14.95	18.85	3.60
DEWAS	15.80	3.16	49.31	15.25	18.70	6.09
DHAR	12.60	6.61	51.27	15.30	17.01	4.31
GWALIOR	35.16	1.94	57.66	15.79	32.06	4.77
HOSHANGABAD	16.12	3.21	48.83	17.74	23.24	3.80
CHHINDWARA	10.35	3.36	33.15	18.40	21.77	7.67
DRUG	16.18	1.23	39.62	18.44	27.54	8.87
JABALPUR	21.39	1.53	46.38	19.74	31.29	5.20
SHAJAUR	9.98	2.41	45.40	19.78	22.63	6.45
WEST NIMAR	9.51	3.30	42.87	20.51	23.55	4.18
SEHORE	12.05	2.98	51.44	22.47	25.99	7.21
BETUL	10.29	2.12	41.62	23.99	28.97	4.91
DATIA	12.69	1.84	48.27	24.18	27.78	12.34
MANDSAUR	6.37	2.50	35.01	25.17	26.68	8.49
RAISEN	12.58	5.61	47.13	26.72	31.32	3.91
JHABUA	7.51	2.26	56.36	28.20	30.71	4.79
32.73GUNA	9.51	2.58	41.42	29.08	33.69	10.53
SHIVPURI	8.09	1.90	43.30	29.18	32.73	8.98
RAIPUR	7.24	1.07	33.50	29.79	35.05	7.39
RAJGARH	7.06	0.85	34.48	29.85	33.50	11.98
SEONI	5.57	1.83	42.37	30.94	33.38	6.94
RAJNANDGAON	4.48	0.43	26.14	31.61	35.53	10.67
MORENA	9.40	1.05	40.39	32.32	38.03	11.11
BILASPUR	9.06	3.24	37.34	34.80	39.35	12.69
SAGAR	11.95	1.80	39.07	35.12	44.03	11.30
VIDISHA	12.03	1.82	52.90	38.91	46.86	7.10
BASTAR	4.45	1.46	39.63	36.71	42.53	6.58
BALAGHAT	3.59	1.36	25.39	40.82	43.23	17.33
DAMOH	6.64	1.87	29.51	46.69	50.74	9.90
BHIND	9.08	1.30	37.73	45.81	53.55	17.29
SATNA	6.92	1.13	29.74	46.88	53.09	22.43
MANDLA	4.04	1.12	40.11	47.28	50.30	9.89
RAIGARH	2.66	0.47	25.14	47.85	51.39	11.41
SHAHDOL	7.50	1.87	28.00	52.73	62.40	17.45
REWA	5.38	0.52	31.28	53.69	59.52	22.53
CHHATARPUR	4.90	0.55	23.95	55.51	62.26	25.97
TIKAMGARH	4.23	0.41	24.25	56.20	60.39	34.28
SIDHI	6.13	2.62	43.97	56.52	60.16	17.21
PANNA	3.97	0.80	25.97	59.63	64.44	26.15
SARGUJA	5.51	1.04	36.29	60.49	67.75	10.57
MADHYA PRADESH	11.97	2.10	44.72	31.19	38.16	8.07

Source: Census of India, 1991, Madhya Pradesh, Housing and Amenities (A Database on Housing and Amenities for District Cities and Towns)

HA 9 - Households by Source of Drinking Water -1991

DISTRICT	Location of Water Source in Households						Source of Water : Well		
	Water Source Within Premises			Water Source Outside Premises			Share of Total Households		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
BHOPAL	47.6%	8.1%	56.9%	52.4%	91.9%	43.1%	9.6%	25.8%	5.8%
INDORE	42.0%	9.9%	56.6%	58.0%	90.1%	43.4%	10.1%	9.0%	10.6%
GWALIOR	44.9%	10.9%	67.9%	55.1%	89.1%	32.1%	32.1%	61.5%	12.2%
JABALPUR	25.2%	7.5%	47.5%	74.8%	92.5%	52.5%	30.7%	39.9%	19.1%
UJJAIN	26.8%	5.3%	59.6%	73.2%	94.7%	40.4%	16.6%	22.8%	7.0%
HOSHANGABAD	30.0%	50.2%	54.8%	70.0%	79.8%	45.2%	36.7%	44.9%	15.9%
EAST NIMAR	20.7%	11.6%	47.0%	79.3%	88.4%	53.0%	28.0%	34.7%	8.2%
RATLAM	22.6%	5.8%	59.8%	77.4%	94.2%	40.2%	14.2%	18.7%	4.1%
DURG	24.1%	10.3%	45.8%	75.9%	89.7%	5432%	27.1%	34.4%	15.5%
CHHINDWARA	16.3%	10.0%	36.3%	83.7%	90.0%	63.7%	37.7%	40.6%	28.6%
NARSIMHAPUR	29.9%	25.3%	56.3%	70.1%	74.7%	43.7%	12.4%	13.4%	6.5%
DATIA	19.9%	9.1%	55.2%	80.1%	90.9%	44.8%	41.9%	47.8%	22.4%
MANDSAUR	17.0%	7.3%	50.1%	83.0%	92.7%	49.9%	71.7%	48.5%	18.4%
WEST NIMAR	14.4%	9.8%	39.0%	85.6%	90.2%	61.0%	22.4%	24.3%	12.0%
BETUL	16.9%	10.3%	42.5%	83.1%	89.7%	57.5%	37.1%	42.6%	16.2%
DHAR	16.8%	11.8%	48.7%	83.2%	88.2%	51.3%	19.2%	20.7%	9.8%
SAGAR	20.3%	11.6%	43.7%	79.7%	88.4%	56.3%	54.4%	63.8%	29.3%
DEWAS	18.4%	8.6%	44.3%	81.6%	91.4%	55.7%	31.3%	37.5%	14.8%
BHIND	16.2%	6.9%	50.3%	83.8%	93.1%	49.7%	62.8%	73.1%	27.8%
RAISEN	20.3%	15.8%	42.7%	79.7%	84.2%	57.3%	37.6%	42.7%	12.5%
BILASPUR	21.0%	15.4%	48.0%	79.0%	84.6%	52.0%	37.9%	41.5%	20.6%
VIDISHA	20.5%	10.9%	59.0%	79.5%	89.1%	41.0%	51.2%	60.5%	14.0%
BALAGHAT	25.7%	23.4%	48.1%	74.3%	76.6%	51.9%	57.9%	58.9%	47.9%
SHAJAPUR	13.8%	6.5%	48.0%	86.2%	93.5%	52.0%	35.9%	40.5%	14.4%
RAIPUR	20.0%	14.7%	42.4%	80.0%	85.3%	57.6%	41.2%	46.7%	17.7%
SARGUJA	24.5%	20.3%	52.7%	75.5%	79.7%	47.3%	54.6%	58.8%	24.8%
SEHORE	16.0%	9.1%	48.9%	84.0%	90.9%	57.1%	39.7%	44.4%	19.4%
MORENA	17.9%	7.8%	55.3%	82.1%	92.2%	44.7%	54.2%	62.9%	22.2%
DAMOH	12.1%	7.7%	32.7%	87.9%	92.3%	67.3%	51.8%	55.8%	32.5%
GUNA	15.8%	7.3%	49.9%	84.2%	92.7%	50.1%	43.4%	48.5%	23.0%
SHIVPURI	14.4%	7.3%	54.9%	85.6%	92.7%	45.1%	43.8%	47.7%	21.5%
SHAHDOL	39.9%	36.1%	54.0%	60.1%	63.9%	46.0%	65.8%	43.0%	39.4%
SATNA	29.8%	26.9%	41.2%	70.2%	73.1%	58.8%	66.7%	73.1%	41.8%
RAJGARH	10.0%	3.4%	42.4%	90.0%	96.6%	57.6%	41.1%	44.4%	25.2%
BASTER	11.1%	8.2%	45.7%	88.9%	91.8%	54.3%	25.6%	26.8%	12.0%
SEONI	18.2%	15.8%	41.3%	81.8%	84.2%	58.7%	50.7%	53.4%	23.6%
SIDHI	33.5%	31.5%	56.0%	66.5%	68.5%	44.0%	63.0%	66.1%	29.7%
RAJNANDGAON	13.8%	10.5%	31.1%	86.2%	89.5%	68.9%	44.0%	48.3%	20.7%
MANDLA	7.2%	4.1%	45.6%	92.8%	95.9%	64.4%	48.4%	50.7%	19.4%
PANNA	8.9%	4.8%	37.6%	91.1%	95.2%	62.4%	63.3%	65.5%	48.0%
JHABUA	10.6%	6.7%	47.5%	89.4%	93.2%	52.5%	21.1%	22.5%	7.5%
CHHATARPUR	9.9%	3.9%	36.2%	90.1%	93.1%	63.8%	75.9%	79.9%	58.7%
REWA	40.2%	38.3%	50.2%	59.8%	61.7%	49.8%	69.5%	74.2%	44.0%
TIKAMGARH	8.2%	3.5%	33.1%	91.8%	96.5%	66.9%	74.5%	78.2%	54.8%
RAIGARH	10.1%	8.2%	30.2%	89.9%	91.8%	69.8%	43.9%	46.0%	22.3%
MADHYA PRADESH	21.6%	13.2%	49.4%	78.4%	86.8%	50.6%	40.8%	47.3%	19.1%

Source: Census of India, 1991, Household Tables for Madhya Pradesh (HH Series)

HA 9 - Households by Source of Drinking Water -1991

DISTRICT	Source of Water : Tap			Source of Water : Handpump/Tubewell			Source of Water: River/Canal		
	Share of Total Households			Share of Total Households			Share of Total Households		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
BHOPAL	68.4%	7.5%	82.8%	20.7%	65.3%	10.2%	0.3%	1.1%	0.1%
INDORE	61.0%	19.5%	79.9%	28.0%	70.6%	8.6%	0.1%	0.2%	0.1%
GWALIOR	51.1%	12.5%	77.2%	15.4%	25.5%	8.5%	0.2%	0.2%	0.1%
JABALPUR	41.0%	22.2%	64.7%	26.0%	34.5%	15.2%	1.7%	2.9%	0.3%
UJJAIN	38.8%	10.1%	82.5%	43.0%	65.1%	9.3%	1.0%	1.7%	0.1%
HOSHANGABAD	38.7%	24.4%	74.9%	20.7%	25.5%	8.7%	3.4%	4.8%	0.1%
EAST NIMAR	38.2%	20.9%	88.5%	30.7%	40.4%	2.3%	2.3%	3.1%	0.1%
RATLAM	37.6%	15.9%	85.9%	45.4%	61.6%	9.5%	2.4%	3.4%	0.0%
DURG	30.8%	12.2%	59.9%	40.4%	50.8%	24.1%	1.1%	1.7%	0.1%
CHHINDWARA	29.6%	18.9%	63.7%	27.3%	34.4%	4.5%	3.8%	4.6%	1.4%
NARSIMHAPUR	28.0%	20.9%	68.8%	56.3%	62.2%	22.5%	2.3%	2.6%	0.4%
DATIA	27.5%	14.7%	69.6%	29.6%	36.4%	7.3%	0.4%	0.4%	0.4%
MANDSAUR	27.3%	14.0%	72.8%	29.8%	36.5%	6.8%	0.5%	0.7%	0.0%
WEST NIMAR	26.9%	17.2%	78.5%	40.1%	45.9%	8.5%	8.8%	10.3%	0.4%
BETUL	25.1%	12.4%	73.6%	34.6%	41.2%	9.4%	2.9%	3.5%	0.6%
DHAR	24.9%	17.0%	76.3%	48.0%	53.5%	12.4%	6.5%	7.5%	0.5%
SAGAR	23.8%	11.5%	56.8%	19.3%	21.9%	12.2%	2.0%	2.4%	0.8%
DEWAS	22.8%	7.6%	63.1%	42.3%	51.5%	18.0%	1.9%	2.4%	0.3%
BHIND	22.7%	10.8%	66.6%	14.2%	15.8%	8.2%	0.1%	0.1%	0.0%
RAISEN	21.8%	15.7%	51.9%	36.0%	36.2%	34.9%	4.3%	5.0%	0.4%
BILASPUR	21.3%	14.4%	55.0%	32.3%	34.4%	22.0%	3.7%	4.2%	0.6%
VIDISHA	20.8%	9.1%	67.4%	25.3%	27.3%	17.4%	2.0%	2.5%	0.1%
BALAGHAT	20.6%	18.3%	42.3%	19.3%	20.4%	8.9%	1.5%	1.6%	0.3%
SHAJAPUR	20.3%	8.1%	77.7%	41.8%	49.2%	7.4%	1.6%	1.9%	0.0%
RAIPUR	19.2%	9.8%	59.2%	34.7%	37.7%	21.9%	2.8%	3.4%	0.3%
SARGUJA	19.1%	12.6%	63.6%	8.6%	9.2%	4.2%	6.1%	6.8%	1.0%
SEHORE	18.9%	8.4%	64.7%	36.9%	42.3%	13.5%	4.2%	4.7%	1.8%
MORENA	18.6%	7.8%	58.5%	25.0%	26.9%	18.0%	1.6%	2.0%	0.3%
DAMOH	17.7%	11.0%	5.1%	20.7%	21.5%	16.4%	8.4%	40.0%	0.3%
GUNA	17.0%	7.5%	54.9%	37.1%	41.1%	20.6%	1.9%	2.3%	0.4%
SHIVPURI	16.7%	8.1%	65.8%	38.4%	42.9%	12.5%	0.8%	0.6%	0.0%
SHAHDOL	16.1%	5.8%	53.8%	10.8%	12.5%	4.5%	4.1%	4.9%	1.0%
SATNA	15.8%	7.0%	50.3%	14.7%	16.7%	6.9%	1.5%	1.7%	0.8%
RAJGARH	15.3%	6.3%	59.3%	41.7%	47.5%	13.4%	1.4%	1.4%	1.7%
BASTER	14.4%	9.6%	71.2%	36.6%	38.5%	14.2%	10.2%	11.0%	1.1%
SEONI	14.2%	9.4%	60.7%	32.4%	34.1%	15.3%	1.9%	2.0%	0.0%
SIDHI	13.7%	9.9%	55.1%	15.7%	15.8%	13.8%	5.8%	6.3%	0.8%
RAJNANDGAON	13.1%	4.4%	59.5%	38.8%	42.8%	17.6%	2.9%	3.2%	1.2%
MANDLA	12.0%	8.1%	59.9%	26.5%	27.4%	14.4%	8.1%	8.4%	4.6%
PANNA	11.6%	7.2%	42.1%	16.4%	17.5%	8.8%	7.1%	8.0%	0.9%
JHABUA	11.5%	5.3%	70.0%	52.7%	56.3%	18.5%	11.9%	12.9%	3.3%
CHHATARPUR	11.1%	5.7%	35.0%	11.6%	12.9%	6.0%	0.8%	1.0%	0.0%
REWA	10.8%	5.0%	42.0%	16.7%	17.6%	11.9%	1.8%	2.0%	1.1%
TIKAMGARH	9.6%	4.4%	36.7%	15.5%	16.9%	7.8%	0.0%	0.0%	0.1%
RAIGARH	7.8%	3.2%	56.2%	32.4%	33.6%	19.7%	4.5%	4.9%	0.5%
MADHYA PRADESH	24.1%	11.4%	66.5%	29.3%	34.2%	13.0%	3.3%	4.2%	0.4%

Source: Census of India, 1991, Household Tables for Madhya Pradesh (HH Series)

HA 9 - Households by Source of Drinking Water -1991

DISTRICT	Source of Water : Tank			Source of Water : Other source		
	Share of Total Households			Share of Total Households		
	Total	Rural	Urban	Total	Rural	Urban
BHOPAL	0.1%	0.0%	0.1%	1.0%	0.2%	1.1%
INDORE	0.1%	0.1%	0.0%	0.7%	0.6%	0.8%
GWALIOR	0.0%	0.0%	0.0%	1.3%	0.3%	1.9%
JABALPUR	0.1%	0.1%	0.0%	0.5%	0.3%	0.7%
UJJAIN	0.0%	0.0%	0.0%	0.6%	0.3%	1.0%
HOSHANGABAD	0.0%	0.0%	0.0%	0.5%	0.5%	0.4%
EAST NIMAR	0.0%	0.1%	0.0%	0.8%	0.7%	0.9%
RATLAM	0.1%	0.1%	0.0%	0.3%	0.3%	0.4%
DURG	0.5%	0.7%	0.1%	0.2%	0.1%	0.3%
CHHINDWARA	0.0%	0.0%	0.0%	1.6%	1.5%	1.8%
NARSIMHAPUR	0.0%	0.0%	0.0%	1.1%	0.9%	1.8%
DATIA	0.0%	0.0%	0.0%	0.6%	0.7%	0.2%
MANDSAUR	0.0%	0.0%	0.0%	0.6%	0.3%	1.8%
WEST NIMAR	0.1%	0.1%	0.0%	1.9%	2.1%	0.6%
BETUL	0.0%	0.1%	0.0%	0.3%	0.3%	0.2%
DHAR	0.5%	0.5%	0.0%	0.8%	0.7%	0.9%
SAGAR	0.1%	0.1%	0.0%	0.4%	0.3%	0.8%
DEWAS	0.1%	0.1%	0.0%	1.6%	0.8%	3.7%
BHIND	0.0%	0.0%	0.0%	0.2%	0.1%	0.4%
RAISEN	0.1%	0.1%	0.0%	0.3%	0.3%	3.7%
BILASPUR	2.8%	3.1%	1.0%	23.1%	2.4%	0.4%
VIDISHA	0.1%	0.1%	0.0%	0.4%	0.6%	0.3%
BALAGHAT	0.2%	0.2%	0.2%	0.5%	0.6%	0.6%
SHAJAPUR	0.1%	0.1%	0.0%	0.3%	0.3%	1.1%
RAIPUR	1.6%	2.0%	0.2%	0.5%	0.4%	0.0%
SARGUJA	0.1%	0.1%	0.0%	11.5%	12.4%	0.5%
SEHORE	0.0%	0.1%	0.0%	0.2%	0.1%	0.7%
MORENA	0.1%	0.1%	0.1%	0.4%	0.3%	5.4%
DAMOH	0.2%	0.2%	0.0%	1.3%	1.5%	0.5%
GUNA	0.1%	0.1%	0.0%	0.5%	0.5%	1.0%
SHIVPURI	0.0%	0.0%	0.1%	0.4%	0.4%	0.7%
SHAHDOL	1.4%	1.6%	0.4%	2.0%	2.2%	0.8%
SATNA	0.2%	0.2%	0.0%	1.1%	1.3%	0.2%
RAJGARH	0.0%	0.0%	0.0%	0.5%	0.5%	0.5%
BASTER	1.8%	1.6%	0.5%	11.4%	12.3%	1.1%
SEONI	0.1%	0.1%	0.0%	0.8%	0.9%	0.4%
SIDHI	0.2%	0.2%	0.1%	1.6%	1.8%	0.4%
RAJNANDGAON	0.5%	0.3%	0.2%	0.8%	0.7%	0.8%
MANDLA	0.4%	0.5%	0.2%	4.6%	4.9%	1.5%
PANNA	0.1%	0.1%	0.0%	1.5%	1.7%	0.2%
JHABUA	0.8%	0.9%	0.0%	2.0%	2.2%	0.6%
CHHATARPUR	0.0%	0.0%	0.0%	0.5%	0.6%	0.3%
REWA	0.1%	0.1%	0.1%	1.0%	1.1%	1.0%
TIKAMGARH	0.1%	0.1%	0.0%	0.4%	0.4%	0.5%
RAIGARH	3.0%	3.2%	0.7%	8.4%	9.2%	0.6%
MADHYA PRADESH	0.6%	0.7%	0.1%	1.9%	2.2%	0.9%

Source: Census of India, 1991, Household Tables for Madhya Pradesh (HH Series)

HA 10 - Status of Drinking Water in Villages - Institutional Provision : 1997

District	Total Villages	Villages Fully Covered	Shares of Villages Fully Covered	Villages Partially Covered	Share of Villages Partially Covered	Villages not Covered	Total number of Handpumps	Handpumps per Village
BHOPAL	511	511	100.0%	0	0.0%	0	2380	4.7
INDORE	624	592	94.9%	32	5.1%	0	3965	6.4
NARSIMHAPUR	1040	914	87.9%	90	8.7%	36	4863	4.7
RATLAM	1051	792	75.4%	259	24.6%	0	5234	5.0
UJJAIN	1092	1092	100.0%	0	0.0%	0	5689	5.2
DHAR	1487	870	58.5%	617	41.5%	0	8739	5.9
DURG	1803	1610	89.3%	1193	10.7%	0	8639	4.8
EAST NIMAR	1060	689	65.0%	371	35.0%	0	5570	5.3
JABALPUR	2257	1519	67.3%	729	32.3%	9	9294	4.1
WEST NIMAR	1887	838	44.5%	1015	53.9%	31	10449	5.5
GWALIOR	706	266	37.7%	436	61.8%	4	3875	5.5
DEWAS	1058	665	62.9%	393	37.1%	0	4362	4.1
JHABUA	1313	768	58.5%	540	41.1%	5	8418	6.4
SHAJAPUR	1068	656	61.4%	412	38.6%	0	4227	4.
BETUL	1328	614	46.2%	710	53.5%	4	5196	3.9
HOSHANGABAD	1420	617	43.5%	795	56.0%	8	5413	3.8
RAISEN	1429	778	54.4%	651	45.6%	0	4626	3.2
DATIA	402	258	64.2%	144	35.8%	0	1794	4.5
RAJGARH	1664	1537	92.4%	127	7.6%	0	6306	3.8
CHHINDWARA	1903	1028	54.0%	860	45.2%	15	8889	4.7
SEHORE	1011	745	73.7%	266	26.3%	0	4116	4.1
SHIVPURI	1326	762	57.5%	562	42.4%	2	5488	4.1
GUNA	2059	1387	67.4%	671	32.6%	1	7666	3.7
RAIPUR	3863	2575	66.7%	1288	33.3%	0	17522	4.5
BILASPUR	3401	2036	58.2%	1452	41.5%	13	16231	3.8
RAJNANDGAON	2273	1896	83.4%	363	16.0%	14	8470	4.7
BASTAR	3670	3494	95.2%	109	3.0%	67	15900	4.1
MANDSAUR	1575	1170	74.3%	405	25.7%	0	5897	4.1
SEONI	1585	1582	99.8%	0	0.0%	3	6998	3.7
VIDISHA	1522	1223	80.4%	297	19.5%	2	4865	4.5
MORENA	1293	124	9.6%	1165	90.1%	4	5788	4.6
SAGAR	1868	855	45.8%	987	52.8%	26	5565	3.7
RAIGARH	2196	164	7.5%	2022	92.1%	10	9796	4.3
BALAGHAT	1269	1212	92.5%	55	4.3%	2	8756	3.7
MANDLA	2106	608	28.9%	1488	70.7%	10	7942	4.4
DAMOH	1205	843	70.0%	325	27.0%	37	4846	3.2
BHIND	877	178	20.3%	687	78.3%	12	3421	4.2
SATNA	1784	400	22.4%	1380	77.4%	4	7413	4.2
SIDHI	1822	1714	94.1%	88	4.8%	20	9042	5.0
PANNA	939	518	55.2%	404	43.0%	17	4586	4.9
SARGUJA	2114	1697	70.3%	595	24.6%	122	10594	4.4
REWA	2352	2204	93.7%	92	3.9%	56	8023	3.4
SHAHDOL	1977	1636	82.8%	297	15.0%	44	9667	4.4
TIKAMGARH	863	270	31.3%	582	67.4%	11	3929	4.6
CHHATARPUR	1076	702	65.2%	374	34.8%	0	4219	2.0
MADHYA PRADESH	71526	46609	65.2%	24328	34.0%	589	314938	1.1

Source: 1. Public Health Engineering Department, Government of Madhya Pradesh
2. Census of India, 1981 and 1991, Madhya Pradesh Household Tables.

HA 10 - Status of Drinking Water in Villages - Institutional Provision : 1997

District	Handpump per 1000 Population	Households Serviced by Handpumps/ Tubewells 1991	Population with access to safe Drinking Water 1981			Population with access to safe Drinking Water 1991		
BHOPAL	7.6	7.5%	68.4%	9.5%	86.4%	89.1%	72.9%	9.0%
INDORE	6.4	19.5%	67.1%	26.6%	86.1%	89.0%	90.1%	88.5%
NARSIMHAPUR	6.6	20.9%	34.9%	26.9%	84.0%	84.3%	83.1%	61.3%
RATLAM	7.0	15.9%	35.9%	14.0%	84.9%	83.1%	77.5%	95.5%
UJJAIN	6.1	10.1%	40.4%	11.2%	87.2%	81.8%	75.2%	91.3%
DHAR	6.3	17.0%	20.7%	12.2%	76.2%	73.0%	70.5%	95.5%
DURG	5.0	12.2%	29.6%	10.5%	65.3%	71.2%	63.0%	88.7%
EAST NIMAR	4.7	20.9%	27.3%	8.2%	83.3%	68.9%	61.4%	84.0%
JABALPUR	5.8	22.2%	32.9%	7.4%	64.6%	67.0%	56.8%	90.8%
WEST NIMAR	5.3	17.2%	18.3%	9.7%	63.7%	66.9%	63.2%	79.9%
GWALIOR	6.1	12.5%	46.7%	8.6%	75.6%	66.4%	38.0%	87.0%
DEWAS	5.1	2.0%	20.5%	7.9%	72.2%	65.1%	59.1%	85.7%
JHABUA	6.6	5.3%	10.6%	6.2%	58.6%	64.2%	61.6%	81.1%
SHAJAPUR	4.5	8.1%	13.9%	5.0%	65.1%	62.1%	57.2%	88.5%
BETUL	4.8	12.4%	24.4%	14.5%	70.2%	59.7%	53.6%	85.1%
HOSHANGABAD	5.2	24.4%	26.9%	10.2%	74.5%	59.4%	49.9%	82.9%
RAISEN	5.7	15.7%	17.1%	11.7%	64.2%	57.8%	51.9%	83.5%
DATIA	5.2	14.7%	12.7%	3.9%	49.0%	57.1%	51.1%	77.0%
RAJGARH	6.9	6.3%	11.8%	5.9%	50.3%	57.0%	53.8%	72.7%
CHHINDWARA	6.5	18.9%	16.7%	9.2%	43.8%	56.9%	53.3%	68.2%
SEHORE	5.3	9.4%	14.1%	9.9%	41.0%	55.9%	50.7%	78.3%
SHIVPURI	4.9	9.9%	8.7%	3.1%	47.2%	55.1%	51.0%	78.3%
GUNA	6.4	7.5%	14.9%	7.8%	56.0%	54.1%	48.6%	75.8%
RAIPUR	4.9	9.8%	20.7%	10.8%	69.6%	53.9%	47.5%	81.1%
BILASPUR	4.5	14.4%	20.1%	13.5%	58.8%	53.6%	48.8%	76.9%
RAJNANDGAON	6.3	4.4%	12.8%	5.1%	66.4%	51.9%	47.2%	77.1%
BASTAR	6.7	9.6%	12.7%	12.0%	66.0%	51.0%	48.1%	85.4%
MANDSAUR	4.4	14.0%	19.3%	6.7%	69.1%	50.0%	46.6%	76.6%
SEONI	6.9	5.8%	13.5%	8.4%	71.9%	46.5%	43.5%	76.0%
VIDISHA	5.6	9.1%	17.3%	6.8%	67.0%	46.1%	36.4%	84.8%
MORENA	3.8	7.8%	15.2%	4.6%	74.2%	43.6%	34.7%	76.5%
SAGAR	4.2	11.5%	17.5%	4.9%	51.5%	43.1%	33.4%	69.0%
RAIGARH	5.7	3.2%	13.5%	9.0%	62.8%	40.2%	36.7%	75.9%
BALAGHAT	6.4	18.3%	5.6%	2.8%	33.7%	39.9%	38.47%	51.2%
MANDLA	5.9	8.1%	7.7%	4.2%	52.3%	38.5%	35.6%	74.3%
DAMOH	5.9	11.0%	13.1%	4.8%	63.6%	38.4%	32.5%	66.5%
BHIND	3.4	10.8%	13.5%	2.9%	26.5%	36.9%	26.6%	74.8%
SATNA	5.6	8.4%	11.2%	4.4%	43.6%	30.5%	23.8%	57.2%
SIDHI	6.0	1.3%	4.4%	3.8%	26.6%	29.4%	25.7%	68.9%
PANNA	6.9	7.2%	5.4%	2.7%	36.4%	28.0%	24.7%	50.9%
SARGUJA	5.1	7.0%	9.2%	4.4%	57.2%	27.7%	21.8%	67.8%
REWA	5.3	5.0%	8.0%	4.8%	39.4%	27.5%	22.6%	53.9%
SHAHDOL	6.2	8.1%	10.5%	4.2%	37.9%	26.9%	18.2%	58.3%
TIKAMGARH	4.5	4.4%	4.9%	0.9%	34.7%	25.0%	21.3%	44.5%
CHHATARPUR	4.0	5.7%	6.9%	1.9%	NA	22.8%	18.6%	41.0%
MADHYA PRADESH	5.5	10.9%	20.2%	8.1%	41.2%	53.4%	45.6%	79.5%

Source: 1. Public Health Engineering Department, Government of Madhya Pradesh
2. Census of India, 1981 and 1991, Madhya Pradesh Household Tables.

**HA 11 - Information on status of Water, Ground Water, Urban Water Supply and Rural Water Reservoirs
in Madhya Pradesh**

District	Status of Ground Water		Situation of Urban Water Supply				Average Water Area		
	Balance Ground Water Resource for Future use	Level of Ground Water Development	Number of Towns with organised Water Supply	Population with Organised Water Supply	Estimated Urban Population	Population with Organised Water Supply	Village Ponds and Tanks	Irrigation Reservoirs	Total
	(m.ha.m/yr)	(%)							
BASTAR	0.13367	1.06	2	105270	161883	65.0	5683	6082	11766
MANDLA	0.07218	2.16	2	67879	99050	68.5	830	2924	3754
SHAJAPUR	0.10124	3.11	5	120855	182886	66.1	1408	2639	4047
RAJNANDGAON	0.08760	3.40	2	200528	226767	88.4	4779	9307	14086
SATNA	0.14940	4.73	12	288842	289164	99.9	3841	803	4644
RAIGARH	0.08492	4.97	5	75296	163059	90.4	5839	1455	7294
RAIPUR	0.19552	6.43	9	147400	771622	91.2	19828	27494	47323
VIDISHA	0.05230	8.37	4	703679	195085	94.5	755	1505	2260
BILASPUR	0.16478	9.62	11	184296	644803	77.3	15651	20134	35785
DATIA	0.01087	10.58	2	498739	88965	91.0	255	664	920
JHABUA	0.03539	10.71	5	80938	98080	76.8	857	2631	3488
MORENA	0.13908	11.07	10	75296	350942	94.5	2266	5363	7630
BALAGHAT	0.06623	12.2	3	331494	129787	74.1	3447	3719	7166
HOSHANGABAD	0.13913	12.80	9	96217	346516	91.3	481	1266	13141
DURG	0.06820	12.97	4	316454	84540	53.5	6759	9000	14659
SEHORE	0.06441	13.80	5	452435	1513330	87.4	1178	3498	4676
SHAHDOL	0.06424	13.93	9	132266	368196	37.0	4661	34660	39321
RAISEN	0.06236	14.51	5	136083	137816	49.25	889	10020	10909
GUNA	0.06359	14.56	8	67864	255576	92.7	1596	4562	6158
DAMOH	0.03204	14.79	3	236908	162922	87.3	1246	1812	3058
GWALIOR	0.04406	15.35	3	142279	830447	94.4	1897	12825	14722
PANNA	0.02469	16.30	4	784349	89567	84.1	1580	1260	2840
SARGUJA	0.08123	17.29	6	75353	251159	49.6	2563	3200	5763
REWA	0.03260	17.33	8	124601	236815	84.8	5107	1589	6597
BHOPAL	0.01139	18.09	2	200772	1080802	100.1	301	5856	6157
BHIND	0.03913	20.08	7	1081552	251143	82.8	1131	2077	3207
NARSIMHAPUR	0.06737	20.79	4	207989	116788	93.9	557	328	886
SAGAR	0.05637	22.06	6	109694	481379	84.3	572	1425	1997
SIDHI	0.05182	23.23	1	405742	88848	32.2	1714	1508	3222
JABALPUR	0.05827	23.29	7	28606	1206461	97.3	3684	19829	23514
BETUL	0.05668	28.59	4	1137134	219950	89.6	329	2977	3306
SEONI	0.03468	29.48	2	197123	94807	79.9	1336	5171	6506
CHATTARPUR	0.08510	29.75	11	75712	223524	86.6	2470	2022	4492
DHAR	0.06736	30.35	8	163481	179710	89.6	2407	3896	6303
KHARGONE	0.06781	31.09	9	161019	305274	79.4	409	3607	4016
KHANDWA	0.04069	31.81	6	242444	394171	60.8	137	1352	1489
DEWAS	0.0480	33.91	4	239514	267660	88.4	872	1077	1952
CHHINDWARA	0.06757	36.14	4	236618	362351	61.4	272	5729	6001
UJJAIN	0.02869	36.51	6	222388	516683	99.0	893	2572	3465
MANDSAUR	0.05669	39.75	14	541051	359269	91.7	1305	42935	44240
TIKAMGARH	0.03230	42.77	8	329404	159014	79.7	1791	5185	6976
RAJGARH	0.02910	43.19	5	106255	166838	63.7	497	1513	2010
RATLAM	0.02420	45.07	5	289751	309737	93.5	709	1193	1901
SHIVPURI	0.01843	45.49	3	137144	172070	79.7	2084	3880	5964
INDORE	0.01819	54.32	5	1145650	1274518	89.9	2236	1368	3604
MADHYA PRADESH			266	12785760	15338837	83.4	119105	295306	413215

Urban population of Bhopal is an estimate and actual population may be more that it.

Source:1 Central Ground Water Board - North Central Region, 1995, Ground Water of MP
2. EPOD, Third Environmental Status Report 1996, pp 284-291

**HA 12 - Electricity Consumers, and Consumption , Rural and Urban, and Villages
Electrified - 1995/96**

District	Per Capita Domestic Consumption (Kwh)			Per Capita non-Domestic 1995 (Kwh)		
	Total Consumption per Consumer (1995-96)	Rural Consumption per consumer (1995-96)	Urban Consumption per Consumer (1995-96)	Total Consumption per consumer	Rural Consumption per Consumer	Urban Consumption per Consumer
BHOPAL	977	457	1044	1964	1045	1992
INDORE	1053	485	4082	1616	855	1626
GWALIOR	678	384	778	1370	357	1442
CHHINDWARA	465	350	597	970	532	1080
DEWAS	549	406	730	961	542	1111
UJJAIN	681	446	859	963	690	1014
MANDSAUR	577	451	708	753	489	863
RATLAM	616	412	788	888	501	966
KHANDWA	569	364	808	1049	763	1123
DHAR	605	535	722	1020	672	1296
SHAJAPUR	466	366	621	819	528	943
KHARGAON	510	418	698	902	602	1104
SEHORE	497	422	676	857	610	962
HOSHANGABAD	749	684	824	1073	515	1200
DATIA	454	356	689	808	477	912
JABALPUR	815	564	947	1370	805	1432
MORENA	454	340	621	725	342	824
SAGAR	666	551	744	880	552	932
BETUL	723	697	763	1086	783	1217
SEONI	583	537	731	864	636	1010
NARSIMHAPUR	581	490	737	858	558	978
RAISEN	541	503	641	1115	712	1261
SHIVPURI	548	463	704	757	483	905
GUNA	551	377	832	874	557	960
DURG	618	394	902	986	520	1195
VIDISHA	791	771	829	903	511	1026
SATNA	581	425	700	1111	783	1161
RAJNANDGAON	509	414	726	822	615	911
RAIPUR	635	419	936	1239	522	1446
DAMOH	628	530	766	755	407	915
BHIND	509	371	667	973	298	1096
SHAHNOL	531	368	876	1090	754	1197
RAJGARH	421	313	572	688	398	785
JHABUA	585	507	778	804	499	940
CHHATARPUR	567	419	765	916	405	1046
MANDLA	481	424	684	788	573	938
BILASPUR	869	811	961	1134	532	1369
TIKAMGARH	494	436	540	698	547	734
BALGHAT	660	651	676	843	615	962
REWA	524	352	540	1149	437	1369
SIDHI	444	365	744	934	542	1108
RAIGARH	631	584	841	871	572	1009
BASTAR	508	433	865	1055	920	1169
SARGUJA	622	528	739	966	671	1092
PANNA	564	469	831	800	519	930
MADHYA PRADESH	644	481	831	1118	585	1257

Source: Madhya Pradesh Vidyut Mandal Nigam, 1995-96, Vidyut Vikas ki Sankhyaki

**HA 12 - Electricity Consumers, and Consumption : Rural and Urban, and Villages
Electrified - 1995/96**

District	Consumption per Industrial Unit : 1995 (Kwh)			Consumption Agriculture Per Unit : 1995 (Kwh)		
	Consumption per Industrial Unit (1995-96)	Consumption per Rural Industrial Unit (1995-96)	Consumption per Urban Industrial Unit (1995-96)	Consumption per consumer	Consumption per Rural Consumer	Consumption per Urban Consumer
BHOPAL	75772	6387	88155	8536	9463	5549
INDORE	59613	9005	61173	10104	15049	8949
GWALIOR	37737	31055	39886	7986	8113	7303
CHHINDWARA	93051	85568	100491	4986	4283	2553
DEWAS	102366	25260	163251	3615	10609	7768
UJJAIN	75388	3274	100330	10018	9574	5878
MANDSAUR	137442	56039	206804	8839	5282	3091
RATLAM	58493	22961	77134	4750	5131	4301
KHANDWA	52670	114775	34864	4823	9528	6127
DHAR	161027	158709	163059	8549	11838	6581
SHAJAPUR	31910	3687	68250	10521	9009	5252
KHARGAON	33132	37312	27967	8054	5233	5799
SEHORE	20755	3309	52425	5352	5693	4911
HOSHANGABAD	73678	35076	104474	5649	8220	4970
DATIA	92088	5860	225974	7397	12119	5502
JABALPUR	67568	88742	56605	11786	6352	4306
MORENA	39799	3583	66447	5856	13833	13912
SAGAR	44821	33574	50795	13842	7659	5267
BETUL	184861	124332	256631	6939	5318	2709
SEONI	15812	5519	41034	4738	3878	2432
NARSIMHAPUR	11271	10261	12527	3671	15272	10143
RAISEN	199295	24411	368820	14238	9772	8815
SHIVPURI	16645	19713	12113	9701	6967	4556
GUNA	45579	82625	10793	6653	9185	4608
DURG	505871	22690	764559	9111	7366	3698
VIDISHA	41663	3852	84026	6855	6711	8704
SATNA	173711	85562	217316	6832	8193	7186
RAJNANDGAON	83673	130096	50171	7707	6638	3363
RAIPUR	202656	73185	255422	5688	8743	8154
DAMOH	114048	132589	82513	8565	11912	6478
BHIND	134378	309226	7903	10716	17065	14164
SHAHDOL	275551	43641	537014	16701	6118	3662
RAJGARH	32312	34471	29874	5644	7072	5201
JHABUA	95929	142136	9360	6864	6589	4429
CHHATARPUR	144187	299981	13420	6081	4106	2926
MANDLA	51843	74324	8388	3889	2064	1148
BILASPUR	192765	50316	332456	1826	13106	3188
TIKAMGARH	8016	8451	7633	10702	5518	3770
BALGHAT	60273	96214	18825	4805	2428	3239
REWA	178319	100269	247652	4854	10229	7638
SIDHI	243923	42577	430743	8984	6517	4392
RAIGARH	125378	169774	74351	5611	12411	11214
BASTAR	196690	194179	201099	12218	6124	3276
SARGUJA	258310	436384	15698	31935826	3377	2048
PANNA	15108	13099	18161	5333	6469	2796
MADHYA PRADESH	107275	71887	129707	7366	7959	5585

Source: Madhya Pradesh Vidyut Mandal Nigam, 1995-96, Vidyut Vikas ki Sankhyaki

**HA 12 - Electricity Consumers, and Consumption : Rural and Urban, and Villages
Electrified - 1995/96**

District	Households with Domestic Connections : Estimate for 1995/96			Households with Access to Electricity : Census 1991			Villages Electrified : 1995/96		
	Total	Rural	Urban	Total	Rural	Urban	Total Villages (1991 Census)	Electrified	Share of Electrified Villages
BHOPAL	54.7%	35.8%	58.1%	78.5%	48.4%	85.7%	511	509	99.61%
INDORE	70.7%	12.6%	92.8%	75.6%	61.5%	82.0%	624	619	99.20%
GWALIOR	55.6%	36.9%	66.9%	69.6%	51.7%	81.7%	706	697	99.73%
CHHINDWARA	57.0%	40.7%	104.3%	66.3%	62.4%	78.9%	1903	1889	99.26%
DEWAS	52.1%	42.0%	71.4%	65.0%	60.2%	77.6%	1058	1051	99.34%
UJJAIN	58.3%	41.8%	83.1%	63.3%	49.3%	84.5%	1092	1092	100.00%
MANDSAUR	58.2%	44.2%	102.2%	61.5%	56.2%	79.7%	1575	1558	98.92%
RATLAM	63.2%	42.6%	106.5%	60.4%	50.6%	82.2%	1051	1051	100.00%
KHANDWA	52.7%	38.3%	93.7%	60.0%	55.1%	74.5%	1060	1046	98.68%
DHAR	43.1%	31.5%	110.6%	59.2%	56.5%	76.7%	1481	1476	99.66%
SHAJAPUR	42.3%	31.6%	86.6%	54.8%	51.3%	70.9%	1068	1061	99.34%
KHARGAON	56.9%	45.6%	115.3%	53.5%	49.9%	72.9%	1884	1743	92.52%
SEHORE	53.7%	47.8%	73.4%	53.3%	47.9%	77.1%	1011	1002	99.11%
HOSHANGABAD	53.2%	40.5%	82.9%	53.2%	45.5%	72.7%	1420	1284	90.42%
DATIA	49.0%	45.3%	60.9%	52.2%	48.1%	65.7%	402	396	98.51%
JABALPUR	52.4%	32.7%	76.8%	50.4%	28.4%	78.1%	2257	2124	94.11%
MORENA	28.9%	22.7%	45.3%	49.0%	43.1%	70.9%	1293	1222	94.51%
SAGAR	43.6%	24.7%	91.2%	47.3%	37.5%	73.5%	1868	1744	93.36%
BETUL	32.8%	25.8%	55.2%	46.8%	39.6%	74.4%	1308	1308	100.00%
SEONI	49.8%	42.6%	108.7%	46.3%	43.5%	74.1%	1585	1509	95.21%
NARSIMHAPUR	47.5%	35.7%	110.6%	46.3%	41.6%	73.1%	1040	1030	99.04%
RAISEN	44.8%	39.8%	59.3%	45.4%	40.1%	72.0%	1429	1315	92.02%
SHIVPURI	28.9%	22.4%	61.4%	44.1%	39.1%	72.5%	1326	1286	93.76%
GUNA	35.0%	27.8%	57.3%	43.4%	36.6%	70.9%	2059	1958	92.09%
DURG	47.7%	44.9%	51.2%	42.2%	30.7%	60.3%	1809	1722	92.21%
VIDISHA	35.9%	29.5%	59.8%	37.6%	28.8%	72.7%	1522	1408	92.51%
SATNA	34.5%	19.2%	85.1%	37.5%	31.2%	62.3%	1784	1608	90.13%
RAJNANDGAON	46.9%	39.6%	79.5%	37.4%	33.6%	57.9%	2273	2083	91.64%
RAIPUR	48.7%	35.8%	97.9%	36.7%	30.7%	61.9%	3863	3596	93.09%
DAMOH	38.1%	27.6%	81.1%	36.1%	29.2%	62.3%	1205	1081	89.71%
BHIND	24.9%	17.3%	48.9%	34.9%	29.0%	56.7%	877	866	98.75%
SHAHNOL	27.7%	24.6%	37.4%	34.4%	25.4%	67.4%	1977	1790	90.54%
RAJGARH	37.2%	26.8%	79.2%	34.2%	28.2%	63.9%	1664	1638	98.44%
JHABUA	32.3%	25.6%	91.1%	32.9%	28.0%	78.5%	1313	1280	97.49%
CHHATARPUR	19.1%	14.1%	37.6%	31.7%	24.3%	64.2%	1076	1057	98.23%
MANDLA	29.1%	24.7%	79.2%	30.6%	27.2%	72.8%	2106	1941	92.17%
BILASPUR	36.8%	27.9%	72.7%	30.3%	24.7%	57.5%	3501	3261	93.14%
TIKAMGARH	29.1%	15.9%	84.3%	30.0%	25.4%	54.2%	863	849	98.36%
BALGHAT	39.0%	27.3%	140.4%	29.3%	25.4%	67.5%	1269	1158	91.25%
REWA	25.7%	12.9%	85.7%	29.0%	22.2%	65.4%	2352	2071	88.05%
SIDHI	17.9%	11.0%	52.8%	28.8%	24.9%	70.6%	1822	1794	98.46%
RAIGARH	29.9%	23.4%	91.3%	26.2%	23.2%	56.9%	2196	1976	89.98%
BASTAR	28.3%	22.5%	56.0%	24.3%	21.4%	58.8%	3670	2931	79.86%
SARGUJA	16.2%	13.7%	30.4%	22.0%	13.6%	79.2%	2414	2112	87.49%
PANNA	23.2%	17.8%	48.9%	20.8%	15.6%	57.6%	939	907	96.59%
MADHYA PRADESH	41.2%	29.4%	75.5%	43.3%	34.5%	72.5%		67096	93.8%

*: Where figures exceed 100%, it shows either actual households in excess of estimated households, or more than one connection for many households

Source: Madhya Pradesh Vidyut Mandal Nigam, 1995-96, Vidyut Vikas Ki Sankhyaki

HA 13 - Households by Type of Fuels Used -1991

District	Cowdung Cake			Electricity			Cola/Coke/Lignite		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
RAIGHGARH	3.0%	3.3%	0.0%	0.0%	0.0%	0.4%	0.2%	0.1%	1.0%
PANNA	17.6%	19.6%	3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
DAMOH	6.6%	7.9%	0.9%	0.0%	0.0%	0.0%	0.1%	0.0%	0.4%
BASTAR	0.0%	0.0%	0.0%	0.3%	0.0%	3.8%	0.0%	0.0%	0.3%
CHHATARPUR	10.3%	12.5%	0.9%	0.1%	0.0%	0.1%	0.0%	0.0%	0.1%
TIKAMGARH	7.0%	7.8%	2.4%	0.1%	0.0%	0.3%	0.0%	0.0%	0.0%
MANDLA	0.2%	0.2%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%
SEONI	3.6%	4.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
BHIND	34.7%	41.0%	11.4%	0.1%	0.0%	0.3%	0.0%	0.0%	0.1%
BALAGHAT	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%
MORENA	24.8%	29.5%	7.5%	0.1%	0.1%	0.2%	0.0%	0.0%	0.1%
RAJNANDGAON	8.7%	10.2%	0.4%	0.0%	0.0%	0.1%	0.3%	0.0%	0.1%
NARSIMHAPUR	4.6%	5.3%	0.3%	0.0%	0.0%	0.1%	0.1%	0.3%	0.2%
GUNA	23.2%	28.2%	3.0%	0.1%	0.0%	0.1%	0.1%	0.0%	0.2%
SHIVPURI	14.1%	16.1%	2.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%
DATIA	48.0%	59.6%	10.2%	0.1%	0.1%	0.1%	0.1%	0.0%	0.5%
REWA	65.5%	74.4%	18.1%	0.1%	0.1%	0.1%	0.1%	0.0%	2.1%
RAJGARH	19.1%	22.4%	2.6%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%
RAIPUR	16.3%	19.6%	2.1%	0.1%	0.1%	0.2%	0.6%	0.1%	1.6%
VIDISHA	45.4%	54.9%	7.0%	0.1%	0.0%	0.2%	0.1%	0.1%	0.2%
SHAJAPUR	5.1%	5.8%	2.0%	0.1%	0.0%	0.2%	0.2%	0.0%	0.9%
SEHORE	6.7%	7.7%	2.3%	0.1%	0.1%	0.2%	0.0%	0.0%	0.2%
RAISEN	11.4%	13.6%	0.3%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
SAGAR	7.9%	10.5%	1.0%	0.0%	0.0%	0.2%	0.6%	0.1%	2.0%
SATNA	32.9%	39.1%	8.4%	0.0%	0.0%	0.1%	0.2%	2.3%	0.7%
JHABUA	4.8%	5.0%	3.2%	0.0%	0.0%	0.0%	0.1%	0.0%	0.2%
WEST NIMAR	2.5%	2.8%	1.0%	0.1%	0.1%	0.1%	0.1%	2.5%	0.4%
HOSHANGABAD	8.0%	11.0%	0.4%	0.1%	0.0%	0.1%	0.5%	0.0%	1.6%
EAST NIMAR	1.5%	1.7%	0.9%	0.0%	0.0%	0.1%	0.4%	0.2%	1.3%
DHAR	18.2%	2.4%	4.2%	0.1%	0.1%	0.3%	0.1%	0.1%	0.1%
SIDHI	8.2%	8.8%	0.9%	0.7%	0.1%	7.1%	4.6%	2.3%	30.0%
MANDSAUR	3.1%	3.5%	1.8%	0.1%	0.0%	0.1%	0.3%	0.0%	1.4%
BILASPUR	6.6%	7.9%	0.4%	1.1%	1.1%	1.0%	5.3%	2.5%	18.7%
DEWAS	14.9%	18.7%	4.6%	0.1%	0.0%	0.1%	0.4%	0.0%	1.3%
RATLAM	5.8%	7.6%	1.9%	0.0%	0.1%	0.1%	2.0%	0.2%	6.0%
BETUL	5.5%	6.9%	0.2%	0.1%	0.0%	2.4%	6.0%	0.1%	28.7%
SARGUJA	0.4%	0.4%	0.0%	0.2%	0.0%	0.2%	9.7%	2.8%	57.7%
JABALPUR	1.4%	2.2%	0.3%	0.1%	0.1%	0.3%	1.2%	0.1%	2.6%
UJJAIN	15.8%	25.3%	1.6%	0.2%	0.1%	0.3%	3.5%	0.2%	8.6%
GWALIOR	31.3%	64.9%	8.5%	0.2%	0.1%	0.2%	0.2%	0.0%	0.3%
SHAHNOL	0.6%	0.7%	0.4%	0.1%	0.0%	0.2%	12.1%	3.6%	42.8%
CHHINDWARA	0.8%	1.0%	0.2%	0.1%	0.0%	0.1%	12.7%	3.8%	41.1%
DURG	23.2%	36.5%	2.3%	0.1%	0.0%	0.3%	13.1%	0.5%	32.7%
INDORE	18.8%	55.3%	2.1%	0.1%	0.2%	0.1%	2.1%	0.3%	2.9%
BHOPAL	2.1%	7.5%	0.9%	0.1%	0.0%	0.1%	0.4%	0.0%	0.4%
MADHYA PRADESH	11.7%	14.6%	2.4%	0.2%	0.1%	0.3%	2.4%	0.6%	8.2%

Source: Census of India, 1991, Madhya Pradesh Household tables (HH Series)

HA 13 - Households by Type of Fuels Used -1991

District	Charcoal			Cooking Gas			Wood		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
RAIGHGARH	0.1%	0.0%	0.7%	1.2%	0.1%	12.2%	94.8%	91.2%	81.3%
PANNA	0.5%	0.5%	0.6%	1.3%	0.1%	9.6%	79.8%	99.2%	84.0%
DAMOH	0.2%	0.1%	1.0%	2.9%	0.4%	14.6%	89.3%	86.5%	80.1%
BASTAR	0.2%	0.0%	1.9%	1.7%	0.4%	19.2%	96.8%	91.1%	68.5%
CHHATARPUR	0.2%	0.1%	0.4%	2.8%	0.3%	14.0%	85.4%	98.8%	80.5%
TIKAMGARH	0.4%	0.3%	0.9%	2.5%	0.2%	14.4%	89.0%	94.2%	77.8%
MANDLA	0.4%	0.2%	3.4%	1.2%	0.3%	13.5%	97.2%	58.2%	77.2%
SEONI	0.3%	0.3%	0.4%	2.5%	0.2%	21.2%	92.2%	98.6%	72.3%
BHIND	0.3%	0.1%	1.2%	2.7%	0.6%	12.0%	61.1%	69.8%	71.8%
BALAGHAT	0.1%	0.1%	0.5%	2.2%	0.1%	16.0%	96.2%	88.6%	73.3%
MORENA	0.6%	0.1%	2.6%	3.3%	0.8%	15.2%	69.8%	92.9%	70.0%
RAJNANDGAON	0.4%	0.2%	1.4%	2.2%	0.1%	13.3%	87.0%	70.6%	78.2%
NARSIMHAPUR	0.3%	0.1%	1.4%	3.9%	0.2%	22.2%	89.1%	82.4%	67.3%
GUNA	0.3%	0.1%	1.5%	4.6%	0.7%	22.3%	69.8%	39.0%	66.3%
SHIVPURI	0.5%	0.3%	1.3%	3.8%	0.2%	23.0%	79.5%	24.1%	63.0%
DATIA	0.1%	0.1%	0.1%	6.4%	0.4%	26.4%	42.6%	76.2%	54.1%
REWA	0.2%	0.1%	0.4%	2.9%	0.3%	17.2%	28.4%	78.6%	51.4%
RAJGARH	0.4%	0.4%	0.5%	2.4%	0.2%	25.6%	75.6%	43.8%	72.3%
RAIPUR	0.6%	0.1%	2.6%	5.1%	0.3%	23.0%	75.5%	92.3%	62.3%
VIDISHA	0.6%	0.1%	2.3%	6.7%	0.4%	26.4%	44.9%	90.8%	49.5%
SHAJAPUR	0.3%	0.1%	1.1%	3.6%	0.2%	17.2%	87.7%	84.4%	66.2%
SEHORE	0.4%	0.1%	1.8%	5.2%	0.5%	25.6%	84.6%	88.2%	58.0%
RAISEN	0.3%	0.2%	0.5%	3.0%	0.5%	15.1%	79.0%	59.1%	69.6%
SAGAR	0.6%	0.3%	1.3%	5.3%	0.3%	18.5%	82.6%	92.1%	69.5%
SATNA	0.6%	0.3%	1.7%	3.7%	0.3%	16.8%	69.9%	89.4%	61.3%
JHABUA	0.9%	0.2%	7.2%	3.2%	0.7%	26.0%	83.7%	86.9%	46.9%
WEST NIMAR	0.8%	0.3%	3.5%	4.4%	1.0%	22.6%	83.5%	93.3%	58.7%
HOSHANGABAD	0.4%	0.0%	1.4%	7.8%	0.8%	25.5%	81.8%	73.2%	59.2%
EAST NIMAR	0.5%	0.1%	1.5%	8.7%	1.3%	30.4%	70.2%	87.9%	51.5%
DHAR	0.7%	0.5%	2.4%	4.7%	1.6%	24.7%	71.9%	92.3%	48.3%
SIDHI	0.1%	0.1%	0.3%	1.2%	0.2%	12.9%	82.4%	87.3%	38.6%
MANDSAUR	0.9%	0.3%	2.8%	5.5%	0.9%	21.3%	88.1%	92.3%	53.5%
BILASPUR	0.4%	0.2%	1.5%	3.0%	0.4%	16.0%	73.1%	87.3%	55.0%
DEWAS	1.3%	0.2%	4.3%	7.0%	0.5%	24.2%	55.2%	79.1%	46.9%
RATLAM	1.2%	0.1%	3.8%	12.7%	0.9%	39.0%	34.0%	88.8%	34.4%
BETUL	0.3%	0.3%	0.2%	2.6%	0.3%	11.5%	84.7%	91.7%	46.6%
SARGUJA	0.1%	0.0%	0.6%	1.3%	0.1%	8.9%	88.1%	96.5%	30.2%
JABALPUR	1.2%	0.2%	2.5%	13.2%	0.2%	29.5%	73.1%	96.6%	43.5%
UJJAIN	0.4%	0.2%	6.2%	15.7%	0.6%	38.7%	55.2%	72.1%	29.4%
GWALIOR	0.4%	0.3%	1.6%	20.8%	0.4%	34.6%	34.0%	32.7%	34.8%
SHAHNOL	1.1%	0.1%	1.6%	1.1%	0.1%	5.0%	84.7%	95.0%	47.0%
CHHINDWARA	5.1%	0.3%	0.6%	3.3%	0.4%	12.6%	80.4%	93.6%	38.3%
DURG	1.4%	0.1%	2.7%	7.2%	0.3%	17.9%	51.7%	61.5%	36.4%
INDORE	0.7%	0.8%	7.1%	33.0%	4.2%	46.1%	26.3%	35.5%	22.1%
BHOPAL	0.2%	0.1%	1.7%	34.4%	0.6%	42.4%	32.5%	89.8%	19.0%
MADHYA PRADESH	1.0%	0.2%	2.4%	6.1%	0.5%	25.0%	74.9%	82.9%	48.3%

Source: Census of India, 1991, Madhya Pradesh Household tables (HH Series)

HA 13 - Households by Type of Fuels Used -1991

District	Bio-gas			Kerosene			Others			Households using Polluting Fuels		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
RAIGHGARH	0.1%	0.0%	0.4%	0.5%	0.1%	3.6%	0.2%	0.2%	0.3%	0.7%	0.3%	5.3%
PANNA	0.1%	0.0%	0.3%	0.3%	0.2%	1.6%	0.4%	0.4%	0.7%	0.8%	0.6%	2.1%
DAMOH	0.1%	0.0%	0.5%	0.5%	0.2%	2.3%	0.2%	0.2%	0.3%	0.9%	0.3%	3.7%
BASTAR	0.0%	0.1%	0.1%	0.7%	0.2%	2.6%	0.2%	0.2%	0.7%	0.9%	0.3%	7.8%
CHHATARPUR	0.1%	0.1%	0.4%	0.7%	0.1%	3.4%	0.4%	0.5%	0.3%	0.9%	0.2%	3.9%
TIKAMGARH	0.2%	0.2%	0.8%	0.6%	0.1%	2.9%	0.3%	0.3%	0.4%	0.9%	0.4%	3.9%
MANDLA	0.1%	0.0%	0.5%	0.5%	0.2%	4.5%	0.3%	0.3%	0.5%	0.9%	0.3%	8.1%
SEONI	0.1%	0.0%	0.3%	0.8%	0.2%	5.0%	0.5%	0.5%	0.2%	1.0%	0.5%	5.8%
BHIND	0.1%	0.0%	0.0%	0.5%	0.2%	3.0%	0.3%	0.3%	0.3%	1.1%	0.3%	4.2%
BALAGHAT	0.2%	0.3%	0.3%	1.1%	0.2%	9.5%	0.1%	0.1%	0.1%	1.3%	0.4%	10.1%
MORENA	0.1%	0.0%	0.2%	0.9%	0.1%	3.8%	0.4%	0.4%	0.3%	1.5%	0.2%	6.5%
RAJNANDGAON	0.1%	0.1%	0.6%	0.9%	0.4%	3.55%	0.4%	0.4%	0.6%	1.6%	0.6%	6.9%
NARSIMHAPUR	0.3%	0.1%	0.1%	1.6%	0.4%	831%	0.3%	0.2%	0.3%	1.9%	0.5%	9.8%
GUNA	0.2%	0.1%	0.7%	1.5%	0.5%	5.5%	0.3%	0.2%	0.3%	1.9%	0.6%	7.3%
SHIVPURI	0.1%	0.1%	0.1%	1.7%	0.3%	10.0%	0.3%	0.3%	0.3%	2.3%	0.7%	11.3%
DATIA	0.1%	0.1%	0.1%	2.3%	0.4%	8.4%	0.4%	0.3%	0.4%	2.4%	0.5%	8.6%
REWA	0.2%	0.1%	0.7%	2.3%	0.6%	11.1%	0.4%	0.3%	0.5%	2.5%	0.7%	11.9%
RAJGARH	0.1%	0.2%	0.4%	2.1%	0.4%	10.4%	0.3%	0.2%	0.5%	2.5%	0.8%	11.1%
RAIPUR	0.1%	0.1%	0.2%	1.4%	0.5%	5.5%	0.3%	0.3%	0.6%	2.6%	0.9%	9.7%
VIDISHA	0.1%	0.1%	0.1%	2.0%	0.3%	8.8%	0.3%	0.2%	0.4%	2.6%	0.4%	11.3%
SHAJAPUR	0.2%	0.1%	0.2%	2.5%	0.6%	11.3%	0.3%	0.3%	0.5%	3.0%	0.8%	13.2%
SEHORE	0.1%	0.2%	0.1%	2.6%	0.6%	11.5%	0.2%	0.1%	0.4%	3.1%	0.7%	13.4%
RAISEN	0.1%	0.1%	0.2%	2.8%	0.7%	13.4%	0.4%	0.4%	0.4%	3.1%	0.9%	14.0%
SAGAR	0.1%	0.3%	0.2%	2.0%	0.2%	6.9%	0.3%	0.3%	0.4%	3.2%	0.5%	10.3%
SATNA	0.2%	0.4%	0.5%	2.5%	0.5%	10.3%	0.4%	0.3%	0.5%	3.3%	0.9%	12.7%
JHABUA	0.1%	1.5%	0.3%	2.5%	1.2%	15.0%	0.7%	0.6%	0.5%	3.5%	1.4%	22.5%
WEST NIMAR	0.3%	0.2%	0.5%	3.0%	1.3%	12.6%	4.2%	4.9%	0.9%	3.9%	1.6%	16.4%
HOSHANGABAD	0.4%	0.1%	0.2%	3.4%	0.5%	10.9%	0.4%	0.4%	0.7%	4.3%	0.6%	13.9%
EAST NIMAR	1.2%	0.2%	0.3%	4.3%	1.0%	13.8%	0.8%	0.9%	0.3%	5.1%	1.2%	16.6%
DHAR	0.2%	0.0%	0.1%	4.7%	2.5%	18.5%	1.3%	1.4%	0.4%	5.5%	3.1%	21.0%
SIDHI	0.1%	0.0%	0.4%	1.1%	0.3%	9.1%	1.1%	0.2%	0.9%	5.8%	2.7%	39.4%
MANDSAUR	0.2%	0.2%	0.6%	5.3%	1.5%	18.3%	0.3%	1.3%	0.4%	6.5%	1.9%	22.5%
BILASPUR	0.1%	0.2%	0.3%	1.4%	0.4%	6.3%	0.5%	0.2%	0.5%	7.1%	3.1%	26.5%
DEWAS	0.2%	0.2%	0.1%	5.4%	0.7%	17.8%	1.0%	0.5%	0.4%	7.1%	0.9%	23.5%
RATLAM	0.1%	0.2%	0.5%	5.1%	1.0%	14.1%	0.2%	1.2%	0.5%	8.3%	1.3%	23.9%
BETUL	0.2%	0.2%	0.2%	2.3%	0.4%	9.5%	0.1%	0.1%	0.4%	8.6%	0.8%	38.4%
SARGUJA	0.0%	0.0%	0.3%	0.4%	0.1%	2.1%	0.5%	0.1%	0.2%	10.2%	2.9%	60.3%
JABALPUR	0.2%	0.1%	0.2%	9.1%	0.3%	20.1%	0.6%	0.2%	0.8%	11.5%	0.6%	25.3%
UJJAIN	0.2%	0.3%	0.4%	6.2%	0.6%	14.7%	0.7%	0.6%	0.6%	12.3%	1.0%	29.5%
GWALIOR	0.2%	0.3%	0.1%	11.4%	0.4%	18.9%	0.2%	0.8%	0.6%	12.7%	0.8%	20.8%
SHAHDOL	0.4%	0.0%	0.3%	0.8%	0.3%	2.7%	0.2%	0.2%	0.2%	13.3%	4.0%	47.1%
CHHINDWARA	0.0%	0.2%	0.3%	1.9%	0.5%	6.4%	0.2%	0.2%	0.4%	15.0%	4.6%	48.1%
DURG	0.2%	0.1%	0.2%	2.9%	0.4%	6.9%	0.5%	0.5%	0.6%	17.1%	1.0%	42.3%
INDORE	0.2%	0.7%	0.2%	13.6%	2.4%	18.7%	0.5%	0.5%	0.6%	20.9%	3.6%	28.7%
BHOPAL	0.3%	0.2%	0.2%	28.2%	1.3%	34.6%	0.7%	0.4%	0.7%	30.0%	1.5%	36.7%
MADHYA PRADESH	0.2%	0.1%	0.3%	3.3%	0.5%	12.6%	0.5%	0.5%	0.5%	6.4%	1.3%	23.2%

Source: Census of India, 1991, Madhya Pradesh Household tables (HH Series)

EMPLOYMENT AND LIVELIHOODS

- EL 1 Employment in Madhya Pradesh 1991
- EL 2 Dependency Ratio and Persons Without Full Employment
- EL 3 Land Use Classification in Madhya Pradesh, 1992/93
- EL 4 Land Use and Land Cover in Madhya Pradesh - NRSA
- EL 5 Land Use and Land Cover Data for Madhya Pradesh - Wastelands : 1988/89
- EL 6 Land Ownership by Social Categories, Gini Co-efficient of Operational Holdings and Tenancy Status - 1992/93
- EL 7 Average Size of Landholdings in Madhya Pradesh
- EL 8 Area, Production, Yield and Per Capita Availability of Foodgrains
- EL 9 Irrigated Area and Irrigated Holdings
- EL 10 Net and Gross Area Irrigated by Different Sources
- EL 11 Agriculture Machinery and Implements
- EL 12 Livestock Population in Madhya Pradesh, Milk Production and Veterinary Centers
- EL 13 Livelihood Profile and Madhya Pradesh - 1981 and 1991

Employment related data from the Census of 1991 has been analysed in these tables to assess the extent of dependency and un-employment in the district. Further data on agriculture, land ownership and land distribution, land classification, and other aspects of provision and access to livelihood supporting infrastructure and resources are presented in these tables. The last table attempts a preliminary analysis of the trends in employment figures of Census in nine industrial categories, and the main non-farm employment categories in 1991

EL 1 EMPLOYMENT IN MADHYA PRADESH, 1991

DISTRICT	Worker Participation Rate					Employment share			
	ALL	Male	Female	Rural	Urban	Primary	Secondary	Tertiary	Non farm sector
BHIND	27.4%	46%	4%	28%	25%	79.9%	4.3%	15.8%	20.2%
BHOPAL	31.8%	48%	14%	43%	29%	24.9%	24.5%	50.6%	75.5%
GWALIOR	30.9%	47%	11%	36%	27%	47.2%	16.7%	63.1%	53.4%
INDORE	34.3%	51%	16%	44%	30%	34.3%	22.8%	42.9%	65.8%
MORENA	31.5%	47%	12%	33%	25%	81.7%	5.0%	13.4%	18.6%
JABALPUR	37.0%	50%	23%	44%	28%	56.2%	18.6%	25.2%	44.6%
DATIA	36.8%	51%	20%	40%	27%	77.1%	6.4%	16.5%	23.0%
RAISEN	37.4%	51%	22%	39%	30%	78.6%	9.0%	12.3%	21.9%
SAGAR	39.1%	50%	26%	42%	33%	57.4%	25.6%	17.0%	43.0%
GUNA	37.0%	52%	21%	39%	28%	79.1%	6.8%	14.1%	21.0%
NARSIMHAPUR	39.6%	52%	25%	41%	29%	79.8%	6.7%	13.5%	20.3%
REWA	37.7%	46%	29%	39%	30%	79.7%	6.9%	13.4%	20.5%
VIDISHA	37.5%	52%	21%	40%	28%	79.3%	6.2%	14.6%	22.0%
DURG	43.9%	51%	37%	51%	30%	71.4%	13.1%	15.5%	30.0%
SATNA	40.3%	50%	30%	42%	32%	74.2%	12.7%	13.1%	26.9%
HOSHANGABAD	37.5%	51%	23%	41%	27%	71.4%	9.2%	19.3%	28.7%
DEWAS	41.0%	51%	30%	45%	31%	76.6%	10.3%	13.2%	23.5%
DAMOH	40.9%	53%	28%	43%	32%	63.8%	24.0%	12.1%	36.3%
BILASPUR	44.7%	52%	37%	48%	30%	82.4%	5.8%	11.8%	18.9%
UJJAIN	39.8%	52%	26%	47%	29%	65.9%	13.6%	20.5%	34.2%
SEHORE	42.0%	51%	32%	45%	29%	81.4%	5.9%	12.6%	18.6%
BALGHAT	49.8%	54%	45%	52%	30%	83.5%	7.8%	8.6%	17.9%
RAIPUR	47.1%	53%	41%	51%	32%	80.2%	7.2%	12.6%	20.0%
TIKAMGARH	42.8%	51%	33%	45%	31%	86.4%	4.6%	9.0%	13.7%
PANNA	41.6%	53%	29%	43%	31%	86.3%	4.4%	9.3%	15.5%
SHAHNOL	43.5%	54%	33%	47%	29%	85.0%	4.9%	10.1%	20.7%
SHIVPURI	42.5%	53%	30%	45%	28%	84.6%	3.8%	11.6%	16.5%
SHAJAPUR	44.7%	54%	35%	48%	31%	82.9%	5.8%	11.3%	17.2%
CHHATRAPUR	41.0%	52%	29%	44%	30%	82.6%	6.0%	11.5%	17.5%
SIDHI	43.0%	52%	34%	44%	31%	87.5%	4.3%	8.2%	14.7%
MANDSAUR	46.6%	54%	38%	51%	32%	80.3%	6.5%	13.2%	19.9%
RAIGARH	49.2%	58%	41%	51%	31%	85.6%	5.3%	9.1%	14.5%
MANDLA	51.2%	55%	47%	53%	30%	90.4%	2.8%	6.9%	9.7%
CHHINDWARA	43.5%	52%	34%	48%	28%	81.3%	5.4%	13.4%	23.2%
EAST NIMAR	43.7%	53%	34%	49%	29%	76.7%	9.8%	13.5%	23.4%
SEONI	49.2%	54%	44%	51%	28%	87.3%	3.4%	9.3%	12.7%
SARGUJA	47.4%	57%	38%	50%	26%	89.0%	2.7%	8.3%	15.7%
RAJGARH	47.0%	55%	38%	50%	30%	82.4%	6.6%	11.1%	17.7%
RAJNANDGAON	52.4%	55%	50%	56%	34%	86.2%	5.1%	8.7%	13.9%
DHAR	46.7%	53%	40%	49%	33%	84.1%	5.9%	10.0%	15.9%
RATLAM	46.0%	55%	37%	53%	30%	74.2%	9.1%	16.7%	25.9%
WEST NIMAR	45.9%	52%	39%	49%	31%	84.8%	4.8%	10.4%	15.2%
BETUL	46.7%	53%	40%	51%	27%	84.8%	4.7%	10.5%	17.5%
BASTAR	53.6%	59%	49%	55%	31%	89.5%	3.2%	7.2%	11.0%
JHABUA	54.0%	56%	52%	56%	33%	90.6%	2.7%	6.7%	9.6%
MADHYA PRADESH	42.8%	52%	33%	47%	30%	77.5%	8.4%	14.1%	23.3%

Source: Census of India 1991, Sanket-MPHRO

EL 1 EMPLOYMENT IN MADHYA PRADESH, 1991

DISTRICT	District: Rural				District: Urban			
	Primary	Secondary	Tertiary	Non-Form sector	Primary	Secondary	Tertiary	Non farm sector
BHIND	89.3%	2.1%	8.6%	10.8%	39.7%	13.9%	46.4%	60.6%
BHOPAL	87.1%	5.9%	7.0%	13.5%	5.5%	30.2%	64.3%	94.9%
GWALIOR	89.1%	3.4%	7.6%	11.8%	12.9%	27.7%	59.5%	87.5%
INDORE	81.7%	8.0%	10.3%	18.5%	5.9%	31.8%	62.4%	94.2%
MORENA	92.2%	2.2%	5.6%	8.0%	32.0%	17.8%	50.1%	68.8%
JABALPUR	83.8%	9.5%	6.7%	17.2%	9.6%	34.0%	56.4%	90.9%
DATIA	89.6%	3.5%	6.9%	10.5%	21.7%	19.2%	59.1%	78.5%
RAISEN	86.9%	5.7%	7.4%	13.7%	25.8%	30.3%	43.8%	74.3%
SAGAR	73.4%	20.6%	6.0%	27.0%	12.0%	39.7%	48.3%	88.1%
GUNA	91.5%	3.3%	5.2%	8.6%	18.5%	24.0%	57.6%	81.6%
NARSIMHAPUR	88.0%	4.6%	7.4%	12.0%	17.7%	22.6%	59.6%	82.4%
REWA	86.3%	5.1%	8.6%	13.9%	35.2%	19.2%	45.6%	65.0%
VIDISHA	91.1%	3.3%	5.6%	10.3%	18.9%	20.9%	60.2%	81.4%
DURG	90.1%	4.5%	5.4%	10.5%	13.9%	39.4%	46.7%	89.9%
SATNA	83.7%	9.2%	7.1%	17.6%	27.6%	30.0%	42.4%	72.6%
HOSHANGABAD	87.4%	5.2%	7.4%	12.8%	14.0%	23.6%	62.4%	86.1%
DEWAS	89.6%	4.2%	6.2%	10.4%	27.2%	33.3%	39.6%	73.0%
DAMOH	72.8%	20.9%	6.3%	27.3%	12.8%	42.0%	45.2%	87.5%
BILASPUR	90.3%	3.7%	6.0%	10.9%	26.1%	20.6%	53.3%	76.2%
UJJAIN	90.3%	4.2%	5.5%	9.8%	11.6%	34.5%	53.9%	88.7%
SEHORE	90.4%	3.6%	6.0%	9.6%	30.9%	20.3%	53.7%	74.1%
BALGHAT	87.2%	7.2%	5.6%	14.0%	18.4%	16.6%	52.4%	74.8%
RAIPUR	90.2%	4.3%	5.3%	9.9%	51.6%	24.4%	57.2%	81.8%
TIKAMGARH	92.1%	3.3%	4.7%	8.0%	41.2%	12.9%	35.5%	48.6%
PANNA	91.6%	3.3%	5.0%	10.1%	46.4%	13.6%	45.2%	61.6%
SHAHDOL	92.0%	3.2%	4.7%	10.5%	23.4%	14.3%	39.3%	77.1%
SHIVPURI	92.6%	2.1%	5.3%	8.3%	35.1%	16.7%	59.9%	78.8%
SHAJAPUR	90.4%	3.9%	5.7%	9.6%	43.2%	17.8%	47.1%	64.9%
CHHATRAPUR	90.1%	4.4%	5.5%	10.0%	34.0%	14.0%	42.8%	56.8%
SIDHI	90.6%	3.6%	5.8%	10.8%	28.9%	16.9%	49.1%	82.6%
MANDSAUR	90.9%	3.7%	5.4%	9.3%	20.5%	19.9%	51.3%	71.4%
RAIGARH	90.5%	4.1%	5.4%	9.6%	27.5%	21.3%	58.1%	79.7%
MANDLA	93.5%	2.2%	4.3%	6.6%	39.4%	13.6%	58.9%	72.8%
CHHINDWARA	89.7%	3.3%	6.9%	12.0%	16.5%	15.6%	44.9%	78.2%
EAST NIMAR	91.3%	3.4%	5.3%	8.8%	19.8%	36.1%	47.5%	83.6%
SEONI	91.7%	2.4%	5.9%	8.3%	46.8%	19.2%	61.0%	80.3%
SARGUJA	93.0%	2.1%	4.9%	8.5%	26.3%	9.9%	43.3%	90.6%
RAJGARH	90.8%	4.2%	4.9%	9.2%	26.3%	22.1%	51.7%	73.9%
RAJNANDGAON	92.9%	2.9%	4.2%	7.3%	28.6%	24.0%	47.3%	71.5%
DHAR	90.6%	3.8%	5.6%	9.4%	26.8%	24.1%	49.2%	73.3%
RATLAM	92.1%	3.4%	4.5%	7.9%	15.5%	27.8%	56.6%	84.5%
WEST NIMAR	92.1%	2.6%	5.3%	8.0%	28.2%	21.4%	50.4%	71.9%
BETUL	91.5%	3.1%	5.4%	9.0%	35.0%	16.9%	48.2%	81.5%
BASTAR	92.6%	2.5%	4.9%	7.5%	29.1%	17.8%	53.1%	30.3%
JHABUA	95.2%	1.6%	3.2%	5.1%	24.7%	18.1%	57.1%	75.3%
MADHYA PRADESH	89.8%	4.5%	5.7%	10.7%	20.3%	26.5%	53.2%	82.2%

Source: Census of India . 1991, Sanket – MPHDR0

EL-1 – Employment in Madhya Pradesh, 1991

District	All	All	All	All	All	All	All
	Cultivators share of main works	Agriculture labour share of main works	Agriculture allied share of main works	Mining share of main works	Household manufacturing share of main works	Non household manufacturing share of main works	Construction share of main works
BHIND	66.5%	12.6%	0.6%	0.1%	1.1%	2.0%	1.2%
BHOPAL	13.6%	9.2%	1.6%	0.4%	1.1%	14.5%	8.8%
GWALIOR	35.0%	10.2%	1.4%	0.6%	1.8%	10.7%	4.2%
INDORE	18.5%	14.8%	0.9%	0.1%	1.3%	17.5%	4.0%
MORENA	71.8%	8.8%	0.8%	0.3%	0.8%	2.6%	1.6%
JABALPUR	29.0%	24.7%	1.6%	0.8%	3.7%	12.5%	2.4%
DATIA	62.9%	13.0%	1.0%	0.1%	1.9%	2.7%	1.8%
RAISEN	38.9%	37.6%	1.5%	0.6%	2.3%	5.3%	1.4%
SAGAR	32.7%	22.7%	1.7%	0.3%	19.9%	3.8%	1.9%
GUNA	58.9%	18.8%	1.3%	0.1%	2.5%	2.6%	1.7%
NARSIMHAPUR	39.8%	38.9%	1.0%	0.1%	3.5%	2.1%	1.1%
REWA	41.1%	36.9%	1.4%	0.2%	3.0%	2.6%	1.3%
VIDISHA	43.5%	33.3%	1.2%	1.2%	1.7%	2.8%	1.6%
DURG	43.3%	25.0%	1.7%	1.4%	1.2%	9.9%	2.1%
SATNA	42.3%	29.2%	1.6%	1.1%	6.1%	5.2%	1.3%
HOSHANGABAD	36.4%	32.7%	2.3%	0.1%	2.3%	4.3%	2.6%
DEWAS	43.5%	31.8%	1.2%	0.1%	1.9%	7.1%	1.3%
DAMOH	36.5%	26.1%	1.4%	0.2%	14.9%	7.6%	1.5%
BILASPUR	55.0%	24.6%	1.5%	1.3%	1.3%	3.0%	1.4%
UJJAIN	40.8%	23.8%	1.2%	0.1%	1.8%	9.3%	2.5%
SEHORE	49.8%	30.7%	0.9%	0.0%	1.9%	2.5%	1.6%
BALGHAT	52.8%	27.5%	1.8%	1.4%	3.4%	3.7%	0.7%
RAIPUR	49.3%	28.8%	1.8%	0.3%	1.6%	4.5%	1.1%
TIKAMGARH	73.5%	11.7%	1.1%	0.1%	2.3%	1.5%	0.8%
PANNA	55.4%	27.0%	2.0%	1.8%	2.3%	1.3%	0.9%
SHAHDOL	53.1%	25.4%	0.8%	5.7%	1.8%	2.0%	1.1%
SHIVPURI	70.1%	12.3%	1.1%	1.0%	1.0%	1.5%	1.3%
SHAJAPUR	50.1%	30.8%	1.9%	0.0%	1.9%	2.3%	1.6%
CHHATRAPUR	59.6%	20.5%	2.4%	0.1%	2.9%	1.9%	1.2%
SIDHI	60.0%	24.1%	1.2%	2.2%	1.7%	1.5%	1.1%
MANDSAUR	59.2%	19.5%	1.4%	0.2%	1.3%	3.7%	1.5%
RAIGARH	60.4%	24.2%	0.9%	0.1%	2.7%	2.0%	0.6%
MANDLA	65.1%	24.3%	0.9%	0.1%	1.3%	1.0%	0.5%
CHHINDWARA	50.0%	25.9%	0.9%	4.4%	1.7%	2.2%	1.5%
EAST NIMAR	41.5%	33.3%	1.9%	0.1%	1.2%	6.8%	1.8%
SEONI	51.9%	33.8%	1.6%	0.0%	1.3%	1.3%	0.8%
SARGUJA	66.5%	16.9%	1.0%	4.7%	0.9%	1.2%	0.6%
RAJGARH	58.1%	21.4%	2.8%	0.1%	2.6%	2.6%	1.4%
RAJNANDGAON	63.7%	20.3%	2.0%	0.2%	1.5%	2.9%	0.7%
DHAR	59.2%	24.1%	0.7%	0.0%	1.0%	3.8%	1.1%
RATLAM	55.0%	18.1%	1.1%	0.0%	1.7%	5.4%	2.1%
WEST NIMAR	54.9%	28.8%	1.1%	0.0%	1.2%	2.6%	1.0%
BETUL	59.8%	24.2%	1.5%	2.4%	1.3%	2.0%	1.4%
BASTAR	73.2%	14.7%	1.1%	0.6%	1.3%	1.1%	0.8%
JHABUA	84.1%	5.9%	0.4%	0.2%	0.9%	0.8%	1.0%
MADHYA PRADESH	51.8%	23.5%	1.4%	0.9%	2.4%	4.4%	1.6%

Source Census of India, 1991, Sanket – MPHDO

EI 1- Employment In Madhya Pradesh 1991

DISTRICT	All			Child WORKS –1991 Census			
	Trade & Commerce share of main works	Transport etc.: share of main works	Other services share of main works	Children (5-14 years) as main works		Children (5-14 years) as main and marginal works	
				%*	Nos.	%*	Nos.
BHIND	3.9%	1.0%	10.9%	1.5%	4820	1.7%	5270
BHOPAL	15.9%	6.9%	27.8%	1.8%	6163	2.5%	8452
GWALIOR	10.3%	3.6%	22.3%	2.3%	8111	2.9%	10281
INDORE	16.6%	6.3%	19.9%	2.7%	11687	3.1%	13407
MORENA	4.1%	1.7%	7.6%	3.1%	14250	3.8%	17820
JABALPUR	8.6%	4.0%	12.6%	2.9%	18835	3.8%	24485
DATIA	5.1%	1.2%	10.3%	2.9%	2910	4.8%	4760
RAISEN	4.1%	1.2%	7.0%	3.6%	8612	4.9%	11651
SAGAR	5.6%	2.1%	9.3%	3.9%	17260	5.3%	23630
GUNA	4.4%	1.1%	8.6%	3.7%	12760	5.4%	18500
NARSIMHAPUR	4.8%	1.2%	7.5%	4.1%	8000	5.4%	10507
REWA	3.7%	1.2%	8.5%	4.0%	15960	5.5%	22231
VIDISHA	5.5%	1.4%	7.6%	3.9%	10287	5.5%	14536
DURG	5.2%	2.3%	8.1%	4.8%	27327	5.5%	30997
SATNA	4.9%	1.7%	6.4%	4.4%	16172	5.8%	21378
HOSANGABAD	6.1%	3.0%	10.2%	4.3%	13970	5.9%	19230
DEWAS	4.1%	1.4%	7.6%	4.8%	13382	6.2%	17266
DAMOH	4.8%	1.4%	5.9%	4.9%	11713	6.4%	15523
BILASPUR	3.8%	1.7%	6.4%	4.7%	44452	6.5%	61025
UJJAIN	7.2%	2.5%	10.8%	5.0%	17210	6.6%	22440
SEHOR	4.1%	1.4%	7.1%	4.7%	10310	6.6%	14420
BALAGHAT	3.0%	0.7%	5.0%	5.0%	15960	6.7%	21280
RAIPUR	5.0%	1.8%	5.7%	6.1%	56878	7.6%	70538
TIKAMGARH	2.9%	0.7%	5.3%	5.0%	12520	7.7%	19290
PANNA	3.0%	0.7%	5.6%	5.6%	10160	7.9%	14360
SHAHDOL	3.1%	1.0%	6.0%	5.6%	24370	7.9%	34742
SHIVPURI	3.7%	1.0%	7.0%	5.6%	15570	8.0%	22060
SHAJAPUR	4.4%	1.1%	5.7%	6.0%	16152	8.4%	22662
CHHATARPUR	4.1%	1.1%	6.2%	5.5%	16506	8.5%	25383
SIDHI	2.3%	0.7%	5.3%	5.6%	20921	8.5%	31794
MANDSAUR	5.4%	1.7%	6.1%	7.4%	28870	9.3%	36278
RAIGARH	2.8%	0.8%	5.5%	6.5%	25290	9.7%	38181
MANDLA	1.9%	0.5%	4.4%	8.5%	26220	10.3%	31850
CHHINDWARA	4.2%	1.3%	7.8%	7.9%	31200	10.5%	41496
EAST NIMAR	5.5%	2.0%	6.0%	8.5%	32370	10.6%	40490
SEONI	3.0%	0.9%	5.4%	8.2%	20525	10.7%	26.857
SARGUJA	2.3%	0.7%	5.2%	6.9%	3470	11.1%	55470
RAJGARH	4.2%	1.1%	5.7%	7.2%	18130	11.2%	28277
RAJNANDGAON	3.1%	0.9%	4.6%	9.4%	32520	11.2%	38820
DHAR	3.6%	1.2%	5.3%	8.7%	32730	11.4%	42587
RATLAM	6.7%	2.7%	7.4%	8.3%	20838	12.1%	30447
WEST NIMAR	3.9%	1.2%	5.3%	9.8%	54490	12.6%	70090
BETUL	3.1%	1.3%	6.1%	11.2%	33534	13.8%	41384
BASTAR	1.9%	0.6%	4.7%	13.4%	76042	17.7%	100584
JHABUA	2.2%	0.6%	3.9%	15.2%	47674	25.5%	79834
MADHYA PRADESH	4.8%	1.7%	7.6%	6.0%	997931	8.1%	1352563

* The Percentage are out of the total child population Source: Census of India, 1991, Sanket – MPHRO

EL 2: Dependency Ratio and Persons without Full Employment

DISTRICT	All	All	Seeking / Available for works as Percentage of population			Marginal workers (age 15-59) out of total population		
	Dependency Ratio: 1981	Dependency Ratio:1991	Total	Males	Females	Total	Male	Female
	BHOPAL	81.0%	73.7%	2.88%	2.54%	3.26%	2.5%	0.5%
INDORE	79.0%	73.7%	1.07%	1.06%	1.08%	1.9%	0.4%	3.7%
DURG	86.0%	75.2%	1.06%	1.25%	0.86%	2.2%	0.6%	3.8%
RAIGARH	81.0%	76.0%	0.77%	0.94%	0.60%	14.3%	1.1%	27.6%
JABALPUR	84.0%	77.3%	0.99%	1.20%	0.76%	5.1%	0.6%	10.0%
BALAGHAT	87.0%	77.3%	0.34%	0.41%	0.28%	10.7%	0.8%	20.6%
GWALIOR	85.0%	79.9%	1.39%	1.53%	1.21%	3.7%	0.6%	7.6%
MANDLA	90.0%	80.0%	0.47%	0.51%	0.42%	7.1%	0.7%	13.6%
BASTAR	87.0%	80.2%	0.31%	0.31%	0.30%	14.7%	0.9%	28.5%
RAIPUR	88.0%	80.7%	0.23%	0.30%	0.16%	4.9%	0.6%	9.2%
RAJNANDGAON	94.0%	80.6%	0.58%	0.77%	0.39%	4.0%	0.9%	7.1%
SARGUJA	82.0%	81.3%	0.51%	0.58%	0.43%	7.9%	1.0%	35.6%
SHAHDOL	86.0%	81.5%	0.82%	0.96%	0.67%	9.0%	0.9%	17.8%
UJJAIN	90.0%	82.5%	0.33%	0.39%	0.26%	5.3%	0.7%	10.3%
RATLAM	89.0%	82.6%	0.52%	0.57%	0.48%	9.1%	1.0%	17.7%
MANDSAUR	90.0%	83.0%	0.36%	0.43%	0.29%	7.1%	0.7%	14.0%
SEONI	96.0%	84.5%	0.33%	0.43%	0.23%	2.5%	1.0%	24.3%
BILASPUR	91.0%	85.2%	0.70%	0.85%	0.55%	6.1%	0.8%	11.5%
NARSIMHAPUR	95.0%	86.2%	0.61%	0.70%	0.51%	5.5%	0.5%	11.1%
DATIA	91.0%	86.4%	1.27%	1.25%	1.28%	8.8%	1.1%	17.9%
SATNA	93.0%	86.7%	0.50%	0.64%	0.35%	7.0%	1.0%	13.5%
CHHINDWARA	96.0%	88.0%	0.30%	0.39%	0.21%	9.5%	0.7%	18.8%
RAJGARH	94.0%	88.3%	0.78%	0.86%	0.70%	15.8%	1.1%	31.7%
HOSHANGABAD	91.0%	88.5%	0.97%	0.99%	0.93%	6.1%	0.6%	12.3%
PANNA	95.0%	88.9%	0.51%	0.43%	0.60%	10.1%	1.0%	20.4%
SHIVPURI	93.0%	89.1%	0.33%	0.34%	0.32%	12.0%	0.6%	25.8%
DAMOH	96.0%	89.6%	1.16%	1.26%	1.04%	8.5%	0.8%	17.1%
SHAJAPUR	97.0%	89.7%	0.35%	0.37%	0.34%	10.1%	0.9%	20.0%
DHAR	99.0%	90.0%	0.57%	0.65%	0.48%	8.5%	0.6%	16.9%
BHIND	94.0%	90.3%	0.36%	0.46%	0.24%	1.7%	0.3%	3.4%
EAST NIMAR	93.0%	90.3%	0.46%	0.56%	0.35%	6.1%	0.6%	12.0%
SAGAR	94.0%	91.1%	0.62%	0.69%	0.54%	7.6%	0.9%	15.3%
DEWAS	98.0%	91.7%	0.91%	1.01%	0.80%	7.2%	0.8%	14.2%
TIKAMGARH	97.0%	91.9%	0.61%	0.73%	0.48%	12.7%	0.8%	26.4%
GUNA	96.0%	92.1%	1.59%	1.11%	2.14%	9.3%	0.7%	19.0%
VIDISHA	97.0%	92.7%	1.55%	1.47%	1.64%	7.2%	0.9%	14.5%
BETUL	98.0%	92.9%	0.43%	0.48%	0.39%	7.2%	0.7%	13.9%
MORENA	96.0%	93.2%	0.24%	0.29%	0.19%	4.5%	0.3%	9.6%
REWA	97.0%	93.3%	0.54%	0.63%	0.44%	6.4%	1.1%	12.0%
CHHARATPUR	99.0%	93.4%	0.67%	0.68%	0.65%	10.7%	0.8%	22.4%
SIDHI	98.0%	94.0%	0.85%	0.94%	0.75%	11.2%	1.2%	22.3%
RAISEN	98.0%	94.3%	0.76%	0.70%	0.83%	6.2%	0.8%	12.3%
WEST NIMAR	102.0%	95.0%	0.41%	0.48%	0.34%	9.5%	0.6%	18.9%
SEHORE	99.0%	95.9%	0.46%	0.54%	0.38%	9.3%	0.8%	18.8%
JHABUA	100.0%	98.9%	0.28%	0.31%	0.26%	22.2%	1.4%	43.4%
MADHYA PRADESH		85.2%	0.68%	0.75%	0.61%	8.0%	0.8%	15.9%

Source: Census of India , 1991, Sanket – MPHDRO

EL -2 DEPENDENCY RATIO AND PERSONS WITHOUT FULL EMPLOYMENT

DISTRICT	All		All	All	Rural	Rural	Rural	Rural
	Non works (age 5-59) out of total population			Person without full employment	Dependency Ratio: 1991	Seeking available for work as percentage of Population		
	Total	Male	Female			Total	Male	Female
BHOPAL	48.4%	22.8%	78.0%	11.3%	98.2%	0.34%	0.35%	0.34%
INDORE	45.0%	19.4%	73.9%	7.9%	86.5%	0.88%	0.86%	0.90%
DURG	29.9%	19.5%	40.9%	8.0%	82.6%	0.55%	0.73%	0.37%
RAIGARH	24.9%	12.1%	37.6%	12.3%	76.7%	0.58%	0.73%	0.44%
JABALPUR	40.4%	20.4%	62.8%	9.9%	85.2%	0.55%	0.66%	0.44%
BALAGHAT	20.1%	14.4%	25.7%	10.3%	78.3%	0.22%	0.26%	0.16%
GWALIOR	48.9%	22.2%	81.8%	10.2%	89.9%	0.77%	0.91%	0.60%
MANDLA	18.7%	12.0%	25.5%	7.8%	80.8%	0.36%	0.40%	0.32%
BASTAR	16.2%	8.3%	24.1%	10.7%	81.5%	0.25%	0.26%	0.25%
RAIPUR	23.8%	14.4%	33.3%	6.9%	83.5%	0.11%	0.17%	0.05%
RAJNANDGAON	16.5%	12.3%	20.5%	6.2%	83.5%	0.29%	0.45%	0.14%
SARGUJA	25.4%	11.1%	40.3%	13.5%	82.3%	0.35%	0.37%	34.00%
SHAHDOL	29.8%	13.5%	47.4%	9.6%	82.9%	0.00%	0.60%	0.52%
UJJAIN	35.5%	15.6%	57.1%	7.5%	89.6%	0.56%	0.15%	0.07%
RATLAM	26.6%	12.2%	42.0%	8.9%	89.1%	0.11%	0.22%	0.19%
MANDSAUR	24.8%	12.2%	38.2%	7.6%	85.1%	0.21%	0.22%	0.10%
SEONI	20.3%	13.0%	27.8%	10.6%	85.8%	0.16%	0.34%	0.13%
BILASPUR	26.3%	15.9%	38.2%	8.3%	88.2%	0.24%	0.81%	0.49%
NARSIMHAPUR	35.4%	15.8%	57.4%	8.0%	88.6%	0.65%	0.52%	0.33%
DATIA	38.3%	15.5%	65.3%	10.3%	78.5%	0.43%	0.71%	0.48%
SATNA	33.5%	18.0%	50.2%	9.2%	89.0%	0.61%	0.57%	0.28%
CHHINDWARA	26.1%	14.9%	44.3%	9.3%	92.0%	0.43%	0.23%	0.10%
RAJGARH	23.5%	11.2%	36.8%	12.2%	89.1%	0.17%	0.58%	0.42%
HOSHANGABAD	37.6%	16.2%	62.0%	8.7%	93.9%	0.50%	0.41%	0.27%
PANNA	28.7%	13.0%	52.0%	9.5%	89.8%	0.34%	0.28%	0.44%
SHIVPURI	31.1%	13.0%	47.7%	10.0%	90.8%	0.36%	0.24%	0.19%
DAMOH	26.6%	12.4%	52.0%	9.1%	91.5%	0.22%	0.83%	0.23%
SHAJAPUR	21.6%	12.0%	42.4%	8.9%	91.4%	0.84%	0.27%	0.31%
DHAR	53.7%	11.8%	32.1%	8.2%	92.6%	0.25%	0.50%	0.21%
BHIND	27.6%	21.0%	92.9%	7.2%	91.4%	0.41%	0.39%	0.13%
EAST NIMAR	33.3%	11.8%	44.5%	6.8%	95.2%	0.31%	0.20%	0.34%
SAGAR	30.2%	15.4%	54.5%	8.9%	96.3%	0.16%	0.40%	0.54%
DEWAS	27.8%	14.0%	48.0%	8.5%	96.1%	0.37%	0.80%	0.28%
TIKAMGARH	36.6%	14.5%	43.2%	11.2%	92.9%	0.67%	0.45%	2.39%
GUNA	36.5%	12.3%	64.4%	9.7%	94.1%	0.37%	1.12%	1.15%
VIDISHA	36.5%	12.9%	64.1%	8.8%	96.2%	0.71%	0.98%	0.18%
BETUL	23.4%	13.3%	34.0%	7.5%	95.6%	0.06%	0.22%	0.11%
MORENA	45.3%	17.7%	78.5%	7.5%	95.2%	0.20%	0.21%	0.35%
REWA	36.8%	22.2%	52.1%	9.6%	96.0%	0.17%	0.57%	0.51%
CHHARATPUR	31.7%	14.8%	51.4%	10.1%	95.8%	0.46%	0.54%	0.64%
SIDHI	27.0%	13.0%	42.4%	10.1%	95.1%	0.53%	0.85%	0.66%
RAISEN	36.2%	13.8%	61.9%	7.7%	97.0%	0.75%	0.49%	0.58%
WEST NIMAR	22.2%	11.6%	33.5%	8.3%	98.7%	0.53%	0.16%	0.09%
SEHORE	28.6%	14.7%	44.0%	9.0%	98.5%	0.13%	0.31%	0.21%
JHABUA	12.0%	7.9%	16.2%	13.3%	101.5%	0.14%	0.17%	0.12%
MADHYA PRADESH	30.0%	14.9%	46.3%	9.1%	89.0%	0.41%	0.47%	0.36%

Source: Census of India 1991, Sanket - MPHRO

EL 2 Dependency Ratio and Persons without Full Employment

District	Rural	Rural	Rural	Rural	Rural	Rural	Rural	Rural
	% of Marginal Workers (age 15-59) out of Rural Population			% of None Workers (age 15-59) out of Rural Population			Persons- without full Employment	Dependency Ratio : 1991
Bhopal	11.4%	1.2%	23.2%	26.4%	11.0%	44.1%	7.1%	68.7%
Indore	5.5%	0.5%	11.0%	26.8%	12.5%	42.7%	6.2%	63.0%
Durg	2.9%	0.6%	5.1%	16.2%	15.0%	17.5%	12.4%	70.2%
Raigarh	15.7%	1.2%	30.0%	21.9%	10.5%	33.2%	9.0%	68.7%
Jabalpur	8.8%	0.9%	17.2%	27.3%	13.3%	42.3%	10.2%	68.7%
Balaghat	11.7%	0.8%	22.5%	15.5%	12.7%	20.2%	9.4%	73.5%
Gwalior	8.6%	1.0%	18.2%	38.0%	14.1%	68.0%	7.5%	69.0%
Mandla	760.0%	0.6%	14.5%	15.7%	10.6%	20.8%	108.0%	69.9%
Bastar	15.8%	0.9%	30.5%	13.3%	6.8%	19.8%	604.0%	65.1%
Raipur	5.9%	0.7%	11.0%	17.0%	11.7%	233.0%	5.3%	69.9%
Rajnandgaon	4.5%	1.0%	8.0%	10.2%	9.5%	10.8%	13.9%	67.7%
Sarguja	20.3%	0.1%	40.1%	21.1%	8.9%	33.6%	9.4%	74.5%
Shahdol	11.0%	1.0%	21.3%	23.8%	10.5%	37.7%	7.0%	76.6%
Ujjain	8.5%	0.8%	16.8%	22.6%	9.4%	36.9%	8.8%	72.7%
Ratlam	12.9%	1.2%	25.3%	13.5%	6.7%	20.7%	7.4%	69.9%
Mandsaur	8.7%	0.7%	17.1%	17.5%	9.4%	26.1%	10.6%	76.2%
Seoni	13.7%	1.1%	26.6%	16.4%	11.1%	21.8%	8.1%	73.5%
Bilaspur	7.2%	1.0%	13.5%	21.4%	13.7%	29.3%	7.6%	82.2%
Narshimapur	6.4%	1.0%	12.8%	32.0%	13.9%	52.2%	9.9%	78.2%
Datia	10.7%	0.6%	22.1%	33.7%	12.9%	58.5%	9.2%	75.8%
Satna	8.2%	1.1%	15.8%	29.8%	16.6%	43.8%	9.2%	84.1%
Chhindwara	18.8%	1.2%	23.9%	21.2%	10.6%	32.1%	12.7%	75.3%
Rajgarh	12.1%	0.8%	37.4%	18.1%	8.9%	28.0%	7.7%	83.0%
Hosangabad	8.4%	1.2%	17.0%	30.1%	11.5%	50.8%	9.3%	80.3%
Panna	11.2%	0.7%	22.6%	28.6%	11.2%	40.0%	10.2%	81.6%
Shivpuri	14.2%	1.1%	30.6%	24.1%	10.8%	47.5%	8.4%	82.0%
Damoh	9.7%	0.7%	19.4%	27.4%	9.2%	34.1%	9.1%	74.5%
Shajapur	11.8%	0.9%	23.6%	21.5%	10.0%	25.3%	8.1%	85.9%
Dhar	9.7%	60.0%	19.2%	17.5%	19.2%	92.3%	6.7%	78.4%
Bhind	2.0%	30.0%	4.0%	52.6%	7.7%	27.9%	6.4%	79.5%
East Nimar	8.1%	60.0%	16.1%	17.5%	11.2%	46.8%	8.4%	80.1%
Sagar	9.7%	1.0%	19.7%	27.7%	11.5%	35.6%	8.4%	87.4%
Dewas	9.2%	90.0%	18.2%	23.1%	12.5%	35.5%	114.0%	83.8%
Tikamgarh	14.8%	90.0%	30.7%	23.7%	9.4%	59.2%	10.0%	79.7%
Guna	11.3%	80.0%	23.1%	32.8%	9.4%	57.7%	8.1%	81.8%
Vidisha	8.8%	1.0%	17.9%	31.8%	10.4%	21.9%	7.2%	86.1%
Betul	880%	80.0%	16.8%	16.1%	15.6%	74.4%	7.2%	79.8%
Morena	5.40%	30.0%	11.6%	42.4%	20.6%	47.8%	9.3%	83.9%
Rewa	7.2%	1.2%	13.4%	34.1%	12.0%	44.4%	10.1%	78.3%
Chhatarpur	12.7%	80.0%	26.6%	27.0%	12.9%	39.4%	10.2%	80.9%
Sidhi	12.0%	1.3%	23.6%	25.5%	12.0%	57.9%	7.3%	76.8%
Raisen	7.1%	80.0%	14.2%	33.5%	9.2%	24.6%	8.0%	84.2%
West Nimar	11.2%	70.0%	22.1%	16.7%	12.6%	35.3%	9.0%	84.2%
Sehore	11.2%	90.0%	24.4%	23.4%	12.6%	10.2%	9.0%	75.4%
Jhabua	24.2%	1.5%	46.9%	8.2%	6.1%	34.7%	13.5%	73.7%
Madhya Pradesh	10.2%	0.9%	2010.0%	22.8%	11.6%	3470.0%	890.0%	73.7%

Source: Census of India ,Sanket-MPHDRO

EL 2: Dependency Ratio and Persons Without Full Employment

District	Urban	Urban	Urban	Urban	Urban	Urban	Urban	Urban	Urban	Urban
	Seeking, Available for Works as Percentage of Population			% of marginal workers (age 15-59) out of total Urban Population			% of non workers (age 15-59) out of total Urban Population			Persons without Full Employment
	Total	Males	Females	Total	Males	Females	Total	Males	Females	
Bhopal	3.52%	3.10%	3.98%	0.6%	0.4%	0.8%	53.1%	25.3%	85.3%	11.9%
Indore	1.15%	1.15%	1.15%	0.5%	0.3%	0.8%	52.1%	22.1%	86.4%	8.3%
Durg	1.99%	2.16%	1.80%	1.0%	0.6%	1.6%	52.4%	26.4%	82.9%	11.3%
Raigarh	2.63%	2.94%	2.29%	2.0%	0.4%	3.8%	51.9%	25.7%	51.3%	11.8%
Jabalpur	1.51%	2.94%	1.15%	1.0%	0.4%	1.8%	54.7%	24.8%	86.2%	10.9%
Balaghat	1.50%	1.82%	1.29%	1.6%	0.4%	2.8%	52.4%	29.4%	78.0%	11.4%
Gwalior	1.82%	1.70%	1.64%	0.5%	0.3%	0.9%	55.8%	27.4%	90.5%	10.8%
Mandla	1.72%	1.81%	1.61%	2.2%	1.5%	3.0%	52.4%	27.1%	79.6%	11.2%
Bastar	1.07%	1.04%	1.10%	2.1%	1.5%	2.5%	50.4%	24.3%	79.3%	9.9%
Raipur	0.73%	0.82%	0.64%	1.1%	0.3%	1.8%	49.3%	24.1%	77.1%	8.7%
Rajnandgaon	2.10%	2.43%	1.76%	1.5%	0.5%	2.6%	47.2%	25.6%	70.0%	10.8%
Sarguja	1.64%	2.04%	1.17%	0.9%	0.4%	1.4%	55.3%	25.6%	91.2%	10.1%
Shadhol	1.79%	2.24%	1.27%	2.0%	0.6%	3.8%	51.7%	23.8%	85.7%	10.3%
Ujjain	0.66%	0.74%	0.57%	0.8%	0.4%	1.2%	53.3%	24.1%	85.7%	8.2%
Ratlam	1.20%	1.32%	1.08%	1.7%	0.6%	2.9%	51.9%	22.7%	83.3%	9.0%
Mandsaur	1.03%	1.11%	0.94%	2.2%	0.6%	3.9%	47.9%	20.9%	77.4%	8.4%
Seoni	1.22%	1.30%	1.15%	1.5%	0.4%	2.7%	55.2%	28.9%	85.0%	10.8%
Bilaspur	0.97%	1.06%	0.86%	1.3%	0.4%	2.3%	51.0%	25.1%	80.2%	9.4%
Narshimapur	1.62%	1.71%	1.59%	0.8%	0.3%	1.5%	53.4%	25.9%	85.3%	10.1%
Datia	3.55%	3.16%	4.00%	2.3%	1.1%	3.8%	53.5%	24.2%	88.1%	11.9%
Satna	0.78%	0.93%	0.62%	2.4%	0.6%	4.5%	47.4%	23.1%	76.2%	9.0%
Chhindwara	0.76%	0.90%	0.61%	1.4%	0.4%	2.4%	53.6%	27.5%	83.5%	9.7%
Rajgarh	2.15%	2.20%	2.08%	1.8%	0.5%	3.3%	49.5%	22.0%	91.2%	9.5%
Hosangabad	2.62%	2.53%	2.72%	0.6%	0.4%	0.8%	55.7%	27.1%	89.5%	11.3%
Panna	1.53%	1.46%	1.67%	2.8%	0.4%	5.5%	48.8%	24.3%	78.7%	10.3%
Shivpuri	0.95%	0.89%	1.01%	1.8%	0.3%	3.6%	52.7%	24.0%	88.1%	9.1%
Damoh	2.58%	3.19%	1.91%	3.5%	0.7%	6.7%	47.0%	25.7%	72.0%	12.1%
Shajapur	0.83%	0.80%	0.86%	2.3%	0.8%	4.0%	48.9%	21.2%	79.8%	8.2%
Dhar	1.62%	1.60%	1.65%	1.3%	0.3%	2.5%	46.6%	21.6%	76.7%	9.1%
Bhind	0.55%	0.74%	0.33%	0.5%	0.2%	1.0%	58.2%	27.5%	95.1%	8.8%
East Nimar	1.23%	1.51%	0.92%	1.1%	0.4%	1.8%	52.0%	21.7%	84.6%	8.1%
Sagar	1.23%	1.41%	1.04%	2.8%	0.4%	5.4%	45.9%	24.3%	72.0%	10.2%
Dewas	1.58%	1.6%	1.55%	1.9%	0.5%	3.5%	48.8%	20.3%	81.4%	8.6%
Tikamgarh	1.79%	2.09%	1.46%	3.0%	0.5%	5.8%	47.6%	23.7%	74.9%	10.1%
Guna	1.10%	1.06%	1.13%	1.2%	0.4%	2.1%	51.8%	23.4%	85.5%	8.4%
Vidisha	3.51%	3.42%	3.60%	1.2%	0.5%	1.9%	53.8%	25.3%	87.4%	11.7%
Betul	1.45%	1.56%	1.32%	0.7%	0.4%	1.1%	53.2%	24.1%	87.2%	8.8%
Morena	1.52%	0.56%	0.48%	1.1%	0.3%	2.0%	56.3%	215.6%	93.7%	8.6%
Rewa	0.95%	0.95%	0.95%	2.1%	0.5%	4.1%	50.6%	29.4%	76.1%	10.9%
Chhatarpur	1.26%	1.28%	1.23%	2.8%	0.6%	5.5%	50.4%	25.7%	79.6%	10.1%
Sidhi	2.33%	2.15%	2.57%	0.3%	0.1%	0.6%	46.9%	17.9%	89.9%	8.5%
Raisen	1.97%	1.78%	2.20%	1.6%	0.8%	2.5%	49.4%	22.7%	82.4%	9.6%
West Nimar	2.02%	2.23%	1.78%	1.2%	0.4%	2.1%	49.7%	23.0%	80.1%	9.5%
Sehore	1.37%	1.57%	1.15%	1.4%	0.6%	2.4%	50.9%	23.6%	83.3%	8.8%
Jhabua	1.76%	1.74%	1.79%	4.9%	1.1%	9.1%	47.6%	23.4%	74.2%	11.3%
Madhya Pradesh	1.57%	1.65%	1.47%	1.3%	0.5%	2.2%	51.9%	24.8%	83.3%	9.9%

Source: Census of India 1991, Sanket - MPHRO

EI-3 Land Use Classification in Madhya Pradesh, 1992/93

District	Geographical Area-1992-93	Total Cropped Area-1992-93	Net Area Sown 1992-93	%Of Net Area Sown to Geographical Area-1992-93	Area Sown More Than Once-1992-93	%Of Area Sown More Than Once to Net Area Sown-1992-93	Cropping Intensity-1992-93
Ujjain	609.80	680.60	474.40	77.80	206.20	43.47	143.47
Bhind	445.20	365.00	336.50	75.58	28.50	8.47	108.47
Vidisha	730.20	581.10	523.80	10.73	57.30	10.94	110.94
Shajapur	617.80	560.30	432.60	70.02	127.70	29.52	129.52
Indore	383.10	368.60	259.20	67.66	109.40	42.21	142.21
Rajgarh	611.70	500.10	409.90	67.01	90.20	22.01	122.01
Ratlam	486.50	474.90	319.50	65.67	155.40	48.64	148.64
Datia	203.50	140.70	132.70	65.21	8.00	6.03	106.03
Durg	870.20	760.50	546.90	62.85	213.60	39.06	139.06
Dhar	819.50	649.30	502.10	61.27	147.20	29.32	129.32
Bhopal	270.80	192.80	157.40	58.12	35.40	22.49	122.49
Rewa	268.80	473.90	365.40	58.11	108.50	29.69	129.69
Mandsaur	946.40	825.70	549.40	58.05	276.30	10.74	150.29
Guna	1098.20	695.20	627.80	57.17	67.40	26.48	110.74
Narsimhapur	513.60	370.60	293.00	57.05	77.60	28.08	126.48
Sehore	656.40	473.00	369.30	56.26	103.70	24.29	128.08
Bilaspur	1966.00	1026.30	825.70	54.32	200.60	40.17	124.29
Jhabua	675.70	505.60	360.70	53.38	144.90	21.61	140.17
Dewas	700.30	441.80	363.30	51.88	78.50	8.07	121.61
Gwalior	521.90	290.50	268.80	51.50	21.70	14.91	108.07
Sagar	1022.50	596.50	519.10	50.66	77.40	40.88	114.91
Tikamgarh	504.00	357.40	253.70	50.34	103.70	21.94	140.88
Raisen	848.70	512.50	420.30	49.52	92.20	23.03	121.94
Satna	742.40	439.20	357.00	48.09	82.20	10.45	123.03
West Nimar	1348.50	711.20	643.90	47.75	67.30	48.22	110.45
Hoshangabad	999.30	673.20	454.20	45.45	219.00	22.37	148.22
Jabalpur	1012.50	561.20	458.60	45.29	102.60	21.51	122.37
Rajnandgaon	1109.70	599.90	493.70	44.49	106.20	6.10	121.51
Raigarh	1298.50	577.30	544.10	41.93	33.20	14.34	106.10
Seoni	870.80	416.10	363.90	41.79	52.20	24.91	114.34
Raipur	2257.10	1174.70	940.40	41.66	234.30	19.15	124.91
Chhatarpur	863.00	424.40	356.20	41.27	68.20	18.98	119.15
Setul	1007.80	487.80	410.00	40.68	77.80	13.60	118.98
Chhindwara	1184.90	545.50	480.20	40.53	65.30	17.81	113.60
Shivpuri	1017.30	477.60	405.40	39.85	72.20	9.99	117.81
East Nimar	1118.40	488.80	444.40	39.74	44.40	15.14	109.99
Damoh	728.60	330.80	287.30	39.43	43.50	10.97	115.14
Morena	1168.30	470.50	424.00	36.29	46.50	25.18	110.97
Sidhi	1039.20	443.40	354.20	33.76	89.20	13.39	125.18
Shahdol	1386.00	512.40	451.90	32.60	60.50	12.85	113.39
Panna	702.90	254.70	225.70	32.11	29.00	19.69	112.85
Mandla	1324.50	508.80	425.10	32.10	83.70	27.83	119.69
Balaghat	924.50t	351.80	275.20	29.77	76.60	9.22	127.83
Sarguja	2201.50	632.50	579.10	26.30	53.40	3.11	109.22
Bastar	3906.00	883.10	856.50	21.93	26.60		103.11
Madhya Pradesh	44342.50	23807.80	19657.10	44.33	4265.30	21.70	121.12

Source: Commissioner of Land Records, Madhya Pradesh, Gwalior

EI-3 Land Use Classification in Madhya Pradesh, 1992/93

District	Forest-1992-93	Fallow Land-1992-93			Cultivable waste land-1992-93			
		Current	Old	Total	Land that Can be brought under Cultivation Immediately	Land that can be Brought under Cultivation after some Improvement	Uneconomical patches of Land	Total
Ujjain	3.30	1.90	2.10	4.00	6.50	3.90	1.60	12.00
Bhind	8.60	2.90	5.10	8.00	8.40	0.80	1.60	10.80
Vidisha	104.50	2.60	3.40	6.00	6.90	3.20	2.60	12.70
Shajapur	6.60	1.60	2.70	4.30	6.60	7.00	6.60	20.20
Indore	52.20	1.50	3.50	5.00	4.00	0.20		4.20
Rajgarh	14.50	1.90	4.20	6.10	21.0	6.10	1.10	28.20
Ratlam	34.40	1.70	2.70	4.40	12.30	7.50	5.70	25.50
Datia	23.30	3.90	3.60	7.50	5.40	-	6.40	11.80
Durg	100.70	18.10	22.30	40.40	11.10	6.50	6.60	24.20
Dhar	134.20	3.70	4.10	7.80	6.00	6.70	7.10	19.80
Bhopal	37.40	1.20	2.80	4.00	1.90	1.60	3.60	7.10
Rewa	67.00	21.20	26.60	47.80	7.20	1.70	1.90	10.80
Mandsaur	106.70	2.60	2.50	5.10	7.10	12.20	2.90	41.20
Guna	151.60	6.60	9.20	15.80	65.00	18.90	5.10	89.00
Narsimhapur	136.30	5.20	7.00	12.20	7.60	7.00	4.60	19.20
Sehore	171.50	1.90	3.20	5.10	8.60	3.70	1.40	13.70
Bilaspur	768.40	24.40	28.90	53.30	14.40	10.30	10.00	34.70
Jhabua	127.90	5.90	4.50	10.40	8.30	6.80	6.50	21.60
Dewas	204.20	1.30	1.70	3.00	3.40		0.10	3.50
Gwalior	109.40	4.20	6.40	10.60	11.30	6.40	5.30	23.00
Sagar	287.30	9.90	14.80	24.70	11.90	2.80	2.10	16.80
Tikamgarh	66.10	12.90	15.40	28.30	5.10	5.80	10.40	21.30
Raisen	333.10	2.10	4.20	6.30	8.80	4.70	4.30	17.80
Satna	134.10	18.30	18.30	36.60	24.80	11.70	9.60	46.10
West Nimar	45.30	4.50	9.80	14.30	9.00	4.10	18.70	31.80
Hoshangabad	359.50	10.40	15.90	26.30	19.80	10.70	8.20	38.70
Jabalpur	154.60	46.00	45.09	91.00	22.80	20.40	20.00	63.20
Rajnandgaon	388.70	28.30	25.20	53.50	12.60	3.70	2.20	18.50
Raigarh	384.70	35.30	29.10	64.40	12.00	2.10	1.40	15.50
Seoni	323.20	36.80	35.50	72.30	13.50	9.40	8.20	31.10
Raipur	905.40	27.20	35.10	62.30	22.40	12.30	10.70	45.40
Chhatarpur	85.70	31.90	46.40	78.30	35.80	33.00	29.60	98.40
Betul	396.10	28.60	30.60	59.20	29.10	8.30	6.50	43.90
Chhindwara	446.40	44.20	33.20	77.40	12.00	5.30	3.80	21.10
Shivpuri	326.80	15.40	22.50	37.90	40.40	23.40	28.70	92.50
East Nimar	511.50	8.30	12.40	20.70	0.60	0.50	0.60	1.70
Damoh	266.30	8.70	11.30	20.00	16.90	5.70	5.60	28.20
Morena	332.70	7.60	9.10	16.70	22.40	17.80	17.00	57.20
Sidhi	445.60	40.10	31.00	71.10	20.10	13.00	17.20	50.30
Shahdol	5489.10	18.10	74.10	148.30	21.00	14.00	27.00	62.00
Panna	298.40	66.50	17.50	35.60	45.20	10.30	6.90	62.40
Mandla	573.40	12.10	63.40	129.90	19.30	7.30	4.40	31.00
Balaghat	496.70	63.00	16.50	28.60	10.60	7.90	9.70	28.20
Sarguja	1113.00	51.50	43.00	106.00				0.00
Bastar	2412.40	816.20	45.30	96.80	87.80	50.90	33.90	172.60
Madhya Pradesh	14405.10		851.10	1667.30	746.90	395.60	386.40	1528.90

Source: Commissioner of Land Records, Madhya Pradesh, Gwalior

EI-3 Land Use Classification in Madhya Pradesh, 1992/93

District	Land not Available for Cultivation-1992-93			Other Uncultivated Land, excluding Fallow Land-1992-93		
	Land Put To Agricultural Uses	Barren and Uncultivated Land	Total	Permanent Pasture and Other Grazing Land	Land Under Misc. Trees Crops and Groves	Total
Ujjain	40.80	3.50	44.30	71.70	0.10	71.80
Bhind	31.80	25.90	57.70	23.20	0.40	23.60
Vidisha	34.70	11.10	45.80	37.30	0.10	84.40
Shajapur	42.90	46.10	89.00	65.00	0.10	111.90
Indore	28.40	2.90	31.30	31.10	0.10	67.00
Rajgarh	39.40	30.30	69.70	83.20	0.10	83.30
Ratlam	26.50	43.40	69.90	32.70	0.10	32.80
Datia	19.20	3.10	22.30	5.80	0.10	5.90
Durg	87.70	6.90	94.60	63.40	0.10	63.50
Dhar	45.40	53.70	99.10	56.40	0.10	56.50
Bhopal	27.00	3.60	30.60	33.50	0.80	62.90
Rewa	56.70	41.40	98.10	38.00	1.70	39.70
Mandsaur	92.40	96.20	188.60	55.30	0.10	141.40
Guna	58.20	98.80	157.00	57.00		57.00
Narsimhapur	22.70	1.00	23.70	29.00	0.20	29.20
Sehore	31.60	10.10	41.70	55.10		55.10
Bilaspur	108.40	46.20	154.60	129.20		129.20
Jhabua	53.20	61.00	114.20	40.90		40.90
Dewas	32.00	15.20	47.20	79.10		79.10
Gwalior	34.80	53.90	88.70	21.30	0.10	21.40
Sagar	50.70	17.70	68.40	105.10	1.10	106.20
Tikamgarh	39.00	47.80	86.80	47.70	0.10	47.80
Raisen	38.10	3.50	41.60	29.20	0.10	29.30
Satna	59.50	83.90	143.40	21.40	3.80	25.20
West Nimar	52.00	70.20	122.20	85.00		97.40
Hoshangabad	31.61	34.20	65.80	51.80	3.00	110.10
Jabalpur	62.20	84.40	146.60	98.10	0.40	98.50
Rajnandgaon	57.20	25.40	82.60	72.60	0.10	208.40
Raigarh	70.00	118.10	188.10	101.70	0.10	101.80
Seoni	45.20	5.30	50.50	29.80		29.80
Raipur	136.90	21.70	158.60	143.80	1.10	144.90
Chhatarpur	46.60	103.90	150.50	93.60	0.30	64.90
Betul	46.20	25.60	71.80	26.80		26.80
Chhindwara	52.80	50.00	102.80	57.00		57.00
Shivpuri	59.70	40.20	99.90	53.30	1.50	45.00
East Nimar	56.70	13.80	70.50	69.30	0.30	69.60
Damoh	26.90	60.80	87.70	38.00	1.10	135.40
Morena	66.10	205.30	271.40	66.30		953.40
Sidhi	62.30	55.70	118.00			118.00
Shahdol	92.80	40.10	132.90	40.80	1.00	41.80
Panna	40.20	23.50	63.70	16.70	0.40	17.10
Mandla	69.80	57.20	127.00	38.10	0.00	86.80
Balaghat	46.70	1.20	47.90	45.70	0.20	200.30
Sarguja	111.30	20.60	131.90	217.10	54.40	279.80
Bastar	89.60	127.50	217.10	150.60		150.60
Madhya Pradesh	2423.90	1991.90	4415.80	2709.70	73.20	2782.90

Source: Commissioner of Land Records, Madhya Pradesh, Gwalior

EL-4 Land Use and Cover in Madhya Pradesh-NRSA Imagery

District	Built-up	Kharif	Rabi	Double Cropped Area	Net Sown Area	Fallow	Total Agriculture Area	Deciduous Forest	Degraded Forest	Forest Blank	Forest Plantations	Total Forest Area
Ujjain	4.3%	55.9%	30.3%	15.9%	70.3%	3.10%	73.4%	0.0%	1.3%	0.00%	0.00%	1.3%
Rewa	7.1%	55.2%	52.0%	40.6%	66.7%	0.55%	67.2%	12.5%	1.2%	0.00%	0.00%	13.7%
Vidisha	3.6%	7.7%	65.9%	7.5%	66.0%	0.00%	66.0%	7.9%	4.0%	0.08%	0.03%	12.0%
Bhind	7.8%	49.1%	62.7%	47.7%	64.1%	0.00%	64.1%	0.5%	0.0%	0.00%	0.04%	0.5%
Raisen	5.8%	36.8%	44.1%	17.7%	63.2%	0.00%	63.2%	17.1%	4.7%	0.01%	0.00%	21.9%
Guna	7.2%	21.7%	48.1%	8.3%	61.5%	0.33%	61.8%	1.8%	11.9%	0.00%	0.00%	13.7%
Datia	7.0%	27.4%	59.4%	27.0%	59.8%	1.20%	61.0%	1.1%	4.4%	5.20%	0.00%	5.5%
Durg	4.2%	53.9%	29.8%	24.4%	59.3%	1.36%	60.7%	16.1%	0.3%	0.91%	0.00%	16.4%
Ratlam	3.2%	45.0%	23.2%	16.8%	51.5%	6.05%	57.5%	1.0%	5.2%	0.00%	0.00%	7.7%
Dhar	3.1%	50.6%	12.5%	10.1%	53.0%	4.25%	57.2%	5.0%	7.3%	0.00%	0.00%	14.2%
Chhattarpur	5.6%	45.3%	33.4%	21.9%	56.8%	0.33%	57.1%	14.8%	3.4%	0.00%	0.00%	18.3%
Bhopal	5.7%	38.8%	52.3%	36.3%	54.8%	0.75%	55.5%	4.0%	9.3%	0.00%	0.14%	13.4%
Satna	3.1%	42.7%	48.6%	36.1%	55.2%	0.123%	55.3%	20.2%	6.0%	0.00%	0.00%	26.2%
Jabalpur	4.2%	39.4%	31.4%	16.8%	54.0%	0.11%	54.1%	22.2%	0.8%	0.44%	0.00%	23.0%
Narsimhapur	6.2%	36.3%	44.6%	26.8%	54.0%	0.00%	54.0%	23.2%	3.1%	0.00%	0.09%	26.4%
Tikamgarh	3.1%	42.8%	53.6%	42.5%	53.9%	0.11%	54.0%	3.3%	7.9%	0.00%	0.00%	11.2%
Betul	3.1%	46.3%	21.5%	15.0%	52.9%	0.00%	52.9%	31.5%	3.6%	0.00%	0.08%	35.2%
Bilaspur	3.0%	49.9%	14.7%	14.1%	50.5%	1.53%	52.1%	30.9%	0.8%	0.00%	0.74%	32.5%
Raipur	3.1%	50.0%	27.5%	26.8%	50.7%	1.07%	51.7%	28.5%	0.5%	0.00%	0.00%	29.0%
Indore	4.9%	9.1%	8.6%	0.6%	17.0%	32.42%	49.5%	0.3%	11.8%	0.00%	0.0%	18.4%
Shivpuri	4.6%	34.7%	32.9%	18.5%	49.1%	0.00%	49.5%	18.8%	7.5%	0.00%	0.00%	16.3%
Gwalior	3.5%	35.6%	41.7%	29.0%	48.3%	0.00%	49.1%	14.8%	8.7%	0.00%	0.00%	23.5%
Chhindwara	2.6%	43.3%	11.7%	8.3%	46.8%	0.00%	48.3%	34.0%	5.0%	0.00%	0.05%	39.1%
Jhabua	2.6%	45.0%	5.6%	5.0%	45.4%	2.57%	48.2%	11.9%	12.2%	0.00%	0.00%	24.8%
Raigarh	2.7%	47.2%	0.6%	0.6%	47.2%	0.00%	47.9%	36.2%	0.8%	0.00%	0.01%	37.0%
Mandla	2.5%	42.0%	9.6%	4.6%	47.0%	0.00%	47.2%	35.2%	3.2%	0.06%	0.12%	38.5%
Hoshangabad	3.0%	41.8%	35.6%	30.8%	46.6%	0.10%	47.0%	34.2%	0.7%	2.46%	0.00%	34.9%
Sehore	2.6%	36.9%	37.7%	29.0%	45.5%	0.45%	46.8%	21.5%	6.5%	0.00%	0.00%	28.1%
West Nimar	2.5%	45.1%	3.1%	3.1%	45.2%	0.70%	46.0%	17.0%	16.6%	4.67%	0.00%	38.3%
Sagar	2.8%	18.9%	44.0%	18.3%	44.6%	0.00%	45.9%	27.0%	5.0%	0.00%	0.00%	31.9%
Rajnandgaon	2.6%	33.0%	27.1%	16.8%	43.2%	1.38%	44.6%	35.1%	3.2%	0.69%	0.00%	38.3%
Shahdol	2.4%	36.0%	14.9%	7.8%	43.0%	0.02%	44.6%	40.5%	1.5%	0.00%	0.11%	42.1%
Sidhi	4.5%	40.9%	10.4%	9.8%	41.5%	0.03%	43.1%	32.3%	7.6%	0.00%	3.43%	43.3%
Seoni	2.3%	30.0%	14.3%	6.4%	38.0%	2.93%	41.6%	33.3%	2.7%	0.00%	0.00%	36.1%
Damoh	2.3%	21.0%	35.6%	16.2%	40.3%	0.37%	40.9%	36.6%	4.5%	0.00%	0.07%	41.2%
East Nimar	2.2%	35.7%	3.5%	3.2%	36.0%	3.54%	40.7%	34.5%	9.5%	0.00%	0.00%	44.7%
Morena	2.2%	34.4%	18.8%	14.0%	39.2%	0.97%	40.7%	29.3%	3.7%	0.00%	0.00%	33.0%
Balaghat	2.3%	39.6%	19.8%	19.8%	39.6%	0.00%	40.1%	52.7%	0.8%	0.00%	0.00%	53.5%
Sarguja	2.0%	34.6%	5.9%	2.9%	37.5%	0.00%	39.6%	40.7%	7.8%	0.00%	0.00%	48.5%
Panna	1.9%	25.8%	21.3%	14.1%	32.9%	0.00%	37.5%	42.1%	13.1%	0.00%	0.05%	55.3%
Bastar	1.7%	31.2%	0.1%	0.0%	31.3%	0.00%	32.9%	54.6%	1.6%	0.00%	0.00%	56.2%
Mandsaur	3.9%	6.1%	9.1%	1.0%	14.2%	15.26%	31.3%	9.2%	8.5%	0.00%	0.00%	17.8%
Dewas	4.5%	13.6%	2.6%	1.4%	14.8%	12.03%	29.4%	18.6%	11.4%	2.18%	0.00%	31.5%
Shajapur	14.3%	14.2%	9.1%	6.3%	17.0%	1.49%	26.8%	0.0%	0.0%	0.00%	0.00%	0.0%
Rajgarh	15.3%	13.1%	8.6%	6.8%	14.9%	1.25%	18.5%	2.1%	0.5%	0.00%	0.00%	32.1%
Madhya Pradesh	3.6%	36.5%	21.3%	13.2%	44.6%	1.50%	16.1%	27.0%	4.7%	0.30%	0.13%	18.3%
India	4.2%	36.7%	23.2%	16.2%	46.1%	4.19%	46.1%	9.7%	5.0%	0.55%	0.34%	18.3%

The percentages are out of total geographical area

Source: NRSA, 1995, Report on Area Statistics of Land Use/Land Cover Generated Using Remote Sensing Techniques

EI-4 Land Use and Land Cover Data – Wastelands and Water Bodies – 1988/89

District	Salt Affected Area	Gullied/Ravenous Area	Land With or Without Scrubs	Sandy Area	Barren/Stony Sheet Rock Area	Total Wasteland Area	
						Area (Ha)	Of Total Area
Balaghat	0.00%	0.00%	3.25%	0.00%	0.00%	30000	3.3%
Sidhi	0.00%	0.67%	5.96%	0.00%	0.65%	76636	7.3%
Betul	0.00%	0.00%	8.07%	0.00%	0.00%	81050	8.1%
Panna	0.00%	0.00%	8.23%	0.00%	0.00%	58709	8.2%
Chhindwara	0.00%	0.04%	8.85%	0.00%	0.00%	105015	8.9%
Hoshangabad	0.00%	0.00%	9.11%	0.00%	0.22%	93644	9.3%
West Nimar	0.00%	0.09%	7.89%	0.01%	1.51%	127845	9.5%
Bastar	0.00%	0.00%	9.69%	0.00%	0.03%	380248	9.7%
Mandla	0.00%	0.00%	10.77%	0.00%	0.00%	142946	10.8%
East Nimar	0.00%	0.42%	9.68%	0.00%	0.68%	116145	10.8%
Rewa	0.00%	0.69%	7.17%	0.00%	2.97%	68433	10.8%
Shahdol	0.00%	0.00%	10.76%	0.00%	0.18%	153498	10.9%
Bilaspur	0.00%	0.08%	10.73%	0.00%	0.30%	221046	11.1%
Sarguja	0.00%	0.00%	10.75%	0.00%	0.77%	257225	11.5%
Raigarh	0.00%	0.02%	8.48%	0.00%	3.74%	158240	12.2%
Rajnandgaon	0.00%	4.01%	8.29%	0.00%	0.00%	63118	12.3%
Vidisha	0.00%	1.17%	10.90%	0.00%	0.54%	96906	13.1%
Raipur	0.00%	0.00%	12.39%	0.16%	0.91%	286063	13.5%
Rajnandgaon	0.00%	0.00%	13.20%	0.00%	0.36%	150852	13.6%
Damoh	0.00%	0.00%	13.54%	0.00%	0.90%	105503	14.4%
Satna	0.00%	0.09%	12.86%	0.00%	2.29%	114361	15.2%
Dhar	0.00%	1.46%	13.42%	0.00%	1.01%	129641	15.9%
Chattarpur	0.00%	0.18%	15.83%	0.00%	0.58%	144115	16.6%
Durg	0.00%	0.00%	16.55%	0.00%	0.21%	14099	16.8%
Guna	0.00%	56.08%	10.01%	0.00%	0.68%	185613	16.8%
Jabalpur	0.00%	0.00%	17.00%	0.00%	0.16%	174302	17.2%
Shivpuri	0.00%	0.00%	14.92%	0.00%	2.25%	176490	17.2%
Jhabua	0.00%	0.19%	16.42%	0.00%	1.14%	120341	17.7%
Indore	0.00%	0.00%	17.20%	0.00%	1.36%	72368	18.6%
Ujjain	0.00%	7.72%	11.27%	0.00%	0.06%	115985	19.0%
Sagar	0.00%	0.00%	19.81%	0.00%	0.25%	20.5599	20.1%
Seonio	0.00%	0.00%	20.17%	0.00%	0.00%	176688	20.2%
Dewas	0.00%	0.00%	19.13%	0.00%	1.55%	145200	20.7%
Sehore	0.00%	9.90%	20.61%	0.00%	0.18%	136719	20.8%
Datia	0.00%	4.43%	11.06%	0.00%	0.72%	44167	21.7%
Ratlam	0.00%	14.96%	16.85%	0.00%	0.71%	106920	22.0%
Raisen	0.00%	0.00%	3.4%	0.00%	3.90%	188679	22.3%
Bhopal	0.00%	8.93%	22.51%	0.00%	0.20%	62962	22.7%
Morena	0.32%	3.70%	4.36%	0.00%	10.01%	270153	23.3%
Gwalior	0.00%	5.66%	9.36%	0.00%	10.63%	123500	23.7%
Mandsaur	0.00%	23.93%	20.57%	0.00%	0.43%	261050	26.7%
Bhind	0.32%	0.00%	2.45%	0.00%	0.06%	119296	26.8%
Tikamgarh	0.00%	0.00%	25.91%	0.00%	1.75%	139633	27.7%
Rajgarh	0.00%	21.85%	18.89%	0.00%	24.71%	26862	43.6%
Shajapur	0.00%	21.85%	20.77%	0.00%	21.58%	397767	64.2%
Madhya Pradesh	0.00%	1.75%	11.85%	0.01%	1.73%	6800900	15.3%
India	0.60%	0.61%	8.07%	1.70%	19.02%	98609923	30.0%

Source: NRSA, 1995, Report on Area Statistics of Land Use/Land Cover Generated Using Remote Sensing Techniques

EL 5 - Land Use and Land Cover Date - Wastelands and Water Bodies : 1998/89

District	Area Under Rivers/Streams	Area Under Lake/Reservoir/Canal	Area Under Total Water Bodies	Ares Under Grass/Grazing Lands	Mining Area	Unclassified Area	Total Geographic Area(Ha)
Balaghat	0.49%	0.37%	0.86%	0.49%	0.07%	0.00%	922900
Sidhi	2.12%	0.81%	2.93%	0.00%	0.46%	0.00%	1052600
Betul	0.46%	0.28%	0.74%	0.00%	0.00%	0.00%	1004300
Panna	1.41%	0.27%	1.68%	0.00%	0.00%	0.00%	713500
Chhindwara	0.70%	0.32%	1.03%	0.00%	0.19%	0.00%	1181500
Hoshangabad	3.86%	2.02%	5.88%	0.00%	0.00%	0.00%	1003700
West Nimar	0.55%	0.00%	0.55%	1.89%	0.00%	1.37%	1345000
Bastar	1.12%	0.04%	1.16%	0.00%	0.01%	0.00%	3911400
Mandla	0.78%	0.31%	1.09%	0.00%	0.05%	0.00%	1326900
East Nimar	0.20%	0.00%	0.20%	0.00%	0.00%	1.38%	1077900
Rewa	0.68%	0.48%	1.16%	0.00%	0.00%	0.00%	631400
Shahdol	1.29%	0.11%	1.40%	0.00%	0.06%	0.00%	1402800
Bilaspur	0.87%	0.38%	1.25%	0.00%	0.08%	0.00%	1989700
Sarguja	0.22%	0.00%	0.22%	0.00%	0.19%	0.00%	2233700
Raigarh	0.70%	0.11%	0.81%	0.0%	0.00%	0.00%	123400
Rajnandgaon	1.04%	0.00%	1.04%	0.00%	0.00%	0.00%	513300
Vidisha	4.99%	0.28%	5.26%	0.00%	0.00%	0.00%	737100
Raipur	2.02%	0.75%	2.77%	0.00%	0.02%	0.00%	2125800
Rajnandgaon	0.19%	0.82%	1.00%	0.00%	0.00%	0.00%	1112700
Damoh	0.96%	0.37%	1.33%	0.00%	0.00%	0.00%	730600
Satna	0.08%	0.07%	0.16%	0.00%	0.15%	0.00%	750200
Dhar	0.79%	0.00%	0.79%	6.85%	0.00%	192%	815300
Chattarpur	1.93%	0.49%	2.41%	0.00%	0.00%	0.00%	868700
Durg	0.90%	0.95%	1.85%	0.00%	0.16%	0.00%	853700
Guna	0.39%	0.18%	0.57%	0.00%	0.00%	0.00%	1106500
Jabalpur	0.70%	0.71%	1.40%	0.17%	0.02%	0.00%	101600
Shivpuri	1.47%	1.41%	2.88%	0.00%	0.00%	0.00%	1027800
Jhabua	0.33%	0.00%	0.33%	5.25%	0.00%	1.39%	678200
Indore	0.23%	0.00%	0.23%	0.0%	0.00%	8.44%	389900
Ujjain	0.96%	0.00%	0.96%	0.00%	0.00%	1.00%	609100
Sagar	0.32%	0.26%	0.58%	0.00%	0.00%	0.00%	1025200
Seonio	0.12%	0.47%	0.59%	0.00%	0.00%	0.00%	875800
Dewas	0.11%	0.00%	0.11%	0.00%	0.00%	16.44%	702000
Sehore	1.71%	0.85%	2.56%	0.0%	0.00%	0.00%	657800
Datia	2.82%	1.93%	4.75%	0.00%	0.00%	0.00%	203800
Ratlam	0.30%	0.00%	0.30%	7.28%	0.00%	2.00%	486100
Raisen	0.31%	0.86%	1.17%	0.00%	0.00%	0.00%	846600
Bhopal	0.52%	2.16%	2.68%	0.00%	0.00%	0.00%	277200
Morena	1.23%	0.16%	1.39%	0.00%	0.0%	0.00%	1159400
Gwalior	0.23%	0.81%	1.04%	0.00%	0.00%	0.00%	521400
Mandsaur	2.26%	0.00%	2.36%	0.00%	0.00%	19.84%	979100
Bhind	0.56%	0.21%	0.77%	0.00%	0.00%	0.07%	445900
Tikamgarh	3.07%	0.97%	4.03%	0.00%	0.00%	0.00%	504800
Rajgarh	0.05%	0.00%	0.05%	0.00%	0.00%	1.81%	615400
Shajapur	0.08%	0.00%	0.08%	0.00%	0.00%	2.95%	619600
Madhya Pradesh	1.02%	0.38%	1.40%	0.36%	0.04%	1.01%	44344600
India	2.56%	0.67%	3.23%	0.00%	0.00%	2.95%	328726300

Source: NRSA, 1995, Report on Area Statistics of Land Use/Land Cover Generated Using Remote Sensing Techniques

**EL 6 - Land Ownership by Social Categories, Gini Coefficient of Operational Holdings -
1992/93, and Tenancy Status**

District	Ownership of Operational Holdings							Ginie Coefficient of Land Holdings	Average of Area per Holdings
	Share of Others		Share of SC		Share of ST				
BALAGHAT	73.5%	68.2%	5.5%	4.1%	19.6%	27.7%	0.720	1.452%	
REWA	89.8%	95.7%	8.5%	1.8%	4.6%	2.5%	0.633	2.377%	
SIDHI	58.6%	67.3%	20.0%	4.2%	32.0%	28.6%	0.611	4.124%	
BILASPUR	43.96%	58.2%	5.5%	15.5%	21.4%	26.3%	0.600	1.421%	
SHAH DOL	73.1%	43.7%	15.0%	3.2%	50.9%	53.1%	0.590	2.401%	
DAMOH	78.2%	81.3%	10.9%	9.0%	11.8%	9.7%	0.585	2.809%	
SATNA	70.9%	58.9%	14.0%	6.5%	10.9%	7.6%	0.584	1.991%	
DURG	65.0%	76.0%	16.52%	9.8%	15.1%	14.2%	0.581	2.013%	
RAIPUR	26.0%	67.1%	5.4%	11.7%	18.5%	21.2%	0.576	1.798%	
BASTAR	70.9%	17.4%	9.0%	3.2%	68.6%	79.4%	0.572	3.288%	
JABALPUR	75.2%	72.1%	16.8%	6.1%	20.2%	21.8%	0.567	1.949%	
SAGAR	51.3%	85.0%	10.4%	9.5%	8.0%	5.4%	0.566	2.908%	
SEONI	40.0%	51.2%	9.6%	9.4%	38.3%	39.4%	0.562	3.047%	
RAIGARH	31.3%	38.1%	5.4%	4.8%	50.4%	57.1%	0.561	2.485%	
MANDLA	78.2%	23.5%	17.8%	8.9%	63.3%	72.8%	0.557	2.666%	
VIDISHA	62.6%	89.4%	9.9%	7.6%	4.0%	1.7%	0.555	5.034%	
RAJNANDGAON	53.8%	61.5%	9.4%	6.9%	27.5%	30.9%	0.555	2.448%	
BETUL	76.5%	54.2%	19.9%	15.0%	36.9%	39.0%	0.544	3.353%	
GWALIOR	77.0%	82.7%	20.3%	10.2%	3.6%	2.3%	0.542	2.731%	
SHAJAPUR	77.2%	88.2%	9.9%	5.7%	2.7%	1.6%	0.542	3.402%	
HOSHANGABAD	70.1%	84.7%	17.5%	12.0%	12.9%	9.63%	0.541	4.039%	
GUNA	82.0%	79.9%	11.8%	5.4%	12.4%	8.2%	0.540	3.391%	
INDORE	39.2%	91.3%	4.0%	2.5%	6.2%	3.3%	0.537	3.653%	
SARGUJA	81.4%	36.0%	15.2%	8.5%	56.8%	61.5%	0.536	2.231%	
RAJGARH	72.2%	89.0%	24.7%	13.4%	3.4%	2.5%	0.536	3.161%	
UJJAIN	71.2%	84.6%	16.1%	7.4%	3.1%	2.0%	0.535	4.315%	
DEWAS	76.9%	83.3%	11.6%	6.8%	12.7%	9.3%	0.527	4.561%	
RAISEN	71.5%	84.6%	16.9%	141.4%	11.4%	8.6%	0.524	4.064%	
PANNA	75.5%	79.4%	17.2%	10.6%	11.6%	9.1%	0.523	2.424%	
SEHORE	53.0%	83.8%	9.8%	7.8%	7.3%	5.6%	0.518	4.118%	
CHHINDWARA	75.4%	49.5%	23.8%	16.8%	37.1%	42.7%	0.517	2.984%	
DATIA	81.5%	82.8%	16.7%	10.7%	0.8%	0.3%	0.517	2.790%	
BHOPAL	83.2%	88.2%	16.8%	11.5%	1.8%	1.1%	0.514	3.843%	
BHIND	54.0%	88.5%	14.0%	8.6%	0.0%	0.0%	0.512	2.551%	
RATLAM	75.6%	67.6%	20.7%	14.3%	32.0%	23.8%	0.511	2.993%	
CHHATARPUR	39.2%	82.7%	5.0%	2.7%	3.7%	3.0%	0.507	2.583%	
DHAR	80.4%	53.5%	9.6%	6.1%	55.9%	44.0%	0.506	3.746%	
NARSINGHPUR	78.0%	81.8%	14.6%	9.5%	10.0%	12.1%	0.501	2.687%	
MANDSAUR	78.1%	85.2%	16.0%	12.1%	7.4%	5.3%	0.493	2.797%	
MORENA	71.3%	82.1%	18.2%	13.8%	5.8%	5.8%	0.487	1.903%	
SHIVPURI	66.7%	79.0%	9.0%	6.5%	10.5%	7.3%	0.484	2.960%	
EAST NIMAR	76.7%	69.7%	19.9%	17.0%	24.3%	23.8%	0.473	3.780%	
TIKAMGARH	51.5%	79.9%	5.3%	3.3%	3.4%	3.1%	0.471	1.886%	
JHABUA	6.5%	56.1%	1.9%	1.2%	91.43%	40.6%	0.460	3.701%	
MADHYA PRADESH	62.7%	6.8%	12.6%	8.1%	24.7%	92.0%	0.567	2.596%	

Source: Directorate of Agriculture, Agriculture Statistics, 1990-91 and 1993-94, Commissioner of Land Records GoMP, Sanket - MPHDRO

EL 6 - Land ownership by Social Categories, Gini Coefficient of Operational Holdings - 1992/93, and Tenancy Status

District	Tenancy Status of Operational Holdings					
	Wholly Owned & Self Operated Holdings		Wholly Leased in Holdings		Wholly Otherwise Operated Holdings	
	Number	Area	Number	Area	Number	Area
BALAGHAT	98.2%	98.0%	0.0%	0.0%	0.2%	0.1%
REWA	98.8%	97.9%	0.1%	0.0%	0.4%	0.1%
SIDHI	77.2%	79.2%	0.2%	0.1%	10.9%	5.4%
BILASPUR	98.3%	97.4%	0.0%	0.5%	0.3%	0.2%
SHAHNOL	82.8%	87.2%	0.0%	0.0%	2.5%	1.7%
DAMOH	97.9%	97.8%	0.4%	0.0%	4.9%	0.2%
SATNA	97.2%	97.5%	0.3%	0.0%	0.6%	0.7%
DURG	99.0%	98.0%	0.1%	0.4%	1.6%	0.0%
RAIPUR	92.7%	89.9%	0.1%	0.5%	0.0%	0.4%
BASTAR	88.4%	86.9%	0.0%	0.0%	1.2%	3.8%
JABALPUR	99.3%	99.2%	0.1%	0.1%	6.2%	0.3%
SAGAR	97.6%	95.8%	0.5%	0.0%	0.4%	0.2%
SEONI	95.6%	95.4%	0.0%	0.1%	0.6%	0.2%
RAIGARH	86.5%	79.6%	79.4%	0.47%	0.7%	0.4%
MANDLA	91.1%	90.9%	0.0%	0.0%	1.4%	0.6%
VIDISHA	1.7%	0.9%	71.1%	63.1%	3.6%	31.2%
RAJNANDGAON	96.1%	94.1%	0.1%	0.0%	18.6%	0.3%
BETUL	1.0%	0.4%	0.4%	47.0%	0.8%	33.3%
GWALIOR	90.9%	88.7%	0.3%	0.1%	27.9%	0.4%
SHAJAPUR	91.5%	87.9%	0.1%	0.3%	1.6%	0.2%
HOSHANGABAD	98.7%	98.4%	0.2%	0.3%	0.8%	0.2%
GUNA	82.3%	75.8%	0.0%	0.0%	0.4%	1.1%
INDORE	97.7%	98.2%	52.1%	0.1%	2.6%	0.0%
SARGUJA	87.0%	82.7%	0.3%	0.0%	0.0%	0.4%
RAJGARH	1.7%	0.6%	0.3%	25.8%	0.6%	60.1%
UJJAIN	95.9%	94.5%	69.4%	0.1%	46.3%	0.2%
DEWAS	92.4%	3.9%	0.0%	0.2%	0.4%	0.6%
RAISEN	5.8%	93.2%	54.9%	55.3%	2.4%	36.4%
PANNA	95.8%	1.8%	0.4%	0.0%	24.1%	0.9%
SEHORE	2.7%	96.0%	0.4%	34.1%	2.1%	54.4%
CHHINDWARA	96.1%	92.2%	0.0%	0.3%	42.4%	0.5%
DATIA	93.8%	7.2%	53.2%	0.0%	1.2%	0.3%
BHOPAL	9.0%	84.3%	0.0%	39.7%	37.9%	44.0%
BHIND	89.2%	87.2%	0.3%	0.0%	0.8%	0.2%
RATLAM	87.9%	95.1%	0.0%	0.2%	2.3%	0.5%
CHHATARPUR	95.0%	90.5%	0.2%	0.0%	2.3%	1.2%
DHAR	90.8%	98.5%	0.0%	0.2%	2.2%	0.7%
NARSINGHPUR	98.8%	77.7%	0.3%	0.0%	2.8%	1.2%
MANDSAUR	82.8%	87.8%	0.0%	0.2%	3.1%	1.0%
MORENA	90.0%	80.9%	0.1%	0.1%	1.8%	1.5%
SHIVPURI	85.9%	94.8%	0.6%	0.0%	3.1%	0.6%
EAST NIMAR	94.4%	94.8%	0.0%	0.8%	2.9%	1.1%
TIKAMGARH	93.8%	97.7%	0.1%	0.0%	1.2%	1.5%
JHABUA	97.7%	77.1%	0.3%	0.1%	6.3%	0.8%
MADHYA PRADESH	77.2%	90.6%	0.2%	0.1%	1.9%	2.0%

Source: Directorate of Agriculture, Agriculture Statistics, 1990-91 and 1993-94, Commissioner of Land Records GoMP, Sanket - MPHDRO

EL 6 - Land ownership by Social Categories, Gini Coefficient of Operational Holdings - 1992/93, and Tenancy Status

District	Tenancy Status of Operational Holdings				
	Partly Owned, Partly Leased in & Partly Otherwise Holdings				
	Number	Owned Area	Leased in Area	Otherwise Operated Area	Total Area
BALAGHAT	1.5%	1.7%	0.1%	0.1%	1.9%
REWA	0.8%	1.7%	0.0%	0.2%	2.0%
SIDHI	11.8%	12.0%	0.0%	3.3%	15.3%
BILASPUR	1.2%	1.6%	0.1%	0.2%	1.9%
SHAHNOL	12.4%	9.3%	0.0%	1.4%	11.1%
DAMOH	1.5%	1.8%	0.0%	0.1%	2.0%
SATNA	1.2%	1.4%	0.1%	0.3%	1.8%
DURG	0.5%	1.1%	0.1%	0.1%	1.3%
RAIPUR	5.8%	7.2%	0.2%	1.5%	8.9%
BASTAR	5.4%	7.2%	0.0%	2.1%	9.3%
JABALPUR	0.3%	0.3%	0.0%	0.1%	0.4%
SAGAR	1.7%	3.4%	0.1%	1.5%	3.9%
SEONI	3.6%	3.9%	0.1%	2.1%	4.4%
RAIGARH	11.6%	15.5%	0.3%	0.1%	19.3%
MANDLA	6.3%	7.5%	0.0%	0.5%	8.5%
VIDISHA	50.3%	4.0%	10.9%	0.4%	5.6%
RAJNANDGAON	3.4%	4.6%	0.1%	3.4%	1.5%
BETUL	42.3%	8.6%	13.0%	1.1%	11.0%
GWALIOR	7.5%	9.8%	0.1%	2.6%	11.6%
SHAJAPUR	7.3%	10.2%	0.1%	0.9%	1.1%
HOSHANGABAD	0.6%	0.7%	0.3%	0.4%	23.1%
GUNA	15.0%	0.7%	0.1%	1.0%	1.7%
INDORE	2.1%	14.2%	0.0%	0.2%	16.9%
SARGUJA	12.4%	15.2%	20.6%	4.3%	4.9%
RAJGARH	63.3%	4.3%	0.5%	1.2%	5.1%
UJJAIN	3.5%	6.1%	0.5%	0.7%	7.2%
DEWAS	5.0%	7.5%	16.6%	0.5%	5.2%
RAISEN	51.5%	2.3%	0.0%	0.6%	2.8%
PANNA	2.1%	10.9%	22.6%	1.0%	9.1%
SEHORE	86.0%	2.5%	0.4%	0.3%	3.2%
CHHINDWARA	2.2%	6.5%	0.2%	0.7%	7.5%
DATIA	5.0%	12.2%	22.2%	1.0%	5.3%
BHOPAL	57.6%	14.3%	0.0%	1.2%	15.5%
BHIND	10.0%	10.1%	0.9%	1.1%	12.1%
RATLAM	9.6%	2.6%	0.0%	1.0%	3.6%
CHHATARPUR	3.1%	6.8%	0.8%	1.1%	8.6%
DHAR	6.9%	0.2%	0.0%	0.1%	0.3%
NARSINGHPUR	0.2%	17.8%	0.2%	3.0%	21.1%
MANDSAUR	14.1%	8.9%	0.1%	1.7%	10.7%
MORENA	6.8%	15.9%	0.4%	2.1%	18.5%
SHIVPURI	12.2%	2.3%	0.7%	0.4%	3.4%
EAST NIMAR	2.0%	2.8%	0.0%	1.0%	3.7%
TIKAMGARH	3.3%	1.0%	0.2%	0.2%	1.4%
JHABUA	0.9%	16.1%	0.4%	4.3%	20.8%
MADHYA PRADESH	16.2%	7.0%	0.2%	1.2%	8.4%

Source: Directorate of Agriculture, Agriculture Statistics, 1990-91 and 1993-94 , Commissioner of Land Records GoMP, Sanket - MPHRO

EL 7 - Average Landholding Size in Madhya Pradesh (in hectares)

DISTRICT	Holdings	Holdings	Holdings	Decline 8-91
	1980-81	1985-86	1990-91	
VIDISHA	6.7	5.3	5.0	25.0%
DEWSA	6.0	5	4.6	23.3%
UJJAIN	6.0	4.9	4.3	28.3%
RAISEN	5.8	4.9	4.1	29.1%
SEHORE	6.2	4.8	4.1	33.4%
HOSHANGABAD	5.6	4.6	4.0	25.8%
EAST NIMAR	5.1	4.2	3.8	23.3%
SHAJAPUR	4.8	4.2	3.7	25.4%
DHAR	5.0	4.1	3.7	32.6%
INDORE	5.5	4.3	3.7	24.3%
WEST NIMAR	5.0	4.2	3.7	21.7%
GUNA	4.5	3.5	3.4	25.0%
BETUL	4.3	3.6	3.4	26.6%
BASTAR	4.4	3.8	3.3	22.9%
RAJGARH	4.4	3.5	3.2	22.1%
SHIVPURI	3.9	3.2	3.0	47.2%
RATLAM	3.9	3.2	3.0	21.0%
BHOPAL	5.7	4.5	3.0	24.8%
CHINDWARA	3.8	3.4	3.0	13.9%
SEONI	3.8	3.5	3.0	19.0%
SAGAR	4.0	3.0	2.9	20.3%
DATIA	3.5	3.0	2.8	24.6%
MANDSAUR	3.5	3.1	2.8	25.1%
GWALIOR	3.6	2.9	2.7	26.1%
NARSIMHAPUR	3.6	2.9	2.7	11.6%
MANDLA	3.7	3.1	2.7	22.7%
BHIND	2.9	2.6	2.6	31.1%
CHHATARPUR	3.4	2.9	2.6	18.4%
JHABUA	3.8	3.1	2.6	26.6%
RAIGARH	3.1	2.7	2.5	21.0%
PANNA	3.3	2.8	2.4	30.0%
DAMOH	3.0	2.6	2.4	18.6%
REWA	3.4	2.8	2.4	26.6%
SHAHDOL	3.0	2.7	2.4	22.1%
RAJNANDGAON	3.3	2.8	2.4	22.3%
SIDHI	3.0	2.6	2.3	21.7%
SARGUJA	2.8	2.5	2.2	26.1%
STNA	2.6	2.2	2.0	20.7%
DURG	2.7	2.2	2.0	26.1%
MORENA	2.4	2.1	1.9	20.7%
TIKAMGARH	2.0	1.9	1.9	4.6%
JABALPUR	2.6	2.1	1.9	26.0%
BALAGHAT	1.9	1.6	1.5	22.3%
BILASPUR	1.7	1.6	1.4	19.2%
RAIPUR	2.3	2.0	1.0	57.3%
MADHYA PRADESH	3.4	2.9	2.6	24.0%

Source: Commissioner Land Records, Madhya Pradesh, Gwalior Agricultural Statistics, 1992

EL -8 Area, Production, Yield and per Capita Availability of Food Grains

DISTRICT	Area under foodgrains (000.ha)			Production of Foodgrains (000. tonnes)			Yield of Food grains (Kgs.)		
	1971	1992	Mean annual % change	1971	1992	Mean annual % change	1991	1992	Mean annual % changes
SEHORE	378.3	217.4	-2.60%	240.4	278.1	0.70%	635.5	1279.2	3.39%
UJJAIN	328.1	245.9	-1.36%	273.2	348.1	1.16%	832.7	1415.6	2.56%
SHAJAPUR	257.2	263.7	0.12%	209.0	316.3	1.99%	812.6	1199.5	1.87%
RAISEN	330.6	367.8	0.51%	207.7	381.6	2.94%	628.3	1037.5	2.42%
NARSIMHAPUR	257.4	269.0	0.21	176.4	329.0	3.01%	565.9	854.2	1.98%
VIDSHA	425.5	480.0	0.58%	240.8	410.0	2.57%	712.9	1016.8	1.71%
MANDSUR	390.5	428.3	0.44%	278.4	435.5	2.15%	712.9	1016.8	1.71%
HOSHAGABAD	329.0	348.3	0.27%	185.4	505.4	4.89%	563.5	1451.0	4.61%
DEWAS	222.5	185.1	-0.87%	164.9	273.3	2.44%	741.1	1476.5	3.34%
CHHINDWARA	413.9	336.3	-0.98%	219.1	394.6	1.42%	529.4	876.0	2.43%
TIKAMGARH	208.2	245.8	0.79%	157.2	336.7	3.69%	755.0	1369.8	2.88%
MOENA	328.6	192.6	-2.51%	246.2	359.2	1.82%	749.2	1865.0	4.44%
DHAR	366.7	289.4	-1.12%	204.5	226.7	0.49%	557.7	783.3	1.63%
SHIVPURI	290.9	285.2	-0.09%	184.8	332.1	2.83%	635.3	1164.4	2.93%
RAJGARH	259.9	266.4	0.12%	163.0	165.9	0.08%	627.2	622.7	0-03%
RATLAM	211.1	184.6	-0.64%	139.5	210.1	1.97%	660.8	1138.1	2.62%
BHIND	292.7	246.4	-0.82%	234.0	378.4	2.32%	799.5	1535.7	3.16%
GUNA	440.9	497.4	0.58%	251.5	323.4	1.20%	570.4	650.2	0.63%
DATIA	15.5	108.6	-0.29%	65.3	151.9	4.10%	565.4	1398.7	4.41%
SEONI	335.2	256.0	-1.28%	204.4	124.2	-2.34%	609.8	485.2	-1.08%
RAIPUR	1061.8	1111.5	0.22%	999.6	1322.1	1.34%	941.4	1189.5	1.12%
BETUL	374.6	300.7	-1.04%	178.1	189.4	0.29%	475.4	629.9	1.35%
BASTAR	687.2	836.7	0.94%	409.9	726.8	2.76%	596.5	868.7	1.81%
RAJNANDGAON	n/a	538.6	-0.11%	n/a	373.1	1.54%	n/a	692.7	1.65%
PANNA	14.3	217.0	0.78%	100.9	145.7	1.77%	547.5	671.4	0.98%
CHHATARPUR	278.0	307.5	0.48%	189.7	282.2	1.91%	682.4	917.7	1.42%
INDORE	208.2	141.3	-1.83%	171.6	265.5	2.10%	824.2	1879.0	4.00%
SARGUJA	526.7	58.0	0-44%	319.2	425.1	1.37%	606.0	735.5	0.93%
MANDLA	411.3	417.8	0.07%	221.1	183.3	-0.89%	537.6	438.7	-0.96%
JHABUA	290.2	324.4	0.53%	122.3	168.8	1.55%	421.4	520.3	1.01%
REWA	374.8	406.1	0.38%	224.4	248.9	0.49%	598.7	612.7	0.11%
BALAGHAT	321.6	313.09	-0.12%	283.2	281.2	-0.03%	880.6	895.8	0.08%
SAGAR	416.4	425.1	0.10%	260.9	296.0	0.60%	626.6	696.3	0.50%
DURG	1232.8	707.5	-2.61%	754.6	685.0	-0.46%	612.1	968.2	2.21%
RAIGARH	477.2	515.4	0.37%	321.4	498.3	2.11%	673.5	966.8	1.74%
DAMOH	458.2	267.2	-2.54%	149.8	171.1	0.64%	326.9	640.3	3.25%
GWALIOR	215.8	171.0	-1.10%	162.2	295.0	2.89%	751.6	1725.1	4.04%
SATNA	345.0	381.3	0.48%	192.5	245.9	1.17%	558.0	644.9	0.69%
WEST NIMAR	463.6	423.5	-0.43%	212.8	348.3	2.37%	459.0	822.4	2.82%
SIDHI	344.3	377.3	0.44%	185.0	188.2	0.08%	537.3	498.8	-0.35%
SHAHDOOL	433.7	444.6	0.12%	203.9	202.8	-0.03%	470.1	456.1	-0.14%
EAST NIMAR	262.4	216.5	-0.02%	178.5	191.6	0.34%	680.3	732.7	0.35%
JABALPUR	499.4	47.1	-0.26%	290.4	323.0	0.51%	581.5	682.7	0.77%
BHOPAL	N/A	122.3	-0.78%	N/a	138.8	3.22%	N/a	1134.9	4.04%
BILASPUR	926.4	983.5	0.29%	725.9	1070.3	1.87%	783.6	1088.3	1.58%
MADHYA PRADESH	16865.5	16865.3	0.00%	10910.6	15508.2	1.69%	646.9	919.5	1.69%

Source: Commissioner land Records, Madhya Pradesh, Gwalior, Agricultural statistics 1974,1981 and agriculture Census
Bhopal and Rajnandgaon were created after 1971, and their rate of change is calculated from 1981.

EL –8 Area, Production, Yield and per Capita Availability of Food Grains

DISTRICTS	Production of Foodgrains Per Capita (kg)			Per capita Production of Food Grains – 1992			
	1971	1992	Mean annual % change	Cereals	Oilseeds	Pulses	Total
				(Kgs.)	(Kgs)	(Kgs)	(Kgs)
SEHORE	471	331	-1.66%	288.0	216.7	102.6	607.2
UJJAIN	317	252	-1.09%	396.7	207.0	83.7	587.4
SHAJAPUR	308	306	-0.03%	309.0	156.3	82.8	548.2
RAISEN	376	436	0.71%	286.9	103.4	152.7	543.0
NARSIMHAPUR	340	419	1.00%	181.8	72.2	218.1	472.1
VIDSHA	366	423	0.69%	264.0	60.1	145.6	469.7
MANDSUR	290	280	-0.16%	322.7	64.6	75.0	462.4
HOSHAGABAD	230	399	2.67%	234.1	113.1	104.8	452.0
DEWAS	277	264	-0.24%	236.5	145.5	50.3	432.3
CHHINDWARA	221	188	-0.78%	260.1	106.4	60.1	426.6
TIKAMGARH	276	358	1.24%	334.0	36.2	45.8	416.0
MOENA	250	210	-0.83%	205.7	162.1	24.1	391.9
DHAR	243	166	-1.80%	237.5	114.5	37.7	389.8
SHIVPURI	273	293	0.33%	272.6	61.4	52.8	386.9
RAJGARH	253	167	-1.96%	205.5	95.4	76.6	377.4
RATLAM	223	216	-0.15%	208.3	83.5	73.5	365.3
BHIND	295	310	0.24%	249.3	43.7	69.4	362.4
GUNA	321	247	-1.24%	215.3	47.3	97.7	360.3
DATIA	256	383	.94%	233.9	18.2	106.2	358.0
SEONI	306	125	-4.17%	228.8	70.5	43.9	343.2
RAIPUR	382	338	-0.59%	302.3	3.3	18.9	324.5
BETUL	242	160	-1.95%	167.8	118.4	25.8	312.0
BASTAR	270	320	0.81%	289.0	6.6	11.9	307.5
RAJNANDGAON	N/A	259	-0.38%	248.5	7.8	46.0	302.4
PANNA	235	212	-0.49%	219.1	14.1	59.7	292.9
CHHATARPUR	266	244	-0.42%	205.9	15.6	62.8	284.3
INDORE	167	145	-0.68%	148.0	102.9	29.5	280.5
SARGUJA	241	204	-0.79%	250.2	13.1	14.8	278.1
MANDLA	253	142	-2.71%	208.5	37.6	28.0	274.0
JHABUA	183	149	-0.98%	207.0	21.1	44.3	272.5
REWA	229	160	-1.70%	217.4	5.0	43.5	265.9
BALAGHAT	290	206	-1.62%	243.5	7.2	14.6	265.3
SAGAR	246	180	-1.48%	164.5	44.8	51.3	260.7
DURG	514	286	-2.75%	210.0	3.5	47.2	260.7
RAIGARH	251	289	0.67%	233.7	13.6	11.8	259.1
DAMOH	261	190	-1.51%	175.5	17.0	62.7	255.2
GWALIOR	189	209	0.48%	167.6	50.0	33.2	250.9
SATNA	211	168	-1.08%	193.1	7.2	32.3	232.6
WEST NIMAR	166	172	0.17%	190.5	19.9	17.1	227.5
SIDHI	238	137	-2.60%	159.0	9.4	37.0	205.4
SHAHDOOL	198	116	-2.51%	165.3	11.8	14.0	191.1
EAST NIMAR	203	134	-1.96%	142.1	16.1	22.6	180.8
JABALPUR	172	122	-1.63%	116.5	6.9	35.7	159.1
BHOPAL	N/A	103	-0.55%	86.6	26.5	22.3	135.5
BILASPUR	297	282	-0.25%	26.4	3.5	33.4	63.4
MADHYA PRADESH	262	234	-0.54%	225.0	48.1	46.9	320.1

Source: Commissioner Land Records Madhya Pradesh , Gwalior , Agriculture 1974, 1981 and Agriculture Census.

Bhopal an Rajnandgaon were created after 1971 and their rate of change is calculated from 1981.

EL 9 – Irrigated Area Irrigated Holdings

DISTRICT	% of net Irrigated Area to net Sown Area	% of Gross Irrigated Area to Gross Area sown	% of net Irrigated Area to gross Area	Gross Irrigated Area
	1992-93	1992-93	1991-93	1992-93
MANDSAUR	36.4	24.5	24.5	202.1
TIKAMGARH	55.6	45.2	45.2	161.6
HOSHANGABAD	63.6	42.9	42.9	288.8
MORENA	57.8	53.0	53.0	249.5
GWALIOR	44.7	47.3	47.3	137.5
DATIA	39.5	38.0	38.0	53.5
INDORE	29.9	21.1	21.1	77.6
UJJAIN	28.2	19.8	19.8	134.5
BHIND	33.1	33.6	33.4	122.1
RAIPUR	45.1	36.3	36.1	425.9
BALAGHAT	43.8	37.6	37.6	132.2
SHIVPURI	32.1	28.0	28.0	133.7
RATLAM	25.3	17.5	7.0	83.2
SHAJAPUR	24.2	19.0	18.9	106.2
CHHATARPUR	34.8	29.4	29.3	124.6
RAJGARH	21.1	17.3	17.3	86.5
BHOPAL	23.6	19.3	19.3	37.2
DURG	36.5	28.1	28.1	214.0
DEWAS	18.5	15.6	15.6	68.8
DHAR	22.5	17.4	17.4	113.1
SEHORE	28.2	22.0	22.0	104.1
BILASPUR	31.6	26.6	26.6	272.9
WEST NIMAR	23.0	27.9	27.8	148.1
NARIMHAPUR	35.8	28.3	28.3	105.0
REWA	18.8	14.5	14.5	68.8
EAST NIMAR	17.1	17.0	17.0	83.1
SIDHI	11.2	9.0	9.0	39.8
RAISEN	25.3	20.8	20.8	106.5
BETUL	17.8	14.9	14.9	72.9
CHHINDWARA	15.3	13.5	13.5	73.5
RAJNANDGAON	14.8	12.8	12.8	77.0
SAGAR	18.7	16.4	16.4	97.9
JHABUA	17.4	13.2	13.2	66.7
GUNA	15.1	13.8	13.8	95.8
DAMOH	16.9	15.9	15.9	52.7
SARGUJA	4.0	3.9	3.9	24.7
SATNA	19.7	16.1	16.0	70.5
SEONI	15.6	13.7	13.6	56.8
JABALPUR	22.5	20.0	20.0	112.3
VIDISHA	16.5	14.9	14.9	86.6
PANNA	13.8	12.2	12.2	31.1
RAIGARH	7.9	7.7	7.7	44.6
SHAHDOL	6.4	5.6	5.6	28.8
BASTAR	3.0	2.9	2.9	25.4
MANDLA	3.5	3.9	3.9	19.8
MADHYA PADESH	24.4	20.9		4918.1

Source: Commissioner of Land Records, Madhya Pradesh , Gwalior Agriculture Table 1992-93

EL 9 – Irrigated Area Irrigated Holdings

DISTRICT	Wholly Irrigated Holdings		Wholly Un-irrigated Holdings		Partly Irrigate Holdings			Holdings Receiving Irrigation	
	Number	Area	Number	Area	Number	Total Area	Area	Number	Area
MANDSAUR	5.7%	1.7%	29.7%	14.1%	64.6%	77.3%	30.4%	70.3%	32.2%
TIKAMGARH	15.7%	10.9% [^]	31.0%	14.5%	52.7%	57.3%	32.6%	68.4%	43.5%
HOSHANGABAD	24.4%	17.5%	32.4%	21.7%	41.8%	47.2%	31.4%	66.2%	48.9%
MORENA	36.7%	30.2%	33.9%	25.6%	28.9%	38.1%	21.4%	65.6%	51.6%
GWALIOR	20.1%	12.2%	39.1%	29.1%	39.3%	51.9%	23.4%	59.5%	35.6%
DATIA	11.3%	4.6%	40.3%	24.9%	48.1%	63.2%	25.6%	59.4%	30.3%
INDORE	9.2%	3.6%	40.7%	25.8%	50.1%	64.6%	31.0%	59.3%	34.6%
UJJAIN	6.0%	1.7%	42.4%	24.5%	51.6%	63.6%	26.9%	57.6%	28.6%
BHIND	11.0%	7.9%	3*9.2%	31.4%	46.4%	59.2%	20.8%	57.5%	28.6%
RAIPUR	29.3%	19.2%	42.5%	37.9%	25.7%	32.8%	17.5%	55.1%	36.7%
BALAGHAT	16.1%	11.7%	40.9%	37.4%	38.5%	38.2%	24.1%	54.6%	35.8%
SHIVPURI	5.7%	1.9%	46.7%	32.6%	47.6%	47.8%	30.9%	53.4%	22.8%
RATLAM	5.2%	1.7%	46.3%	26.8%	46.4%	62.6%	21.0%	51.6%	22.8%
SHAJAPUR	4.9%	2.9%	49.0%	24.8%	44.5%	58.5%	20.8%	51.0%	23.8%
CHHATARPUR	9.0%	4.8%	46.8%	32.7%	40.8%	37.0%	18.3%	49.8%	23.1%
RAJGARH	1.7%	0.6%	52.0%	25.8%	46.3%	60.1%	20.0%	48.0%	20.0%
BHOPAL	9.0%	7.2%	53.0%	39.7%	37.9 [^]	44.0%	15.0%	46.8%	22.2%
DURG	16.3%	9.8%	53.2%	45.6%	30.0%	35.7%	18.8%	46.2%	28.6%
DEWAS	2.0%	0.5%	53.09%	31.0%	44.1%	52.5%	21.3%	46.1%	21.8%
DHAR	2.8%	1.3%	48.5%	31.7%	43.3%	62.4%	23.2%	46.1%	24.4%
SEHORE	2.7%	1.8%	54.9%	34.1%	42.4%	54.4%	20.9%	45.1%	22.6%
BILASPUR	20.9%	14.3%	59.2%	53.5%	18.7%	24.3%	12.8%	39.6%	27.1%
WEST NIMAR	1.9%	1.3%	62.1%	47.8%	35.9%	43.6%	17.4%	37.9%	18.7%
NARIMHAPUR	10.0%	7.5%	60.9%	51.3%	26.2%	34.2%	20.0%	36.2%	27.5%
REWA	2.6%	1.8%	66.6%	41.6%	30.5%	38.5%	12.1%	33.1%	13.9%
EAST NIMAR	2.9%	1.2%	67.6%	47.2%	29.55	40.75%	13.4%	32.4%	14.6%
SIDHI	0.4%	0.4%	67.7%	47.4%	31.9%	36.1%	6.0%	32.3%	6.4%
RAISEN	6.3%	3.9%	69.4%	55.3%	24.1%	36.4%	12.7%	30.4%	16.6%
BETUL	1.0%	0.4%	71.1%	47.0%	27.9%	33.3%	12.6%	28.9%	13.0%
CHHINDWARA	1.4%	0.6%	72.7%	52.4%	25.9%	32.7%	11.5%	27.3%	12.1%
RAJNANDGAON	3.3%	2.3%	74.2%	59.0%	22.5%	26.5%	8.0%	25.8%	10.3%
SAGAR	3.6%	1.8%	71.7%	54.7%	22.0%	34.5%	10.9%	25.6%	12.7%
JHABUA	1.1%	0.5%	74.9%	64.3%	24.0%	30.5%	9.0%	25.1%	9.5%
GUNA	2.0%	1.4%	75.2%	59.8%	22.7%	32.5%	10.5%	24.7%	11.9%
DAMOH	6.3%	3.9%	74.3%	60.2%	17.8%	25.2%	8.4%	24.1%	12.3%
SARGUJA	0.0%	0.0%	76.0%	55.2%	23.7%	40.1%	3.2%	23.7%	3.2%
SATNA	2.3%	1.5%	76.8%	55.5%	20.6%	27.8%	10.6%	22.9%	2.0%
SEONI	2.1%	0.7%	76.6%	58.5%	19.4%	22.0%	9.1%	21.6%	9.8%
JABALPUR	4.9%	5.7%	74.9%	48.9%	15.7%	21.8%	7.7%	20.6%	13.3%
VIDISHA	1.7%	0.9%	79.4%	63.1%	18.6%	31.2%	10.0%	20.3%	10.9%
PANNA	1.7%	1.0%	81.1%	61.9%	14.2%	20.0%	6.6%	15.9%	7.6%
RAIGARH	1.8%	0.6%	81.2%	63.6%	13.9%	23.0%	4.2%	15.7%	4.8%
SHAHDOL	0.0%	0.0%	87.3%	63.2%	11.8%	13.0%	2.6%	11.9%	2.6%
BASTAR	1.0%	0.6%	91.9%	81.6%	4.9%	5.2%	1.4%	6.0%	1.9%
MANDLA	0.6%	0.3%	96.3%	72.3%	3.0%	2.9%	0.8%	3.6%	1.1%
MADHYA PADESH	8.9%	4.7%	61.6%	46.2%	28.3%	36.3%	14.5%	37.2%	19.2%

Source: Commissioner Land Records, Gwalior, Madhya Pradesh, Sanket MPHDRO.

EL –10 Net and Gross Area Irrigated By Different Source

DISTRICT	Percentage of Net Area Irrigated by Different Sources					Total Area (000. hectares) 1992-93
	Canals	Tanks	Tubewells	Wells	Others	
	1992-93	1992-93	1992-93	1992-93	1992-93	
MORENA	56.3%	0.7%	4.0%	34.8%	4.2%	245.2
BHIND	50.9%	0.2%	7.9%	38.6%	2.4%	111.5
GWALIOR	53.9%	0.1%	3.2%	36.1%	6.7%	120.1
DATAI	25.0%	0.2%	0.2%	73.7%	7.0%	52.4
SHIVPURI	11.1%	2.7%	1.4%	74.3%	10.5%	130.2
GUNA	19.4%	2.1%	9.8%	36.5%	32.2%	94.9
TIKAMGARH	12.0%	5.6%	0.9%	76.0%	5.5%	141.2
CHHATARPUR	15.7%	3.8%	0.0%	73.4%	7.0%	123.9
PANNA	23.5%	3.2%	3.9%	29.9%	39.9%	31.1
SAGAR	10.3%	0.9%	3.4%	44.2%	41.2%	97.1
DAMOH	13.6%	2.7%	10.5%	24.5%	48.7%	48.5
SATNA	15.5%	1.0%	25.0%	35.3%	23.3%	70.5
REWA	28.2%	3.3%	13.7%	34.6%	20.2%	68.8
SHAHDOL	33.7%	3.1%	4.9%	18.8%	39.8%	28.8
SINDHI	35.9%	0.8%	12.8%	35.4%	15.1%	39.8
MANDSAPUR	2.1%	2.0%	2.5%	87.6%	5.9%	199.8
RATLAM	4.2%	2.3%	23.2%	64.1%	6.2%	81.0
UJJAIN	1.3%	0.1%	41.4%	49.6%	7.7%	134.0
SHAJAPUR	2.2%	1.5%	10.9%	74.0%	11.5%	104.8
DEWAS	1.6%	0.1%	36.4%	52.7%	9.1%	67.3
JHABRA	5.4%	0.5%	31.6%	41.3%	62.7%	62.7
DHAR	3.3%	2.9%	38.3%	40.9%	14.6%	113.1
INDORE	1.3%	0.9%	77.2%	16.1%	4.5%	77.5
WEST NIMAR	14.6%	0.0%	5.5%	60.7%	19.2%	148.1
EAST NIMAR	1.1%	0.8%	5.5%	78.8%	13.8%	76.0
RAJGARH	1.6%	1.0%	4.4%	83.2%	9.7%	86.5
VIDISHA	33.8%	0.8%	9.9%	17.8%	37.6%	86.6
BHOPAL	8.1%	1.3%	14.5%	44.1%	32.0%	37.2
SEHORE	21.9%	1.7%	10.3%	54.4%	11.7%	104.1
RAISEN	38.8%	0.5%	27.2%	14.9%	18.6%	106.5
BETUL	18.1%	0.3%	2.5%	65.2%	14.0%	72.9
HOSHANGABA	65.4%	0.1%	8.4%	20.4%	5.6%	288.8
JABALPUR	19.3%	0.3%	12.9%	40.4%	27.2%	103.3
NARSIMHAPUR	1.0%	0.1%	24.2%	67.1%	7.6%	105.0
MANDLA	72.8%	0.0%	0.0%	16.6%	10.6%	15.1
CHHINDWARA	7.2%	1.0%	3.7%	80.2%	8.0%	73.6
SEONI	46.3%	13.0%	0.2%	28.0%	12.5%	56.8
BALAGHAT	59.6%	27.1%	0.0%	9.9%	3.5%	120.7
SARGUJA	37.0%	2.2%	3.0%	20.9%	37.0%	23.0
BILASPUR	82.3%	7.9%	3.7%	3.6%	2.4%	261.5
RAIGARH	43.2%	14.4%	21.8%	5.3%	15.3%	43.1
RAJNANDGAON	71.4%	5.9%	4.4%	5.1%	13.3%	73.0
DURG	65.4%	4.5%	7.3%	4.6%	18.2%	199.4
RAIPUR	80.8%	8.6%	2.5%	4.1%	4.1%	424.4
BASTAR	35.4%	40.6%	1.6%	9.4%	13.0%	25.4
MADHYA PADESH	35.3%	3.7%	10.1%	38.5%	12.4%	4775.2

Source: Commissioner Land Records , Madhya Pradesh, Gwalior, Agriculture Statistics, 1992-93

EL 10 – Net and Gross Area Irrigated B Different Sources

DISTRICT	Percentage of Net Area Irrigated by Different Sources					Total Area (000. hectares) 1992-93
	Canals	Tanks	Tubewells	Wells	Others	
	1992-93	1992-93	1992-93	1992-93	1992-93	
MORENA	56.3%	0.7%	4.1%	34.8%	4.2%	249.5
BHIND	53.4%	0.2%	8.1%	35.9%	2.5%	122.1
GWALIOR	56.3%	0.1%	2.9%	34.8%	5.9%	137.5
DATAI	24.5%	0.2%	0.2%	74.2%	0.9%	53.5
SHIVPURI	10.8%	2.6%	1.3%	74.9%	10.3%	133.7
GUNA	19.3%	2.1%	9.7%	36.7%	32.2%	95.8
TIKAMGARH	12.0%	5.8%	0.9%	76.1%	5.3%	161.6
CHHATARPUR	15.7%	3.8%	0.0%	73.6%	7.0%	124.6
PANNA	23.2%	3.2%	3.9%	30.9%	39.5%	31.1
SAGAR	11.0%	0.9%	3.4%	43.8%	40.9%	97.1
DAMOH	15.2%	2.7%	9.7%	23.1%	49.3%	53.7
SATNA	15.5%	1.0%	25.0%	35.3%	23.3%	70.5
REWA	28.2%	3.3%	13.7%	34.6%	20.2%	68.8
SHAHDOL	33.7%	3.1%	4.9%	18.8%	39.6%	28.8
SINDHI	35.9%	0.8%	12.8%	35.4%	15.1%	39.8
MANDSAPUR	2.1%	2.0%	2.5%	87.6%	5.8%	202.1
RATLAM	4.1%	2.3%	22.6%	64.8%	6.3%	82.2
UJJAIN	1.3%	0.1%	41.5%	49.5%	7.7%	134.5
SHAJAPUR	2.2%	1.6%	10.8%	73.8%	11.6%	106.2
DEWAS	1.6%	0.1%	36.2%	52.9%	9.2%	68.8
JHABRA	21.1%	5.4%	0.6%	31.6%	41.2%	66.7
DHAR	3.3%	2.9%	38.3%	40.9%	14.6%	113.1
INDORE	1.3%	1.0%	77.0%	16.2%	4.5%	77.7
WEST NIMAR	14.6%	0.0%	5.5%	60.7%	19.2%	148.1
EAST NIMAR	1.0%	0.7%	5.1%	80.6%	12.7%	83.0
RAJGARH	1.6%	1.0%	4.4%	83.2%	9.7%	86.5
VIDISHA	33.8%	0.8%	9.9%	17.8%	37.6%	86.6
BHOPAL	8.1%	1.3%	14.5%	44.1%	32.0%	37.2
SEHORE	21.9%	1.7%	10.3%	54.4%	11.7%	104.1
RAISEN	38.8%	0.5%	27.2%	14.9%	18.6%	106.5
BETUL	18.1%	0.3%	2.5%	65.2%	14.0%	72.9
HOSHANGABA	65.4%	0.1%	8.4%	20.4%	5.6%	288.8
JABALPUR	22.8%	0.4%	11.9%	38.6%	26.3%	112.3
NARSIMHAPUR	1.0%	0.1%	24.2%	67.1%	7.6%	105.0
MANDLA	69.2%	0.0%	0.0%	22.7%	8.1%	19.8
CHHINDWARA	7.2%	1.0%	3.7%	80.2%	8.0%	73.6
SEONI	46.3%	13.0%	0.2%	28.0%	12.5%	56.8
BALAGHAT	61.0%	26.2%	0.0%	9.5%	3.4%	132.2
SARGUJA	37.0%	2.0%	3.2%	21.9%	35.6%	24.7
BILASPUR	81.2%	8.2%	4.1%	3.8%	2.6%	272.9
RAIGARH	43.2%	13.9%	22.9%	5.2%	14.8%	44.6
RAJNANDGAON	68.7%	5.7%	5.1%	7.1%	13.4%	77.0
DURG	61.0%	4.4%	8.7%	6.3%	19.6%	214.0
RAIPUR	80.7%	8.5%	2.6%	4.1%	4.1%	425.9
BASTAR	35.4%	40.6%	1.6%	9.4%	13.0%	25.4
MADHYA PADESH	35.4%	3.7%	10.0%	38.5%	12.3%	4918.1

Source: Commissioner Land Records , Madhya Pradesh, Gwalior, Agricultural Statistics, 1992,93

EL 11- Agriculture Machinery and Implements

District	Plough (No.)		Bullock carts (No.)	Sugarcane Crushers (No.)		Oil Engine Pumps (No.)	Electric Pumps (No.)	Tractors (No.)
	Wooden	Iron		Power Driven	Bullock Driven			
	1992-93	1992-93		1992-93	1992-93			
RAISEN	34676	8725	52678	2	7	8503	6715	4634
VIDISHA	64833	6136	43360	37	39	10633	5470	5659
BHOPAL	23592	9192	17188	119	278	2581	8640	826
DATIA	24892	2566	17836	10	107	2801	5086	1380
MORENA	111325	17194	54333	173	438	7548	6950	6464
GUNA	104117	3667	56788	453	474	10258	12795	5226
HOSHANGABAD	70073	17342	90804	53	17	6305	19482	4214
WEST NIMAR	141862	65131	106392	135	237	8892	51335	1082
BHIND	57296	12919	439906	6	108	2399	6659	4524
SEHORE	64837	5559	58349	990	370	3320	30127	2696
SAGAR	79777	21272	52295	16	55	10192	13872	4351
GWALIOR	29603	24124	22591	21	610	2610	2149	3507
INDORE	40357	17048	20770	149	31	47	18538	2259
NARSIMHAPUR	50589	2487	43564	593	8	2153	14638	2274
MANDSAPUR	101020	4474	65929	18	170	9196	73945	3741
UJJAIN	52086	3934	34049	312	438	908	41682	2404
DEWAS	59141	7739	46425	894	248	1467	36658	1646
SHIVPURI	111556	17084	54338	14	447	8531	12359	2248
CHHATARPUR	147687	6273	61931	-	301	7541	18343	1843
DHAR	110750	27583	64144	129	57	6213	42281	2224
SATNA	118730	3495	21321	-	27	4570	19948	2579
REWA	175944	-	4960	-	12	4*952	10918	1950
RATLAMA	56630	8992	2440	15	71	2097	33361	1442
DAMOH	58881	17401	10820	-	16	3715	6592	939
SHAJAPUR	72447	15300	57026	148	750	1773	26560	1686
EAST NIMAR	76927	39755	78470	30	-	7018	23700	933
TIKAMGARH	51537	459	24003	7	356	1794	10871	862
BETUL	145073	14931	131022	1017	129	5687	24414	1034
PANNA	86905	6273	38221	20	97	4320	2920	838
CHHINDWARA	14271	16616	100587	580	230	1301	37489	975
DURG	188485	1147	114356	54	27	3033	7087	1509
RAJGARH	87363	20279	50714	35	527	2463	32137	953
RAIPUR	367369	211551	170661	10	718	16582	6428	2836
JABALPUR	119961	22964	21150	5	15	6167	12981	2390
SEONI	126456	2316	6973	89	197	3610	6306	567
RAIGARH	258103	2343	55094	3	1924	3736	1670	914
BILASPUR	260339	748	147229	24	776	1115	440	1327
SIDHI	168208	3865	373	-	14	3101	4259	611
RAJNANDGAON	169881	1221	87220	2	190	3466	2198	524
SHAHDOL	223096	13159	37866	-	88	2004	1969	494
JHUBUA	158192	20243	25848	4	12	5825	7639	251
BASTAR	404065	7023	69492	6	1012	3926	69	235
SURGUJA	294635	23744	10452	55	698	2480	1623	478
MANDLA	197686	355	8374	133	285	1239	1004	164
BALAGHAT	149906	2907	109320	67	816	2678	3339	349
MADHYA PRADESH	5640159	772916	2474746	6428	13427	210750	714276	90060

Source : Commissioner of Land Records , Gwalior , Madhya Pradesh, Agricultural Statistics, 1992-93.

EL 11- Agriculture Machinery and Implements

District	Plant Protection Machines (No.)	Expellers (No.)	Persia Wheel (o.)	Tractors per 10 Villages	Tractors Per 100 Operational Holdings	Electric Pumps per 100 Operational Holdings	Oil Engine Pumps per 100 Operational Holdings
	1992-93	1992-93	1992-93	1991-92	1991-92	1991-92	1991-92
RAISEN	3940	8	15	47.79	6.29	3.69	5.53
VIDISHA	936	6	10	32.94	4.63	5.05	7.61
BHOPAL	668	1	1	38.00	4.53	18.59	5.26
DATIA	489	-	1880	36.87	2.88	12.32	4.28
MORENA	12	5	1023	47.32	2.68	4.46	2.21
GUNA	1050	57	713	24.38	2.67	5.11	3.75
HOSHANGABAD	16198	0	8	24.04	2.67	7.71	4.06
WEST NIMAR	55431	12	79	21.73	2.50	27.82	5.53
BHIND	201	-	389	37.73	2.40	4.72	1.16
SEHORE	3710	36	-	22.90	2.33	18.22	2.30
SAGAR	352	5	66	23.87	2.30	7.58	6.44
GWALIOR	825	5	1615	33.37	2.27	14.19	3.27
INDORE	4265	1	-	21.68	2.09	50.07	0.15
NARSIMHAPUR	6756	1	-	21.24	1.88	8.80	1.85
MANDSAPUR	4738	85	30	23.26	1.84	31.87	5.96
UJJAIN	6176	10	-	16.88	1.72	37.11	0.68
DEWAS	14667	9	1	13.07	1.48	37.04	1.32
SHIVPURI	292	57	26714	16.28	1.36	6.72	5.33
CHHATARPUR	462	213	19145	21.40	1.24	8.15	3.66
DHAR	36371	17	254	10.42	1.19	26.76	2.83
SATNA	3768	20	3	14.16	1.19	2.66	1.03
REWA	526	336	16	7.90	0.98	3.58	2.45
RATLAMA	10789	27	1	9.47	0.85	23.37	1.98
DAMOH	201	-	59	11.52	0.82	4.04	2.75
SHAJAPUR	2893	24	152	9.76	0.79	31.29	2.75
EAST NIMAR	11505	6	2	8.39	0.77	25.32	6.23
TIKAMGARH	280	21	12513	12.53	0.73	9.05	2.37
BETUL	580	41	-	7.46	0.65	12.93	3.03
PANNA	46	2	1182	7.31	0.58	2.18	2.80
CHHINDWARA	6209	27	191	5.20	0.52	19.77	0.76
DURG	16903	7	-	8.43	0.51	1.84	1.16
RAJGARH	218	1591	2859	4.39	0.50	16.81	1.12
RAIPUR	28695	439	12	6.62	0.44	2.16	2.26
JABALPUR	4635	20	62	4.82	0.37	1.34	1.20
SEONI	701	5	83	3.14	0.34	3.38	2.05
RAIGARH	9206	635	7	3.69	0.32	0.58	1.68
BILASPUR	23846	179	16	3.14	0.30	1.09	0.87
SIDHI	1540	752	3	2.64	0.26	2.13	1.90
RAJNANDGAON	7256	46	5	2.45	0.24	0.97	1.11
SHAHDOL	219	82	-	3.09	0.23	0.81	1.14
JHUBUA	9873	4	-	1.93	0.21	5.04	4.34
BASTAR	1474	118	20	1.14	0.15	0.20	0.84
SURGUJA	2545	132	121	1.7/8	0.14	0.47	0.81
MANDLA	6	22	62	0.70	0.07	0.45	0.35
BALAGHAT	1452	18	16*9	2.32	0.05	0.48	0.27
MADHYA PRADESH	302905	5082	69481	12.13	1.03	6.67	2.26

Sources: Commissioner of Land Records , Gwalior, Madhya Pradesh, Agricultural Statistics, 1992-93

EL 12 – Livestock Population in Madhya Pradesh, Milk Production and Veterinary Centers.

District	Cattle (in'000s)				Buffaloes (in '000s)			
	Bull, Bullocks	Cows	Others Cattle	Total Cattle	Male	Female	Other	Total
	1992-93	1992-93	1992-93	1992-93	1992-93	1992-93	1992-93	1992-93
CHHATARPUR	256.2	132.9	247.0	736.1	6.7	108.5	96.3	211.5
SHIVAPURI	247.8	219.3	202.5	669.6	3.3	112.7	90.4	206.4
PANNA	180.8	151.0	161.8	493.6	9.3	59.6	54.9	123.8
SIDHI	351.1	246.9	260.8	858.8	4.8	84.0	77.0	165.8
TIKAMGARH	187.1	157.8	172.7	517.7	3.2	71.4	64.6	139.2
DEWAS	143.4	120.9	136.2	400.5	1.96	97.6	69.3	168.8
MORENA	190.9	186.0	157.3	534.2	2.8	200.1	163.2	366.1
DAMOH	136.7	144.4	167.1	448.2	2.4	41.6	39.3	83.3
RAJGARH	144.7	136.6	134.8	416.1	2.7	122.6	107.6	232.9
MANDSAUR	168.3	210.7	196.2	575.2	2.6	145.9	122.9	217.1
SEHORE	137.7	119.2	128.4	385.3	2.4	71.1	55.9	129.4
BASTAR	603.2	427.5	460.8	1491.5	148.4	2*9.2	35.2	212.8
SATNA	295.4	222.7	251.2	769.3	15.5	71.0	70.7	157.2
GUNA	219.3	185.5	192.8	597.6	4.9	111.5	99.5	215.9
BHIND	106.4	74.5	76.5	257.4	2.8	140.5	126.5	275.8
SHAJAPUR	125.3	150.8	136.4	412.5	2.8	115.3	92.5	210.6
DATIA	51.5	41.1	44.8	137.4	0.4	42.0	32.9	75.3
RAJNANDGAON	255.8	253.4	265.9	775.1	95.8	22.0	22.7	140.5
VIDISHA	137.7	131.2	137.1	406.0	2.4	66.3	51.3	120.0
REWA	326.5	218.5	245.8	800.8	4.1	76.3	74.1	154.5
SEONI	195.0	141.5	162.3	498.8	10.9	47.2	44.3	102.4
SHAHDOL	386.4	264.8	317.4	968.6	83.1	64.2	70.0	217.3
SAGAR	203.9	231.7	267.1	702.7	2.4	80.5	70.2	154.1
RATLAM	108.3	98.6	98.4	305.3	1.9	77.9	62.0	141.8
CHHINDWARA	297.3	203.6	223.5	724.4	3.7	62.1	57.3	123.1
RAISEN	143.1	134.4	146.4	423.9	3.6	52.3	45.7	101.1
JHABUA	288.9	137.5	142.8	569.2	1.7	53.0	46.4	101.1
BETUL	284.8	144.5	164.5	593.8	4.4	57.3	54.8	116.2
WEST NIMAR	342.6	230.3	232.7	805.6	3.3	132.3	102.0	237.6
SARGUJA	537.5	296.3	295.4	1129.2	89.6	62.6	61.4	213.7
MANDLA	276.6	219.7	212.6	708.9	41.7	47.5	57.0	145.2
NARSINGHPUR	105.4	107.9	128.0	341.3	3.0	43.7	42.3	89.0
RAIPUR	567.5	558.3	631.7	1757.4	237.4	62.3	72.0	372.7
UJJAIN	117.8	124.2	118.1	360.1	3.3	132.4	88.0	224.7
BALAGHAT	251.8	165.2	164.5	581.5	50.8	39.6	44.4	134.8
HOSHANGABAG	202.0	156.9	185.7	544.6	4.1	75.8	64.2	144.2
BILASPUR	402.5	547.8	592.5	1542.8	317.5	50.7	59.0	427.2
DHAR	233.1	149.2	167.6	549.9	2.0	94.5	76.3	171.8
DURG	251.5	318.7	365.0	935.2	100.7	40.0	39.2	179.9
RIGARH	381.4	216.7	248.8	846.9	109.7	19.2	22.0	150.9
EAST NIMAR	211.8	138.4	163.4	513.6	2.6	77.6	58.9	139.1
GWALIOR	103.9	122.9	98.2	325.0	6.7	110.5	79.9	197.1
JABALPUR	304.4	265.5	324.5	864.4	18.7	86.3	81.3	186.3
INDORE	79.8	76.8	79.5	236.1	2.0	116.4	61.0	179.4
BHOPAL	48.6	47.1	49.2	144.9	0.9	32.5	24.2	57.6
MADHYA PRADESH	10591.7	8529.4	9355.9	29687.0	1426.0	3507.3	2595.3	7969.7

Source: Commissioner Land Records, Gwalior, Madhya Pradesh Sanket- MPHRO

EL 12 – Livestock Population in Madhya Pradesh , Milk Production and Veterinary Center

DISTRICT	Other Animals (in '000s)					Mitch Animals	Grass Total
	Sheep	Goats	Horses	Pigs	Others	1992-93	1992-93
	1992-93	1992-93	1992-93	1992-93	1992-93		
CHHATARPUR	52.6	257.2	0.6	18.4	2.4	241.4	1278.8
SHIVAPURI	75.2	251.4	0.4	8.2	1.8	332.0	1213.0
PANNA	10.9	112.2	0.8	7.3	0.5	210.6	749.1
SIDHI	25.7	317.9	1.5	9.8	0.2	330.9	1379.7
TIKAMGARH	71.2	186.0	0.5	8.1	1.0	229.2	923.6
DEWAS	0.1	122.1	0.9	2.9	1.5	218.5	696.7
MORENA	32.4	288.8	0.9	10.4	5.5	386.1	1238.3
DAMOH	5.8	87.8	0.7	8.0	0.8	186.0	634.6
RAJGARH	10.1	124.7	1.2	5.7	4.1	259.2	794.8
MANDSAUR	47.4	259.1	2.5	5.2	6.9	356.3	1167.4
SEHORE	1.6	77.6	1.9	3.5	1.5	190.3	600.8
BASTAR	24.9	507.7	0.1	210.8	-	456.7	2447.8
SATNA	24.4	180.4	0.6	13.8	0.5	293.7	1146.2
GUNA	9.5	16.9	1.1	5.9	2.1	297.0	997.0
BHIND	42.7	141.0	0.8	10.4	3.0	215.0	731.1
SHAJAPUR	5.2	146.0	1.9	4.8	3.9	266.1	784.9
DATIA	14.9	73.5	0.2	3.5	0.5	83.1	305.3
RAJNANDGAON	13.5	143.5	0.8	20.9	0.1	275.4	1094.4
VIDISHA	1.9	76.9	1.3	2.9	1.6	197.5	610.6
REWA	22.6	179.0	0.7	21.4	0.3	294.8	1179.3
SEONI	0.4	116.0	1.6	8.5	0.1	188.7	727.8
SHAHNOL	11.3	183.8	3.5	10.7	-	329.0	1395.2
SAGAR	4.9	107.8	1.6	7.0	0.5	312.2	978.6
RATLAM	17.1	131.9	1.3	2.4	2.0	176.5	601.8
CHHINDWARA	2.4	244.6	5.1	6.9	0.8	265.7	1107.3
RAISEN	2.5	66.2	2.6	2.8	2.2	186.7	601.8
JHABUA	8.0	301.4	0.4	0.2	2.5	190.5	982.8
BETUL	6.5	122.2	2.4	8.4	0.9	201.8	850.4
WEST NIMAR	14.7	415.9	1.0	5.3	4.8	362.6	1484.9
SARGUJA	7.2	387.9	4.7	43.4	-	358.9	1786.1
MANDLA	1.2	119.4	7.5	22.9	-	267.2	1005.1
NARSINGHPUR	1.3	68.9	1.7	5.8	1.3	151.6	509.3
RAIPUR	48.4	238.7	0.2	25.4	0.2	620.6	2443.1
UJJAIN	10.11	1.4	2.0	3.2	256.6	733.3	733.3
BALAGHAT	-	160.2	0.2	21.3	-	204.8	898.0
HOSHANGABAG	0.5	107.5	2.0	3.9	1.1	232.7	803.8
BILASPUR	23.4	276.6	1.9	18.1	0.1	598.5	2290.1
DHAR	14.1	313.0	1.0	3.3	3.1	243.7	1056.2
DURG	22.5	136.2	0.5	7.9	0.1	358.7	1282.3
RIGARH	36.5	296.8	1.7	59.9	-	235.9	1392.7
EAST NIMAR	28.3	166.4	1.9	3.2	2.0	216.0	854.5
GWALIOR	63.1	241.9	4.6	33.6	13.3	233.4	878.6
JABALPUR	15.6	192.8	2.2	24.3	0.4	351.8	1316.0
INDORE	2.7	94.8	1.2	14.4	1.3	193.2	529.9
BHOPAL	0.5	49.6	0.8	5.7	0.6	76.6	256.7
MADHYA PRADESH	835.8	8370.0	72.4	729.2	78.6	12036.7	46742.7

Source: Commissioner Land Records Gwalior Madhya Pradesh , Sanket- MPHRO

EL 12 – livestock Population in Madhya Pradesh , Milk Production and Veterinary Center

	Animals per Capita	Draught Animals Per operational Holding	Mulch Animals Per House	Milch Animals per Capita Pigs	Draught Animals per Capita dependent on agriculture and allied activities
DISTRICT	1991-92				
CHHATARPUR	1.16	1.57	1.69	0.28	0.89
SHIVAPURI	1.08	1.73	1.62	0.27	0.82
PANNA	0.98	1.65	1.35	0.25	0.96
SIDHI	0.97	1.89	1.36	0.23	0.83
TIKAMGARH	0.89	1.31	1.33	0.22	0.68
DEWAS	0.67	1.59	1.31	0.21	0.51
MORENA	0.77	1.14	1.46	0.21	0.65
DAMOH	0.76	1.25	1.08	0.20	0.80
RAJGARH	0.75	0.98	1.23	0.20	0.47
MANDSAUR	0.72	0.87	1.13	0.19	0.33
SEHORE	0.70	1.54	1.18	0.19	0.61
BASTAR	0.99	2.28	1.00	0.19	0.74
SATNA	0.78	1.51	1.10	0.19	0.83
GUNA	0.72	1.32	1.17	0.19	0.76
BHIND	0.58	0.93	1.30	0.18	0.50
SHAJAPUR	0.60	0.91	1.09	0.18	0.37
DATIA	0.69	0.98	1.19	0.18	0.53
RAJNANDGAON	0.75	1.59	0.99	0.18	0.59
VIDISHA	0.59	1.59	1.08	0.18	0.67
REWA	0.72	1.84	1.06	0.17	0.84
SEONI	0.75	1.49	0.98	0.17	0.60
SHAHNOL	0.78	1.82	0.93	0.17	0.91
SAGAR	0.60	1.26	1.00	0.17	0.75
RATLAM	0.61	0.99	0.95	0.16	0.40
CHHINDWARA	0.69	1.50	0.95	0.16	0.64
RAISEN	0.65	1.69	1.01	0.16	0.80
JHABUA	0.84	2.33	1.03	0.16	0.70
BETUL	0.69	1.71	0.98	0.16	0.64
WEST NIMAR	0.66	1.79	0.99	0.16	0.43
SARGUJA	0.79	1.82	0.84	0.16	0.91
MANDLA	0.61	1.25	0.80	0.15	0.51
NARSINGHPUR	0.61	0.92	0.90	0.15	0.48
RAIPUR	0.59	1.34	0.83	0.15	0.57
UJJAIN	0.50	1.28	0.88	0.14	0.41
BALAGHAT	0.61	0.48	0.77	0.14	0.61
HOSHANGABAD	0.54	1.55	0.82	0.14	0.65
BILASPUR	0.54	1.93	0.76	0.14	0.57
DHAR	0.62	1.49	0.81	0.13	0.41
DURG	0.51	1.20	0.72	0.13	0.50
RIGARH	0.76	1.91	0.65	0.13	0.82
EAST NIMAR	0.52	1.74	0.74	0.12	0.46
GWALIOR	0.37	0.95	0.72	0.11	0.52
JABALPUR	0.38	0.95	0.46	0.08	0.57
INDORE	0.24	0.96	0.46	0.08	0.30
BHOPAL	0.17	1.20	0.27	0.05	0.52
MADHYA RADESH	0.66	1.42	0.94	0.16	0.62

Source: Commissioner Land Records Gwalior Madhya Pradesh, Sanket =MPHDRO

EL 12 – Livestock Population in Madhya Pradesh, Milk Production and Veterinary Centers

DISTRICT	District wise annual Production of Milk (Kgs)		Production of Milk per person in the District per day (Kgs)	Veterinary Hospitals	Veterinary Dispensaries	Total	Animals per Hospitals and Dispensaries
	1995-96	1996-97	1996-97	1996-97	1996-97	1996-97	
CHHATARPUR	92686050	96290258	0.37	16	52	68	18806
SHIVAPURI	176161985	168750523	0.66	15	51	66	18379
PANNA	85427304	88254547	0.59	8	38	46	16285
SIDHI	100413301	102395078	0.33	19	69	88	15678
TIKAMGARH	85426308	87742362	0.42	13	41	54	17104
DEWAS	175368171	20248617	0.09	12	26	38	18334
MORENA	1711311676	175195066	0.45	19	53	72	17199
RAMOH	76890827	79000084	0.41	9	32	41	157478
RAJGARH	87856391	94731370	0.45	14	40	54	14719
MANDSAUR	203562591	167934680	0.52	17	48	65	17960
SEHORE	82503995	85972100	0.47	12	25	38	15811
BASTAR	112908874	123079161	0.27	42	105	147	16652
SATNA	95598365	95810697	0.30	15	58	73	15701
GUNA	139311754	141489479	0.48	15	62	77	12948
BHIND	154345924	157205405	0.57	10	27	37	19759
SHAJAPUR	84331625	105905319	0.48	15	30	45	17442
DATIA	65184722	67521386	0.76	4	17	21	14538
RAJNANDGAON	94174920	73875978	0.25	16	69	85	12875
VIDISHA	91040040	95044905	0.45	8	35	43	14200
REWA	98134921	98673671	0.29	16	59	75	15724
SEONI	71813477	77804258	0.38	13	39	52	13996
SHAHDOL	97015161	98625557	0.26	25	80	105	13288
SAGAR	89732903	91410027	0.26	18	45	63	15533
RATLAM	1726224421	173577830	0.86	12	30	42	14329
CHHINDWARA	91911010	92532931	0.28	19	66	85	13027
RAISEN	77820705	80018950	0.42	13	30	43	13995
JHABUA	967778498	99936117	0.40	18	43	61	16111
BETUL	90411999	92573490	0.37	18	48	66	12885
WEST NIMAR	167200016	169881259	0.40	16	36	52	28556
SARGUJA	97621185	98925873	0.23	31	76	107	16693
MANDLA	100062977	78954982	0.30	21	55	76	13225
NARSINGHPUR	83667734	85945181	0.52	9	27	36	14147
RAIPUR	119454956	122630174	0.15	41	127	168	14542
UJJAIN	185491810	153436383	0.53	9	29	38	19297
BALAGHAT	79807960	82586480	0.30	15	42	57	15754
HOSHANGABAD	88923750	76513764	0.28	18	41	59	13624
BILASPUR	137554017	139098998	0.17	37	124	161	14224
DHAR	108145360	110622762	0.38	21	51	72	14669
DURG	86419092	73024754	0.15	21	77	98	13085
RIGARH	731261497	105779029	0.31	20	61	81	17194
EAST NIMAR	167782460	169961319	0.57	26	73	99	8631
GWALIOR	175106930	176008897	0.55	16	21	37	23746
JABALPUR	97927470	101687799	0.18	20	57	77	17091
INDORE	20408459	209926334	0.52	11	26	37	14322
BHOPAL	92543890	99719460	0.31	9	12	21	12367
MADHYA RADESH	5125558618	5224241286	0.37	772	2253	3026	15447

Source: Commissioner Land Records, Gwalior Madhya Pradesh Sanket-MPHDRO

EL-13- LIVELIHOOD PROFILE OF MADHYA PRADESH

District	Major Occupation	Other Occupation	Significant Non Agricultural Occupation in 1981	Significant Non Agricultural Occupation in 1991	Occupation with significant Decadal Growth Rates	Status of manufacturing	Observations
Morena	Cultivation (70%) and Agriculture labour (8.8%)	Other Services (7.6%)	Trading in Food and Food Articles , Public Administration an defence service	Public Administration and Defence Service, Retail trade in Food and food articles , land Transport Construction	Agricultural labour (69%) Construction (57%) Transport storage and communications (85%) non house hold manufacturing (44%) other services (65%)	Moderate growth as seen from growth in non household manufacturing (44%) an other service (65%)	Increase in female main worker by 11% this increase is mainly in the sector of agricultural labour, non household manufacturing and Cultivation Increase in construction labour among urban males.
Bhind	Cultivation (67%) and agriculture labour (12.6)	Other services (10.9%)	Public administration defence service	Public administration and defence services Educational services, Retail trade in Food and food articles.	Other Services (81%) Agricultural labour (61%)	Moderate growth as seen from growth in seen from growth in non house hold (28%) and other services (81)	Increase in female main workers by (90%). This increase is mainly in the other sector of agricultural labour, non household manufacturing and construction.
Gwalior	Cultivation (67%) and Other Services (22%)	Non household manufacturing (10.7%), trade and commerce (10.3%)	Manufacturing of Cotton textiles , Product Construction , Trading in Food and Food Articles, Land Transport , Public administration an defence services, Education and Research services and personal services.	Public Administration and Defence Services Unclassified services Construction , Educational services, Retail trade in food and food articles , Land Transport.	Mining (287%) Construction (83%) and Other Services (79%)	Stagnation a seen from growth in non household manufacturing (-3%)	Increase in construction labour is main among the rural female main workers. Decrease in Agriculture Allied By 41%
Datia	Cultivation (63%) and Agriculture labour (13%)	Other services (10.3%)	Trading in food and food Articles , Public Administration and defence services	Public Administration and defence service, retail trade in food and food articles, Educational services Unclassified services Construction, Personal services.	Other services (65%) Trade and Commerce (51%) Transport, storage and Communication (51%) and Construction (43%)	Law rate of growth as seen from growth in non household manufacturing (-1%)	Increase in female main workers by (6%) The increase in marginal worker is by 206% much of this increase in among female marginal worker.
Shivpuri	Cultivation (70%) and Agriculture labour (12.3%)	Other services (7%)	Trading in Food and Food Articles , Public Administration and defence services	Public administration and Defence services, Educational services Retail trade in food and food articles , Construction 15 , Personal services.	Mining (172%) , Other services (71%) Transport, storage an Communication (54%) Trade and Commerce (55%) Construction (48%)	Low rate of growth as seen from growth in non household manufacturing (-3%)	Increase in female main workers by 9% The increase in the sectors Other Services and rural construction. Increase in marginal workers by 88% mainly among the female marginal workers. Increase in mining by 172%. The increase mainly among the rural males.
Guna	Cultivation (59%) and agriculture labour (18.8%)	Other service (8.6%)	Manufacture of Beverages, Construction, Manufacture of Food Production , Public administration and defence services, Education	Public Administration and Defence services Unclassified services , Retail trade in food and food articles , Construction Educational services personal services.	Other services (96%) Non household manufacturing (72%) Transport storage and Communication (62%)	The rate of growth is high as seen from growth in non household manufacturing (72%) and other Services (96%)	There is a 99% increase in the marginal worker Much of this increase is among the female marginal workers . The district shows a growth of 7% in the Agriculture Allied sector when more than 80% o the districts are showing a negative trend in the same sector.

1. The Percentages denote the percent of main worker engaged in the particular occupation
2. The percentage denote the decadal growth rates in main workers (1981-1991)

EL-13- LIVELIHOOD PROFILE OF MADHYA PRADESH

District	Major Occupation	Other Occupation	Significant Non Agricultural Occupation in 1981	Significant Non Agricultural Occupation in 1991	Occupation with significant Decadal Growth Rates	Status of manufacturing	Observations
Tikamgarh	Cultivation (73.5%) and Agricultural labour (11.7%)	Other services (5.3%)	Manufacture of Beverages Construction, Manufacture of Food Products, Public Administration and Defence Services, Education	Public Administration and Defence service, Educational services, Retail trade in food and food articles, Manufacture of wood and wood products Unclassified services.	Non household manufacturing (63%) Trade and Commerce (60%) Other services (52%)	Moderate growth as seen from growth in non household manufacturing (63%) and other services (52%)	Increase in female main workers by 60%. The increase is mainly among rural female cultivators. Decline in Agriculture Allied sector by 28%
Chhatarpur	Cultivation (50.6%) and Agricultural Labour (20.5%)	Other services (6.2%)	Livestock Production	Retail trade in Food and Food articles, Educational services, Public Administration and Defence services. Manufacture of Wood and wood products, Livestock production, Personal services Construction	Trade and commerce (51%) Storage Transport and Communication (62%)	Low level of growth as seen from growth in non household manufacturing (21%) and other services (23%)	Increase in marginal workers by 64%. The increase is primarily among female marginal workers. Increase in female main workers by 56%. The increase is mainly in the area rural female cultivators.
Panna	Cultivation (55.4%) and Agricultural labour (27%)	Other services (5.6%)	Construction	15, Public Administration and Defence services, Retail trade in food and food articles, Manufacture of wood and wood products.	Mining (71%) Transport and communication (55%) Trade and Commerce (43%)	Low level of growth as seen from growth in non household manufacturing (18%) and other services (37%)	Increase in marginal workers by 65%. The increase is mainly among female marginal worker The district has more than 14,000 child workers.
Sagar	Cultivation (32.7%) and Agricultural labour (22.5%)	Household manufacturing (19.9%), Trade and Commerce (5.6%)	Construction, manufacture of food Products, Land transport, Public Administration and Defence Services, Education	Manufacture of Beverages, Tobacco and tobacco products, public administration and defence service	Construction (50%) Trade and commerce (48%), other Services (43%)	Low level of growth as seen from growth in non household manufacturing (9%) and other Services (43%)	The district shows a growth of 8% in house hold manufacturing while more than 80% of the districts show a negative trend in the same sector.
Damoh	Cultivation (36.2%) and Agricultural labour (26.1)	Household manufacturing (14.9%), Non Household manufacturing (7.6%)	Manufacture of Beverages	Manufacture of Beverages, Tobacco and tobacco Products, Retail trade in Food and food articles.	Non Household Manufacturing (193%) Agricultural labour (44%)	Moderate level of growth as seen from growth in non household manufacturing (193%) and other services (37%)	Increase in female main workers by 43%.
Satna	Cultivation (42.3%) and Agricultural labour (29.2%)	Other services (6.4%) household manufacturing (6.1%)	Manufacture of Beverages, wood Product, Pottery and Ceramics, Manufacture of Food Products, land Transport	Manufacture of Beverages, Tobacco and tobacco products, manufacture of non-metallic mineral products, Retail trade in food and food articles, Public Administration and defence services, Land Transport.	Trade and commerce (64%) Other Services (62%)	Low level of growth as seen from growth in non household manufacturing (2%)	Decline in household manufacturing by 15% Increase in marginal worker by 47%. This increase is mainly among the female marginal workers.
Rewa	Cultivation (41%) and Agricultural labour (37%)	Other services (8.5%) household manufacturing (3%)	Construction, Manufacture of Food Products, Public Administration and Defence Services, Education.	Public Administration and Defence Services, Educational services, Retail trade in food and food articles, manufacture of wood and wood products.	Non household manufacturing (94%) other services (95%) Transport, Storage and Communications (61%)	High level of growth as seen from growth in non household manufacturing (94%) and other services (95%).	Highest percentage of Agriculture laborers (37%) in the state. Increase in Agriculture Allied sector by 24% (more than 80% of the districts show a negative trend in this sector).

EL-13- LIVELIHOOD PROFILE OF MADHYA PRADESH

District	Major Occupation	Other Occupation	Significant Non Agricultural Occupation in 1981	Significant Non Agricultural Occupation in 1991	Occupation with significant Decadal Growth Rates ²	Status of manufacturing	Observations
Shahdol	Cultivation (55%) and Agricultural labour (25.4%)	Other Services (6.1%)	Coal mining, Construction education	Coal Mining, Public Administration and defence services, Educational services , Retail trade in Food and food articles	Other services (114%) Trade and Commerce (55%)	Moderate growth as seen from growth in non household manufacturing (35%) and other services (114%)	Increase in marginal workers by 58%. Much of this increase is among the female marginal workers 5.6% (20,370) of the total population of Children are employed as main workers.
Sidhi	Cultivation (60%) and Agricultural labour (24%)	Other services (5.3%)	Construction	Coal mining , public Administration and defence services , Educational services, Manufacture of Leather and leather products, Retail trade in food and food articles , construction Manufacture of Wood an wood products	Mining (207%), Non household manufacturing (79%) trade and commerce (97%), Transport storage and communication (146%) and other services (149%)	High level of growth as seen from growth in non household manufacturing (79%) and other services (149%)	Increase in marginal workers by 1111%. Much of this increase is among female marginal workers. 5.6% (20,921) of the total population o Children are employed as main workers.
Mandsaur	Cultivation (59%) and Agricultural labour (19.5%)	Other services (6.1%) Trade and Commerce (5.7%)	Livestock Production , Manufacture of Food Products, land Transport public Administration and Defence services , Education	Retail trade in Food and Food articles , Land Transport Public Administration Defence services Construction , Educational services, Unclassified services .	Construction (68%) Mining (61%) and Agricultural labour (47%)	Low growth as seen from growth in non household manufacturing (35%) and other services (39%)	Increase in construction labour among urban male 7.4% (28,870) of Children are employed as main workers.
Ratlam	Cultivation (55%)and agricultural labour (18%)	Other services (7.4%), Trade and Commerce (6.7%)	Manufacture of Food Products , Land Transport, Public Administration and Defence Services.	Land Transport , Retail trade in food and food articles Construction, Public Administration and defence services , Educational services Personal services,	Construction (154%) trade and Commerce (52%)	Low growth as seen from growth in non household manufacturing (37%) and other services (28%)	Increase in Female main workers by 68%. Mach of this increase is in the from of 95% increase in rural female cultivators . Increase in agriculture allied sector by 32% 8.3% (20,838) of Children are employed as main workers.
Ujjain	Cultivation (40.8%) and Agricultural labour (30.8%)	Other services (10.8%), non household manufacturing (9.3%).Trade and Commerce (7.2%)	Livestock Production Manufacture of Cotton Textiles, wool and Food products , Land Transport Public Administration and defence services , Education	Public Administration and Defence services, Manufacture of Cotton Textiles Unclassified services , Retail trade in Food and food articles Land Transport educational services Construction.	Construction (129%) Other services (54%)	Low growth as seen from growth in non household manufacturing (6%) and other services (54%)	Increase In construction labour by 129% This increase in mainly among the urban male Decline in household manufacturing by 30% Decline in Agriculture Allied sector by 32%
Shajapur	Cultivation (50%) and Agricultural labour (30.8%)	Other services (5.7%)	Livestock Production	Retail trade in food and food articles Livestock Production , Construction Educational services , Public Administration and defence services Unclassified services .	Construction (100%) Trade and Commerce (48%), Transport storage and Communication (65%) and Other services (46%)	Low growth as seen from growth in non household manufacturing (33%) and other services (46%)	Increase in female main workers by 53% much of this increase is in the form of increase in rural female cultivators. Decline in Agriculture Allied sector by 33%
Dewas	Cultivation (43.5%) and Agricultural labour (31.8)	Other services (7.6%) Non household manufacturing (7.1%)	Livestock Production	Public Administration and Defence service, Retail trade in Food and food articles Unclassified services, Educational services, Personal services Land Transport.	Non-household manufacturing (57%) Construction 53%) Trade and Commerce (44%) Transport storage and Communication (78%) and other services (74%).	High growth as seen from growth in non household manufacturing (57%) and other services (74%).	Decline in Agriculture Allied sector by 60% in the highest in the state.

EL-13 LIVELIHOOD PROFILE OF MADHYA PRADESH

District	Major Occupation	Other Occupation	Significant Non Agricultural Occupation in 1981	Significant Non Agricultural Occupation in 1991	Occupation with significant Decadal Growth Rates ²	Status of manufacturing	Observations
Jhabua	Cultivation (84%)	Agriculture labour (5.9%)	Educational and Research services.	Educational service Public Administration and defence services Retail trade in food and food articles Construction.	Construction (92%) Non Household Manufacturing (49%) Trade and Commerce (55%)	Low growth as seen from growth in non household manufacturing (49%) and other services (39%).	Increase in marginal workers by 82% much of this increase is in the form of increase in female marginal workers. Decline in Agriculture Allied sector by 34% 15.2% of the Children are employed as main workers.
Dhar	Cultivation (59%) and Agricultural labour (24%)	Other services (15.3%)	Manufacture of food Products	Retail trade in Food and Food articles, Unclassified services Educational services, Public Administration and defence services, Land Transport Construction	Non household manufacturing (230%) Construction (184%) Trade and Commerce (52%) Transport storage and Communication (77%) and other services (52%)	High growth as seen from growth in non household manufacturing (230%) and other services (52%)	Increase in construction labour by 184% Decline in household manufacturing by 35% 8.7% (33,730) of the Children are employed main workers.
Indore	Other Services (20%) and Cultivation (18.5%)	Non Household manufacturing (17.5%) Agricultural labour (15%) Trade and Commerce (54%)	Manufacture of Food Products, Cotton Textiles Textile Product, wood Product metal Product Repair Construction manufacture of food Product Textile Household utilities others restaurants and Hotels land Transport Public Administration and Defence services, Education and Research services Personal services Unclassified services.	Public Administration and Defence Services, Land Transport, Unclassified services, Retail trade in food and food articles, Manufacture of Cotton Textiles, Personal Services Retail trade in Others.	Construction (101%) Trade and Commerce (54%), Other services. (58%)		Decline in Household manufacturing by 28% Increase in construction labour by 101%
Khargone	Cultivation (55%) and Agricultural labour (28.8%)	Other Services (5.3%)	Manufactures of Food Products, Education and Research services, Education	Retail trade in Food and Food articles, Public Administration and Defence services, Educational services land Transport Personal Services construction	Construction (83%) Transport, storage and Communication (79%)	Low growth as seen from growth in non household manufacturing (39%) and other services (43%)	Decline in household manufacture by 23% 9.8%(54,490) of the total child population are employed as main workers.
Khandwa	Cultivation (41.5%) and Agricultural labour (33.3%)	Non household manufacturing (6.8%) other services (6%)	Manufacture of Cotton Textiles, Manufacture of Food Products, Land Transport, Public Administration and Defence services, Education	Manufacture of Cotton Textiles, Retail trade, in Food and food articles, Land Transport, Construction, personal services, Public Administration and defence service	Construction (108%) Transport Storage and Communication (56%)	Low growth as seen from growth in non household manufacturing (1%) and Other services (33%)	Increase in construction labour by 108% 8.5% (32,370) of the total child Population are employed as main workers.
Rajgarh	Cultivation (58%) and Agricultural labour (21.4%)	Other services (5.7%)	Livestock Production	Livestock Production, Retail trade in food and food articles, public Administration and Defence services, Construction Personal Services, Manufacture of Wood and wood products.	Construction(77%) Transport, Storage and Communication (89%) Trade and Commerce (59%) Other services (48%)	Low growth as seen from growth in non household manufacturing (41%) and other services (48%)	Increase in marginal workers by 87%. Much of this increase is among female marginal workers. Increase in construction labour by 77% 7.2% of children are employed as main workers.

EL-13 LIVELIHOOD PROFLE OF MADHYA PRADESH

District	Major Occupation	Other Occupation	Significant Non Agricultural Occupation in 1981	Significant Non Agricultural Occupation in 1991	Occupation with significant Decadal Growth Rates ²	Status of manufacturing	Observations
Vidisha	Cultivation (43.5%) and Agricultural labour (33.3%)	Other services (7.6%) trade and Commerce (5.6%)	Manufacture of Food Products Education and Research services	Retail trade in food and food articles , Educational services Public Administration and defence Classified services Personal services Construction Land Transport	Agricultural labour (53%) Mining (72%) Trade and Commerce (55%)	Low growth as seen from growth in non household manufacturing (14%) and other services (34%)	Increase in female main workers by 109%. Much of this increase is among female cultivators and female agricultural laborers
Bhopal	Other services (27.8%) Trade commerce (10%)	Non Household manufacturing (14.5%) Construction (8.8%) Cultivation (13.6%)	Electrical Machinery Repair Construction Manufacture of Food Products, Land Transport, Public Administration and Defence services , Education Unclassified services	Public Administration and Defence Services Construction, Land Transport Unclassified services Manufacture of Machinery and tools and Parts retail trade in food and food articles Trade in Others.	Construction (189%)Transport, storage and Communication (64%) Trade and Commerce (106%) Other services (63%), Agriculture and Allied (45%).		Increase in marginal workers by 75%. Much of this increase is among n female main workers by 70% Much of this increase is in the category Other services Increase in Agriculture Allied sector By 45% (Highest in the state) Decline in Household manufacturing by 59% Increase in construction by 189%
Sehore	Cultivation (49.8%)and Agricultural labour (30.7%)	Other services (7.1%)	Manufacture of Metal Product, Pottery and Ceramics , Construction Manufacture of Food Products, Public Administration and Defence service Education, Personal services Unclassified services.	Public administration an Defence service, Retail trade in food and food articles Educational services Construction, Unclassified services , Land Transport Personal services.	Construction (68%) Transport, Storage and Communication 77%) Trade and Commerce (67%) Other Services (55%).	Low growth as seen from growth in non household manufacturing (28%) and other services(55%)	Increase in female main workers by 75% Much of this increase in among female cultivators and female agricultural laborers. Decline in Agriculture and Allied sector by 55%.
Raisen	Cultivation 39%) and Agricultural labour (37.6%)	Other services (7%) Non household manufacturing (5.3%)	Pottery and Ceramics	Retail trade and food articles Manufacture of Beverages , Tobacco and tobacco Products educational service , Public Administration and Defence services , Personal services Construction	Non-household manufacturing (127%) Trade and Commerce 73%) Other Services (46%).	Moderate growth as seen from growth in non household manufacturing (127%), Other services (46%)	
Betul	Cultivation (56.8%) Agricultural labour (24.2%)	Other services (6.1%)	Coal Mining Construction	Coal mining, Public Administration and defence services , Educational services Construction Retail trade in Food and Food articles , land Transport , Personal services.	Non household manufacturing (43%) other services (57%)	Low growth as seen from growth in non household manufacturing (43%) and Other services (57%).	Decline in Agriculture and allied sector by 34% 11.2% (33.534) of the children are employed as main workers.
Hoshangabad	Cultivation (36.4%) and Agricultural labour (32.7%)	Other services (10.2%) Trade and Commerce (6.1)	Manufacture of food Products land Transport Public Administration and Defence services . Education.	Public Administration and Defence services, land Transport , Retail trade in food and food articles, construction, educational services , Personal services .	Other services. (54%)	Low growth as seen from growth in non household manufacturing (26%) and Other services (54%)	Increase in marginal workers by 78% Much of this increase is among female marginal workers.

EL-13 LIVELIHOOD PROFILE OF MADHYA PRADESH

District	Major Occupation	Other Occupation	Significant Non Agricultural Occupation in 1981	Significant Non Agricultural Occupation in 1991	Occupation with significant Decadal Growth Rates ²	Status of manufacturing	Observations
Jabalpur	Cultivation (29%) and Agricultural labour (24.7%)	Other services (12.6%) Non household manufacturing (12.5%) Trade and commerce (8.6%)	Other mining beverages, Textiles Product wood product , Pottery and Ceramics Machinery Transport Repair Construction , Manufacture of Food Products Land Transport , Education Unclassified services	Public Administration and defence services Manufacture of beverages Tobacco and tobacco product, land Transport Retail trade in Food and food articles , Education services.	Agriculture Allied (41%) Trade and Commerce (53%) Other services (49%)	Low growth as seen from in non household manufacturing (6%) and other services (49%)	Decline in household manufacturing by 35%
Narsimhapur	Cultivation (39.8%) and Agricultural labour (39%)	Other services (7%)	Manufacture of food Products	Retail trade in food and food articles Public Administration and defence services , Educational services , Personal services Manufacture of wood and wood products, Unclassified services.	Other service	Low growth as seen from growth in non household manufacturing (-3%) and other services (48%).	Increase in marginal workers by 72%. Much of this increase is among female marginal workers
Mandla	Cultivation (65%) and Agricultural labour (24.3%)	Other services (4.4%)	Education and Research services, Education	Public Administration defence service educational services , Retail trade in food and food articles , Manufacture of wood and wood products	Non household manufacturing (112%) Trade and Commerce (43%) other Service (48%)	High growth as seen from growth in non household manufacturing (112%) and other services (48%)	Decline in household manufacturing by 24% Decline in Agriculture Allied by 26% 8.5% (26,220) of the children are employed as main workers.
Chhindwara	Cultivation (50%) and Agricultural labour (26%)	Other services (7.8%)	Coal Mining, Manufacture of Textiles Product, Manufacture of food Products, land Transport, Education	Coal Mining, Public Administration and Defence Services, Educational services, Retail trade, In Food and food articles , personal services Construction.	Construction (83%) Trade and Commerce (49%) other services (91%)	Low growth as seen from growth in non household manufacturing (17%)	Increase in Marginal workers by 105%. Much of this increase in among female marginal workers. Decline in Agriculture Allied by 33% Increase in Construction labour by 83% 7.9% (31,200) of the children are employed as main workers.
Seoni	Cultivation (52%) and Agricultural labour (33.8%)	Other services (5.4%)	Manufacture of Food Products, Public Administration and Defence services.	Education services, Public Administration and Defence services, Retail trade in food and food articles, Personal services Land Transport.	Other services (42%) Trade and Commerce (41%)	Low growth as seen from growth in non household manufacturing (11%)	Decline in Household manufacturing by 25% 8.2% (20,525) of the children are main workers.
Balaghat	Cultivation (52.8%) and Agricultural labour (27.5%)	Other Services (05%)	Metal ore Mining Beverages, Manufacture of Food Products	Manufacture of Beverages Tobacco and tobacco products, Manufacture beverages Tobacco product retail trade in food and food article Public Administration and Defence Services , 13 Personal services, Manufacture of Wood and wood products.	Non household manufacturing (65%)	Moderate growth as seen from growth is non household manufacturing (65%) and Other services (39%)	Decline in household manufacturing by 36%
Sarguja	Cultivation (66.5%) and Agricultural labour (17%)	Other services (5.2%)	Coal Mining Education	Coal Mining, Educational services, Public Administration and defence service, Retail trade in food and food articles	Non household manufacturing (60%) trade and commerce (55%), Other Service (88%)	High growth as seen from growth in non household manufacturing (60%) and other services (88%)	Decline in Household manufacturing by 32% Increase in marginal workers by 50% Much of this 6.9% (34,270) of the Children are employed as main workers.

EL-13 LIVELIHOOD PROFILE OF MADHYA PRADESH

District	Major Occupation	Other Occupation	Significant Non Agricultural Occupation in 1981	Significant Non Agricultural Occupation in 1991	Occupation with significant Decadal Growth Rates ²	Status of manufacturing	Observations
Bilaspur	Cultivation (55%) and Agricultural labour (24.6%)	Other services (6.4%)	Livestock Production Coal Mining Wood Product Basic Metal Repair Electricity construction manufacture of Food Products land Transport Public Administration and Defence Services, Education, Personal services, Unclassified services.	Public Administration and Defence service, retail trade food and food articles Educational services , Land Transport Construction, Coal mining.	Non household manufacturing (45%) trade and Commerce (82%) Other service (71%).	Moderate growth as seen from growth in non household manufacturing (45%) and other services (71%)	Increase in marginal workers by 33% Much of this increase in among female marginal workers Decline in Household manufacturing by 32% 44,452 of the Children are main workers.
Raigarh	Cultivation (60.4%) and Agricultural labour (24.2%)	Other services (5.5%)	Education	Educational services, Public Administration and defence service ,Retail trade in food and food articles, Manufacture of wood and wood products .	Trade and Commerce (45%), Other service (69%)	Low growth as seen from growth in non household manufacturing (19%) and other services (69%).	6.5% (25,290) of Children are employed as workers.
Rajnandgaon	Cultivation (63.3%) and Agricultural labour (20.3%)	Other services (4.6%)	Livestock Production, Cotton Textiles, Public Administration and defence service.	Retail trade in food and food articles , Education services personal services livestock production , public Administration and defence service, land Transport	Trade and Commerce (152%)	Low growth as seen from growth in non household manufacturing (27%) and other service (38%)	9.4% (32,520) of the Children are employed as main workers.
Durg	Cultivation (43.3%) and Agricultural labour (25%)	Non household manufacturing (9.9%) other services (8.1%)	Livestock Production, Metal ore Mining Basic Metal Repair Construction Manufacture of Food Products, Land Transport Public Administration an Defence service , Personal services Unclassified service.	Basic metal and alloys Industries, Construction, Land Transport, Pubic Administration and defence services Educational services Personal services.	Trade and Commerce (65%), Other service (64%) other service (64%) transport storage and Communication (155%)	Low growth as seen from growth in non household manufacturing (14%), and other service (64%)	Growth in Agriculture Allied sector by 18% Manufacture of wood and wood products 327 of children are main workers.
Raipur	Cultivation (49.3%) and Agricultural labour (28.8%)	Other service (5.7%)	Livestock Production manufacture of Food Products, Beverages , Textile Product wood product pottery and ceramics, Repair Construction, Manufacture of Food products other restaurants and hotel land Transport, Public Administration and defence services , unclassified services.	Retail trade in food and food articles , land Transport Public Administration and Defence service , Personal service, Educational services.	Mining (74%), Trade and Commerce (62%) other service (40%)	Low growth as seen from growth in non household manufacturing (43%) and Other services (40%).	6.1% (56,56,878) of Children are main workers.
Bastar	Cultivation (73.2%) and Agricultural labour (14.7%)	Other services (4.7%)	Construction , Public Administration and defence services , Education .	Educational service , Public Administration and defence services , Retail trade in food and food articles, Construction.	Other services (76%)	Low growth as seen from growth in non household manufacturing (27%)	Increase in marginal workers by 56% much of this increase is among female marginal workers. 13.4% (67,042) of children are employed as main workers.

EDUCATION

- **ED 1** Crude Literacy Rates, 1991
- **ED 2** Education Status of Population aged 19 year and above
- **ED 3** Persons Educationally Deprived in Madhya Pradesh, 1991
- **ED 4** Retention Rates in School: 1994/95
- **ED 5** Illiteracy and Number of Illiterates in Different age Groups, 1991.
- **ED 6** Educational Infrastructure: Students and Teacher in Madhya Pradesh , 1996

Basic literacy and education status is given in three two tables. Census of 1991 enables Calculation of two important sets of indicators, the educationally deprive population and the school retention rates. The last table give the latest available figures for all districts on the infrastructure for school and teachers and students in them.

ED 10 – Crude Literacy Rates

District	Crude Literacy Rate (1991)			Crude female Literacy Rate (1991)		
	All	Rural	Urban	All	Rural	Urban
	%	%	%	%	%	%
INDORE		43.7	75.9	53.3	22.5	66.6
BHOPAL	64.3	33.1	71.5	54.2	15.2	63.1
JABALPUR	59.1	43.6	76.8	45.0	26.1	67.4
DURG	58.7	50.4	73.5	42.8	33.0	61.5
GWALIOR	57.7	37.9	71.0	41.7	16.5	58.4
NARSIMHAPUR	55.6	51.4	79.3	41.6	36.5	69.7
SARGAR	53.4	44.0	75.5	37.8	26.8	63.5
BALAGHAT	53.2	50.8	75.7	38.9	36.3	64.8
HOSHANGABAD	52.5	42.5	78.0	37.6	26.3	66.7
BHIND	49.2	45.7	62.7	28.2	23.5	45.7
UJJAIN	49.1	33.5	72.1	32.6	13.8	60.9
MANDSUR	48.7	14.9	70.8	28.3	19.9	56.2
RAIPUR	48.1	42.4	70.6	31.0	24.4	58.4
DAMOH	46.3	40.0	73.8	30.5	23.5	61.3
BETUL	45.9	38.8	76.3	33.9	26.7	66.2
EAST NIMAR	45.5	36.4	68.4	31.5	21.0	58.1
BILASPUR	45.3	39.7	71.7	27.3	20.9	58.4
CHHINDWARA	44.9	36.2	72.5	32.5	23.6	62.0
SATNA	44.7	39.5	65.0	27.8	22.2	50.9
SEONI	44.5	40.8	78.7	31.1	27.1	69.1
RAJNANDGAON	44.4	39.3	70.7	27.8	22.2	57.5
REWA	44.4	40.5	65.0	26.9	22.8	50.1
RATLAM	44.2	30.6	72.1	29.1	13.9	60.8
VIDISHA	44.1	37.2	70.2	27.8	19.5	59.1
DEWAS	44.1	35.9	67.0	25.6	16.2	52.5
DATIA	43.6	37.9	63.0	23.7	16.1	49.0
MOREA	41.3	36.1	61.0	20.8	14.9	43.2
RAIGARH	41.2	38.2	70.0	26.5	23.5	56.3
RAISEN	40.8	36.1	65.1	25.5	20.5	52.4
SEHORE	40.4	34.7	65.8	22.0	15.1	53.2
SHAJAPUR	39.2	33.7	64.4	19.8	13.6	48.4
MANLA	37.3	33.8	76.9	22.2	18.6	65.9
WEST NIMAR	36.0	30.1	66.9	23.2	17.6	53.9
CHHATRAPUR	35.2	28.3	63.4	21.3	14.1	50.5
TIKAMGARH	34.8	30.6	55.4	20.2	15.4	41.9
SHAHDOL	34.8	27.2	62.7	20.1	12.9	48.5
GUNA	34.6	27.2	64.1	18.0	10.1	49.6
DHAR	34.5	29.4	67.4	20.7	15.6	54.3
PANNA	33.7	29.3	62.3	19.4	14.9	49.7
SHIVPURI	33.0	27.1	65.1	15.6	9.4	49.6
RAJGARH	31.8	25.7	62.0	15.6	9.5	46.3
SARGUJA	30.1	24.9	67.2	17.4	12.5	54.8
SIDHI	29.1	26.5	66.4	13.6	11.4	49.6
BASTAR	24.9	21.1	71.3	15.3	11.8	60.6
JHABUA	19.0	13.7	70.0	11.5	6.8	58.4
MADHYA PRADESH	44.2	35.9	70.8	28.8	19.7	58.9

Source : Census of India , 1991 Primary Census Abstract- Madhya Pradesh

ED 1 – CRUDE LITERACY RATE

District	Crude Literacy Rate (1991)			Gap Male and Female Literacy			
	All	Rural	Urban	All	Rural	Urban	Rate of Male to female Literacy
	%	%	%	%	%	%	
INDORE	78.0	63.0	84.3	24.3	40.5	17.7	1.5
BHOPAL	73.1	48.5	79.0	19.0	33.4	15.8	1.4
JABALPUR	71.9	60.0	85.0	26.9	34.0	17.6	1.6
DURG	74.1	68.0	84.1	31.3	35.0	22.6	1.7
GWALIOR	70.8	55.1	81.5	29.1	38.6	23.3	1.7
NARSIMHAPUR	68.4	64.9	87.9	26.9	28.3	18.1	1.6
SARGAR	67.0	59.0	85.8	29.2	32.1	22.2	1.8
BALAGHAT	67.6	65.6	85.9	28.7	29.3	21.1	1.7
HOSHANGABAD	65.8	57.1	87.8	28.2	30.7	21.1	1.7
BHIND	66.2	63.5	76.6	38.0	39.9	30.9	2.3
UJJAIN	64.2	51.9	82.4	31.6	38.1	21.5	2.0
MANDSUR	67.9	62.8	84.4	39.6	42.9	28.1	2.4
RAIPUR	65.1	60.6	82.0	34.0	36.2	23.6	2.1
DAMOH	60.5	54.9	84.8	30.0	31.4	23.6	2.0
BETUL	57.4	50.2	85.2	23.5	23.9	19.0	1.7
EAST NIMAR	58.5	50.8	77.9	27.0	29.8	19.8	1.9
BILASPUR	62.9	58.3	83.7	35.6	37.4	25.2	2.3
CHHINDWARA	56.6	48.5	81.8	24.1	24.9	19.8	1.7
SATNA	60.0	55.5	77.3	32.2	33.4	26.4	2.2
SEONI	57.5	54.1	87.4	26.4	27.0	18.3	1.8
RAJNANDGAON	61.3	56.8	83.5	33.4	34.6	26.0	2.2
REWA	60.7	57.3	77.5	33.8	34.5	27.4	2.3
RATLAM	58.4	46.4	82.6	29.2	32.5	21.8	2.0
VIDISHA	58.0	52.3	80.0	30.2	32.8	20.9	2.1
DEWAS	61.1	54.3	80.0	35.6	38.1	27.5	2.4
DATIA	60.2	55.9	75.2	36.5	39.8	26.20	2.5
MORENA	58.0	53.4	75.4	37.2	38.5	32.2	2.8
RAIGARH	56.0	53.1	82.4	29.6	29.6	26.1	2.1
RAISEN	54.0	49.8	75.8	28.6	26.4	23.3	2.1
SEHORE	56.9	52.4	76.7	34.9	37.3	23.4	2.6
SHAJAPUR	57.0	52.2	78.8	37.2	38.6	30.4	2.9
MANLA	52.2	49.1	87.0	30.0	30.5	21.2	2.3
WEST NIMAR	48.0	42.1	78.6	24.8	24.5	24.7	2.1
CHHATRAPUR	46.9	40.1	74.5	25.5	26.0	24.0	2.2
TIKAMGARH	47.5	43.5	67.2	27.6	28.1	25.4	2.4
SHAHDOL	48.4	40.9	74.7	28.3	28.1	26.2	2.4
GUNA	48.9	41.9	76.6	30.9	31.8	27.0	2.7
DHAR	47.6	42.5	78.9	26.9	26.8	24.6	2.3
PANNA	46.3	42.1	73.1	26.9	27.2	23.5	2.4
SHIVPURI	47.5	41.9	78.1	31.9	32.5	28.5	3.0
RAJGARH	46.7	40.6	76.1	31.1	31.2	29.9	3.0
SARGUJA	42.1	36.8	77.8	24.7	24.3	23.0	2.4
SIDHI	43.2	40.2	78.6	29.6	29.1	29.1	3.2
BASTAR	34.5	30.6	81.3	19.2	18.8	20.7	2.3
JHABUA	26.3	20.5	80.7	14.8	13.7	22.3	2.3
MADHYA PRADESH	58.4	51.0	81.3	29.6	31.3	22.4	2.0

Source : Census of India , 1991 Primary Census Abstract- Madhya Pradesh

ED 2 – Education Status of Population aged 19 Years and Above

District	Illiterate			Literate with educational level					
	All	Male	Female	NON FORMAL			FORMAL		
				All	Male	Female	All	Male	Female
INDORE	39.0%	24.6%	55.2%	0.5%	0.6%	0.4%	8.2%	9.6%	6.6%
BHOPAL	40.9%	29.5%	54.0%	0.3%	0.3%	0.2%	5.2%	6.3%	4.0%
GWALIOR	48.1%	32.4%	66.6%	0.7%	0.9%	0.4%	7.1%	9.5%	4.3%
JABALPUR	48.5%	32.4%	66.0%	0.3%	0.4%	0.2%	9.2%	12.4%	5.7%
DURG	51.2%	32.4%	70.3%	0.4%	0.5%	0.3%	12.8%	17.6%	8.0%
NARSIMHAPUR	54.8%	39.0%	71.8%	0.5%	0.7%	0.3%	12.2%	16.4%	7.7%
HOSHANGABAD	55.2%	38.7%	73.6%	0.3%	0.4%	0.2%	11.5%	15.4%	7.2%
SAGAR	55.4%	38.3%	74.6%	0.4%	0.5%	0.2%	10.4%	14.3%	6.0%
BALGAHT	56.8%	38.5%	74.8%	0.5%	0.7%	0.3%	13.9%	19.5%	8.4%
UJJAIN	56.9%	39.7%	75.3%	0.4%	0.6%	0.1%	7.8%	11.2%	4.2%
MANDASUR	58.8%	37.4%	81.6%	0.3%	0.4%	0.2%	10.4%	16.0%	4.4%
EAST NIMAR	59.9%	43.8%	76.5%	0.3%	0.5%	0.2%	12.6%	18.6%	7.0%
BHIND	60.3%	41.1%	82.6%	0.6%	0.9%	0.3%	5.0%	7.0%	2.7%
RAIPUR	60.6%	41.0%	79.9%	0.5%	0.7%	0.2%	12.5%	19.1%	6.0%
RATLAM	61.2%	45.0%	78.0%	0.2%	0.3%	0.1%	8.1%	11.8%	4.3%
DEWAS	62.7%	43.4%	83.2%	0.6%	0.8%	0.3%	7.9%	12.0%	3.5%
DATIA	62.7%	43.8%	84.0%	1.1%	1.9%	0.2%	5.6%	8.6%	2.3%
DAMOH	62.7	44.9%	81.6%	0.4%	0.6%	0.2%	10.3%	15.3%	5.0%
BILASPUR	63.3%	43.6%	82.8%	0.4%	0.6%	0.2%	11.7%	18.4%	5.1%
VIDISHA	63.3%	46.8%	81.9%	0.4%	0.6%	0.2%	8.9%	13.2%	4.1%
CHHINDWARA	64.2%	50.1%	78.9%	0.3%	0.4%	0.2%	9.4%	13.2%	5.4%
BETUL	64.4%	50.3%	79.0%	0.3%	0.5%	0.2%	9.7%	14.1%	5.2%
SATNA	64.5%	47.9%	82.4%	0.6%	0.9%	0.3%	5.2%	7.7%	2.6%
SEONI	65.0%	49.4%	80.8%	0.4%	0.5%	0.2%	10.2%	14.6%	5.8%
RAJNANDGAON	65.4%	46.3%	83.5%	0.5%	0.7%	0.3%	10.9%	17.4%	4.8%
REWA	66.3%	48.6%	84.8%	0.8%	1.1%	0.4%	3.8%	5.4%	2.1%
MORENA	66.6%	49.2%	87.2%	0.5%	0.7%	0.2%	5.1%	7.7%	2.1%
RAISEN	66.7%	51.3%	84.0%	0.9%	1.2%	0.5%	6.6%	9.3%	3.5%
SHAJAPUR	67.9%	49.1%	87.9%	0.5%	0.7%	0.2%	8.0%	12.7%	2.9%
SEHORE	68.2%	50.5%	87.4%	1.4%	2.2%	0.6%	6.8%	10.5%	2.7%
RAIGARH	68.4%	52.1%	84.3%	0.8%	1.2%	0.4%	9.6%	14.7%	4.6%
WEST NIMAR	70.6%	56.1%	85.5%	0.6%	0.9%	0.3%	8.0%	11.8%	4.1%
GUNA	70.6%	55.5%	88.0%	0.5%	0.8%	0.2%	5.9%	9.4%	2.0%
MANDLA	70.9%	54.2%	87.3%	0.4%	0.5%	0.2%	8.6%	13.7%	3.5%
DHAR	72.2%	58.0%	87.1%	0.4%	0.6%	0.2%	6.1%	9.0%	3.0%
SHIVPURI	72.2%	57.3%	89.7%	1.1%	1.8%	0.3%	5.6%	9.0%	1.6%
SHAHNOL	72.7%	58.4%	88.0%	0.7%	1.1%	0.3%	5.1%	8.0%	2.0%
CHHATARPUR	72.8%	60.9%	86.5%	0.2%	0.2%	0.1%	5.2%	7.8%	2.2%
TIKAMGARH	73.8%	60.3%	98.1%	0.2%	0.3%	0.1%	3.3%	5.2%	1.3%
PANNA	73.9%	60.6%	88.5%	0.8%	1.1%	0.4%	4.3%	6.5%	1.8%
RAJGARH	75.1%	60.7%	90.7%	0.3%	0.4%	0.1%	5.5%	9.0%	1.8%
SIDHI	77.2%	63.5%	91.9%	1.0%	1.6%	0.4%	3.9%	6.5%	1.2%
SARGUJA	77.4%	64.8%	90.5%	0.4%	0.6%	0.1%	5.5%	8.7%	2.0%
BASTAR	81.3%	71.1%	91.3%	0.3%	0.5%	0.2%	4.7%	7.5%	2.0%
JHUBUA	86.5%	80.9%	92.1%	0.1%	0.1%	0.0%	2.4%	3.3%	1.4%
MADHYA PRADESH	63.6%	47.4%	80.7%	0.5%	0.7%	0.2%	8.3%	12.1%	4.3%

Source : Census of India , 1991 sanket – MPHRO

ED 2 EDUCATION Status of Population Aged 19 Years an above

DISTRICT	PRIMARY			Middle			Matriculation / Secondary		
	ALL	MALE	FEMALE	ALL	MALE	FEMALE	ALL	MALE	FEMALE
INDORE	13.6%	16.4%	10.5%	10.3%	12.9%	7.4%	5.4%	7.3%	3.3%
BHOPAL	10.4%	11.8%	8.8%	8.6%	10.5%	6.4%	5.6%	7.0%	4.1%
GWALIOR	11.2%	13.7%	8.3%	9.4%	12.4%	5.9%	5.0%	7.2%	2.5%
JABALPUR	12.1%	14.8%	9.1%	8.0%	10.5%	5.3%	8.1%	11.1%	4.8%
DURG	11.6%	14.8%	8.3%	7.1%	9.8%	4.4%	6.7%	10.0%	3.4%
NARSIMHAPUR	13.5%	16.3%	10.5%	7.0%	9.5%	4.2%	5.5%	8.3%	2.4%
HOSHANGABAG	12.0%	15.6%	8.0%	6.3%	8.6%	3.7%	4.9%	7.3%	2.2%
SARGA	13.4%	17.7%	8.6%	6.9%	9.8%	3.6%	4.1%	5.9%	1.9%
BALAGAHT	13.7%	18.1%	9.3%	5.8%	8.4%	3.3%	3.9%	6.0%	1.8%
UJJAIN	12.8%	18.2%	7.1%	6.9%	10.0%	3.7%	3.0%	4.4%	1.5%
MANDSAUR	13.4%	20.2%	6.2%	6.6%	10.3%	2.7%	2.5%	4.0%	0.9%
EAST NIMAR	11.6%	15.8%	7.2%	5.1%	7.1%	3.1%	3.6%	5.1%	2.1%
BHIND	11.2%	14.6%	7.3%	9.5%	14.5%	3.8%	4.1%	6.8%	0.9%
RAIPUR	10.4%	14.7%	6.1%	5.3%	7.8%	2.8%	4.2%	6.5%	1.9%
RATLAM	11.8%	17.0%	6.4%	6.2%	8.9%	3.5%	2.4%	3.5%	1.2%
DEWAS	11.4%	17.2%	5.2%	6.3%	9.7%	2.6%	2.5%	4.0%	0.8%
DATIA	12.5%	18.2%	6.1%	7.0%	10.5%	3.2%	2.8%	4.6%	0.9%
DAMOH	11.3%	15.8%	6.6%	5.9%	9.0%	2.6%	3.7%	5.7%	1.7%
BILASPUR	8.5%	12.1%	5.0%	4.8%	7.1%	2.4%	4.7%	7.6%	1.8%
VIDISHA	12.5%	18.0%	6.2%	5.0%	7.4%	2.2%	1.8%	2.7%	0.7%
CHHINDWARA	10.0%	13.3%	6.6%	5.2%	7.0%	3.3%	4.9%	7.0%	2.7%
BETUL	10.2%	13.4%	6.8%	4.9%	6.5%	3.3%	3.7%	5.3%	2.0%
SATNA	9.3%	12.0%	6.4%	6.9%	9.8%	3.7%	3.2%	5.4%	0.9%
SEONI	11.5%	15.7%	7.3%	4.9%	7.2%	2.5%	3.6%	5.5%	1.7%
RAJNANDGAON	10.0%	14.7%	5.5%	5.1%	8.0%	2.3%	3.4%	5.2%	1.6%
REWA	6.6%	8.6%	4.5%	6.1%	8.8%	3.3%	3.8%	6.3%	1.1%
MORENA	9.5%	13.4%	4.8%	7.2%	10.9%	3.8%	3.0%	4.9%	0.6%
RAISEN	10.9%	15.3%	5.9%	5.3%	8.2%	2.2%	2.0%	3.1%	0.7%
SHAJAPUR	10.9%	17.4%	4.0%	5.0%	8.1%	1.6%	1.5%	2.5%	0.4%
SEHORE	10.0%	15.4%	4.0%	4.9%	7.7%	1.8%	1.8%	3.0%	0.5%
RAIGARH	9.1%	12.9%	5.5%	4.4%	6.7%	2.2%	3.1%	5.0%	1.3%
WEST NIMAR	9.3%	13.5%	4.9%	4.0%	6.0%	1.9%	1.6%	2.5%	0.7%
GUNA	10.1%	15.7%	3.7%	4.6%	6.9%	1.9%	1.5%	2.3%	0.7%
MANDLA	8.9%	13.7%	4.2%	4.1%	6.3%	1.9%	3.3%	5.3%	1.3%
DHAR	9.6%	12.8%	4.3%	4.5%	6.9%	1.9%	1.8%	3.1%	0.6%
SHIVPURI	8.7%	13.5%	3.1%	4.3%	6.6%	1.7%	1.7%	2.8%	0.4%
SHAHDOL	7.8%	11.2%	4.1%	4.5%	6.7%	2.2%	2.0%	3.1%	0.7%
CHHATARPUR	8.4%	11.3%	4.9%	4.6%	6.6%	2.1%	1.8%	2.8%	0.8%
TIKAMGARH	8.5%	12.4%	4.1%	5.4%	8.3%	2.1%	1.9%	3.1%	0.6%
PANNA	8.2%	12.0%	4.1%	4.7%	7.1%	1.9%	1.8%	2.9%	0.5%
RAJGARH	8.2%	13.0%	3.0%	3.8%	6.2%	1.3%	1.3%	2.1%	0.4%
SIDHI	5.6%	8.2%	2.8%	3.8%	6.1%	1.4%	2.1%	3.5%	0.6%
SARGUJA	6.1%	9.2%	2.9%	3.6%	5.5%	1.6%	2.4%	3.9%	0.9%
BASTAR	5.2%	7.4%	2.6%	2.2%	4.5%	1.3%	2.0%	3.1%	0.9%
JHABUA	3.6%	4.9%	2.2%	5.7%	3.1%	1.3%	1.1%	1.6%	0.6%
MADHYA PRADESH	10.0%	13.8%	2.9%	5.7%	8.2%	3.0%	3.5%	5.3%	1.6%

Source : Census of the India, 1991, Sanket -MPHDRO

ED 2 EDUCATION Status of Population Aged 19 Years and above

DISTRICT	Higher secondary Intermediate /Pre University Senior School			Non technical diploma or certificate not equal to a degree			Technical diploma or certificate , not equal to a Degree			Graduate and above		
	ALL	MALE	FEMALE	ALL	MALE	FEMALE	ALL	MALE	FEMALE	ALL	MALE	FEMALE
INDORE	10.0%	12.3%	7.5%	0.02%	0.03%	0.01%	0.34%	0.60%	0.05%	12.60%	15.7%	
BHOPAL	12.7%	14.8%	10.4%	0.07%	0.08%	0.05%	1.53%	2.67%	0.20%	14.60%	17.1%	1
GWALIOR	8.2%	10.7%	5.4%	0.04%	0.05%	0.03%	0.39%	0.67%	0.06%	9.80%	12.4%	
JABALPUR	5.9%	8.2%	3.4%	0.03%	0.04%	0.01%	0.43%	0.76%	0.06%	7.40%	9.3%	
DURG	4.5%	6.9%	2.0%	0.05%	0.07%	0.03%	0.64%	1.19%	0.08%	5.0%	6.8%	
NARSIMHAPUR	2.9%	4.4%	1.2%	0.04%	0.07%	0.01%	0.13%	0.24%	0.02%	3.60%	5.1%	
HOSHANGABAG	4.5%	6.4%	2.5%	0.02%	0.01%	0.02%	0.30%	0.55%	0.02%	5.0%	7.1%	
SARGA	4.8%	6.8%	2.5%	0.01%	0.02%	0.01%	0.19%	0.34%	0.02%	4.50%	6.3%	
BALAGAHT	2.6%	4.3%	1.0%	0.04%	0.08%	0.01%	0.12%	0.24%	0.01%	2.70%	4.2%	
UJJAIN	5.6%	7.2%	4.0%	0.03%	0.04%	0.01%	0.20%	0.38%	0.02%	6.20%	8.3%	
MANDSAUR	4.4%	6.5%	2.2%	0.02%	0.05%	0.00%	0.15%	0.28%	0.01%	3.4%	4.9%	
EAST NIMAR	3.2%	4.4%	1.9%	0.01%	0.02%	0.00%	0.33%	0.60%	0.06%	3.3%	4.6%	
BHIND	6.1%	10.2%	1.4%	0.01%	0.02%	0.00%	0.13%	0.24%	0.00%	3.0%	4.6%	
RAIPUR	2.8%	4.4%	1.1%	0.04%	0.08%	0.01%	0.13%	0.24%	0.02%	3.6%	5.4%	
RATLAM	5.3%	7.0%	3.5%	0.03%	0.05%	0.01%	0.21%	0.29%	0.01%	4.5%	6.0%	
DEWAS	5.1%	7.6%	2.3%	0.07%	0.13%	0.01%	0.24%	0.45%	0.01%	3.4%	4.7%	
DATIA	4.5%	6.7%	2.0%	0.02%	0.01%	0.03%	0.10%	0.19%	0.01%	3.6%	5.7%	
DAMOH	2.8%	4.5%	1.0%	0.02%	0.03%	0.00%	0.10%	0.20%	0.00%	2.7%	4.0%	
BILASPUR	3.1%	5.1%	1.0%	0.01%	0.02%	0.01%	0.35%	0.70%	0.01%	3.2%	4.8%	
VIDISHA	4.5%	6.2%	2.6%	0.03%	0.05%	0.01%	0.17%	0.32%	0.01%	3.5%	4.7%	
CHHINDWARA	2.8%	4.2%	1.3%	0.01%	0.01%	0.00%	0.14%	0.26%	0.02%	3.1%	4.5%	
BETUL	3.6%	5.2%	1.9%	0.01%	0.02%	0.00%	0.37%	0.70%	0.02%	2.8%	4.0%	
SATNA	6.2%	9.9%	2.2%	0.03%	0.04%	0.02%	0.16%	0.29%	0.02%	3.8%	6.0%	
SEONI	1.8%	2.9%	7.0%	0.02%	0.03%	0.01%	0.13%	0.24%	0.03%	2.5%	3.9%	
RAJNANDGAON	2.3%	3.7%	0.9%	0.01%	0.02%	0.00%	0.07%	0.15%	0.00%	2.4%	3.8%	
REWA	8.0%	13.5%	2.3%	0.08%	0.14%	0.02%	0.19%	0.35%	0.01%	4.4%	7.2%	
MORENA	5.3%	8.7%	1.3%	0.01%	0.02%	0.00%	0.09%	0.16%	0.01%	2.7%	4.2%	
RAISEN	4.9%	7.5%	2.0%	0.07%	0.90%	0.04%	0.10%	0.19%	0.00%	2.6%	3.8%	
SHAJAPUR	3.5%	5.3%	1.6%	0.03%	0.05%	0.01%	0.09%	0.17%	0.00%	2.6%	3.9%	
SEHORE	4.5%	6.9%	1.9%	0.01%	0.10%	0.00%	0.07%	0.13%	0.01%	2.4%	3.5%	
RAIGARH	2.3%	3.8%	0.9%	0.03%	0.05%	0.02%	0.06%	0.12%	0.01%	2.1%	3.5%	
WEST NIMAR	3.3%	5.0%	1.6%	0.03%	0.06%	0.01%	0.07%	0.14%	0.00%	2.5%	3.9%	
GUNA	3.7%	5.2%	1.9%	0.06%	0.10%	0.02%	0.10%	0.18%	0.00%	2.8%	3.9%	
MANDLA	1.7%	2.8%	0.7%	0.01%	0.01%	0.00%	0.09%	0.17%	0.01%	2.1%	3.3%	
DHAR	3.6%	5.3%	1.8%	0.03%	0.06%	0.01%	0.21%	0.40%	0.01%	2.5%	3.9%	
SHIVPURI	3.6%	5.3%	1.7%	0.02%	0.04%	0.00%	0.12%	0.22%	0.00%	2.6%	3.6%	
SHAHDOL	4.2%	6.6%	1.6%	0.02%	0.03%	0.00%	0.23%	0.44%	0.01%	2.8%	4.4%	
CHHATARPUR	4.1%	6.0%	1.8%	0.07%	0.09%	0.05%	0.11%	0.21%	0.00%	2.8%	3.9%	
TIKAMGARH	4.5%	6.9%	1.8%	0.02%	0.03%	0.01%	0.07%	0.13%	0.00%	2.3%	3.4%	
PANNA	3.9%	6.1%	1.6%	0.08%	0.12%	0.03%	0.07%	0.13%	0.00%	2.4%	3.5%	
RAJGARH	3.4%	5.1%	1.6%	0.01%	0.01%	0.00%	0.07%	0.13%	0.01%	2.3%	3.4%	
SIDHI	3.8%	6.5%	1.0%	0.07%	0.11%	0.02%	0.15%	0.29%	0.00%	2.3%	3.8%	
SARGUJA	2.5%	3.9%	1.0%	0.00%	0.01%	0.00%	0.12%	0.23%	0.01%	2.1%	3.2%	
BASTAR	2.0%	3.0%	0.9%	0.01%	0.02%	0.01%	0.09%	0.17%	0.02%	1.8%	3.7%	
JHABUA	2.2%	3.0%	1.4%	0.01%	0.02%	0.00%	0.13%	0.24%	0.03%	1.8%	3.6%	
MADHYA PRADESH	4.3%	6.4%	2.1%	0.03%	0.05%	0.01%	0.23%	0.42%	0.02%	3.9%	5.6%	

Source : Census of India , 1991, Sanket- MPHRO

ED 3 Persons Educationally Deprived in Madhya Pradesh , 1991

DISTRICT	Share of Person Attending School in Age Group 7 -14 Years								
	ALL	MALE	FEMALE	Rural			Urban		
				ALL	MALE	FEMALE	ALL	MALE	FEMALE
INDORE	72.5%	78.6%	66.1%	53.8%	67.7%	39.6%	81.1%	83.5%	78.5%
BHOPAL	71.7%	75.4%	67.6%	48.9%	60.5%	35.4%	77.6%	79.5%	75.7%
JABALPUR	68.7%	75.1%	61.9%	57.4%	67.1%	46.9%	82.4%	84.8%	80.0%
DURG	71.9%	80.3%	63.9%	67.3%	77.4%	57.0%	80.2%	85.4%	74.8%
GWALIOR	65.5%	72.8%	56.5%	47.6%	60.0%	31.4%	78.2%	82.5%	73.2%
NARSIMHPUR	70.7%	76.6%	64.7%	68.4%	74.8%	61.7%	84.1%	86.7%	81.3%
SAGAR	65.4%	72.9%	57.0%	58.9%	67.9%	48.4%	82.0%	85.8%	78.0%
BALAGAHT	67.8%	73.3%	62.6%	66.4%	72.3%	60.8%	80.6%	82.2%	79.1%
HOSAHANGABAD	62.1%	69.1%	65.5%	53.9%	62.7%	44.4%	83.6%	86.5%	80.6%
BHIND	63.8%	74.6%	49.4%	61.2%	73.3%	44.8%	73.7%	79.8%	65.9%
UJJAIN	56.9%	67.8%	45.4%	42.9%	57.8%	27.2%	79.3%	82.9%	74.6%
MANSAUR	58.1%	72.3%	43.7%	52.7%	69.1%	36.0%	76.6%	78.3%	70.1%
RAIPUR	59.4%	69.2%	49.6%	56.0%	67.0%	44.8%	73.9%	86.8%	69.5%
DAMOH	58.3%	65.3%	50.2%	52.9%	60.7%	43.9%	82.9%	75.3%	78.6%
EAST NIMAR	52.8%	60.0%	44.8%	45.0%	54.1%	35.1%	73.3%	90.1%	71.1%
BETUL	61.8%	67.4%	56.2%	55.6%	61.7%	49.7%	87.1%	83.6%	84.0%
VIDISHA	59.4%	67.8%	49.5%	54.5%	64.0%	43.1%	79.2%	81.9%	74.4%
BILASPUR	57.0%	69.2%	44.5%	52.7%	66.5%	38.3%	77.9%	81.1%	73.9%
DEWAS	55.8%	67.8%	42.6%	49.4%	63.4%	33.9%	74.9%	82.4%	68.2%
SATNA	59.1%	69.8%	47.7%	54.6%	66.6%	41.8%	77.1%	84.3%	71.2%
REWA	60.1%	71.7%	48.2%	57.6%	69.9%	44.7%	75.1%	84.7%	68.3%
CHHINDWARA	56.6%	62.9%	50.2%	49.1%	56.2%	41.9%	81.0%	76.4%	77.6%
RAJNANDGAON	60.8%	71.3%	49.9%	57.3%	68.9%	45.3%	80.1%	82.6%	75.3%
DATIA	53.9%	65.6%	38.9%	48.9%	62.6%	30.9%	70.4%	84.0%	63.4%
RATLAM	50.4%	60.5%	39.6%	38.9%	51.6%	25.9%	77.9%	78.9%	72.7%
SEONI	58.1%	64.3%	51.9%	55.5%	62.3%	48.7%	82.8%	81.8%	81.6%
MORENA	52.5%	65.4%	35.9%	47.4%	61.9%	28.6%	71.9%	76.4%	63.0%
RAIGARH	59.2%	68.2%	50.2%	57.1%	66.6%	47.7%	77.1%	79.3%	72.0%
RAISEN	50.4%	59.1%	40.5%	46.5%	56.0%	35.6%	72.2%	81.5%	67.6%
SEHORE	54.3%	67.1%	40.4%	49.6%	64.4%	33.4%	75.1%	86.5%	70.6%
SHAJAPUR	50.7%	65.0%	34.8%	45.7%	61.4%	28.1%	74.0%	68.7%	65.6%
MANDLA	53.4%	61.8%	44.5%	50.6%	59.5%	41.3%	83.8%	82.3%	80.7%
TIKAMGARH	49.9%	58.9%	39.2%	47.1%	56.9%	35.6%	63.2%	77.2%	56.9%
SHAHNOL	50.1%	61.2%	38.4%	42.6%	55.0%	29.6%	76.1%	73.2%	69.4%
CHHATARPUR	47.8%	57.0%	37.0%	42.4%	52.4%	30.5%	71.2%	77.4%	64.3%
WEST NIMAR	42.2%	48.3%	35.7%	37.6%	44.2%	30.6%	69.3%	75.0%	65.2%
DHAR	44.4%	53.9%	34.4%	40.5%	50.7%	29.6%	72.7%	72.8%	67.9%
GUNA	41.2%	52.1%	28.6%	34.7%	46.8%	20.4%	68.4%	78.7%	61.2%
PANNA	43.2%	51.4%	34.0%	39.3%	48.1%	29.4%	68.4%	77.1%	63.4%
SHIVPURI	40.5%	52.3%	26.7%	34.1%	47.0%	18.9%	72.4%	85.6%	65.1%
RAJGARH	43.9%	57.5%	29.4%	38.8%	53.5%	23.0%	68.7%	80.9%	60.0%
SARGUNA	47.1%	55.8%	38.1%	41.6%	50.8%	32.2%	81.0%	84.3%	75.9%
SIDHI	41.5%	55.8%	25.7%	39.3%	54.1%	23.0%	74.3%	80.3%	66.7%
BASTAR	37.5%	44.5%	30.4%	34.2%	41.5%	26.7%	81.5%	81.8%	78.7%
JHABUA	26.8%	34.9%	18.3%	22.4%	30.7%	13.9%	74.7%	80.3%	68.6%
MADHYA PRADESH	55.6%	64.8%	45.7%	49.0%	59.7%	37.4%	77.7%	81.8%	73.2%

Source : Census of India, Madhya Pradesh C.Tables (C Series), Sanket - MPHRO

ED 3 Persons Educationally Deprived in Madhya Pradesh , 1991

DISTRICT	Illiterates in Population 15 Years and above								
	ALL	MALE	FEMALE	Rural			Urban		
				ALL	MALE	FEMALE	ALL	MALE	FEMALE
INDORE	36.7%	23.1%	51.9%	60.6%	39.4%	84.1%	26.2%	16.1%	37.7%
BHOPAL	38.2%	27.7%	50.2%	70.8%	53.8%	90.5%	30.3%	21.4%	40.5%
JABALPUR	45.1%	29.9%	61.9%	61.9%	42.9%	82.2%	26.1%	15.9%	38.0%
DURG	46.8%	29.0%	65.3%	56.2%	35.8%	76.0%	30.2%	18.0%	44.4%
GWALIOR	45.3%	30.5%	63.4%	65.2%	46.5%	88.3%	32.1%	19.8%	47.1%
NARSIMHPUR	51.3%	36.2%	68.0%	56.2%	40.2%	73.8%	24.4%	14.2%	36.0%
SAGAR	51.7%	35.5%	70.7%	62.2%	44.5%	82.4%	28.0%	15.2%	43.3%
BALAGAHT	52.6%	35.5%	69.7%	55.3%	37.8%	72.6%	27.7%	15.0%	41.5%
HOSAHANGABAD	51.7%	36.0%	69.6%	62.3%	45.3%	81.1%	25.4%	13.1%	40.0%
BHIND	56.1%	36.9%	79.2%	59.8%	40.0%	83.7%	41.7%	24.9%	61.9%
UJJAIN	54.3%	37.5%	72.5%	70.4%	50.6%	91.5%	31.1%	18.8%	44.7%
MANSAUR	56.1%	35.0%	78.5%	63.3%	40.8%	87.2%	32.6%	16.7%	50.0%
RAIPUR	57.1%	38.0%	76.3%	63.3%	42.9%	83.3%	32.8%	19.4%	47.4%
DAMOH	59.2%	42.0%	78.1%	65.8%	47.9%	85.2%	30.7%	21.1%	46.5%
EAST NIMAR	57.5%	42.2%	73.7%	67.1%	50.7%	84.4%	33.7%	17.1%	47.0%
BETUL	60.6%	47.1%	74.6%	68.0%	54.5%	81.8%	28.5%	22.0%	41.6%
VIDISHA	60.3%	44.1%	79.1%	67.4%	50.1%	87.6%	33.6%	17.1%	47.1%
BILASPUR	59.6%	40.1%	79.5%	65.6%	45.2%	85.8%	31.8%	20.9%	48.3%
DEWAS	59.8%	40.6%	80.6%	68.4%	48.1%	90.1%	39.6%	25.2%	53.6%
SATNA	60.6%	43.7%	79.1%	65.9%	48.6%	84.5%	39.6%	25.5%	56.5%
REWA	61.4%	43.4%	80.7%	65.6%	47.3%	84.7%	32.4%	20.9%	57.8%
CHHINDWARA	60.3%	46.5%	74.9%	69.0%	54.9%	83.6%	33.5%	18.4%	45.4%
RAJNANDGAON	61.4%	42.4%	79.7%	66.9%	47.3%	85.5%	40.0%	25.4%	49.2%
DATIA	59.6%	41.0%	81.3%	65.3%	45.5%	88.5%	30.5%	18.1%	56.8%
RATLAM	58.7%	43.0%	75.2%	72.9%	49.5%	90.9%	24.8%	13.8%	43.8%
SEONI	61.1%	45.9%	76.8%	65.0%	50.3%	90.8%	43.8%	26.6%	37.3%
MORENA	63.4%	45.3%	85.1%	68.5%	51.4%	90.5%	33.6%	18.9%	64.7%
RAIGARH	64.4%	48.2%	80.6%	67.6%	52.5%	93.5%	38.7%	25.3%	50.1%
RAISEN	63.3%	48.0%	80.9%	68.0%	51.5%	95.7%	38.5%	25.4%	54.1%
SEHORE	64.7%	46.7%	84.9%	70.4%	51.3%	91.3%	39.4%	22.4%	58.2%
SHAJAPUR	65.1%	46.1%	85.7%	70.7%	54.0%	91.6%	36.4%	14.0%	39.8%
MANDLA	67.6%	50.8%	84.4%	71.2%	60.1%	88.1%	47.8%	33.9%	63.6%
TIKAMGARH	70.0%	55.7%	86.4%	74.5%	62.3%	91.1%	42.5%	28.3%	59.7%
SHAHNOL	69.6%	54.8%	85.6%	76.8%	64.0%	92.0%	40.1%	27.5%	55.0%
CHHATARPUR	69.4%	56.8%	84.2%	76.5%	60.0%	91.3%	36.2%	21.6%	52.5%
WEST NIMAR	67.8%	53.5%	82.8%	74.0%	60.6%	88.6%	35.4%	21.6%	51.6%
DHAR	69.4%	54.4%	84.8%	75.0%	60.1%	89.9%	35.4%	24.3%	55.9%
GUNA	68.5%	52.9%	86.4%	75.8%	60.5%	93.7%	38.8%	27.8%	56.2%
PANNA	70.7%	57.0%	86.2%	75.2%	60.6%	90.7%	40.8%	22.4%	56.1%
SHIVPURI	69.7%	54.6%	87.9%	75.7%	63.9%	93.8%	37.7%	26.0%	59.9%
RAJGARH	72.6%	57.4%	89.1%	78.8%	66.6%	94.9%	41.9%	25.2%	53.2%
SARGUNA	74.6%	61.4%	88.6%	79.5%	62.8%	92.9%	37.9%	22.7%	56.7%
SIDHI	74.2%	59.7%	90.3%	76.9%	72.3%	92.3%	36.5%	21.2%	53.7%
BASTAR	78.8%	68.3%	89.3%	82.5%	72.3%	92.5%	33.1%	21.2%	46.3%
JHABUA	84.5%	77.9%	91.2%	90.0%	84.2%	95.8%	33.1%	20.9%	46.3%
MADHYA PRADESH	60.3%	44.2%	77.5%	69.0%	52.2%	96.7%	32.5%	19.9%	47.0%

Source : Census of India, Madhya Pradesh C Tables (C Series), Sanket - MPHDRO

ED 3 Persons Educationally Deprived in Madhya Pradesh , 1991

DISTRICT	Illiterates in Population 15 Years and above								
	ALL	MALE	FEMALE	Rural			Urban		
				ALL	MALE	FEMALE	ALL	MALE	FEMALE
INDORE	34.6%	22.7%	47.8%	57.3%	37.8%	78.5%	24.6%	16.2%	34.1%
BHOPAL	35.8%	27.0%	45.9%	65.8%	50.2%	84.0%	28.4%	21.2%	36.6%
JABALPUR	41.8%	28.8%	56.2%	57.2%	40.2%	75.2%	24.2%	15.8%	33.7%
DURG	42.6%	26.9%	58.9%	50.9%	32.7%	68.7%	27.9%	18.3%	40.0%
GWALIOR	42.7%	29.7%	58.6%	62.0%	44.8%	83.5%	29.7%	19.2%	42.2%
NARSIMHPUR	46.0%	33.2%	60.0%	50.2%	36.7%	65.0%	22.4%	14.0%	31.8%
SAGAR	47.3%	33.3%	63.4%	56.6%	41.2%	74.2%	25.5%	15.0%	37.8%
BALAGAHT	48.1%	33.6%	62.4%	50.5%	35.6%	65.1%	25.8%	15.6%	36.8%
HOSAHANGABAD	48.3%	34.7%	63.5%	58.1%	43.3%	74.6%	23.3%	13.2%	34.8%
BHIND	51.2%	34.0%	72.6%	54.8%	36.7%	77.2%	37.9%	23.7%	55.2%
UJJAIN	51.6%	36.2%	68.2%	67.1%	48.6%	86.9%	28.7%	18.2%	40.2%
MANSAUR	52.7%	33.3%	73.1%	59.5%	38.4%	81.5%	30.5%	16.8%	45.2%
RAIPUR	53.4%	36.3%	70.4%	58.9%	40.6%	76.9%	31.3%	19.9%	43.5%
DAMOH	54.7%	40.1%	70.9%	60.9%	45.6%	77.8%	27.3%	15.8%	40.2%
EAST NIMAR	54.9%	41.6%	69.0%	63.9%	49.4%	79.4%	31.9%	22.0%	42.6%
BETUL	55.1%	43.6%	66.9%	62.2%	50.6%	74.0%	24.5%	15.3%	34.8%
VIDISHA	55.1%	41.0%	71.6%	61.6%	46.3%	79.6%	30.4%	20.6%	41.6%
BILASPUR	55.7%	37.9%	73.9%	61.2%	42.4%	80.1%	29.5%	17.3%	42.9%
DEWAS	55.8%	38.4%	74.7%	63.8%	45.0%	83.9%	33.5%	20.4%	48.1%
SATNA	55.9%	40.5%	72.6%	61.0%	45.0%	78.2%	35.6%	23.5%	49.6%
REWA	56.0%	39.7%	73.4%	59.7%	42.9%	77.3%	36.1%	23.1%	51.3%
CHHINDWARA	56.2%	44.3%	68.7%	64.5%	52.2%	77.3%	29.1%	19.7%	39.7%
RAJNANDGAON	56.3%	39.2%	73.1%	61.3%	13.5%	78.6%	30.5%	17.7%	43.8%
DATIA	56.3%	39.3%	76.6%	61.9%	43.5%	84.1%	37.4%	25.0%	51.8%
RATLAM	56.5%	42.1%	71.6%	69.9%	54.0%	86.6%	28.7%	18.0%	40.2%
SEONI	56.5%	43.5%	69.9%	60.1%	46.7%	73.7%	23.1%	14.3%	32.6%
MORENA	59.2%	42.4%	79.8%	64.4%	47.0%	85.7%	39.7%	25.1%	57.6%
RAIGARH	59.2%	44.8%	74.1%	62.5%	47.7%	77.0%	31.2%	18.8%	45.0%
RAISEN	59.6%	46.1%	75.2%	64.1%	50.2%	80.0%	35.9%	24.9%	49.0%
SEHORE	59.9%	43.3%	78.4%	65.4%	47.5%	85.1%	35.0%	24.2%	47.4%
SHAJAPUR	61.2%	43.3%	80.7%	66.6%	48.1%	86.8%	36.1%	21.5%	52.3%
MANDLA	63.0%	47.9%	78.1%	66.3%	51.0%	81.8%	24.1%	13.9%	35.1%
TIKAMGARH	64.9%	52.0%	79.9%	69.0%	55.8%	84.4%	45.0%	33.2%	58.4%
SHAHNOL	65.0%	51.1%	79.9%	72.3%	58.3%	87.0%	37.9%	25.8%	52.2%
CHHATARPUR	65.0%	53.4%	79.9%	71.7%	59.9%	85.8%	37.4%	26.4%	50.3%
WEST NIMAR	65.1%	53.0%	77.9%	70.8%	58.8%	83.4%	34.9%	22.8%	48.1%
DHAR	65.7%	52.5%	79.7%	70.8%	57.5%	84.7%	33.5%	21.9%	46.7%
GUNA	66.0%	51.7%	82.6%	73.1%	58.3%	90.2%	37.0%	24.5%	51.5%
PANNA	67.2%	54.9%	81.1%	71.6%	59.1%	85.6%	38.5%	27.7%	51.1%
SHIVPURI	67.3%	53.0%	84.4%	73.4%	58.8%	90.8%	35.2%	22.1%	50.8%
RAJGARH	68.6%	53.9%	84.6%	74.6%	59.7%	90.6%	39.3%	25.3%	54.8%
SARGUNA	69.8%	57.7%	82.7%	75.0%	62.9%	87.5%	33.2%	22.6%	54.7%
SIDHI	70.2%	55.7%	86.1%	72.7%	58.4%	88.3%	33.8%	21.8%	50.0%
BASTAR	75.0%	65.2%	84.7%	78.6%	69.0%	88.1%	29.8%	20.0%	40.3%
JHABUA	81.4%	74.4%	88.6%	86.6%	80.1%	93.2%	31.2%	20.6%	42.7%
MADHYA PRADESH	56.4%	42.1%	71.9%	64.6%	49.3%	80.9%	30.1%	19.5%	42.1%

Source : Census of India , Madhya Pradesh C Tables (C Series) Sanket, - MPDRO

ED 4 – Retention Rates in Schools ; 1994/95

District	Retention Rates in schools			Retention rate in Class 8			Retention rate in Class 10			Retention Rate : class 8 : 5		
	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls
NARSIMHAPUR	95.2%	98.4%	91.5%	45.4%	55.1%	33.8%	31.3%	42.9%	17.5%	47.7%	56.0%	37.0%
TIKAMGARH	82.5%	82.4%	82.6%	40.8%	48.7%	28.3%	40.7%	54.6%	18.6%	49.5%	59.1%	34.3%
SAGAR	82.4%	84.0%	80.4%	43.1%	51.6%	32.2%	25.5%	30.8%	18.7%	52.3%	61.4%	40.1%
BALAGHAT	77.9%	77.5%	78.4%	38.6%	43.3%	33.4%	22.7%	29.1%	15.7%	49.5%	55.8%	42.7%
VIDISHA	74.0%	79.5%	66.7%	30.7%	39.6%	18.9%	19.8%	25.9%	11.7%	41.5%	49.8%	28.3%
SEHORE	2.9%	80.3	63.1%	29.9%	39.9%	16.6%	19.3%	27.4%	8.5%	41.1%	49.7%	26.3%
INDORE	72.3%	77.0%	67.1%	42.2%	46.8%	37.0%	31.2%	36.7%	25.2%	58.3%	30.5%	55.1%
CHHATARPUR	71.5	75.1	65.9	34.2	41.4	22.9	24.3	32.1	12.0	47.9	55.2	34.7
UJJAIN	70.9	75.9	64.2	37.6	42.6	30.8	23.0	26.3	18.4	53.0	56.1	48.1
REWA	70.3	73.6	66.0	43.8	51.8	33.3	39.3	55.4	18.1	62.3	70.4	50.4
JABALPUR	70.2	73.3	66.7	38.4	43.5	32.4	24.8	28.5	20.6	54.6	59.4	48.6
DURG	70.2	74.1	66.0	40.2	47.9	31.7	31.3	41.0	20.6	57.2	64.6	48.1
DHAR	70.2	72.3	94.1	34.3	40.2	25.9	19.8	24.9	12.4	48.9	55.6	38.6
DAMOH	69.1	70.9	66.9	34.4	42.3	24.3	21.4	28.2	12.6	49.8	59.6	36.4
BHOPAL	68.8	69.6	67.9	44.8	47.5	40.6	38.7	41.2	35.7	64.7	68.2	60.3
WEST NIMAR	67.7	68.0	67.5	27.1	30.4	22.5	16.8	20.6	11.7	40.0	44.8	33.3
MANDSAUR	67.6	75.9	56.7	30.7	38.4	20.6	18.8	24.9	10.9	45.4	50.5	36.4
CHHINDWARA	67.6	67.4	67.9	28.6	30.8	25.7	17.5	20.6	13.5	42.3	45.7	37.9
HOUSANGABA D	67.2	71.6	61.7	33.9	39.4	27.1	19.9	24.3	14.4	50.5	55.0	43.9
DEWAS	67.2	74.0	58.1	33.0	42.2	20.8	23.7	33.4	10.7	49.1	57.0	35.8
SEONI	66.4	65.0	68.0	32.6	36.7	27.6	15.9	18.7	12.5	49.1	56.4	40.6
SATNA	64.7	67.7	60.7	41.3	48.8	31.4	27.9	38.7	13.9	63.8	72.1	51.8
RAISEN	64.4	68.3	59.4	31.0	38.5	21.3	20.1	27.6	10.4	48.1	56.3	35.8
EAST NIMAR	63.4	66.7	59.1	25.8	28.7	22.0	14.7	16.7	12.1	40.7	43.1	37.2
RAJGARH	61.8	38.2	51.9	25.7	32.9	14.6	16.7	21.8	8.7	41.6	48.2	28.0
DATIA	61.6	67.6	53.0	36.0	46.6	20.8	27.2	37.7	12.1	58.4	68.9	39.2
SHAJAPUR	60.9	74.1	44.5	23.58	32.7	12.0	16.4	24.1	6.8	38.6	44.5	27.0
BHIND	60.6	66.7	52.7	38.9	49.8	25.1	42.3	64.7	13.6	64.3	74.6	47.6
BETUL	60.5	60.5	60.4	32.6	34.4	30.5	18.8	22.3	14.8	53.9	56.8	50.5
RAIPUR	59.5	63.0	55.5	29.6	36.2	21.9	19.2	25.7	11.7	49.6	57.4	39.5
PANNA	59.4	62.5	55.2	28.8	34.6	20.9	19.5	26.3	10.4	48.5	55.4	37.9
RAJNANDGAO N	58.9	63.2	54.0	29.2	36.8	20.4	17.3	24.7	8.9	49.5	58.2	37.8
GWALIOR	56.4	58.4	53.6	42.4	47.5	35.5	36.2	44.9	24.5	75.2	81.2	66.1
MORENA	56.4	61.3	48.5	34.9	43.7	20.6	33.1	46.1	12.0	61.9	71.4	42.4
SHIVPURI	54.6	61.7	42.4	25.8	32.1	15.0	15.5	19.9	8.0	47.2	52.0	35.3
MANDLA	54.3	54.4	54.3	28.1	32.7	22.0	17.5	23.1	10.1	51.7	60.0	40.6
BILASPUR	53.7	57.8	48.4	30.6	36.5	23.0	25.1	34.1	13.5	57.0	63.1	47.6
SARGUJA	53.6	55.9	50.6	22.8	26.9	17.0	10.1	12.4	6.8	42.5	48.2	33.7
SHAHDOL	52.5	57.1	46.7	29.4	36.0	21.3	21.6	27.7	14.0	56.1	63.0	45.6
SIDHI	52.3	56.3	45.5	32.5	39.0	21.6	31.2	41.0	14.7	62.3	69.4	47.5
RAIGARH	51.8	54.1	49.3	29.7	34.5	24.3	24.1	32.4	14.7	57.2	63.7	49.2
GUNA	45.0	52.0	34.7	20.6	25.8	12.8	9.3	11.9	5.6	45.7	49.7	37.0
RATLAM	41.5	48.9	33.4	22.1	28.5	15.2	12.4	15.7	8.8	53.3	58.3	45.3
BASTAR	36.2	38.7	33.1	17.8	20.8	13.9	14.3	18.2	9.5	49.1	53.9	42.0
JHABUA	29.2	29.8	28.3	13.5	16.4	8.9	7.7	9.2	5.3	46.0	54.9	31.3
Madhya Pradesh	61.3	64.7	56.8	32.1	38.0	24.4	22.9	29.7	14.1	52.4	58.8	43.0

Source: Department of School Education, Madhya Pradesh, 1996, Sanket-MPHDRO

ED5 – Illiteracy and Number of Illiterates in different Age Groups, 1991

District	Illiterates in Age Group 15-35 Years			Illiteracy Rate in Age Group 15-35 Years			Illiterates in Age Group 35-50 Years		
	All	Male	Female	All	Male	Female	All	Male	Female
DATIA	65225	22409	42816	50.5%	31.6%	73.4%	34450	12130	22320
NARSIMHAPUR	110170	39082	71088	42.5	28.7	57.8	56850	20180	36670
PANNA	140193	56655	83538	63.4	48.0	81.0	72911	30688	42223
SEHORE	145016	47708	97308	55.7	34.9	78.7	75619	29620	45999
RAISEN	149332	55219	94113	54.2	37.6	73.2	80700	33042	47658
DAMOH	151117	53798	97319	51.1	34.1	70.3	77124	28307	48817
BHOPAL	157146	58451	98695	31.4	22.2	41.5	83831	33096	50735
VIDISHA	162022	59309	102713	51.9	35.4	71.1	85669	34019	51650
SEONI	170201	60473	109728	52.1	36.8	67.5	94081	35169	58912
RATLAM	172303	62016	110287	52.5	37.1	68.4	88313	34581	53732
HOUSHANGABAD	173888	61015	112873	42.4	28.0	58.9	98134	34830	63304
BHIND	176624	52210	124414	45.2	24.4	70.3	98462	34048	64414
DEWAS	176763	56741	120022	52.2	32.3	73.7	89196	32915	56281
BALAGHAT	181642	57638	124004	41.0	26.3	55.6	124606	39633	84973
TIKAMGARH	181785	96159	112626	60.9	43.5	80.7	96687	43030	53657
BETUL	182709	69197	113512	50.4	37.8	63.2	105775	41480	64295
GWALIOR	188649	66912	121737	38.1	24.4	55.1	98064	35562	62502
SHAJAPUR	190856	62630	128226	57.2	36.2	79.8	99480	37386	62094
INDORE	196797	62450	134347	30.1	18.2	43.2	105486	35480	70006
RAJGARH	209708	78063	131645	65.8	47.9	84.7	108651	47193	61458
UJJAIN	212728	71442	141286	47.2	30.7	64.8	114330	41745	72585
CHHATARPUR	216681	87953	128728	60.9	46.1	78.0	116571	51766	64805
SHIVPURI	225719	91051	134668	63.2	46.6	83.2	111574	48632	62942
SAGAR	230600	78025	152575	42.2	26.3	61.0	121631	44439	77192
EAST NIMAR	238061	88967	149094	31.6	37.8	66.4	119364	45205	74159
SATNA	241509	79403	162106	50.9	32.4	70.7	137237	53591	83646
REWA	243682	74871	168811	50.4	30.3	71.5	145613	52894	92719
CHHINDWARA	247539	91935	155604	49.4	36.0	64.0	147072	58385	88687
RAJNANDGAON	248875	76420	172455	51.6	32.1	70.6	139469	48328	91141
MANDSAUR	249592	69457	180135	48.4	26.5	71.1	135537	45210	90327
GUNA	260093	97807	162286	62.5	44.6	82.5	127165	53783	73382
MANDLA	264707	91417	173290	60.7	42.5	78.4	137620	53345	84275
JHABUA	278154	123438	154716	80.5	72.2	88.7	136793	66853	69940
DHAR	283489	107783	175706	63.0	47.0	79.7	141368	60234	81134
SIDHI	295208	113263	181945	67.5	50.2	86.1	151138	66273	84865
DURG	301509	84682	216827	36.2	20.0	53.1	191093	58996	132097
MORENA	307752	105158	202594	55.6	35.0	80.0	155714	63231	92483
RAIGARH	310122	105388	204734	54.7	37.7	71.7	192751	73461	119290
JABALPUR	340706	112238	228468	36.8	23.1	52.0	191609	66180	125429
SHAHNOL	356060	130497	225563	62.0	44.8	79.6	198902	84640	114262
WEST NIMAR	400702	158241	242461	62.2	47.8	77.3	194596	79854	114742
SARGUJA	455536	173135	282401	67.8	51.7	83.7	2596.0	114643	144987
BASTAR	548936	223031	325905	73.5	61.4	84.9	304429	139270	165159
BILASPUR	548936	223031	325905	73.5	61.4	84.9	304429	139270	165159
RAIPUR	622764	192595	430169	48.1	29.6	66.7	355057	117940	237117
MADHYA PRADESH	11278493	2966178	7312315	52.0	35.4	69.6	6160987	2384808	3776179

Source: Census of India, 1991, C Series – Madhya Pradesh, Sanket-MPHDRO

ED 5 – Illiteracy and Number of Illiterates in Different Age Groups, 1991

District	Illiteracy Rate in Age Group 35 50 Years			Illiterates Rate in Age Group 50 +			Illiteracy Rate in Age Group 50+ Years		
	All	Male	Female	All	Male	Female	All	Male	Female
DATIA	62.5	41.5	86.2	41143	17743	23400	79.0	64.6	98.0
NARSIMHAPUR	52.5	35.0	72.3	77904	31559	46345	70.8	55.1	87.9
PANNA	75.3	61.3	90.4	73401	35543	37858	83.9	74.8	94.8
SEHORE	67.7	49.7	88.3	92278	41889	50389	82.7	70.9	95.9
RAISEN	67.1	50.9	86.0	88116	40854	47262	82.5	71.5	95.2
DAMOH	62.8	44.0	83.3	84870	34018	50852	77.2	62.3	91.9
BHOPAL	41.2	29.5	55.4	81501	33845	47656	58.3	43.9	75.8
VIDISHA	64.0	46.6	84.9	92813	40500	52313	78.4	64.9	93.6
SEONI	64.3	46.6	83.1	106869	45869	61000	76.4	66.6	92.8
RATLAM	60.4	44.3	78.9	86967	34140	52827	73.9	58.0	89.6
HOUSHANGABAD	54.5	36.1	75.9	118974	48965	70009	71.3	55.7	88.7
BHIND	60.8	39.3	85.6	128852	58799	70053	76.9	63.2	93.9
DEWAS	62.1	42.6	85.0	100319	39565	60754	77.1	60.8	93.4
BALAGHAT	57.0	35.8	78.7	144089	54732	89357	74.0	55.9	92.2
TIKAMGARH	75.1	61.9	90.6	107113	52343	54770	86.6	78.4	96.2
BETUL	65.0	49.0	82.3	125948	54003	71945	79.5	66.3	96.2
GWALIOR	47.4	31.2	67.5	105520	42343	63177	64.5	48.8	82.3
SHAJAPUR	67.5	48.1	89.1	118244	50487	67757	80.7	66.7	95.6
INDORE	38.0	23.4	55.5	119829	42983	76846	54.5	37.1	73.7
RAJGARH	75.4	60.9	92.3	117932	54334	63598	85.5	75.4	96.4
UJJAIN	55.9	38.2	76.1	126704	49352	77352	70.3	53.5	87.9
CHHATARPUR	74.1	61.9	87.9	130728	66255	64473	83.9	75.3	94.9
SHIVPURI	72.9	58.1	90.9	115159	53587	61572	82.8	71.2	96.4
SAGAR	55.7	37.6	77.0	146269	61053	85216	73.6	59.1	89.3
EAST NIMAR	58.1	41.8	76.4	128152	49114	79038	72.1	55.0	89.5
SATNA	66.3	49.1	85.6	147880	66025	81855	78.6	65.3	93.9
REWA	68.7	49.3	88.6	162249	73733	88516	80.3	67.6	95.1
CHHINDWARA	64.6	49.2	81.5	170308	73868	96440	80.9	68.8	93.5
RAJNANDGAON	65.2	44.9	85.7	161349	61749	99600	80.9	65.3	94.9
MANDSAUR	59.0	37.1	83.6	150112	57793	92319	71.7	53.2	91.6
GUNA	70.2	54.6	88.9	132259	63453	68806	81.7	71.6	94.0
MANDLA	69.9	52.6	88.3	139933	58182	81751	82.9	69.7	95.8
JHABUA	87.8	83.0	93.1	106511	52650	53861	91.8	87.5	96.5
DHAR	73.4	59.5	89.0	129774	56936	72838	82.9	71.6	94.5
SIDHI	78.5	64.8	94.0	136142	66521	69621	87.9	79.3	97.9
DURG	51.4	31.0	72.6	212546	78473	134073	70.5	51.6	89.8
MORENA	68.3	50.9	89.1	158195	74641	83554	79.4	66.8	95.4
RAIGARH	68.1	50.6	86.4	214345	88925	125420	81.6	68.0	95.1
JABALPUR	47.9	31.0	97.4	209574	81000	128574	65.5	48.7	83.6
SHAHNOL	73.6	58.8	90.4	179884	85074	94810	85.6	75.7	96.8
WEST NIMAR	70.1	55.1	86.3	192308	80838	111470	80.2	67.0	93.6
SARGUJA	77.6	64.7	92.1	241083	116420	124663	87.7	79.3	93.9
BASTAR	82.2	72.3	93.0	230653	104880	125773	89.5	81.8	97.1
BILASPUR	62.7	42.1	84.1	400056	155943	244113	77.8	61.4	93.7
RAIPUR	59.9	38.9	82.0	405181	148485	256696	76.0	57.9	92.7
MADHYA PRADESH	63.7	46.9	82.5	6540036	2779464	3760572	77.6	63.8	92.3

Source: Census of India, 1991, C Series – Madhya Pradesh, Sanket-MPHDRO

ED6 – Education Infrastructure, Students and Teachers in Madhya Pradesh, 1996

District	Primary					Middle			
	No. Of Institutions	Total Enrolment	Boys	Girls	Teachers	No. Of Institutions	Total Enrolment	Boys	Girls
BHOPAL	946	198643	107230	91413	3632	586	82653	47194	35459
EAST NIMAR	1282	19913	114441	84672	3130	292	44225	29585	14640
WEST NIMAR	2037	237010	136558	100452	4444	454	78564	48021	30543
DAMOH	929	123379	68968	54411	2490	197	38072	25444	12628
SAGAR	1734	234748	130057	104691	4955	377	118514	75961	42553
TIKAMGARH	954	128771	76548	52223	2279	224	45572	32698	12874
INDORE	1432	283761	156547	127214	5140	756	95701	58326	37375
JABALPUR	2480	372759	209980	162779	9048	683	115813	68010	47803
DURG	2283	370357	208315	162042	7922	648	146929	85653	61276
BILASPUR	4105	575122	351047	224075	12791	840	192596	132374	60222
SIDHI	1627	271375	150628	120747	4769	350	90426	55784	34642
CHHATARPUR	1262	178293	106344	71949	2525	306	47795	33620	14175
DHAR	1635	160564	95248	65316	3869	368	54062	35523	18539
SATNA	1481	235324	133581	101743	3084	406	99385	61649	37736
DEWAS	1246	138477	78367	60110	3398	246	42317	29393	12924
RAIPUR	4136	557123	303887	253236	11672	953	194293	119723	74570
JHABUA	1544	121874	78033	43841	7979	242	35168	22291	12877
GUNA	1572	187859	113889	73970	4046	306	43241	32560	10681
HOSHANGABAD	1412	179921	92962	86959	3858	358	56639	35018	21621
BASTAR	3827	308894	176746	132148	8698	685	71859	43508	28351
REWA	1774	197584	111887	85697	4376	369	96607	66299	30308
MORENA	2017	285616	185734	99882	7050	488	85950	67559	18391
NARSIMHAPUR	860	109151	60399	48752	1903	221	42036	25630	16406
VIDISHA	1284	152500	87056	65444	3797	265	52929	37528	15401
MANDSAUR	1887	223872	129245	94627	4826	487	67754	47386	20368
PANNA	933	92893	55382	37511	1792	150	29110	20430	8680
SHAJAPUR	1324	130215	78429	51786	3312	304	39181	29153	10028
RATLAM	1222	129892	73775	56117	3673	314	36488	24156	12332
UJJAIN	1631	179485	104270	75215	5139	468	66788	44819	21969
SHIVPURI	1389	194920	122843	72077	3492	309	47234	38095	9139
SHAHDOL	3092	175774	110379	65395	4064	586	60252	43656	16596
CHHINDWARA	2113	211034	130079	80955	4920	412	58046	33641	24405
BETUL	1443	177168	95229	81939	3730	409	51049	30897	20152
SEHORE	1141	133169	74864	58305	2697	253	49169	35038	14131
RAJNANDGAON	1900	206781	114309	92472	4304	392	67843	40050	27793
DATIA	492	81544	48799	32745	1226	146	29582	20522	9060
RAJGARH	1393	134256	81073	53183	2734	262	35197	28206	6991
BALAGHAT	1803	206195	112781	93414	4639	383	88430	48470	39960
SEONI	1465	161220	96476	64744	3404	273	44480	28772	15708
GWALIOR	1662	309081	202033	107048	6170	766	101037	73769	27268
BHIND	1495	226562	128526	98036	4006	608	88316	62700	25616
RAISEN	1358	116149	65405	50744	2612	328	37091	27146	9945
SARGUJA	3161	327500	197583	129917	7163	629	91173	58216	32957
RAIGARH	2735	235855	165224	70631	6783	518	69875	42395	27480
MANDLA	2296	152903	86437	66466	3847	441	58049	39228	18821
MADHYA PRADESH	78794	9614686	5607593	4007093	211388	19058	3187490	2086096	1101394

Source : Directorate of Public Instruction, Madhya Pradesh, 1996, Basic Educational Statistics

ED6 – Education Infrastructure, Students and Teachers in Madhya Pradesh, 1996

District	High School and Higher Secondary					Total Enrollment in School			
	Teachers	No. Of Institutions	Boys	Girls	Teachers	Teachers	Total Enrolment	Boys	Girls
BHOPAL	3856	224	57877	35734	22143	2367	339173	190158	149015
EAST NIMAR	893	91	6330	4758	1572	779	249668	148784	100884
WEST NIMAR	3253	134	37127	26551	10576	2172	352701	211130	141571
DAMOH	1161	64	18653	13774	4879	761	180104	108186	71918
SAGAR	1970	133	41554	27998	13556	1919	394816	234016	160800
TIKAMGARH	1213	117	30103	23510	6593	1196	204446	132756	71690
INDORE	6761	213	65936	42438	23498	3272	445398	257311	188087
JABALPUR	4263	327	108542	78302	30240	4819	597114	356292	240822
DURG	2910	252	109827	74250	35577	3082	627113	368218	258895
BILASPUR	4162	290	208233	141683	66550	4154	975951	625104	350847
SIDHI	2408	132	50063	35305	14758	1280	411864	241717	170147
CHHATARPUR	2326	129	26487	20126	6361	1952	252575	160090	92485
DHAR	1337	117	24945	17583	7362	1984	239571	148354	91217
SATNA	2795	216	85953	65042	20911	3334	420662	260272	160390
DEWAS	1455	79	24352	17707	6645	609	205146	125467	79679
RAIPUR	3901	340	111785	61318	50467	3356	863201	484928	378273
JHABUA	1016	68	25046	20644	4402	948	182088	120968	61120
GUNA	1041	79	18482	13686	4796	473	249582	160135	89447
HOSHANGABAD	1855	120	28603	21089	7514	1707	256163	149069	116094
BASTAR	2951	170	46265	36000	10265	1944	427018	256254	170764
REWA	4510	264	47418	35338	12080	3738	341609	213524	128085
MORENA	5979	314	53797	46576	7221	2905	425363	299869	125494
NARSIMHAPUR	132	85	9024	5809	3215	1103	160211	91838	68373
VIDISHA	1428	75	18738	13610	5128	624	224167	138194	85973
MANDSAUR	2724	139	40313	30475	9838	1250	331939	207106	124833
PANNA	889	62	18609	15003	3606	557	140612	90815	49797
SHAJAPUR	1332	88	18319	14441	3878	792	187715	122023	65692
RATLAM	1513	108	19057	12499	6558	1106	185437	110430	75007
UJJAIN	2713	134	32075	21246	10829	1548	278348	170335	108013
SHIVPURI	1925	105	26955	212300	5725	652	269109	182168	86941
SHAHNOL	3853	239	29752	23567	6185	3688	265778	177602	88176
CHHINDWARA	1722	147	29230	18976	10254	1508	298310	182696	115614
BETUL	1104	153	23345	14450	8895	4450	251562	140576	110986
SEHORE	1139	73	22964	17951	5013	632	205302	127853	77449
RAJNANDGAON	1495	112	33760	25493	8321	884	308384	179798	128586
DATIA	701	50	12624	10209	2415	363	123750	79530	44220
RAJGARH	962	72	17420	13832	3588	454	186873	123111	63762
BALAGHAT	1784	116	34862	22856	12006	1707	329487	184107	145380
SEONI	1144	69	24718	17456	7262	996	230418	142704	87714
GWALIOR	3023	334	79147	50809	28338	2955	489265	326611	162654
BHIND	1890	238	78572	57894	20678	2198	393450	249120	144330
RAISEN	908	68	19323	14073	5250	458	172563	106624	65939
SARGUJA	2241	176	60815	44314	16501	1674	479488	300113	179375
RAIGARH	2096	157	40191	27553	12638	1764	345921	235172	110749
MANDLA	1243	115	31808	23798	8010	1209	242760	149463	93297
MADHYA PRADESH	97977	6788	1948999	1376902	572097	78023	14751175	9070591	5680584

Source: Directorate of Public Instruction, Madhya Pradesh, 1996, Basic Education Statistics

ED 6 – Education Infrastructure, Students and Teachers in Madhya Pradesh, 1996

District	Student : Teacher Ratio				Institutions per 10 Sq kms				Children (6 – 19 years) per Institution
	Primary	Middle	High	Total	Primary	Middle	High	Total	
BHOPAL	54.7	21.4	24.5	34.4	3.50	2.17	0.83	6.50	320
EAST NIMAR	63.6	49.5	8.1	52.0	1.88	0.43	0.13	2.44	316
WEST NIMAR	53.3	24.2	17.1	35.7	2.00	0.44	0.13	2.57	289
DAMOH	49.5	32.8	24.5	10.8	1.76	0.37	0.12	2.26	280
SAGAR	47.4	60.2	21.7	44.6	2.08	0.45	0.16	2.69	274
TIKAMGARH	56.5	37.6	25.2	43.6	2.09	0.49	0.26	2.83	274
INDORE	52.2	14.2	20.2	29.4	4.11	2.17	0.61	6.89	268
JABALPUR	41.2	27.2	22.5	32.9	2.67	0.74	0.35	3.76	267
DURG	46.8	50.5	35.6	45.1	2.86	0.81	0.32	3.98	267
BILASPUR	45.0	46.3	50.1	46.2	2.71	0.55	0.19	3.45	257
SIDHI	56.9	37.6	39.1	48.7	1.85	0.40	1.15	2.39	256
CHHATARPUR	70.6	20.5	13.6	37.1	1.46	0.36	0.15	1.97	251
DHAR	41.5	23.1	12.6	29.3	1.99	1.45	0.14	2.59	250
SATNA	76.3	35.6	25.8	45.7	1.99	0.55	0.29	2.83	250
DEWAS	40.8	29.1	40.0	37.6	2.00	0.39	0.13	2.52	249
RAIPUR	47.7	49.8	33.3	45.6	2.68	0.62	0.22	3.52	249
JHABUA	15.3	34.6	26.4	18.3	2.39	0.37	0.11	2.87	246
GUNA	46.4	41.5	39.1	44.9	1.44	0.28	0.07	1.79	244
HOSHANGABAD	46.6	30.5	16.8	35.7	1.84	0.47	0.16	2.47	242
BASTAR	35.5	24.4	23.8	31.4	1.54	0.28	0.07	0.88	239
REWA	45.2	21.4	12.7	27.1	2.84	0.59	0.42	3.86	238
MORENA	40.5	28.9	18.5	32.9	1.73	0.42	0.27	2.42	237
NARSIMHAPUR	57.4	318.5	8.2	51.1	1.89	0.49	0.19	2.56	233
VIDISHA	40.2	37.1	30.0	38.3	1.77	0.36	0.10	2.23	222
MANDSAUR	46.4	24.9	32.3	37.7	2.10	0.54	0.15	2.80	220
PANNA	51.8	32.7	33.4	43.4	1.56	0.25	0.10	1.91	220
SHAJAPUR	39.3	29.4	23.1	34.5	2.15	0.49	0.14	2.79	217
RATLAM	35.4	24.1	17.2	29.5	2.52	0.65	0.22	3.38	216
UJJAIN	34.9	24.6	20.7	29.6	2.69	0.77	0.22	3.68	216
SHIVPURI	55.8	24.5	41.3	44.3	11.56	0.35	0.12	2.03	215
SHAHDOL	43.3	15.6	8.1	22.9	1.52	0.42	0.17	2.11	214
CHHINDWARA	42.9	33.7	19.4	36.6	2.14	0.42	0.15	2.71	211
BETUL	47.5	46.2	20.3	42.0	1.91	0.54	0.20	2.65	210
SEHORE	49.4	43.2	36.3	45.9	1.82	0.40	0.12	2.35	208
RAJNANDGAON	48.0	45.4	38.2	46.1	2.28	0.47	0.13	2.89	207
DATIA	66.5	42.2	34.8	54.0	2.55	0.76	0.26	3.57	206
RAJGARH	49.1	36.6	38.4	45.0	2.66	0.57	0.17	3.40	194
BALAGHAT	44.4	49.6	20.4	40.5	2.66	0.57	0.17	3.40	194
SEONI	47.4	38.9	24.8	41.6	2.32	0.43	0.11	2.87	194
GWALIOR	50.1	33.4	26.8	40.3	3.14	1.45	0.63	5.21	191
BHIND	56.6	46.7	35.7	48.6	3.36	1.37	0.54	5.27	188
RAISEN	44.5	40.8	42.2	43.4	1.83	0.44	0.09	2.37	184
SARGUJA	45.7	40.7	36.3	43.3	1.74	0.35	0.10	2.18	174
RAIGARH	34.8	33.3	22.8	32.5	2.63	0.50	0.15	3.29	160
MANDLA	39.7	46.7	26.3	38.5	2.57	0.49	0.13	3.19	153
MADHYA PRADESH	45.5	32.5	25.0	38.1	2.13	0.51	0.18	2.82	231

Source : Directorate of Public Instruction, Madhya Pradesh, 1996, Basic Educational Statistics



HEALTH AND NUTRITION

- HE 1 Health Infrastructure and Personnel in Madhya Pradesh, 1996-97
- HE 2 Estimates of Mortality and Fertility for Madhya Pradesh, 1981 and 1991
- HE 3 Mortality Figures – 1991
- HE 4 Public Distribution System in Madhya Pradesh, 1996

Mortality estimates are available for district level only from the decadal censuses. The tables present mortality and fertility related indicated from the 1981 census released by the Registrar General of India, and some indicators for 1991. The figures for Life Expectancy for 1991 has been derived by Sanket-MPHDRO Based upon the fertility tables of 1991 census on the methodology Prescribed by the Registrar General of India. While there are no direct estimates available on nutrition, the data from the public distribution system gives the state of public provisioning of food.

HE 1 Health Infrastructure and Personnel in Madhya Pradesh, 1996-97.

	District Hospital		Urban Civil Hospital		Community Health Centres (CHC)		Urban Civil Dispensary		Primary Health Centre (PHC)		Sub Health Centre (SHC)
	Units	Beds	Units	Beds	Units	Beds	Units	Beds	Units	Beds	
SHIVPURI	1	184			4	120			15	40	199
DAMOH	1	135			1	30			15	36	162
MORENA	1	208	1	58	4	136	3	0	28	46	285
BHIND	1	233			6	160	1	0	20	12	186
GUNA	1	256	1	50	5	150	1		26	66	227
UJJAIN	1	571	6	183			8		21	40	169
TIKAMGARH	1	145			3	90	1	1	20	40	156
SEHORE	1	156	1	40	4	120	1	0	18	54	150
RAIPUR			3	96	9	276	2		83	176	664
JABALPUR	1	275	3	286	3	90	11		38	98	354
RAJNANDGAON	1	125			5	150	1		32	103	276
REWA					3	90	3		36	96	270
HOSHANGABAD	1	140	3	234	5	150	0	0	25	57	204
SHAJAPUR	1	136	5	164	2	60			23	51	171
PANNA	1	132			1	30			17	34	132
SAGAR	1	316	1	50	4	126	7		34	62	245
DATIA	1	88	2	56	0		2	0	9	30	58
BALAGHAT	1	150	1	50	5	156			36	69	274
DURG	1	330	2	45	7	216	1		47	40	352
VIDISHA	1	163	1	56	0	0	0	0	24	91	143
SIDHI	1	175			8	240			42	12	287
GWALIOR			4	158	4	120	5	0	18	18	124
RAISEN	1	321	0	0	5	150	0	0	23	59	175
BHOPAL	1	210	7	325	2	30	27	0	9	12	59
BILASPUR	1	437	3	144	10	306	8	0	108	177	679
JHABUA	1	110	1	60	5	156	1		38	46	286
NARSIMHAPUR	1	184	1	36	2	60			23	33	144
BETUL	1	130	0	0	6	180	0	0	34	56	241
SEONI	1	245			4	120			32	46	222
DEWAS	1	270	2	30					27	82	180
RAJGARH	1	145	1	37	3	94	2	0	31	85	159
MANDSAUR	1	256	5	243	1	30			47	98	268
SATNA	1	220	1	38	3	90	1		47	69	258
RATLAM	1	470	3	140	2	60	1		27	49	156
SHAHDOL	1	203	1	36	7	210			58	52	372
EAST NIMAR	1	209	1	111	7	210	3		45	46	270
DHAR	1	1	209		8	246	3		53	96	303
CHHATARPUR	1	148	1	22	1	30	13	0	43	73	180
INDORE	1	100	4	242	2	66	13	0	27	46	111
RAIGARH	1	117	3	165	5	150	6	0	76	133	382
MANDLA	1	214			6	180			60	60	376
WEST NIMAR	1	262	4	342	8	240	3		88	96	459
SARGUJA	1	188	1	20	11	330	0	0	94	126	594
CHHINDWARA	1	294	1	30	6	180	1		69	67	294
BASTAR	1	252	4	210	10	326			128	168	682
MADHYA PRADESH	42	8796	287	3757	197	5954	114	0	1814	3046	11938

Source: Directorate of Health Services, GOMP, 1997, Madhya Pradesh mein Chikitsa Sansthayen.

HE 1 – Health Infrastructure and Personnel In Madhya Pradesh, 1996-97

District	Other Hospitals		PHC per lakh Rural Population	PHC Beds per lakh Rural Population	PHC per 100 sq Kms: Rural Area	Rural Population Served per SHC	Population per Health Centre
	Units	Beds					
SHIVPURI	0	0	13.8	3.69	0.46	5448	16.9
DAMOH	0	0	1.87	4.49	0.70	4952	17.8
MORENA	0	0	1.87	3.08	0.40	5245	16.2
BHIND	0	0	1.89	1.13	0.28	5696	15.6
GUNA	01	0	2.23	5.65	0.61	5145	17.3
UJJAIN	5	102	2.29	4.37	0.68	5416	13.6
TIKAMGARH	0	0	2.33	4.66	0.91	5507	16.9
SEHORE	1	40	2.37	7.11	0.88	5062	18.4
RAIPUR	4	346	2.39	5.06	1.16	5238	17.3
JABALPUR	3	0	2.41	6.21	1.11	4457	14.2
RAJNANDGAON	0	0	2.42	7.80	1.26	4786	19.6
REWA	0	0	2.44	6.50	1.61	5470	17.7
HOSHANGABAD	0	0	2.45	5.59	0.76	4994	16.7
SHAJAPUR	1	0	2.48	5.50	0.84	5421	17.7
PANNA	0	0	2.59	5.18	0.58	4969	19.2
SAGAR	3	50	2.64	4.81	0.76	5262	16.0
DATIA	0	0	2.65	8.82	1.58	5865	16.1
BALAGHAT	0	0	2.68	5.14	1.03	4899	21.3
DURG	0	0	2.76	2.35	0.52	4836	15.2
VIDISHA	0	0	2.83	10.75	1.27	5920	15.6
SIDHI	0	0	2.84	0.81	0.14	5149	20.3
GWALIOR	2	104	2.86	2.86	0.37	5074	9.8
RAISEN	0	0	2.90	7.43	0.81	4535	20.7
BHOPAL	3	346	2.95	3.93	0.50	5173	6.5
BILASPUR	0	0	3.08	5.05	1.20	5159	18.8
JHABUAA	0	0	3.09	3.74	0.72	4296	24.6
NARSIMHAPUR	0	0	3.15	4.53	0.74	5064	19.8
BETUL	0	0	3.21	4.61	0.73	4495	23.2
SEONI	0	0	3.24	9.83	1.36	4633	17.6
DEWAS	0	0	3.24	9.83	1.36	4633	17.6
RAJGARH	1	34	3.45	9.45	1.44	5657	17.8
MANDSAUR	5	0	3.61	7.52	1.12	4862	18.9
SATNA	0	0	3.62	5.32	0.97	5029	18.8
RATLAM	1	66	3.96	6.70	1.03	4690	17.6
SHAHDOL	0	0	3.75	3.39	0.39	4125	22.0
EAST NIMAR	0	0	3.91	4.00	0.69	4259	20.3
DHAR	1	35	3.94	7.13	1.18	4443	37.2
CHHATARPUR	1	125	4.12	6.99	0.88	5801	17.2
INDORE	7	105	4.45	7.58	1.42	5469	7.9
RAIGARH	0	0	4.49	7.85	1.29	4433	25.1
MANDLA	0	0	4.53	4.53	0.68	3526	30.7
WEST NIMAR	0	0	4.59	5.00	0.95	4179	24.9
SARGUJA	0	0	4.63	6.21	0.70	3417	29.7
CHHINDWARA	5	200	5.13	4.99	0.69	4571	21.3
BASTAR	2	40	5.50	7.21	0.68	3414	32.8
MADHYA PRADESH	45	1593	3.23	5.42	0.84	4709	78.2

Source: Directorate of Health Services, GOMP, 1997, Madhya Pradesh mein Chikitsa Sansthayen.

HE 1 Health Infrastructure and personnel in Madhya Pradesh, 1996-97

District	Total Health Centres per 100 sq kms	Total Beds per lakh Population	Class I	Class II	Female Multi Purpose Health Worker	Male Multi Purpose Health Worker
SHIVPURI	2.5	344	11	64	166	191
DAMOH	3.4	204	6	23	166	120
MORENA	2.8	448	16	87	245	256
BHIND	4.8	405	15	68	174	182
GUNA	2.4	522	16	89	226	220
UJJAIN	3.5	896	12	126	148	145
TIKAMGARH	4.0	275	11	39	150	150
SEHORE	2.8	410	15	67	136	121
RAIPUR	5.0	894	11	178	664	580
JABALPUR	4.4	749	8	116	323	238
RAJNANDGAON	3.8	378	11	77	306	196
REWA	5.0	186	3	70	259	269
HOSHANGABAD	3.1	581	12	72	187	170
SHAJAPUR	3.3	411	4	95	111	133
PANNA	2.5	196	5	36	127	122
SAGAR	3.5	604	20	112	240	238
DATIA	3.7	174	5	36	58	58
BALAGHAT	4.7	425	7	68	258	243
DURG	5.1	631	21	123	263	314
VIDISHA	2.3	310	7	77	113	118
SIDHI	3.8	427	4	39	221	249
GWALIOR	3.0	400	15	177	101	124
RAISEN	2.8	341	8	62	135	161
BHOPAL	4.0	923	24	91	58	58
BILASPUR	3.3	1064	31	212	571	567
JHABUAA	5.1	372	11	69	260	281
NARSIMHAPUR	3.7	366	6	56	206	185
BETUL	4.1	411	5	69	215	198
SEONI	4.1	411	5	69	215	198
DEWAS	3.4	382	10	65	155	144
RAJGARH	3.3	395	12	48	142	148
MANDSAUR	3.6	627	10	90	237	222
SATNA	4.2	417	18	91	243	198
RATLAM	3.9	785	14	69	141	139
SHAHDOL	3.2	501	18	79	204	294
EAST NIMAR	4.7	657	18	93	238	246
DHAR	7.0	378	13	95	275	164
CHHATARPUR	2.6	398	11	71	179	179
INDORE	4.7	559	19	160	127	127
RAIGARH	4.6	565	11	133	276	355
MANDLA	5.0	454	10	86	360	347
WEST NIMAR	5.5	940	21	156	385	436
SARGUJA	3.9	664	13	149	487	456
CHHINDWARA	3.8	771	13	112	241	277
BASTAR	3.3	996	16	198	630	632
MADHYA PRADESH	3.9	23146	553	4152	10555	10399

Source: Directorate of Health Services, I GOMP, 1997, Madhya Pradesh Mein Chikitsa Sansthayen.

HE 2 – Estimates of Mortality and Fertility of Madhya Pradesh, 1981 and 1991

DISTRICT	Total Fertility Rate		District level Fertility Estimates – using different Methods for 1981				
	1981: Census	1991: Census	Brass	Method Palmore Method	Funsek Palmore Method	Rele Method	Average TFR – 1981
			a	b	c	d	(Average a-d)
INDORE	4.5	3.8	4.5	4.4	4.2	4.4	4.4
UJJAIN	5.3	4.2	5.3	5.3	5.0	5.1	5.1
JHABUA	6.3	5.7	6.3	6.4	6.4	6.2	6.3
SARGUJA	4.4	4.3	4.4	4.7	4.4	4.7	4.6
BHOPAL*	5.1	4.8	5.1	4.8	4.3	4.8	4.6
GWALIOR	5.8	4.9	5.8	5.6	5.0	5.3	5.3
DEWAS	5.5	4.9	5.5	6.0	5.6	5.8	5.8
BASTAR	4.7	4.5	4.7	4.8	4.6	4.8	4.7
DHAR	5.7	5.0	5.7	6.0	6.0	6.0	6.0
DURG	4.5	4.2	4.5	5.0	4.7	4.9	4.9
BHIND	6.1	5.6	6.1	6.3	5.8	5.8	6.0
VIDISHA	6.5	5.6	6.5	6.9	6.3	6.3	6.5
BILASPUR	4.7	4.7	4.7	5.3	5.1	5.1	5.2
SIDHI	5.7	6.0	5.7	6.0	5.8	6.0	5.9
MANDSAUR	5.3	4.1	5.3	5.5	5.2	5.4	5.4
RAIGARH	3.8	4.0	3.8	4.3	4.2	4.3	4.3
MANDLA	4.5	4.1	4.5	4.9	4.8	5.0	4.9
SHAJAPUR	5.7	5.0	5.7	6.1	5.6	5.7	5.8
MORENA	6.8	6.6	6.8	6.7	6.2	6.3	6.4
CHHINDWARA	5.2	5.2	5.2	5.7	5.5	5.5	5.6
SHIVPURI	6.4	5.4	6.4	7.1	6.6	6.3	6.7
NARSIMHAPUR	5.5	4.0	5.5	6.2	5.9	5.7	5.9
JABALPUR	5.3	4.6	5.3	5.6	5.0	5.2	5.2
RAIPUR	4.7	4.3	4.7	5.0	4.9	4.9	5.0
GUNA	6.3	5.9	6.3	6.7	6.4	6.3	6.5
RAJGARH	5.7	5.2	5.7	6.0	5.6	5.6	5.7
SEHORE	6.2	5.2	6.2	6.6	6.1	6.0	6.2
WEST NIMAR	5.9	5.1	5.9	6.4	6.2	6.2	6.3
SEONI	5.0	4.3	5.0	5.6	5.5	5.4	5.5
RATLAM	5.3	4.7	5.3	5.4	5.0	5.2	5.2
EAST NIMAR	5.7	4.2	5.7	6.1	5.6	5.6	5.8
RAJNANDGAON	5.0	4.2	5.0	5.4	5.2	5.3	5.3
DATIA	6.1	5.1	6.1	5.6	6.1	6.0	6.2
PANNA	6.7	5.7	6.7	6.6	6.0	5.9	6.2
CHHATARPUR	6.8	5.6	6.8	7.2	6.8	6.4	6.8
SHAHDOL	4.9	5.0	4.9	5.4	5.1	5.3	5.3
SAGAR	6.4	5.5	6.4	6.8	6.1	6.0	6.3
HOSHANGABAD	6.0	4.7	6.0	6.2	5.5	5.5	5.8
RAISEN	6.4	6.1	6.4	6.8	6.3	6.3	6.5
BALAGHAT	7.0	6.2	7.6	7.2	6.8	6.4	6.8
TIKAMGARH	7.0	6.2	7.6	7.2	6.8	6.4	6.8
SATNA	5.9	5.5	5.9	6.2	5.7	5.6	5.8
BETUL	5.0	5.0	6.0	6.2	5.7	5.6	5.8
REWA	5.8	5.6	5.8	5.9	5.6	5.6	5.7
DAMOH	6.2	5.1	6.2	6.7	6.1	6.0	6.3
MADHYA PRADESH	5.3	4.9	5.3	5.7	5.4	5.4	5.5

* Bhopal and Rajnandgaon were formed in 1972.

** P-Population, M-Male, F-Female, R-Rural, U-Urban

Source: 1. Census of India 1951 to 1981

2. District Level Estimates of Fertility and Child Mortality for 1991, RGI, New Delhi.

HE 2- Estimates of Mortality and Fertility for Madhya Pradesh, 1981 and 1991

	Crude Birth Rate (CBR)		Total Marital-Fertility Rate (TMFR)		General Fertility Rate (GFR)		General Marital Fertility Rate (GMFR)	
	1981	1991	1981	1991	1981	1991	1981	1991
INDORE	35.0	31.2	5.4	4.9	149	130	182	159
UJJAIN	37.2	31.4	5.9	4.9	165	138	189	161
JHABUA	42.7	39.4	7.5	6.8	190	180	233	216
SARGUJA	33.4	33.4	4.9	4.9	137	141	157	159
BHOPAL	39.6	38.6	6.3	6.2	166	159	510	206
GWALIOR	40.7	34.7	6.6	5.7	182	157	213	184
DEWAS	37.8	35.9	5.9	5.5	173	162	192	182
BASTAR	34.3	35.4	5.6	5.8	144	144	179	182
DHAR	39.4	37.4	6.5	5.8	175	164	207	192
DURG	34.4	34.9	5.2	5.4	145	141	170	172
BHIND	40.2	37.4	6.5	6.0	188	182	204	199
VIDISHA	43.4	38.2	6.9	6.1	202	181	221	203
BILASPUR	34.1	35.3	5.3	5.6	147	153	169	179
SIDHI	38.7	42.6	5.9	6.4	173	194	187	207
MANDSAUR	38.3	32.0	2.7	4.5	167	137	186	154
RAIGARH	37.2	32.1	4.8	5.2	121	130	149	158
MANDLA	33.6	34.0	5.2	5.0	142	140	169	164
SHAJAPUR	38.5	35.9	6.2	5.4	175	162	192	179
MORENA	44.6	44.1	7.3	7.1	211	211	288	229
CHHINDWARA	35.6	37.7	6.1	6.5	161	168	196	207
SHIVPURI	40.6	35.7	6.8	6.0	196	171	212	193
NARSIMHAPUR	36.9	30.0	6.1	4.8	173	137	197	158
JABALPUR	35.0	36.5	6.0	5.5	169	154	201	185
RAIPUR	34.4	34.5	5.5	5.5	146	144	174	176
GUNA	42.0	40.5	6.8	6.4	196	189	215	210
RAJGARH	39.0	37.4	6.1	5.6	175	167	190	183
SEHORE	40.8	36.0	6.6	5.8	189	172	208	192
WEST NIMAR	39.7	37.2	6.6	6.1	187	169	216	199
SEONI	35.1	33.5	5.8	5.3	157	143	186	174
RATLAM	38.2	36.1	5.9	5.4	164	153	190	178
EAST NIMAR	39.7	38.9	6.5	6.3	177	173	210	206
RAJNANDGAON	35.5	34.2	5.7	5.1	153	141	180	170
DATIA	40.0	36.0	6.4	5.6	186	168	203	186
PANNA	45.5	39.4	7.0	6.2	202	181	222	198
CHHATARPUR	42.2	36.8	7.2	6.1	204	176	221	196
SHAHDOL	35.6	38.6	5.1	5.5	152	164	165	181
SAGAR	43.2	39.2	7.0	6.3	200	184	224	211
HOSHANGABAD	0.9	33.8	6.7	5.6	185	156	215	184
RAISEN	42.6	41.1	6.9	6.7	197	196	218	219
BALAGHAT	34.3	30.8	5.2	4.9	144	127	171	156
TIKAMGARH	44.5	43.2	7.3	6.7	210	203	224	220
SATNA	41.2	40.5	6.3	6.0	18	180	197	198
BETUL	40.7	38.0	7.1	6.9	183	172	224	218
REWA	40.6	39.2	6.1	6.0	177	179	191	196
DAMOH	42.9	38.1	6.6	5.7	194	174	213	194
MADHYA PRADESH	38.0	32.8	2.9	2.7	167	161	192	188

* Bhopal and Rajnandgaon were formed in 1972.

** P-Population, M-Male, F-Female, R-Rural, U-Urban

Source: 1. Census of India 1951 to 1981

2. District Level Estimates of Fertility and Child Mortality for 1991, RGI, New Delhi.

HE 2- Estimates of Mortality and Fertility for Madhya Pradesh, 1981 and 1991

DISTRICT	Child Mortality Estimates by District – Madhya Pradesh – 1981											
	Mortality at Age 1			Mortality at Age 2			Mortality at Age 3			Mortality at Age 5		
	P	M	F	P	M	F	P	M	F	P	M	F
INDORE	84	87	82	86	88	83	91	93	90	112	109	115
UJJAIN	106	116	94	136	141	131	147	148	147	168	166	169
JHABUA	144	163	123	151	151	151	164	173	155	180	182	177
SARGUJA	115	127	104	142	151	132	147	155	139	170	174	165
BHOPAL	91	81	102	99	99	100	105	101	109	130	129	130
GWALIOR	151	155	148	150	138	163	166	147	186	191	165	220
DEWAS	134	147	120	135	135	135	165	161	170	185	180	191
BASTAR	118	131	104	130	144	117	137	143	130	163	170	155
DHAR	116	120	111	138	140	136	150	152	148	171	174	168
DURG	137	155	119	144	154	133	148	152	145	162	166	159
BHIND	129	124	135	158	143	174	193	169	221	205	174	242
VIDISHA	144	156	131	183	183	183	205	198	212	236	221	253
BILASPUR	145	159	131	150	156	143	159	167	152	183	187	178
SIDHI	161	165	157	169	177	160	178	182	173	202	204	200
MANDSAUR	138	150	126	159	166	151	164	170	158	188	191	185
RAIGARH	156	167	143	147	155	139	154	160	147	178	186	170
MANDLA	153	147	159	148	152	143	158	165	152	185	192	177
SHAJAPUR	149	150	148	185	194	175	201	193	209	232	231	232
MORENA	132	124	140	163	153	173	179	159	202	199	173	203
CHHINDWARA	138	149	127	148	156	140	162	163	161	196	200	192
SHIVPURI	179	180	177	208	198	220	211	195	229	244	218	274
NARSIMHAPUR	162	164	159	174	172	177	177	165	189	204	198	211
JABALPUR	188	209	167	174	181	167	179	182	176	207	206	209
RAIPUR	141	151	132	149	155	143	144	149	138	164	170	159
GUNA	150	146	154	181	182	179	199	193	205	221	207	237
RAJGARH	170	188	153	190	196	184	199	199	198	225	222	227
SEHORE	146	161	127	198	194	2052	203	201	205	244	231	259
WEST NIMAR	137	143	131	145	151	139	156	157	154	178	177	179
SEONI	149	170	128	151	151	150	158	157	159	181	183	178
RATLAM	143	152	134	161	163	158	166	171	160	196	194	198
EAST NIMAR	161	145	138	177	182	171	185	185	185	209	195	223
RAJNANDGAON*	159	182	134	183	197	168	183	190	176	208	205	211
DATIA	156	140	176	206	194	219	216	200	235	238	210	270
PANNA	185	190	176	204	204	204	238	232	244	270	261	280
CHHATARPUR	182	181	183	205	199	211	237	234	241	267	248	288
SHAHNOL	164	187	141	179	191	166	193	195	189	215	219	210
SAGAR	164	173	155	185	179	193	197	181	214	220	205	237
HOSHANGABAD	163	170	156	190	189	191	198	189	208	229	215	244
RAISEN	157	185	128	175	182	168	191	186	197	226	217	234
BALAGHAT	193	205	177	163	180	145	167	175	158	185	194	176
TIKAMGARH	195	201	189	213	208	219	233	225	244	275	262	289
SATNA	181	176	187	205	203	200	212	207	218	241	231	251
BETUL	158	161	155	170	177	163	177	177	176	207	206	208
REWA	173	178	168	178	179	176	192	187	197	211	200	222
DAMOH	189	197	182	202	200	205	220	213	228	243	228	258
MADHYA PRADESH	150	158	140	162	165	159	171	170	173	197	193	201

* Bhopal and Rajnandgaon were formed in 1972.

** P-Population, M-Male, F-Female, R-Rural, U-Urban

Source: 1. Census of India 1951 to 1981

2. District Level Estimates of Fertility and Child Mortality for 1991, RGI, New Delhi.

HE 2- Estimates of Mortality and Fertility for Madhya Pradesh, 1981 and 1991

DISTRICT	Child Mortality Estimates by District – Madhya Pradesh – 1991											
	Mortality at Age 1			Mortality at Age 2			Mortality at Age 3			Mortality at Age 5		
	P	M	F	P	M	F	P	M	F	P	M	F
INDORE	71	74	69	75	77	72	86	84	89	94	89	97
UJJAIN	77	79	74	133	121	146	1140	133	151	147	141	156
JHABUA	92	91	96	104	101	107	165	151	171	169	159	179
SARGUJA	92	89	95	99	101	97	104	106	102	113	115	112
BHOPAL	94	89	98	97	95	101	99	100	103	105	102	107
GWALIOR	96	100	103	111	106	113	113	108	115	119	121	126
DEWAS	97	87	102	118	109	126	125	108	133	129	116	139
BASTAR	98	95	86	112	117	106	121	124	115	129	130	123
DHAR	99	95	102	111	108	115	113	112	114	122	117	127
DURG	102	112	84	108	116	93	117	121	101	122	128	115
BHIND	105	98	113	131	106	161	144	109	174	149	108	185
VIDISHA	107	109	102	165	158	170	175	177	173	191	184	198
BILASPUR	109	116	91	114	121	99	119	126	106	123	127	118
SIDHI	111	115	106	136	133	138	146	143	150	165	167	163
MANDSAUR	111	109	112	136	135	137	140	139	142	150	147	153
RAIGARH	112	116	107	121	123	116	125	127	120	131	134	129
MANDLA	114	125	104	115	118	112	119	123	115	132	135	129
SHAJAPUR	116	113	118	139	144	132	149	147	164	168	153	184
MORENA	118	120	116	130	116	147	132	120	152	138	149	163
CHHINDWARA	119	126	116	129	133	124	136	141	132	142	145	137
SHIVPURI	120	112	139	134	158	179	181	163	201	200	172	234
NARSIMHAPUR	120	119	121	136	132	152	138	141	157	148	144	159
JABALPUR	121	126	117	134	142	128	140	147	132	147	151	145
RAIPUR	121	120	122	124	123	126	129	129	134	137	136	138
GUNA	124	113	144	174	156	195	183	161	194	195	167	198
RAJGARH	125	109	144	160	150	171	169	159	179	182	167	198
SEHORE	125	137	117	156	161	153	170	170	170	178	183	195
WEST NIMAR	126	138	124	144	142	147	153	155	152	158	160	156
SEONI	126	135	118	133	142	131	142	147	139	152	156	148
RATLAM	128	120	132	132	134	125	140	139	145	149	147	151
EAST NIMAR	129	127	131	137	138	136	141	142	144	151	147	153
RAJNANDGAON	129	134	124	139	142	133	145	149	142	150	154	145
DATIA	131	129	141	152	138	167	15	143	174	178	148	213
PANNA	132	142	129	177	188	194	191	187	201	204	201	207
CHHATARPUR	136	130	149	190	183	194	197	188	1999	199	193	227
SHAHNOL	137	144	111	145	150	138	152	162	144	160	165	154
SAGAR	138	141	132	157	159	155	165	169	162	172	176	169
HOSHANGABAD	138	138	139	155	144	167	171	167	178	179	174	183
RAISEN	141	135	159	167	170	163	171	174	167	179	181	170
BALAGHAT	141	132	147	189	151	153	159	159	159	167	164	172
TIKAMGARH	142	131	153	178	149	198	182	167	200	187	172	205
SATNA	142	139	147	186	183	191	198	194	200	203	198	207
BETUL	146	150	141	158	161	154	168	168	168	180	179	181
REWA	149	162	127	174	188	147	188	191	185	196	195	198
DAMOH	166	181	139	175	188	162	188	197	168	194	200	173
MADHYA PRADESH	133	131	136	139	134	143	143	138	149	147	142	151

* Bhopal and Rajnandgaon were formed in 1972.

** P-Population, M-Male, F-Female, R-Rural, U-Urban

Source: 1. Census of India 1951 to 1981

2. District Level Estimates of Fertility and Child Mortality for 1991, RGI, New Delhi.

HE 3 – Mortality Rates 1991

DISTRICT	Life Expectancy – All				Infant Mortality Rate – All	
	Census: 1951- 61	Census: 1961-71	Census: 1971-81	Census: 1981-91(p)	1981	1991(p)
BHOPAL			59.14	65.0	91	70
GWALIOR	44.6	47.4	51.43	64.9	133	70
INDORE	49.3	43.0	61.29	63.9	80	75
DURG	46.7	50.0	52.29	63.7	128	75
SARGUJA	44.1	46.9	52.58	63.6	126	76
BASTAR	44.7	47.6	58.13	62.1	117	83
DHAR	44.0	46.7	53.16	61.7	123	84
BILASPUR	43.0	45.6	51.43	61.0	133	87
MANDLA	42.8	45.3	51.72	60.9	131	88
RAIGHAR	43.2	46.0	51.86	60.7	130	88
DEWAS	42.5	45.0	53.60	60.2	121	90
RAIPUR	44.4	47.2	51.57	60.1	132	91
RAJNANDGAON*						
SEONI	43.1	45.7	51.29	58.5	133	98
UJJAIN	46.4	49.6	53.46	58.3	121	99
EAST NIMAR	43.2	45.9	47.67	58.1	154	100
MORENA	45.5	45.0	49.60	58.0	143	100
RATLAM	44.2	47.0	49.388	57.9	141	100
JABALPUR	43.3	45.9	48.08	57.8	151	101
BHIND	40.5	42.7	50.30	57.7	139	102
CHHINDWARA	41.5	43.8	51.72	57.4	131	103
MANDSAUR	42.2	44.7	50.16	57.1	140	104
WEST NIMAR	43.4	46.0	52.15	57.1	129	104
SHAJAPUR	38.6	40.4	46.59	56.9	160	105
SIDHI	41.2	43.5	48.77	56.8	147	105
HOSHANGABAD	41.6	44.0	45.93	56.0	164	109
SHAHDOL	39.8	41.9	47.40	55.9	155	110
NARSIMHAPUR	41.0	43.0	48.08	55.9	151	110
BALAGHT	42.7	45.3	51.29	55.9	133	110
DATIA	37.7	39.3	43.83	54.7	176	115
SAGAR	42.3	44.8	46.59	54.4	160	116
RAJGARH	39.2	46.0	45.93	53.3	164	122
SEHORE	37.4	39.0	44.84	53.2	170	122
DAMOH	37.6	39.2	44.35	53.1	173	123
RAISEN	39.2	41.1	47.95	52.8	152	124
VIDISHA	38.1	39.9	6.86	52.7	158	124
REWA	40.5	42.6	47.54	51.9	155	128
BETUL	40.8	43.0	48.63	51.9	148	128
GUNA	39.5	41.4	47.13	51.5	157	130
JHABUA	4.5	45.8	51.29	51.5	133	130
TIKAMGARH	34.7	35.8	42.93	51.0	182	132
PANNA	35.1	36.7	44.09	50.8	175	133
SATNA	37.8	39.5	43.96	48.7	175	143
CHHATARPUR	34.4	36.6	43.96	47.3	175	150
SHIVPURI	37.4	38.7	43.57	44.5	178	164
MADHYA PRADESH			49.74	57.3	142	104

Source: Census of India 1981, 1991, F Series, Madhya Pradesh, Sanket – MPHRO

* Bhopal and Rajnandgaon were created in 1981

** These estimates are provisionally calculated by the M PHDRO Office based on Fertility tables of 1991 Census.

HE 3 – Mortality Rates 1991

DISTRICT	All Male : Years : 1981-91(**)			All Female : 1981-91(**)			Rural: 1981-91(**)		
	Infant Mortality Rate (per 1000 live births)	Child Mortality – ages 1-5 (per 1000 live births)	Life Expectancy (in years at birth)	Infant Mortality Rate (per 1000 live births)	Child Mortality – ages 1-5 (per 1000 live births)	Life Expectancy (in years at birth)	Infant Mortality Rate (per 1000 live births)	Child Mortality – ages 1-5 (per 1000 live births)	Life Expectancy (in years at birth)
BHOPAL	72	32	64.6	69	30	65.3	129	88	51.8
GWALIOR	68	30	35.5	75	35	63.9	96	54	58.9
INDORE	66	28	66	83	42	61.9	93	50	59.8
DURG	81	39	62.5	70	31	35	91	49	60.1
SARGUJA	77	36	63.4	75	35	63.8	80	39	62.6
BASTAR	86	44	61.2	80	39	62.7	84	43	61.6
DHAR	82	40	63.2	88	466	60.8	89	47	60.5
BILASPUR	91	49	60.1	83	41	62	94	52	59.4
MANDLA	89	47	60.5	85	43	61.5	88	46	60.3
RAIGARH	92	50	59.9	85	43	61.5	91	48	60.2
DEWAS	85	43	61.6	94	54	85.8	103	61	57.3
RAIPUR	90	47	60.4	92	50	59.8	96	54	58.9
RAJNANDGAON	105	62	57	90	47	60.4	101	58	57.8
SEONI	98	55	58.5	99	56	58.3	100	58	58
UJJAIN	92	49	60	107	64	56.6	111	69	55.6
EAST NIMA	102	59	57.6	98	56	58.6	112	70	55.3
MORENA	89	47	60.5	112	69	55.54	107	64	56.5
RATLAM	105	53	56.8	95	52	59.2	120	79	53.5
JABALPUR	106	63	56.8	95	53	59.2	129	89	51.7
BHIND	83	41	62	122	80	53.3	107	65	56.4
CHHINDWARA	97	54	58.8	109	67	56	108	66	56.2
MANDSAUR	103	61	27.3	106	63	56.8	111	68	55.7
WEST NIMAR	100	57	58.1	108	66	56.2	108	66	56.2
SHAJAPUR	108	66	56.2	102	59	57.7	112	70	55.3
SIDHI	104	61	57.1	107	64	56.5	109	66	56
HOSHANGABAD	103	61	57.3	116	74	54.5	119	78	53.8
SHAHDOL	114	71	55	106	63	56.8	118	76	54.1
NARSIMHAPUR	101	58	57.9	119	77	53.9	114	71	55
BALAGHAT	108	66	56.2	111	69	55.6	114	71	55
DATIA	106	63	56.8	125	84	52.5	125	83	52.6
SAGAR	118	76	54.1	115	73	54.7	129	88	51.7
RAJGAR	84	42	61.8	130	90	51.4	128	88	51.8
SEHORE	129	88	51.8	114	72	54.9	128	87	52
DAMOH	124	83	52.8	120	79	53.6	130	90	51.4
RAISEN	127	87	52	120	78	53.7	130	90	51.4
VIDHISHA	119	77	53.9	131	91	51.3	136	97	50.2
REWA	119	77	53.8	137	98	49.9	166	94	50.7
BETUL	126	86	52.2	129	88	51.7	137	98	50
GUNA	117	75	54.2	143	1106	75.7	133	93	50.8
JHABUA	115	73	54.7	145	107	48.4	131	91	51.2
TIKAMGARH	112	70	55.4	154	119	46.5	137	98	50
PANNA	123	82	53	143	105	48.8	139	100	49.6
SATNA	136	97	50.1	150	114	47.4	154	120	46.4
CHHATARPUR	135	86	50.3	165	133	44.4	156	122	46.1
SHIVPURI	149	113	47.5	180	154	41.4	173	145	42.8
MADHYRA PRADESH	101	58	57.9	106	64	56.6	112	70	55.3

Source: Census of India 1981, 1991, F Series, Madhya Pradesh, Sanket – MPHRO.

* Bhopal and Rajnandgaon were created in 1981

** These estimates are provisionally calculated by the MPHRO Office based on Fertility tables of 1991Census

HE 3 Mortality Rates 1991

DISTRICT	Rural Male : Years : 1981-91(**)			Rural All Female :1981-91(**)			Urban: 1981-91(**)		
	Infant Mortality Rate (per 1000 live births)	Child Mortality –ages 1-5(per 1000 live births)	Life Expectancy (in years at birth)	Infant Mortality Rate (per 1000 live births)	Child Mortality – ages 1-5 (per 1000 live births)	Life Expectancy (in years at birth)	Infant Mortality Rate (per 1000 live births)	Child Mortality – ages 1-5 (per 1000 live births)	Life Expectancy (in years at birth)
BHOPAL	138	99	49.9	118	76	54.1	54	20	68.9
GWALIOR	88	46	60.8	106	63	56.8	48	17	70.4
INDORE	86	44	61.3	99	57	58.2	64	27	66.5
DURG	99	57	58.2	82	41	62.2	40	12	72.7
SARGUJA	80	39	62.7	81	39	62.5	35	10	74.1
BASTAR	87	45	61	81	40	62.3	59	23	67.6
DHAR	85	43	61.5	94	51	59.5	51	18	69.8
BILASPUR	87	55	58.5	89	47	60.4	47	16	70.9
MANDLA	91	49	60.1	85	43	61.5	79	38	62.9
RAIGARH	94	51	59.5	89	46	60.6	50	18	69.9
DEWAS	99	56	58.3	108	65	56.3	54	20	69
RAIPUR	97	54	58.8	96	53	59	67	29	65.8
RAJNANDGAON	109	66	56	93	51	59.5	70	31	65.1
SEONI	100	57	58.2	101	59	57.7	67	29	65.8
UJJAIN	102	59	57.7	121	380	50	79	38	63
EAST NIMA	113	71	55.1	12	70	55.4	56	21	68.5
MORENA	94	51	59.4	121	79	53.5	71	32	64.8
RATLAM	123	81	5.1	119	77	53.8	48	16	70.5
JABALPUR	137	98	50.1	120	79	53.6	51	18	69.8
BHIND	88	46	60.7	130	89	51.5	74	34	64.1
CHHINDWARA	102	59	57.6	116	74	45.6	74	34	64
MANDSAUR	110	67	55.8	111	69	55.5	81	40	62.5
WEST NIMAR	105	62	57	112	69	55.5	77	36	63.4
SHAJAPUR	117	75	54.2	107	65	56.4	66	28	66
SIDHI	107	64	56.5	111	69	55.5	49	17	70.4
HOSHANGABAD	111	69	55.6	127	86	52.1	64	27	66.4
SHAHNOL	122	80	53.2	114	71	55	73	33	64.2
NARSIMHAPUR	105	63	56.8	122	81	53.2	79	39	62.8
BALAGHAT	113	71	55.1	114	72	54.9	66	28	65.9
DATIA	114	71	55	136	97	50.1	79	39	62.8
SAGAR	129	89	51.6	128	88	51.8	75	35	63.8
RAJGAR	122	80	53.2	137	98	50.1	91	49	60.1
SEHORE	133	94	50.8	122	80	5.3	90	48	60.3
DAMOH	133	93	50.9	126	87	52	72	33	64.5
RAISEN	134	95	50.6	126	85	52.4	87	45	61.1
VIDHISHA	131	81	51.3	141	104	49.1	69	30	65.2
REWA	126	85	52.4	142	104	48.9	91	49	60
BETUL	136	96	50.3	138	100	49.7	84	43	61.6
GUNA	120	78	53.7	146	109	48.2	115	73	54.7
JHABUA	115	73	54.6	147	111	47.9	114	72	54.9
TIKAMGARH	115	73	54.7	160	128	45.2	106	63	56.7
PANNA	130	89	51.5	148	111	47.8	80	39	62.8
SATNA	147	110	47.9	162	130	44.9	90	48	60.2
CHHATARPUR	141	103	49.2	171	142	43.2	119	78	53.7
SHIVPURI	154	119	46.5	190	170	39.4	106	64	56.6
MADHYA PRADESH	111	68	55.7	115	73	54.6	66	28	66

Source: Census of India 1981, 1991, F Series, Madhya Pradesh, Sanket – MPHRO.

- Bhopal and Rajnandgaon were created in 1981
- ** These estimates are provisionally calculated by the MPHRO Office based on Fertility tables of 1991

Census

HE 3 – Mortality Rates 1991

DISTRICT	Urban Male : Years : 1981-91(**)			Urban Female : 1981-91(**)		
	Infant Mortality Rate (per 1000 live births)	Child Mortality – ages 1-5 (per 1000 live births)	Life Expectancy (in years at birth)	Infant Mortality Rate (per 1000 live births)	Child Mortality – ages 1-5 (per 1000 live births)	Life Expectancy (in years at birth)
BHOPAL	53	20	69.1	54	20	69
GWALIOR	50	17	70	47	16	70.9
INDORE	55	20	68.8	73	33	64.4
DURG	37	11	73.4	43	14	71.9
SARGUJA	50	18	70	n/a	n/a	n/a
BASTAR	64	26	66.6	55	20	68.8
DHAR	60	24	57.5	42	13	72.1
BILASPUR	49	17	70.4	44	14	71.5
MANDLA	62	25	66.9	94	52	56.3
RAIGARH	50	18	69.9	50	18	69.9
DEWAS	43	14	71.9	65	27	66.3
RAIPUR	51	18	69.7	82	41	62.2
RAJNANDGAON	79	38	62.9	58	23	57.9
SEONI	84	43	61.7	52	18	69.6
UJJAIN	74	34	64.2	84	42	61.8
EAST NIMA	60	24	67.6	52	19	69.5
MORENA	66	28	65.9	76	35	63.7
RATLAM	60	24	67.5	36	10	73.8
JABALPUR	52	19	69.4	49	17	70.3
BHIND	59	23	67.6	91	48	60.2
CHHINDWARA	n/a	n/a	n/a	79	38	62.8
MANDSAUR	78	37	63.2	84	42	61.8
WEST NIMAR	60	24	67.4	92	50	59.8
SHAJAPUR	57	21	68.3	75	35	63.8
SIDHI	50	17	70.1	47	16	70.7
HOSHANGABAD	63	26	66.7	66	28	66
SHAHNOL	74	34	64	72	32	64.5
NARSIMHAPUR	63	26	66.8	96	53	59
BALAGHAT	64	27	66.5	70	31	65.1
DATIA	74	34	64	88	46	60.8
SAGAR	80	39	62.7	70	31	65
RAJGAR	82	40	62.3	102	59	57.7
SEHORE	99	56	55.4	81	40	62.5
DAMOH	71	32	64.7	73	33	64.3
RAISEN	86	44	61.2	84	45	61.1
VIDHISHA	65	27	66.2	75	35	63.8
REWA	80	39	62.7	104	62	57.1
BETUL	87	45	61.1	83	41	62
GUNA	1.3	60	75.5	128	87	52
JHABUA	109	67	56	119	77	53.9
TIKAMGARH	94	51	59.5	120	75	53.7
PANNA	77	37	63.3	83	42	61.9
SATNA	83	41	62	98	55	58.6
CHHATARPUR	108	66	56.2	129	88	51.8
SHIVPURI	108	65	56.3	105	62	57
MADHYRA PRADESH	63	26	66.8	69	30	65.2

Source: Census of India 1981, 1991, F Series, Madhya Pradesh, Sanket – MPHRO.

- Bhopal and Rajnandgaon were created in 1981
- ** These estimates are provisionally calculated by the MPHRO Office based on Fertility tables of 1991 Census

HE 4 – Public Distribution System in Madhya Pradesh – 1996

DISTRICT	Fair Price Shops (FPS)			FPS Lakh people	Number of Ration Cards		
	Total	Rural	Urban		Total	Rural	Urban
JABALPUR	1375	889	489	47.26	568227	324590	243637
INDORE	466	150	316	22.19	385528	1128800	272648
BHOPAL	353	107	246	21.19	311848	72750	239098
SATNA	785	109	76	47.37	280000	215167	64833
REWA	640	579	61	36.21	257690	219339	38351
TIKAMGARH	435	398	37	40.61	183.700	160839	22861
UJJAIN	524	373	151	34.02	289677	161243	128434
BHIND	382	338	44	27.92	165494	118920	46574
BILASHPUR	1236	1072	164	28.66	766866	647502	119364
DAMOH	428	384	44	42.54	159896	1278712	31184
SIDHI	703	684	19	42.18	287685	18907	268778
SAGAR	656	555	101	35.66	29590	222172	72418
RAIPUR	1212	1070	142	27.48	620912	501941	118971
GWALIOR	408	224	184	25.52	401360	109680	291680
DURG	608	459	149	22.48	513756	362430	151326
RAIGARH	730	691	39	38.78	292621	268370	24251
DATIA	134	115	19	29.94	79993	18513	61480
CHATARPUR	599	554	45	45.09	156872	113553	43319
BETUL	518	483	35	38.68	189657	107386	82271
EAST NIMAR	455	362	93	28.53	279166	204814	74352
BALAGHAT	444	418	26	29.79	299604	253475	26129
RATLAM	303	242	61	27.97	183797	120229	63568
SHAHDOL	848	781	67	42.59	297762	255935	41827
RAJNANDGAON	507	463	44	34.58	276526	244813	31713
NARSIMHAPUR	273	252	21	31.61	119720	100278	19442
DEWAS	366	313	53	30.68	208518	146870	61648
HOSHANGABAD	441	369	72	30.94	238903	170708	68198
SEONI	363	345	18	32.57	190051	175253	14798
MANDSAUR	515	448	67	29.79	301547	221388	80159
DHAR	459	416	43	29.52	247938	214548	33390
MANDLA	500	486	14	34.70	203249	190580	12669
SARGUJA	1014	966	48	42.90	377632	346930	30702
CHHINDWARA	530	439	91	29.93	293302	248309	44993
PANNA	320	297	23	40.68	97111	82221	14890
RAISEN	393	364	29	39.86	158063	138330	19733
WEST NIMAR	541	485	56	23.92	354000	293946	60054
RAJGARH	309	285	24	27.84	220413	188424	31989
SHAJAPUR	308	270	38	26.82	219561	180844	38717
VIDSHA	353	307	46	32.60	204545	160355	44190
JHABUA	265	240	25	19.66	197360	179042	18318
SEHORE	219	193	26	22.85	167544	130565	36979
BASTAR	869	826	43	34.44	396975	370890	26085
SHIVPURI	266	229	37	20.47	214146	184220	29926
MORENA	290	228	62	14.59	325572	267787	57785
GUNA	251	186	65	16.61	171172	131882	19290
MADHYA PRADESH	23594	20044	3550	31.53	12430549	9087527	3343022

Source: Nagrik Apurti Nigam, 1997, Madhya Pradesh.

HE 4 – Public Distribution System in Madhya Pradesh – 1996

DISTRICT	Fps per 100 Sq km		FPS per 100 Sq km			Cereals Distributed per capita (in kgs)
	Rural	Urban	Total	Rural	Urban	
JABALPUR	4.86	5.47	14.80	10.05	109.17	3.88
INDORE	2.38	5.47	13.36	4.64	123.54	1.83
BHOPAL	1.20	2.69	13.06	4.45	82.30	1.36
SATNA	6.03	5.55	10.55	9.93	25.36	1.15
REWA	6.73	7.57	10.26	9.69	22.93	0.82
TIKAMGARH	5.34	9.28	9.51	9.04	21.27	1.26
UJJAIN	5.68	4.86	8.63	6.31	98.62	1.49
BHIND	8.91	6.63	8.59	7.96	22.22	0.19
BILASHPUR	5.41	6.78	8.15	7.25	42.85	5.00
DAMOH	6.23	6.54	8.13	7.49	32.66	1.21
SIDHI	78.15	0.70	7.97	7.82	28.36	7.57
SAGAR	5.80	7.60	7.88	6.81	55.08	0.48
RAIPUR	6.93	7.83	7.82	7.06	50.65	3.33
GWALIOR	5.74	3.32	7.70	4.58	44.98	0.47
DURG	4.70	6.63	7.61	5.98	46.87	7.46
RAIGARH	6.31	7.80	7.03	6.72	38.79	7.86
DATIA	18.37	1.75	6.96	6.05	75.91	0.54
CHATARPUR	9.20	6.57	6.95	6.69	13.25	1.36
BETUL	9.92	3.33	6.85	6.43	68.03	13.66
EAST NIMAR	5.61	5.99	6.66	5.41	66.19	5.81
BALAGHAT	5.30	5.66	6.56	6.25	32.54	6.74
RATLAM	6.09	5.53	6.24	5.09	61.10	3.34
SHAHDOL	6.00	10.91	6.14	5.84	15.88	9.83
RAJNANDGAON	5.40	8.97	6.09	5.65	31.17	5.24
NARSIMHAPUR	7.27	6.92	6.00	5.61	35.44	0.87
DEWAS	5.68	5.82	5.87	5.20	25.45	1.45
HOSHANGABAD	5.97	5.96	5.76	4.94	40.63	4.23
SEONI	4.69	7.88	5.76	5.51	42.83	5.59
MANDSAUR	5.89	5.31	2.74	5.12	30.09	0.75
DHAR	6.27	6.26	5.60	5.13	50.24	5.13
MANDLA	6.96	9.10	5.59	5.49	16.30	8.09
SARGUJA	5.85	10.88	5.57	5.34	44.98	8.26
CHHINDWARA	5.41	9.49	5.37	4.53	55.77	5.40
PANNA	7.98	8.78	5.35	5.08	16.52	0.42
RAISEN	5.74	9.75	5.30	5.01	19.45	0.54
WEST NIMAR	6.53	5.72	5.30	4.79	69.29	7.16
RAJGARH	4.77	6.58	5.08	4.83	13.12	0.44
SHAJAPUR	5.13	5.72	5.01	4.46	39.75	0.28
VIDSHA	5.28	5.35	4.86	4.27	59.65	0.73
JHABUA	6.86	6.51	4.10	3.75	40.26	11.19
SEHORE	5.82	5.38	3.50	3.15	19.61	1.36
BASTAR	6.28	7.47	3.49	3.33	60.87	12.89
SHIVPURI	5.89	7.15	3.00	2.63	24.07	0.75
MORENA	5.58	8.52	2.49	1.98	36.01	0.67
GUNA	8.85	8.74	2.29	1.73	37.09	0.59
MADHYA PRADESH	6.19	5.56	6.36	5.53	44.89	4.25

Source: Nagrik Apurti Nigam, 1997, Madhya Pradesh.

GENDER

- GE 1 Women Married in the Age group 10-19 years by Location in Madhya Pradesh
- GE 2 Women Ever Married and Children Born per annum in Madhya Pradesh
- GE 3 Child Bearing by Women in Ages 40+ and 4+ Children Born to Mothers
- GE 4 Average Children Born to Mothers in the Age Group 45-49 Years
- GE 5 Performance of Women Candidates in Elections to Vidhan Sabha, Madhya Pradesh: 1985, 1990 & 1993

The fertility and demographic tables of 1991 census have been analysed to derive gender-related information. Information with relevance to condition of women and mothers in the state, and related with marriage and child bearing having direct consequences on status of women are given. The last table is a preliminary attempt to assess the relative level of women's empowerment in the political arena in the districts of the state.

GE –1 Women Married in the Age Group 10-19 Years by Location in Madhya Pradesh

DISTRICT	RURAL			URBAN		
	Women Currently Married	Share of Currently Married (10-14 years)	Share of Currently Married (15-19 years)	Women Currently Married	Share of Currently married (10 - 14 years)	Share of Currently Married (15-19 years)
JHABUA	249761	3.3	65.3	24355	7.4	63.8
BASTAR	567853	4.4	65.5	39415	6.6	65.3
RAIGARH	461703	3.5	75.8	40848	4.7	69.6
BHOPAL	69919	18.4	65.3	259147	9.2	60.0
BETUL	243086	6.1	71.0	49678	7.2	68.5
CHHINDWARA	315784	5.6	75.0	88859	7.5	67.3
BALAGHAT	349638	8.9	71.1	32035	6.5	63.5
WEST NIMAR	44.890	6.7	74.4	76786	6.6	69.8
INDORE	155856	21.7	63.5	327779	9.4	57.8
EAST NIMAR	274547	10.5	73.2	98132	6.1	65.5
SEONI	246736	7.0	75.9	22287	5.6	65.4
DHAR	314597	10.2	69.1	44484	8.7	67.4
RAIPUR	895526	10.0	75.6	197251	8.9	63.5
MANDLA	347122	10.6	71.6	24959	7.5	65.1
GWALIOR	150395	15.6	71.2	204287	10.2	63.9
HOSHANGABAD	241487	12.0	73.8	82301	10.5	61.2
JABALPUR	538493	16.6	66.8	59667	12.5	65.3
SARGUJA	538493	16.6	66.8	59667	12.5	65.3
NARSIMHAPUR	182811	12.6	73.9	29099	8.8	64.8
BILASPUR	904397	16.6	67.4	16.2099	11.8	64.6
DURG	454347	20.6	62.9	211469	12.0	63.7
SEHORE	188504	17.6	60.7	35591	12.2	62.8
RAJNANDGAON	362194	21.5	56.6	59865	11.1	64.9
RATLAM	190511	26.7	51.0	82856	12.3	59.9
RAISEN	191343	17.9	67.7	32245	13.2	64.3
GUNA	277459	18.5	67.5	61532	13.1	61.7
PANNA	162838	18.7	64.6	22083	12.0	69.3
DEWAS	213609	21.4	60.3	68911	13.1	59.4
DATIA	83036	16.7	72.3	21871	11.7	70.0
DAMOH	200743	19.8	71.5	40258	11.1	70.2
UJJAIN	245323	28.8	50.8	140995	12.6	58.4
VIDISHA	202926	19.8	66.6	47030	11.1	64.7
MORENA	348418	17.7	68.6	85539	3.1	68.5
BHIND	255753	16.9	71.6	62445	12.8	72.2
SAGAR	303077	23.8	67.7	113821	14.7	66.1
SATNA	410625	23.4	59.0	91185	16.5	63.8
SHAHDOL	410625	23.4	56.8	91185	16.5	63.8
SHIVPURI	245993	22.5	64.7	40704	12.4	64.5
SIDHI	358414	22.6	57.5	19906	15.9	59.5
REWA	375451	26.1	55.5	58763	16.1	61.7
MANDSAUR	359111	27.4	51.9	95794	41.0	60.4
CHHATARPUR	245720	25.7	58.9	53582	16.1	64.1
TIKAMGHAR	209136	26.7	62.4	39890	20.2	64.2
RAJGARH	246504	31.4	47.8	43073	16.1	61.5
SHAJAPUR	254234	34.4	44.0	48009	16.3	62.2
MADHYA PRADESH	14081890	16.6	65.8	3807720	11.0	63.1

Source: Census of India, 1991, Madhya Pradesh Tables, F series, Sanket-MPHDRO

GE –1 Women Married in the Age Group 10-19 Years by Location in Madhya Pradesh

DISTRICT	Women Currently Married	Share of Currently Married (10-14 years)	Share of Currently Married (15-19 years)	Female Mean Age Marriage (Years)	Children Born per annum per 100 Married Women	Children Born per annum per 100 Married Women	Children Born per annum per 100 Married Women
JHABUA	274116	3.7	65.2	18.4	14.3	14.6	10.7
BASTAR	607268	4.6	65.5	18.4	12.0	12.1	10.0
RAIGARH	502551	3.6	75.3	17.9	10.4	10.2	11.5
BHOPAL	329066	11.2	61.1	17.7	12.1	15.4	11.2
BETUL	292764	6.2	70.6	17.7	12.4	12.7	11.4
CHHINDWARA	404643	6.0	73.3	17.6	11.9	12.4	10.3
BALAGHAT	381673	8.7	70.5	17.5	9.5	9.4	10.4
WEST NIMAR	520676	6.7	73.7	17.4	11.9	12.3	9.5
INDORE	483635	13.3	59.6	17.3	7.7	10.0	6.6
EAST NIMAR	372679	9.3	71.2	17.3	13.1	13.7	11.3
SEONI	269023	6.9	75.1	7.3	11.8	12.1	9.0
DHAR	359081	10.0	68.9	17.2	14.2	14.4	13.4
RAIPUR	1092777	9.8	73.4	17.1	11.1	11.4	9.9
MANDLA	372081	10.4	71.2	17.0	9.3	9.4	8.8
GWALIOR	354682	12.5	67.0	16.9	11.6	13.3	10.3
HOSHANGABAD	323788	11.6	70.6	16.8	12.0	13.4	8.1
JABALPUR	701508	14.8	63.9	16.8	9.9	11.8	7.8
SARGUJA	598160	16.2	66.7	16.6	9.2	9.1	10.7
NARSIMHAPUR	211910	12.1	72.7	16.5	10.2	10.6	8.0
BILASPUR	1066496	15.8	67.0	16.5	11.7	12.0	10.2
DURG	665843	17.8	63.2	16.5	10.2	10.3	10.0
SEHORE	224095	16.7	61.0	16.3	12.3	12.5	11.1
RAJNANDGAON	422059	20.0	57.8	16.3	13.1	13.4	11.2
RATLAM	273367	22.3	53.7	16.2	11.6	12.5	9.5
RAISEN	223588	17.2	67.2	16.2	16.0	15.4	19.5
GUNA	338991	17.5	66.5	16.1	11.0	11.1	10.7
PANNA	184921	17.9	66.1	16.1	13.0	13.2	11.6
DEWAS	282520	19.4	60.1	16.1	12.1	12.6	10.9
DATIA	104907	15.6	71.8	16.0	11.5	11.7	10.8
DAMOH	241001	18.3	71.3	16.1	13.4	13.6	12.4
UJJAIN	386318	22.9	53.6	16.0	8.8	9.9	7.0
VIDISHA	433957	16.8	68.6	15.9	11.7	11.8	11.3
MORENA	433957	16.8	68.6	15.9	11.7	11.8	11.3
BHIND	318198	16.1	71.7	15.9	10.9	10.9	10.9
SAGAR	416898	21.3	67.2	15.9	14.8	15.0	14.2
SATNA	408320	21.7	60.4	15.9	11.8	12.1	10.5
SHAHDOL	501810	22.1	59.9	15.9	11.4	11.4	11.5
SHIVPURI	286697	21.1	64.6	15.8	12.6	12.5	13.4
SIDHI	378320	22.2	57.6	15.8	13.3	13.2	15.5
REWA	434214	24.7	56.3	15.7	11.2	11.4	10.3
MANDSAUR	454905	24.6	53.7	15.7	9.8	10.1	8.9
CHHATARPUR	299302	24.0	59.8	15.6	12.9	13.2	12.0
TIKAMGHAR	249026	25.7	62.7	15.4	13.1	13.3	11.8
RAJGARH	289577	29.1	49.8	15.4	12.1	11.9	12.2
SHAJAPUR	302243	31.6	46.9	15.1	12.8	13.1	11.7
MADHYA PRADESH	17889610	15.4	65.2	16.6	11.6	12.0	10.1

Source: Census of India, 1991, Madhya Pradesh Tables, F series, Sanket-MPHDRO

GE –2 Women Married Below the Age of 20 Years in Madhya Pradesh

DISTRICT	All Females			Rural Females		
	Ever Married Women	Share of Ever Married Women (15 years and below)	Share of Ever Married Women (16 – 19 years)	Ever Married Women	Share of Ever Married Women (15 years and below)	Share of Ever Married Women (16- 19 years)
BASTAR	60726	17.2	52.8	567853	16.6	53.2
JHABUA	274116	18.8	50.1	249761	18.0	50.7
RAIGARH	502551	22.0	56.9	461703	21.9	57.4
BETUL	292764	28.4	48.5	243086	28.4	48.7
CHHINDWARA	404643	29.2	50.2	315784	29.7	50.9
BALAGHAT	381673	30.5	48.7	349638	31.2	48.8
WEST NIMAR	520676	32.2	48.2	443890	32.5	48.6
SEONI	269023	32.9	49.0	246736	33.5	49.4
BHOPAL	329066	33.6	38.6	69919	53.0	30.6
RAIPUR	1092777	35.1	48.1	895526	36.0	49.5
EAST NIMAR	372679	36.0	44.5	274547	40.6	43.1
MANDLA	372081	36.6	45.0	347122	37.1	45.1
DHAR	359081	36.8	42.0	314597	37.2	42.0
INDORE	483635	39.6	33.4	155856	60.7	24.6
RAJNANDGAON	422059	42.3	35.5	362194	43.5	34.6
BILASPUR	1066496	42.7	40.1	904397	44.1	39.9
DURG	665843	43.1	37.9	454347	47.9	35.6
JABALPUR	701508	43.4	35.4	407805	53.1	31.9
GWALIOR	354682	43.7	35.8	15.095	55.7	31.1
HOSHANGABAD	323788	44.0	38.2	241487	47.9	37.9
SARGUJA	598160	44.5	38.4	538493	45.6	37.9
NARSIMHAPUR	211910	47.8	36.9	182811	50.2	36.3
SEHORE	224095	47.9	29.8	188504	49.9	28.3
RATLAM	273367	49.4	26.7	190511	55.1	22.5
PANNA	184921	50.6	33.3	162838	52.0	36.3
SIDHI	378320	50.8	29.1	358414	51.5	28.6
SHAHDOL	501810	50.8	31.2	410625	52.6	29.8
RAISEN	223588	51.4	33.0	191343	53.0	32.6
REWA	434214	51.7	29.3	375451	53.3	28.3
SATNA	408320	51.9	30.3	335215	53.8	28.8
UJJAIN	386318	52.5	24.0	245323	62.1	17.6
DEWAS	282520	52.5	27.0	213609	56.7	25.0
MANDSAUR	454905	54.9	23.3	359111	59.2	20.0
GUNA	338991	55.7	28.3	277459	58.5	27.5
VIDISHA	249956	56.2	28.2	202926	60.2	26.2
DATIA	104907	56.3	31.1	83036	58.8	30.2
MORENA	433957	57.6	27.8	348418	60.0	26.3
DAMOH	241001	27.8	31.8	200743	61.1	30.1
RAJGARH	289577	57.8	21.2	246504	60.1	19.1
CHHATARPUR	299302	58.6	25.2	245720	61.7	22.9
BHIND	318198	59.9	27.9	255753	62.1	26.4
SAGAR	416898	60.5	28.0	303077	66.4	25.0
SHIVPURI	286697	60.7	25.0	245993	63.5	23.7
SHAJAPUR	30.2243	61.7	16.7	254234	34.3	1.2
TIKAMGARH	249026	64.6	23.7	209136	66.5	22.6
MADHYA PRADESH	17889610	43.8	36.8	14081890	46.3	36.1

Source: Census of India, 1991, Madhya Pradesh F – 15 Tables (F series), series, Sanket-MPHDRO

GE –2 Women Married Below the Age of 20 Years in Madhya Pradesh

DISTRICT	Urban Females			Children Born per annum per 100 Married Women		
	Ever Married Women	Share of Ever Married Women (15 years and below)	Share of Ever Married Women (16 – 19 years)	All	Rural	Urban
BASTAR	39415	25.5	46.4	12.0	12.1	10.0
JHABUA	24355	27.8	43.4	14.3	14.6	10.7
RAIGARH	40848	23.0	51.4	10.4	10.2	11.5
BETUL	49678	28.6	47.2	12.4	12.7	11.4
CHHINDWARA	88859	27.2	47.5	11.9	12.4	10.3
BALAGHAT	32035	23.1	46.9	9.5	9.4	10.4
WEST NIMAR	76786	30.8	45.5	11.9	12.3	9.5
SEONI	22287	26.4	44.6	11.8	12.1	9.0
BHOPAL	259147	28.4	40.8	12.1	15.4	11.2
RAIPUR	197251	30.7	41.7	11.1	11.4	9.9
EAST NIMAR	98132	23.1	48.4	13.1	13.7	11.3
MANDLA	24959	29.6	43.1	9.3	9.4	8.8
DHAR	44484	33.7	42.4	14.2	14.4	13.4
INDORE	327779	29.6	37.6	7.7	10.0	6.6
RAJNANDGAON	59865	35.1	40.9	13.1	13.4	11.2
BILASPUR	162099	35.2	41.2	11.7	12.0	10.2
DURG	211496	32.9	42.7	10.2	10.3	10.0
JABALPUR	293703	29.8	40.3	9.9	11.5	7.8
GWALIOR	204287	34.8	39.2	11.6	13.3	10.3
HOSHANGABAD	82301	32.5	39.2	12.0	13.4	8.1
SARGUJA	59667	34.8	43.0	9.2	9.1	10.7
NARSIMHAPUR	29099	32.3	41.3	10.2	10.3	8.0
SEHORE	35591	37.6	37.5	12.3	12.5	11.1
RATLAM	82856	36.1	36.1	11.6	12.5	9.5
PANNA	22083	40.3	41.0	13.0	13.2	11.6
SIDHI	19906	38.1	37.3	13.3	13.2	15.5
SHAHDOL	91185	42.7	37.5	11.4	11.4	11.5
RAISEN	32245	41.9	35.6	16.0	15.4	19.5
REWA	58763	41.8	36.0	11.2	11.4	10.3
SATNA	73105	42.9	36.8	11.8	12.1	10.5
UJJAIN	140995	35.8	35.2	8.8	9.9	7.0
DEWAS	68911	39.4	33.1	12.1	12.6	10.9
MANDSAUR	95794	38.7	35.7	9.8	10.1	8.9
GUNA	61532	43.0	31.8	11.0	11.1	10.7
VIDISHA	47030	39.2	36.7	14.9	15.4	12.6
DATIA	21871	47.0	34.6	11.5	11.7	10.8
MORENA	85539	47.9	33.7	11.7	11.8	11.3
DAMOH	40258	41.	39.8	13.4	13.6	12.4
RAJGARH	430.73	44.7	32.9	12.0	11.9	12.2
CHHATARPUR	53582	44.4	35.8	12.9	13.2	12.0
BHIND	62445	50.8	34.2	10.9	10.9	10.9
SAGAR	113821	44.9	35.9	14.8	15.0	14.2
SHIVPURI	40704	43.9	33.0	12.6	12.5	13.4
SHAJAPUR	48009	48.4	30.0	12.8	13.1	11.7
TIKAMGARH	39890	24.9	29.5	13.1	13.3	11.8
MADHYA PRADESH	3807720	34.8	39.3	11.6	12.0	10.1

Source: Census of India, 1991, Madhya Pradesh F – 15 Tables (F series), Sanket-MPHDRO

GE –3 Child Bearing by Women in ages 40+, and 4 and more children born to Mothers, 1991.

DISTRICT	All Births of order 4 and above to total births	All Currently Married Women < 15 Years, with Children	All Currently Married Women Aged above 40 years, with Children	All Married Women Aged above 40 years Bearing Children	All Births of order 4 and above to total births	All Currently Married Women < 15 Years, with Children
BALAGHAT	22.9	3.0	10.3	1.8	23.1	3.3
INDORE	23.1	2.5	10.7	1.5	25.7	2.3
MANDLA	24.0	1.4	12.7	1.1	24.1	1.5
RAIGARH	25.0	1.4	14.1	2.4	24.5	1.5
DURG	25.1	2.0	13.9	1.9	27.2	1.0
RAJNANDGAON	26.0	0.6	15.4	2.2	26.6	0.6
MANDSAUR	27.1	1.0	9.0	1.7	27.9	0.9
NARSIMHAPUR	27.9	2.7	14.8	1.8	28.5	3.0
UJJAIN	28.7	1.1	9.9	1.8	30.4	1.0
SEONI	28.8	2.4	13.4	1.6	28.8	2.6
GWALIOR	28.9	16.1	12.3	3.6	33.4	17.8
RAIPUR	29.4	1.9	14.4	1.9	29.8	1.7
RATLAM	29.8	0.9	12.1	2.9	32.7	0.8
BHOPAL	30.0	2.7	11.2	2.6	39.6	0.7
SARGUJA	30.1	1.9	10.3	1.6	29.4	1.9
BASTAR	30.2	2.0	14.8	3.2	30.8	2.1
DEWAS	30.7	5.1	13.8	3.2	32.5	5.6
BILASPUR	31.8	3.2	13.5	2.6	32.4	3.4
JABALPUR	31.9	1.2	10.9	1.6	34.0	0.8
DHAR	32.1	1.5	14.4	3.3	33.5	1.4
SHAJAPUR	32.3	2.2	10.4	3.4	32.6	2.0
SHAHDOL	33.4	0.9	10.9	2.6	33.4	1.0
RAJGARH	34.2	2.0	8.8	3.6	34.9	1.9
PANNA	34.2	7.9	12.0	4.2	35.0	8.1
SATNA	34.4	2.1	10.1	2.7	35.6	1.3
WEST NIMAR	34.4	2.8	15.2	2.3	35.3	2.4
EAST NIMAR	34.4	1.1	15.2	2.6	34.8	1.3
RAISEN	34.6	0.8	12.1	5.5	35.7	0.4
CHHINDWARA	34.8	3.0	14.3	2.2	35.5	0.8
DATIA	35.0	2.2	12.4	1.7	37.0	1.6
HOSHANGABAD	35.3	3.6	14.9	2.2	37.2	4.0
DAMOH	35.8	0.4	14.4	2.2	36.4	0.4
SEHORE	36.4	2.0	9.9	3.8	37.4	2.1
BHIND	37.1	3.4	10.3	2.3	37.1	3.6
REWA	37.4	1.5	9.2	2.7	36.9	1.3
BETUL	37.7	7.5	15.2	2.6	39.2	7.1
GUNA	37.8	3.1	9.3	3.2	38.8	3.0
TIKAMGARH	38.0	2.5	13.0	2.9	37.8	2.4
SAGAR	38.9	2.3	14.5	3.2	40.8	1.9
JHABUA	39.7	5.0	16.5	4.4	40.4	4.9
SIDHI	39.8	2.9	10.8	4.2	40.3	2.9
SHIVPURI	40.3	3.7	10.0	4.2	42.5	3.3
VIDISHA	41.4	2.3	12.4	3.9	43.2	1.9
MORENA	41.4	3.1	9.8	3.2	42.6	3.0
CHHATARPUR	42.2	2.1	12.7	3.8	43.6	2.3
MADHYA PRADESH	32.7	2.3	12.1	2.6	33.8	2.1

Source: Census of India, 1991, Madhya Pradesh F – 16 Tables, Sanket-MPHDRO

GE –3 Child Bearing by Women in ages 40+, and 4 and more children born to Mothers, 1991.

DISTRICT	All Currently married Women Aged 15 –19 Years, with Children	All Married Women Aged above 40 Years Bearing Children	All Births of order 4 and above to total births	All Currently Married Women < 15 years, with Children	All Currently Married Women Aged 15-19 Years, with Children	All Married Women Aged above 40 Years Bearing Children
BALAGHAT	10.2	1.8	20.7	0.0	11.1	1.8
INDORE	10.1	2.4	21.2	2.8	11.3	1.1
MANDLA	12.6	1.1	22.4	0.0	14.6	1.0
RAIGARH	14.1	2.3	29.4	0.0	14.3	2.6
DURG	13.9	1.4	20.8	7.9	14.0	3.0
RAJNANDGAON	15.2	2.3	22.0	0.0	18.2	1.4
MANDSAUR	9.0	1.8	23.7	2.4	9.1	1.4
NARSIMHAPUR	15.1	1.8	23.2	0.0	11.7	2.1
UJJAIN	10.5	2.2	24.7	1.5	8.2	1.1
SEONI	13.4	1.6	28.2	0.0	13.2	2.2
GWALIOR	12.9	4.0	24.4	13.6	11.6	3.2
RAIPUR	14.6	1.8	27.7	2.9	13.2	2.4
RATLAM	12.2	3.3	21.2	1.3	11.5	2.2
BHOPAL	8.2	4.9	26.5	5.3	13.0	2.0
SARGUJA	10.6	1.6	35.4	2.0	10.1	2.0
BASTAR	14.6	3.3	20.2	0.0	19.7	1.8
DEWAS	14.2	3.1	24.7	1.3	12.4	3.7
BILASPUR	13.4	2.6	27.8	1.7	14.3	2.9
JABALPUR	10.7	1.7	27.5	2.7	11.5	1.4
DHAR	14.9	2.2	21.5	3.7	9.8	2.8
SHAJAPUR	10.0	3.7	30.2	5.1	13.2	2.1
SHAHDOL	11.2	2.5	33.1	0.0	8.9	3.0
RAJGARH	8.7	3.8	30.3	3.0	9.8	2.8
PANNA	12.2	4.4	27.4	4.0	10.4	2.7
SATNA	9.7	2.9	27.8	9.5	13.1	1.8
WEST NIMAR	15.5	2.5	27.7	5.5	12.6	1.6
EAST NIMAR	15.5	3.0	33.2	0.0	13.6	1.6
RAISEN	12.0	5.1	29.0	3.6	12.8	8.0
CHHINDWARA	16.4	2.1	31.9	7.5	7.6	2.3
DATIA	12.2	5.1	29.0	3.6	12.8	8.0
HOSHANGABAD	16.4	2.1	31.9	7.5	7.6	2.3
DAMOH	13.7	2.5	32.7	0.0	19.1	0.8
SEHORE	9.4	2.9	30.4	0.0	14.2	2.3
BHIND	10.4	2.3	37.2	2.7	9.6	2.4
REWA	8.8	2.8	41.0	4.3	12.3	2.5
BETUL	15.5	2.9	29.9	9.5	12.8	1.0
GUNA	9.0	3.4	33.2	4.3	11.3	2.2
TIKAMGARH	13.0	2.9	39.1	2.9	13.0	2.9
SAGAR	14.1	3.5	33.5	4.5	15.9	2.5
JHABUA	16.5	4.5	28.3	5.3	15.9	3.0
SIDHI	10.6	4.1	33.0	4.4	16.9	4.7
SHIVPURI	10.2	3.8	27.9	8.1	7.6	6.7
VIDISHA	12.8	4.2	31.7	5.7	10.2	2.2
MORENA	9.4	3.3	36.1	4.0	11.8	2.9
CHHATARPUR	12.6	4.2	34.7	0.0	13.5	1.8
MADHYA PRADESH	12.1	2.7	28.0	3.7	12.1	2.2

Source: Census of India, 1991, Madhya Pradesh F – 16 Tables, Sanket-MPHDRO

GE 4 – Average Number of Children born to Mothers Aged between 45-49 years

DISTRICT	Average Children Born to Married Women		
	Rural	Urban	All
RAIGARH	3.75	4.21	3.79
BASTAR	4.00	3.83	3.99
BALAGHAT	4.03	4.17	1.04
SARGUJA	4.04	4.18	4.05
INDORE	4.52	3.97	4.15
MANDLA	4.27	4.83	4.31
RAIPUR	4.47	4.12	4.41
BILASPUR	4.57	4.24	4.52
DURG	4.81	4.19	4.59
SHAHDOL	4.65	4.49	4.62
UJJAIN	4.97	4.11	4.63
GWALIOR	5.22	4.28	4.68
MANSAUR	4.91	4.36	4.79
SEONI	4.83	4.68	4.82
NARSIMHAPUR	4.89	4.54	4.84
BHOPAL	5.74	4.63	4.84
CHHINDWARA	4.97	4.57	4.88
RAJNANDGAON	5.02	4.51	4.94
BHIND	5.01	4.66	4.94
JABALPUR	5.40	4.40	4.97
HOSHANGABAD	5.37	3.79	4.99
BETUL	4.97	5.09	4.99
SATNA	5.12	4.42	4.99
DATIA	5.11	4.56	4.99
RATLAM	5.30	4.37	4.99
DHAR	5.23	4.46	5.14
RAJGARH	5.20	4.92	5.16
REWA	5.30	4.34	5.16
SHIVPURI	5.24	5.00	5.20
SHAJAPUR	5.30	4.83	5.22
MORENA	5.30	4.91	5.23
GUNA	5.29	4.97	5.23
PANNA	5.27	5.08	5.24
SEHORE	5.30	4.98	5.25
JHABUA	5.34	4.58	5.27
DEWAS	5.47	4.76	5.30
EAST NIMAR	5.59	4.75	5.34
WEST NIMAR	5.47	4.85	4.38
DAMOH	5.51	5.07	5.43
CHHATARPUR	5.58	4.94	5.47
SIDHI	5.56	4.82	5.53
RAISEN	5.75	5.44	5.70
SAGAR	5.93	5.13	5.71
TIKAMGARH	5.81	5.23	5.72
VIDISHA	6.09	4.92	5.87
MADHYA PRADESH	4.93	4.46	4.83

Source: Census of India, 1991, Fertility Tables – Madhya Pradesh, Sanket-MPHDRO

**GE 5- Performance of Women Candidates in Elections of Vidhan Sabha, Madhya Pradesh:
1985, 1990 and 1993.**

District	Total Seats	Total seats for which Elections Were held in Three State Elections	Women Candidates				Index of Women Participation in Legislative Elections
			Total	Women Candidates per Seat	Women Candidates with >5% Votes	Share of women candidates with > 5% Votes	
SEONI	5	15	17	1.13	10	0.588	0.770
PANNA	3	9	5	0.56	4	0.800	0.719
RAJNANDGAON	8	24	13	0.54	10	0.769	0.693
JHABUA	5	15	6	0.40	5	0.833	0.689
MANDLA	7	21	4	0.19	3	0.750	0.563
EAST NIMAR	7	21	6	0.29	4	0.667	0.540
DHAR	6	18	9	0.50	5	0.556	0.537
WEST NIMAR	10	30	10	0.33	6	0.600	0.511
JABALPUR	13	39	25	0.64	11	0.440	0.507
RAIGARH	10	30	8	0.27	5	0.625	0.506
BASTAR	12	36	8	0.22	5	0.625	0.491
CHHINDWARA	8	24	19	0.79	6	0.316	0.474
BHOPAL	4	12	17	1.42	0	0.000	0.472
SIDHI	6	18	11	0.61	4	0.364	0.446
RAIPUR	20	60	37	0.62	12	0.324	0.422
RAISEN	4	12	2	0.17	1	0.500	0.389
SAGAR	8	24	7	0.29	3	0.429	0.383
SHAJAPUR	5	15	5	0.33	2	0.400	0.378
DEWAS	5	15	5	0.33	2	0.400	0.378
CHHATARPUR	5	15	6	0.40	2	0.333	0.356
SHAHDOL	8	24	10	0.42	3	0.300	0.339
BILASPUR	19	57	26	0.46	7	0.269	0.332
DURG	11	33	17	0.52	4	0.235	0.329
BETUL	6	18	8	0.44	2	0.250	0.315
BALAGHAT	8	24	6	0.25	2	0.333	0.306
RATLAM	5	15	3	0.20	1	0.333	0.289
GWALIOR	7	21	15	0.71	1	0.067	0.283
SEHORE	4	12	5	0.42	1	0.200	0.272
MANDSAUR	7	21	13	0.62	1	0.077	0.258
SHIVPURI	5	15	4	0.27	1	0.250	0.256
SARGUJA	10	30	3	0.10	1	0.333	0.256
VIDISHA	5	15	5	0.33	1	0.200	0.244
UJJAIN	7	21	9	0.43	1	0.111	0.217
REWA	7	21	8	0.38	1	0.125	0.210
INDORE	8	24	9	0.38	1	0.111	0.199
SATNA	7	21	6	0.29	0	0.000	0.095
BHIND	6	18	5	0.28	0	0.000	0.093
NARSIMHAPUR	4	12	3	0.25	0	0.000	0.083
HOSANGABAD	6	18	4	0.22	0	0.000	0.074
MORENA	8	24	5	0.21	0	0.000	0.069
RAJGARH	5	15	3	0.20	1	0.000	0.067
TIKAMGARH	4	12	2	0.17	0	0.000	0.056
GUNA	6	18	2	0.11	0	0.000	0.037
DAMOH	4	12	1	0.08	0	0.000	0.028
DATIA	2	6	0	0.00	0	0.000	0.000
MADHYA PRDESH	320	960	392	0.41	128	0.327	0.354

Source: Election Commission of India, Bhopal, Sanket – MPHRO



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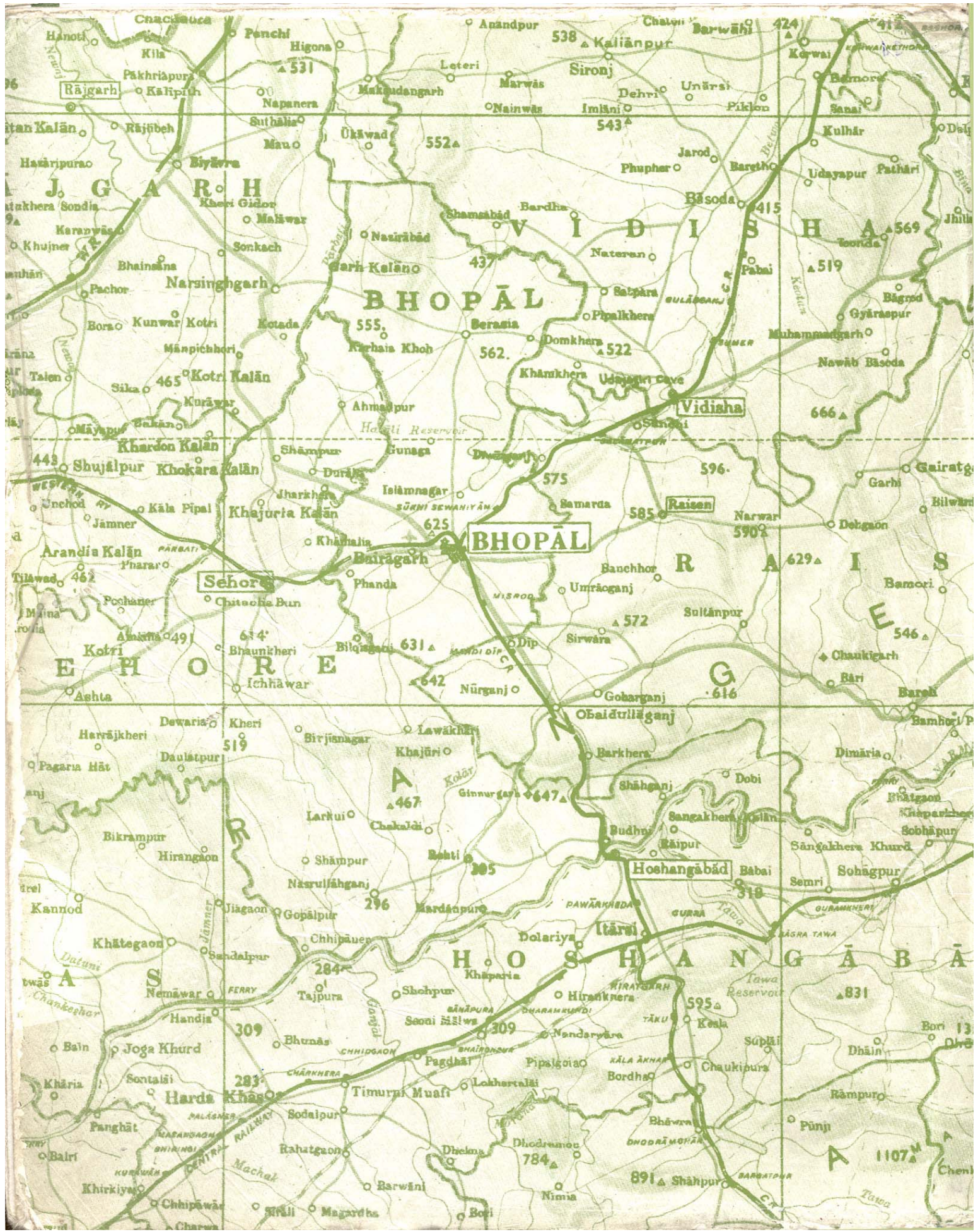
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BHOPĀL

BHOPĀL

Vidisha

Sehōr

Hoshangābād

H.O.S.H.A.N.G.Ā.B.Ā

Hardā Khāso

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Rājgarh

J.G.A.R.H.

Narsingharh

Kotr Kalān

Shujālpur

Arandīa Kalān

E.P.H.O.R.E.

Kannod

Nemāwar

Hardā Khāso

Khāria

Chhipāwā

V.I.D.I.S.H.A.

BHOPĀL

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Karavās

Bhainsāna

Bora

Māyap

Arandīa Kalān

Mina

Aeshta

Pagarīa Hāt

Bikrampur

Kannod

Handia

Khāria

Bairi

Chhipāwā

Chachānūca

Kila

Biyāra

Karavās

Bhainsāna

Māyap

Arandīa Kalān

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Aeshta

Pagarīa Hāt

Bikrampur

Kannod

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Arandīa Kalān

Mina

Aeshta

Pagarīa Hāt

Bikrampur

Kannod

Handia

Khāria

Bairi

Chhipāwā

Barwāhi

Imlāni

Biyāra

Karavās

Bhainsāna

Māyap

Arandīa Kalān

Mina

Aeshta

Pagarīa Hāt

Bikrampur

Kannod

Handia

Khāria

Bairi

Chhipāwā

Kerwai

Dehri

Biyāra

Karavās

Bhainsāna

Māyap

Arandīa Kalān

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Aeshta

Pagarīa Hāt

Bikrampur

Kannod

Handia

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