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2002



सत्यमेव जयते

Human

Development

Report

Maharashtra

**Human  
Development  
Report  
Maharashtra  
2002**

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Government of Maharashtra  
Mumbai

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**MESSAGE**

Maharashtra enjoys the reputation of being the most progressive and well-administered State in the country. The State Government is aware that although progress has been achieved in various sectors since the inception of Maharashtra, much remains to be done in many fields. The Government is, therefore, making strenuous efforts to provide basic minimum services to the people, including drinking water, health, education, employment opportunities, etc. The issues like securing peoples participation, poverty alleviation, social protection to the poor, removal of regional imbalances, good governance are also high on the agenda of the Government. We are committed to the cause of human development.

I compliment the Planning Commission and the United Nations Development Programme for collaborating with the State Government in preparation of the Maharashtra Human Development Report (MHDR), which provides an objective, in-depth analysis of the present status of various aspects of human welfare in our State.

I am sure, the authoritative and comprehensive document, so meticulously prepared, providing a realistic assessment of the current status of human development in Maharashtra, will serve as a guide for future planning in various fields to achieve socio-economic well-being of our people.

I appreciate the endeavour.

A handwritten signature in red ink, appearing to read 'Vilasrao Deshmukh'.

**(Vilasrao Deshmukh)**



मंत्री  
वित्त व नियोजन  
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मंत्रालय, मुंबई 400032  
MINISTER FOR  
FINANCE AND PLANNING  
GOVERNMENT OF MAHARASHTRA  
Mantralaya, Mumbai 400032

## MESSAGE

Maharashtra has a creditable record of development in different areas because of sustained efforts of development planning spread over last four decades. The benefit of development unfortunately has not reached equally to various sections of our population or to people living in different regions of the State. In particular, progress has been very uneven in the field of education, health and nutrition. Progress in these areas is very important to ensure sustained development of the sections of the population who are lagging behind. On the basis of latest indicator of human development, Maharashtra seems to be falling behind in comparison with a number of other States which apparently are less developed.

The Maharashtra Human Development Report, 2002 prepared by the State with the help of Planning Commission and UNDP gives us a detailed analysis of the situation of different aspects of human welfare in the State in a desegregated manner. This, I hope, will help in a more focussed attention on the relatively neglected areas to enable them to catch up with the rest of the State. This Report will prove a milestone in the process of development planning of the State. I appreciate the efforts made by the Government officials, the experts, officials of UNDP and the Planning Commission who were involved in the formulation of this Report.

(Jayant Patil)



**KAMALUDDIN AHMED**

सदस्य  
योजना आयोग  
योजना भवन  
नई दिल्ली ११०००१

**MEMBER  
PLANNING COMMISSION  
YOJANA BHAVAN  
NEW DELHI 110001**

### MESSAGE

I congratulate the Government of Maharashtra on the preparation of their First Human Development Report. I am glad that both the UNDP and the Planning Commission supported this endeavour.

The preparation of a Human Development Report is symptomatic of the growing realization that people are at the center of the development process. Development is not confined to economic attainments alone. But is multi-dimensional with a focus on expanded opportunities and enhanced choices through building of capabilities.

Maharashtra's experience is a unique one. While per-capita income is forty per cent, higher than the all India average, there are enormous intra-state differences, both in the levels of attainment and in poverty ratios. These differences are brought out in the Report and are attributed largely to an uneven natural resources endowment. The Marathwada and Vidarbha areas of the State are characterized by drought proneness with agriculture subject to periodic droughts which in turn have an adverse impact on the incomes of the majority. This issue of regional imbalances within the State is a complex one but has to be addressed effectively by the Government.

Another problem is the existence of a large urban population living in slums. Measures would have to be taken to tackle this problem as well, and to improve the living conditions of the slum-dwellers.

The Report has given some pointers for future course of action. In this, the State Government, the Civil Society and the Panchayati Raj Institutions would all have to work in tandem. The success of the Report would therefore, depend to a large extent upon the follow up actions that would be taken after the Report is released.

Once again, I would like to commend the State Government for bringing out this Report. It has been prepared with the help and involvement of a wide spectrum of development practitioners both from the Government and Civil Society. I wish you all success in the pursuit of the goals that have been mapped out for the future.

  
(Kamaluddin Ahmed)



## Message

On behalf of the United Nations Development Programme, I would like to express appreciation of the Maharashtra Human Development Report, which shows the status, achievements and challenges, as also the way forward for poverty eradication, sustainable livelihoods and all-round social development in the State.

The Report highlights the issues of income and employment generation, reduction in poverty and regional disparities, provision of basic minimum services, people's participation and development of human capabilities, especially of the income poor.

While the Maharashtra HDR places the State amongst the high-income States, it also points out diversities within the State and argues that high per-capita income has not always resulted in improving social attainments commensurately.

I am very pleased that the analysis in the Report has flagged the crucial importance of investing in gender-equality, effective local governance and the need to ensure social protection, especially for the poor. The State Government must be commended for focussing strongly on a right to development approach in the Report, including livelihoods promotion, guaranteed access to basic services, and the treatment of HIV/AIDS as a mainstream development issue.

I once again congratulate the Government of Maharashtra for its enduring commitment to the cause of human development, and express confidence that the Report will be a critical and key tool for lasting people-centered development in Maharashtra.

A handwritten signature in blue ink, reading 'Brenda Gael McSweeney'.

**(Brenda Gael McSweeney)**  
UNDP Resident Representative &  
UN Resident Coordinator

## Preface

Like a lion who looks back with a sense of pride and self-esteem as to how much he has achieved wondering how much remains to be conquered, (*Sinhavalokan*) we need to sit back and ask ourselves, what have we done all these years that would qualify us to be called a civilized society. Human beings are different and better than the animals in that they are endowed with the power to think, power to reason. That being so, we are expected to cherish and exert ourselves for achievement of values such as equality, liberty and fraternity. Equality in terms of availability of equal opportunity for development and enhancement of quality of one's own life. Development of an individual is intimately linked with social development and vice versa.

This theory was well known to all of us for quite long and all of us have been trying in that direction. But it needs to be done in a more organised way with proper planning and through time-bound programmes. Preparation of human development reports is therefore of paramount importance both for knowing exactly where we have reached and for future planning.

World Human Development Report 2000 adds a new dimension to the concept of human development and its evaluation. It lays emphasis on the state of human rights in a particular society to assess its development. It sees an organic relationship between human rights and development. Assessment of human development, if combined with the human rights perspective, can indicate the duties of others in the society to enhance human development in one way or the other. The human rights approach may offer an additional and very useful perspective for the analysis of human development. Human rights have intrinsic value as ends in themselves. They also have instrumental value.

There are causal links between the realisation of

one right and that of another—right to food, right to free speech, right to education and so on. They are all linked with each other and cannot be viewed, achieved and evaluated in isolation. This is precisely what the great Man of Indian Renaissance, Justice Mahadev Govind Ranade (1842–1901) said a hundred years ago. In his Presidential address to the Social Conference of which he was also the founder at Satara in May 1900, he said, 'You cannot have a good social system when you find yourself low in the scale of political right nor can you be fit to exercise political rights and privileges unless your social system is based on reason and justice. You cannot have a good economic system when your social arrangements are imperfect. If your religious ideas are low and groveling, you cannot succeed in social, economic or political spheres. This interdependence is not an accident, but is the law of our nature. Like the members of our body, you cannot have strength in the hands and the feet if your internal organs are in disorder; what applies to the human body holds good of the collective humanity, we call the society or state. It is a mistaken view which divorces considerations, political from social and economic and no man can be said to realise his duty in one aspect who neglects his duties in the other directions.'

The World Human Development Report 2000 has brought out another very important fact to our notice. It says, 'The link between economic prosperity and human development is neither automatic nor obvious. Two countries with similar income can have very different HDI values; countries with similar HDI values can have very different incomes.' This underlines the need to view development as an overall development of human society.

HDRs by UNDP have emerged as the principal advocacy platform for sustainable human development. The need however, is to translate advocacy into action plans. It is therefore the process and change in



mindsets that is critical for successful action based on the State HRD. Change in mindsets of policy makers and of those who are entrusted with the all-important responsibility of implementing the policies. Good economics has become imperative for good politics in the new global context, as also on the basis of our own past experiences in development planning.

Maharashtra is widely acclaimed as a progressive and developed State. The progress that the State has achieved in different sectors since its inception on 1 May 1960 is laudable. However, much remains to be achieved. Government will have to play a proactive role in social investments such as drinking water, health, education, employment generation etc. Such investments would be expected to ensure that all sections of society benefit equally from the growth of economy. A host of policy initiatives have

been taken and efforts are being made to redress regional inequalities as well as the backwardness of specific areas. However, there has to be a framework of analysis for determining the impact of such policies aimed at redressing inequalities and their implications for the key indicators of social development. It is in this perspective that a State Human Development Report acquires considerable significance as an important policy tool for leveraging greater resources and focussing attention on areas critical to an overall social development.

With valuable assistance from the Planning Commission and under guidance of the UNDP, we have been able to come out with a comprehensive status-report-cum-policy document which would enable us to herald a new era of overall human development in the State.

DR RATNAKAR MAHAJAN,  
Executive Chairman,  
State Planning Board,  
Maharashtra

# Prologue

The UNDP initiative of ranking countries on the basis of their human development indices has been accepted universally as an effective method to bring into focus deficiencies in health, education and access to other essential facilities for a good living. From a simple measure of per capita income as indicator of development, we have moved into a much more holistic concept of 'well being' of the population. Preparation of state level Human Development Reports (HDRs) has also been gaining ground in India. States like Madhya Pradesh, Karnataka, Sikkim and Rajasthan have come out with their State Human Development Reports, trying to emulate the methodology propounded by UNDP

Various measures of well being of the population disaggregated at the district level are found to be extremely useful to catalyse adoption of appropriate measures by Government and other agencies. We, in Maharashtra, also felt the need to undertake such an effort to obtain valuable information and analysis de-segregated at the district level, which can be usefully utilised by all concerned. This idea was conceived in February 2001 and within a reasonable period of about one year and two months it has been possible to come out with this Maharashtra Human Development Report 2002.

This effort could not have been at a more appropriate juncture, this year being the launching year of the Tenth Five-Year Plan. Maharashtra has many creditable achievements and is either the leader or among the leaders in many indices of development. But certain disparities or stark realities reflect very adversely on these developmental achievements of the State. Human development, as a measure of well being of the population, seems to be eluding a large section of our population. The huge slum population with a falling quality of life, the great disparity in the levels of income among various parts of the State, the unabated population

growth, the growing adverse sex ratio, the big difference in the nutrition status—all call for serious introspection. For ensuring a happy and stable population and a stable social fabric, reorientation and reprioritisation of the policies and programmes and the deployment of the State's resources is absolutely necessary. This Human Development Report is an effort to provide in-depth analysis of the state of affairs in various aspects of the human welfare in various regions and districts of the State.

It is important that the Human Development Report so prepared must not be perceived only as a Government document, giving a catalogue of achievements and schemes and programmes of the Government departments. It has to rise above such loyalties and should be able to look at facts as they are, dispassionately, often critically, so that the report so prepared can enable the reader to be able to perceive the truth. In this regard, though the Planning Department of the Government of Maharashtra has coordinated this effort and Government of Maharashtra fully owns this Report, it has been meticulously ensured that free and frank opinion, unhindered by any constraints are expressed in its various Chapters. It has been ensured that professional and technical considerations get the importance they deserve. Therefore, in many places in this report, opinions and views have been expressed which may sound critical of the Government's policies and programmes, but that is what it ought to be.

The preparation of this Report was first conceived by the Executive Chairman of the State Planning Board, Dr Ratnakar Mahajan, whose leadership to this exercise was critical. The State Government received unstinted technical advice and financial support from UNDP and financial assistance from the Planning Commission of the Government of India. A tripartite MoU was signed on 12 April 2001, among Planning Commission, UNDP and the

Government of Maharashtra which lay down their respective roles and responsibilities in the preparation of the MHDR. The MHDR is, therefore, the result of the cumulative efforts of the UNDP, Planning Commission, Government of India and the agencies of the State Government.

It will be appropriate to briefly narrate the process which has been followed in the finalisation of this report. At the outset, two workshops at an interval of about a month were organised for finalising the contents of the Human Development Report and the methodology to be adopted for the purpose. These workshops were attended by the concerned Secretaries and the Heads of concerned departments of the State Government. The reputed institutions and individuals who are known to have made valuable contribution in various aspects of human development and representatives of UNDP and Planning Commission, Government of India also participated. These workshops helped in finalising the framework of the HDR. These workshops also helped identify the resource persons who could be approached for contributing to this report. For coordinating and advising the Government in finalising the various aspects of this Report, an Advisory Committee was appointed under the Chairmanship of Executive Chairman of the State Planning Board with eminent persons like Dr Bhalachandra Mungekar, Vice-Chancellor of Mumbai University, Dr Rupa Shah, Vice-Chancellor, SNDT University, Mumbai, Dr Anil Kakodkar, Chairman of the Atomic Energy Commission, Professor R.R. Singh, Director, Tata Institute of Social Sciences, Mumbai, Shri T.K. Roy, Director, International Institute for Population Sciences, Mumbai, as members. In addition, all the Secretaries of the concerned Departments and the Heads of the departments of I.C.D.S., Women and Child Welfare, Primary Education and Health Services, were associated. Shri B.M. Nagrale, the Director, Economics and Statistics, Maharashtra, as well as the Regional Census Director, Shri Sameer Biswas, were closely associated with the Advisory Committee.

In order to give statistical support to the Resource Persons, a team of officers from the Directorate of

Economics & Statistics, Maharashtra under the leadership of Shri D.R. Bhosale. Additional Director, was set up. This team consisted of Smt. A.D. Deo, Shri S.G. Jagtap, all Joint Directors and Shri D.G. Sute, Shri J.V. Chaudhary, Deputy Directors, and Shri K.S. Jagtap, Senior Research Officer. The latest information, including from the Census, was made available to the Resource Persons by the members of this Cell who also took pains to prepare appropriate tables, charts and graphs required by the Resource Persons. The Director of Census Operations gave great help in making available the latest information from the census to make the HDR relevant to the current situation.

The Resource Persons prepared various background papers, and workshops were organised in the presence of the members of the Advisory Committee where each of them made presentations of their papers and these were thoroughly discussed. The heads of Government Departments who were present in the workshops checked the facts and information and gave their views which were duly noted by the Resource Persons. The papers so finalised were subsequently made use of for the preparation of the current HDR.

It was realised that the papers contributed by the Resource Persons reflected the perspective, the style and the conviction of the authors, and were complete treatises by themselves. It was necessary to weave them together into an integrated report avoiding overlapping, bringing continuity and putting the matters in a uniform style. This job has been competently performed by Shri Mahesh Vijapurkar, Bureau Chief and Deputy Editor of *The Hindu* based in Mumbai, who has helped ensure that the essentials of the papers written by the Resource Persons are maintained, the integrity of analysis is sound and the basic focus is sustained. Shri Vijapurkar has also consulted Resource Persons informally wherever needed and has given the final Chapters a reader-friendly appearance. The Chapters written have been also vetted by the respective departments of the State Government to ensure that the facts are put correctly and that the views expressed are not at variance with the reality of the

situation. And finally, we had the assistance of a Press Coordinator to help in various aspects of publication—Shri K. Vijayakumar from the *Economic and Political Weekly (EPW)*. He has been extremely useful in tying up loose ends and coordinating with the press. He has also used his experience of work in the *EPW* to rectify minor deficiencies here and there. We are indeed fortunate that Shri Prakash Akolkar, Senior Assistant Editor, *Maharashtra Times* has undertaken the Marathi translation of the Report.

It is also necessary to acknowledge the creative work in the designing of the Report of Maharashtra Human Development 2002 from the Directorate of Information & Public Relations. We wish to thank Ms Seema Ranalkar, Deputy Director and Ms Mrinalini Pitale for their design inputs. We also appreciate the efforts of Shri R.S. Kulkarni, who has now retired from service, and Shri R.S. Parchake, Officer on Special Duty in the Planning Department, who has taken great pains to help organise the review meetings and logistics of the Report's preparation since the very beginning. It is also necessary to put on record the hard work done by Shri U.S. Sonawane, Manager, Government Central Press and his team in insuring the excellent quality of the publication.

The Planning Commission, Government of India, has supported the preparation of the Report. We acknowledge with thanks the advice and encouragement of Dr Rohini Nayyar, Adviser (Rural

Development), and Mr B.N. Nanda. Dr Nayyar also provided substantive inputs at the design stage and in successive peer review meetings.

Under the leadership of Dr Brenda McSweeney, Resident Representative of the India Country Office, UNDP has not only been the inspiration for launching this project but it has actually helped us in great many ways in the process of preparation. In this regard, the contributions from Professor K. Seeta Prabhu, Head, HDRC and Dr Suraj Kumar, Programme Adviser, UNDP, need to be gratefully acknowledged. They have participated and guided in all our deliberations, in going through the draft Chapters and making appropriate suggestions in the final design of the Report. But for the guidance and help from both of them and members of the HDRC teary (Ms Aparna Pande, Trishna Satpathy and Shri V. Srinivasan), it would not have been possible to come out with this Report in such a short time.

This Human Development Report, therefore, is the culmination of the team effort of Government officials, of experts and of a large number of other dignitaries. It is a report of Government of Maharashtra. But in a sense, it is unique, that it does not reflect the opinion and views of the Government of Maharashtra alone. Rather, many of the critiques are directed towards itself. We hope that all concerned will look at this Report in that constructive spirit and will help in bringing into sharper focus the need for change in the policy paradigm to usher in a more humane and egalitarian society.

A SOKE BASAK  
Ex-Principal Secretary,  
Planning Department and  
presently Additional Chief Secretary,  
Home Department

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# HUMAN DEVELOPMENT CONCEPT AND MEASUREMENT





# Human Development: Concept and Measurement

Conceptually, Human Development is the combination of people's entitlements and actual attainments in the crucial aspects of their lives: education, health and livelihoods. Taken together, these three elements form the everyday experience of—and even an unremitting struggle for—'development'. It is true for all people as individuals and also members of a community, a State or the nation. It is, then, the sum of outcomes relating to schooling, health services and quality of life—chances such as life expectancy and nutrition and importantly, income. This revolves critically around access and the quality of services available. With respect to incomes, it is a question of a secure and adequate and above all, sustainable livelihood and the quality of consumer choices that flow from it.

Human Development has been defined as the 'process of enlarging people's choices'. The most critical ones are those that enable one to lead a long and healthy life and in the process to be educated and to enjoy a decent standard of living. Additional choices include political freedom, guaranteed human rights and self respect. The key dimensions of human rights include promotion of gender and economic equity, social and cultural rights, particularly those pertaining to healthcare, food, water, education, environment and culture.

In 1990, the United Nations Development Programme (UNDP) launched the first Human Development Report (HDR). It was pioneered by Mahbub ul Haq and Amartya Sen. These HDRs have stimulated discussions world-wide leading to what is now called the 'human development movement' which includes international and national governments, policy makers, planners, opinion leaders, parliamentarians, media, NGOs and various members of civil society.

HDRs propose composite indices that go beyond income-based measures. The Human Development Index (HDI), Gender Development Index (GDI), Gender Empowerment Measure (GEM) and Human Poverty Index (HPI) have been introduced in various HDRs since 1990. The methodology used has been evolved, taking into account the need to strike a balance between indicators that capture the complexity of human development and avoiding the inclusion of too many indicators that could produce a perplexing picture. However, despite the limitations imposed by simple indices and averages, these composite indices have helped in highlighting the need to remove human deprivation on a priority basis—a purpose for which the HDI is more suitable than only GDP as a measure.

## Human Development Reports: National and Sub-national

Many countries have brought out their National Human Development Reports (NHDRs) which have been instrumental in the shift from advocacy to action. The preparation of NHDRs has contributed to the identification and monitoring of national and sub-national human development targets, the tracking of development gaps and their impact on constituent groups, especially the vulnerable. The reports have been effective tools for the formulation of national development strategies and specific action plans and programmes, including those related to poverty reduction and towards more effective development assistance.

In India, the preparation of Human Development Reports has been pioneered at the State level. The process has brought together a wide spectrum of development practitioners from government and civil society, and has helped States that have engaged

in the preparation of the State Human Development Reports (SHDRs) in enhancing allocations to human development priority sectors. They have helped significantly in assessing the impact of various interventions, evaluating the strengths and inadequacies and mapping the road ahead.

The motivation behind the decisions of State Governments to prepare their HDRs has been the diversity and the complexity of the regions within as well as the fact that the State Governments have the mandate for action on Human Development sectors as per the Constitution.

The process of preparation of State HDRs can provide disaggregated data and indicators, enabling policy makers to identify more precisely critical requirements specific to larger sub-regions with their distinct diversities. Thus, SHDRs can help in directing and focusing public investment towards provision of basic minimum services and strengthening social capital, especially in the backward regions.

State Governments have been encouraged by the United Nations Development Programme (UNDP) and the Planning Commission of the Government of India to embark on the preparation of HDRs. The principles followed by the UNDP and Planning Commission in their co-operation with the State Governments are that:

- The analysis and contents of the HDR should be undertaken by an independent team of experts at the behest of the State Government.
- The integrity and coherence in the contents of the HDRs should have added value to the users of the HDR.
- There should be a commitment to widespread dissemination of the HDR and discussion by a variety of methods, including oral and visual means of communication.
- The preparation of the HDRs should be cost-effective.

Maharashtra too has now undertaken this exercise, concerned as it is at profiling the status of its

people, and using it to chart its future course of action.

## **Maharashtra: A Profile**

Maharashtra, located on the west coast abutting the Arabian Sea, and carved out as a linguistic entity of Marathi-speaking people, is the second largest (among India's 28 major States and 5 Union Territories) in terms of population and the third largest in terms of area. As per the Census 2001, its population is 96.8 million or 9.42 per cent of the Indian population and is spread over 307,713 square kilometres.

One among the richer States, with a per capita income that is 40 per cent higher than the all-India average, Maharashtra's income is derived more from the secondary and tertiary sectors. Agriculture has not made the State self-sufficient in food grains but the tilt towards commercial crops has given rise to a vibrant agro-processing industry though mostly limited to sugarcane, to some extent cotton and lately fruits and vegetables. This focus on sugarcane in turn has reduced the scope for equity in sharing a precious resource—water for irrigation.

Maharashtra also has the country's second largest urban population, with about 43 persons out of every 100 living in towns and cities. It has a large migrant population, of which nearly 72 per cent speak Marathi, which is the most widely spoken language. Other prominent languages are Hindi, Urdu and Gujarati.

Positioned between 16° N and 22° N latitude and 72° E and 80° E longitude, Maharashtra with a 720 km long coastline stretching from Daman in the north to Goa in the south, is encircled by the States of Gujarat, Madhya Pradesh, Chhattisgarh, Andhra Pradesh and Karnataka (refer Map). It falls in the resource development zone called the Western Plateau and Hill Regions, one of the 15 such zones into which India is divided on the basis of the agro-climatic features.

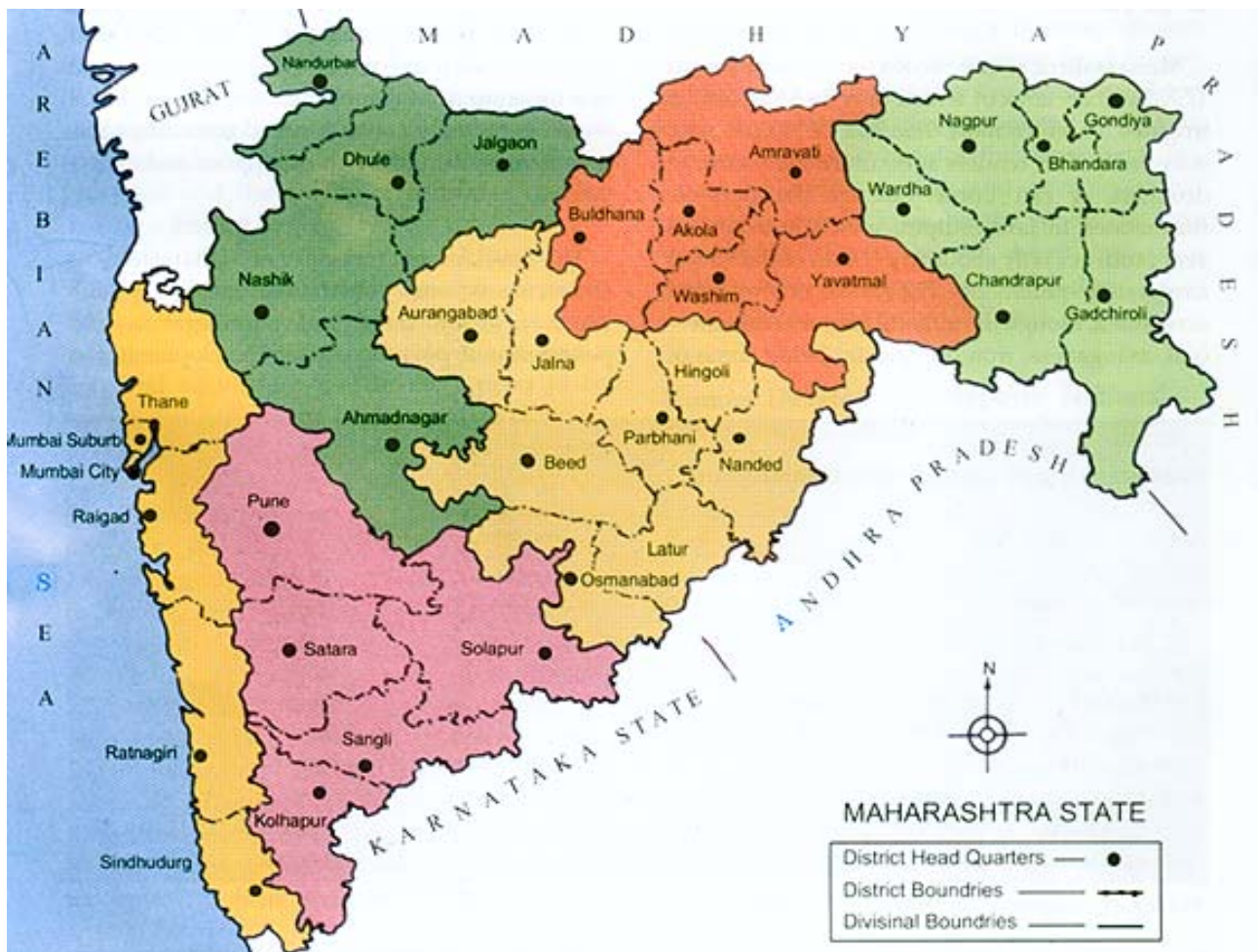
Maharashtra's topography is diverse. It is classified into five broad regional groups, historically evolved

as socio-cultural units—Greater Mumbai, Western Maharashtra, Marathwada, Konkan and Vidarbha, Mumbai being the country's prime metropolis. These regions are divided into six revenue divisions for administrative purposes. Each division has its headquarters at Navi Mumbai, Nashik, Pune, Aurangabad, Nagpur and Amravati respectively. The 35 districts are divided amongst these divisions.

Konkan division consists of Mumbai, Thane, Raigad, Ratnagiri and Sindhudurg districts on the coast where landholdings are small but more or less evenly distributed, and has no irrigation facilities worth mentioning. Nashik, Dhule, Nandurbar, Jalgaon and Ahmednagar districts with a large tribal population, with large landholdings, high level of landlessness, forests, a few fertile tracts and good rainfall comprise the Nashik division. Pune, Sangli, Satara, Kolhapur, and Sholapur districts constitute the Pune division, and have relatively lower rainfall being in the narrow rain shadow area though its smaller landholdings are served by canals and wells.

The Nashik and Pune divisions being contiguous, mesh into what is popularly known as Western Maharashtra,

Marathwada's Aurangabad, Jalna, Parbhani, Hingoli, Nanded, Osmanabad, Beed and Latur together form the Aurangabad division and are culturally well tied, all of them being from the erstwhile State of Hyderabad. The region is rocky and dry with low and uncertain rainfall, large landholdings and some landlessness. One part of Vidarbha, comprising Buldhana, Akola, Amravati, Washim and Yavatmal is administered by the Amravati division and the rest of the same region, comprising Nagpur, Wardha, Bhandara, Gondiya, Chandrapur and Gadchiroli districts, is assigned to Nagpur division. The two divisions of Vidarbha cover part of a plateau with deep black soils, assured rainfall and medium to large landholdings and high levels of landlessness. Bhandara, Gondiya, Chandrapur and Gadchiroli districts have a large tribal population and forest cover.



The State has an uneven natural resource endowment. Its soil endowment is poor in quality, being residual and obtained from the underlying basalts. Though a beneficiary of the South West Monsoon, which lasts from July to September, the rainfall is varying; it is as high as 2000 mm in the Western Ghats and some 600 mm in the plains.

Maharashtra's net sown area is around 17,732,000 hectares of which only 14.5 per cent is irrigated, of which more than half i.e., 55 per cent, is by wells. This renders agriculture vulnerable to droughts, a fact borne out by the periodic fluctuations in farm output, which in a normal year produces only about 90 per cent of the State's food grain requirements. The rural economy is not diversified, though the mineral base is abundant—coal, manganese, iron ore and tin being some of the important minerals. The mineral belt stretches across Chandrapur, Gadchiroli, Bhandara and Nagpur districts. Ilmenite is found in Ratnagiri district.

Mumbai, Maharashtra's capital city was once the icon of industrialisation in the country. With the decline of manufacturing, it is now instead the principal financial centre and a major commercial hub of the country. A maritime state, Maharashtra has five districts along the coast with two major

ports, Mumbai and Nhava Sheva; the first is in the city of Mumbai and the other across the harbour in Raigad district.

An inter-State comparison of key indicators across some major States reveals that Maharashtra's high income level has not been matched by its attainments in social development (Table 1.1). The State has performed better than a few other states but has some distance to cover before it catches up with the others. However, this Report is a measure of Maharashtra's own status and it would expectedly march forward according to its own genius, using its rich experience and expectations.

The development trajectory of Maharashtra, its endowments and constraints, including high urban primacy, large scale in-migration and persistence of poverty, uneven development and spread of social and economic gains, has been documented in this Report. Human development, in addition to improving human welfare directly, is an excellent investment in terms of the contribution it can make to economic growth. For this, the pattern of economic growth is important in that it has an impact on distribution of incomes. Reduction in income poverty and redistribution of physical assets help in improving productive capabilities of the poor,

**Table 1.1**  
**Maharashtra in a Comparative Framework**

No. State	Life expectancy at birth 1996–2000		Percentage of population below poverty line (30 day recall period)	1999–2000 Per capita Net State Domestic Product (Rs – current prices)	1998–99 Literacy Rate (per cent) 2001
	Female	Male			
1 Maharashtra	68.19	65.31	25.02	22763	77.27
2 Karnataka	63.36	61.73	20.04	14909	67.04
3 Punjab	71.40	68.39	6.10	20463	69.95
4 Gujarat	62.77	61.53	14.07	18792	69.97
5 Madhya Pradesh	57.21	56.83	37.43	10507	64.11
6 Goa	n.a.	n.a.	4.40	n.a.	82.32
7 Tamil Nadu	67.58	65.21	21.12	17349	73.40
8 All India	63.39	62.36	26.10	15562	65.38

Sources: (1) Government of India, 2001; (2) RGI, 2001.

enhance their ability to access basic services and participate as empowered citizens.

In short, economic growth by itself, though necessary, is not a sufficient condition for human development attainment. Despite its higher level of economic growth and being one of the higher-income States with growth rates that exceed that of several States, in terms of Human Development Index (HDI) Maharashtra was ranked third among 17 States in 1991 with a HDI value of 0.532.

### **Maharashtra Human Development Report: Purpose and Focus**

Existing levels of human deprivation in Maharashtra need to be seen both as a challenge and an opportunity for focused action by the Government to eliminate them. It is important to note that the human development approach offers a comprehensive framework that goes beyond a mere sectoral and/or departmental mode of action.

The Maharashtra HDR attempts to assess and explain the status of human development in the

State and helps articulate policy implications. Conforming to the dimensions of human development, issues related to population, poverty, education, health and nutrition and gender have been analysed in separate chapters. Gender and people's participation issues have also been considered as crosscutting themes. It may be noted that this Report is an overview intended to galvanise public debate. As such it does not claim to offer a comprehensive analysis of issues such as urban poverty, informal sector livelihoods, forestry and environment, etc., which could be covered in subsequent documents.

In the Report, analysis moves from the State to the district level, highlighting issues related to data gaps, data comparability and availability. The structure of the Report has evolved considering main questions raised in a consultative dialogue with various partners, taking into account the concerns of the people of Maharashtra.

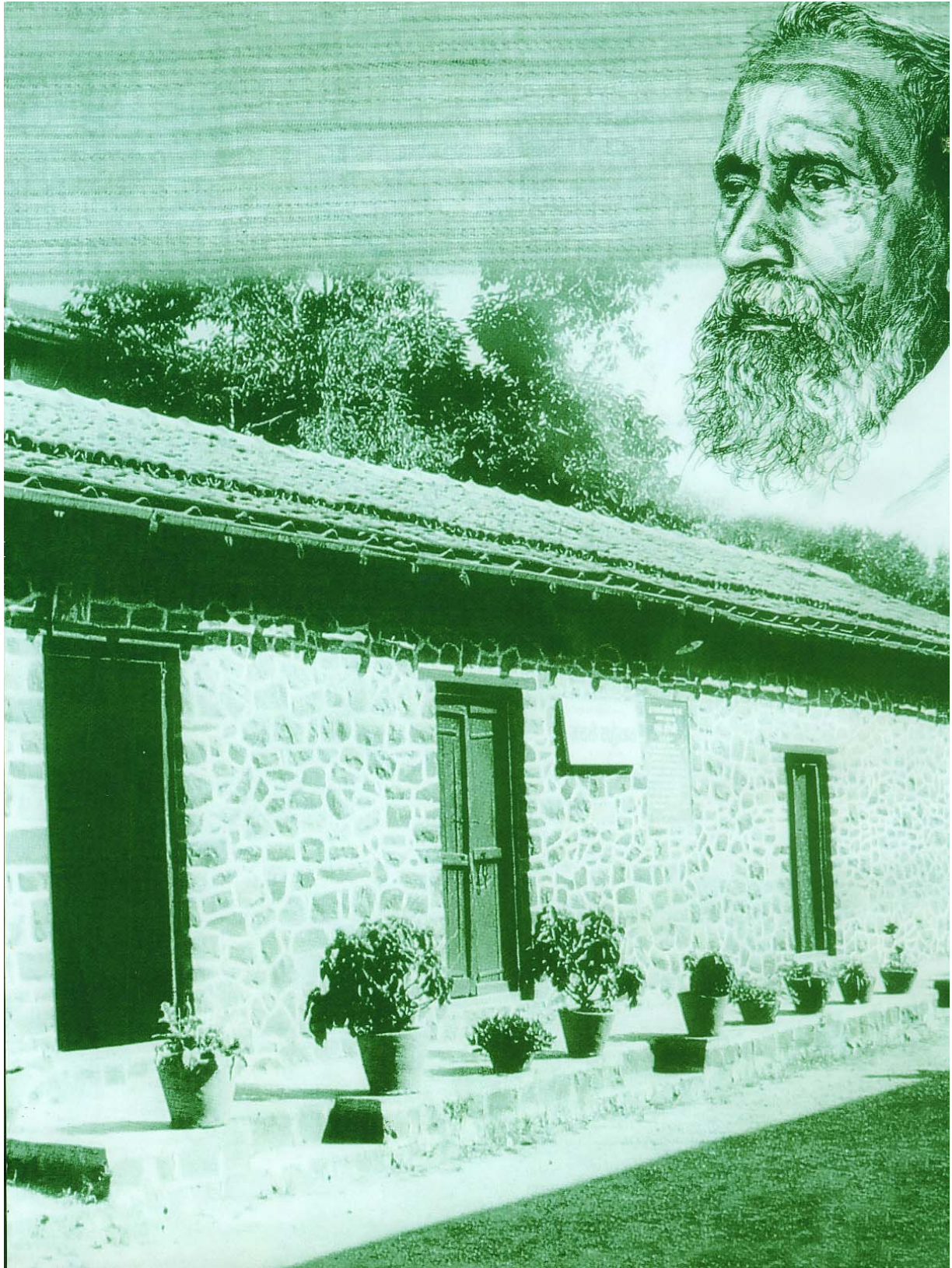
This document is expected to promote deeper understanding of the challenges and opportunities for human development action and sustainability of the challenges that have been met since the formation of the State of Maharashtra.

Chapter II →



## RICH HERITAGE





## Rich Heritage: A Guide to the Future

**M**aharashtra is not a mere geographic expression or just faceless numbers, but an entity built out of centuries of collective effort of its people, backed by a culture and ethos that is distinctly its own. Maharashtra has its own spiritual dimension, having spawned saint after thinking saint, some of them like Sant Dnyaneshwar who walked the land some 700 years ago. There have been landmarks like the rebellion against restrictive social norms by Mahatma Jyotiba Phule, who opened the doors of development and social justice to the disadvantaged masses in the middle of the 19th century which, in turn helped shape the later mass movements towards equity.

Maharashtra's political identity was established with the emergence of Chhatrapati Shivaji, who organised the people both politically and militarily. The saints of that time, while offering their spiritual contribution, helped the cultural awakening of the region as well; they preached common wisdom as well as helped spread nationalism. That was the time when building of a new administrative system energised the people. It was not for nothing that Shivaji was called the *jaanataa raja*, a 'knowing king'. After all, he added value to the lives of the people.

### Pro-People Concerns

In 1676, two years after his coronation, a letter from the Chhatrapati to the Subedar of Prabhavali had said:

*Go from village to village. Conduct meetings with farmers and take stock of the prevailing situation. Determine whether farmers have the capability and the human resources for cultivation of land. Those who have the capability and the manpower*

*but do not have the necessary agricultural implements, bulls, or do not have adequate food grains for sustenance can be provided with funds to purchase 2–3 bulls and a few sacks of grain. Once the farmers attain a certain level of self-sufficiency, the principal amount of funds given to them can be gradually recovered. In this effort, even if 2,00,000 laris (Rs 40,000 today) are spent, as long as wasteland is brought under cultivation, taxes increased and farmers made self-sufficient, such expenditure is acceptable to us.*

The Subedar was not to remain at his seat of power but travel to villages, keep in touch with the people and give instructions for the benefit of the State.

The letter to the Subedar of Prabhavali helped design a win-win strategy for both the State and the people. Foregoing loans, former wastelands were brought under the plough, farmers earned their livelihood and the State obtained its revenue after a gap of time—investment in the future by the wise ruler. Welfare was the cornerstone of the principles that guided the Chhatrapati's approach to the people. His intent and purpose was to create a new order, sensitive to the needs of the common people. Latter day social reformers and political leaders drank at the fountain of his wisdom.

### Social Justice and Equity

It is from this sense of social justice and equity, which continues to underscore the intent of the policy makers in Maharashtra even today, that the land reforms became a common slogan leading to the fine-tuning of tenancy laws between 1957 and 1965. *Watandari* system was abolished. This could have happened only in Maharashtra, which by March

2000 saw 1.49 million tenant-farmers getting ownership in respect of 1.73 million hectares of land. The next step was the ceiling on agricultural holdings in January 1962, the ceilings being revised and lowered in 1975, with surplus lands to the extent of 0.26 million hectares being allotted to 0.14 million landless persons, all of which led to an increase in the number of holdings. The development of these lands attracted help from the State so that the neo-owner did not suffer a handicap.

The link with history is clear, especially when one sees other States following with their own laws, converting their slogans into positive conclusions. Not surprisingly, Maharashtra recorded more than 10 per cent of the total achievements in India in managing surplus lands. Subsequent political and social leaders were inspired by Shivaji's approach, which was one of humane development. The vision was that of a society in which the status of women was valued and the welfare of the poor, regardless of caste and religion, had to be given priority.

### **Building Social Capital**

Maharashtra extracted much from the period commencing from the entry of the British into India and the impact on the emerging political thinking and social reforms of that time. The learning experience was not confined to the spheres of politics and social justice but also in the field of industry. Seen in the context of current phases of globalisation, this was a new phase of building social capital in Maharashtra.

A modern civil society—organised citizens expanding the limits of freedom against the existing social norms and State laws—emerged to see two distinct streams of activity stimulated by British rule. Pune, the erstwhile seat of Peshwa power, was witness to the emergence of an organised political thought opposed to British rule. It also saw social reform movements take shape and grow. Nationalism and social reform developed parallel to each other, rarely converging and co-operating and often critical of one another. Maharashtra benefited from both.

### **Activism**

It was not accidental that most social and political activists began their work by opening schools, starting from one for girls—the first of its kind in the country—established in 1848, signifying that formal education and support to women was the foundation of social change. These initiatives inspired even princely States of those times to absorb in their domain such radical ideas into policy. As far back as in 1902, Kolhapur State reserved 50 per cent of all jobs for the backward classes and gave unhindered entry to 'untouchables' into schools. Notes by reformers of those times on effective running of schools could well be models for today.

When Mumbai became the industrial hub of the country, indigenous entrepreneurship rose in Western Maharashtra at the start of the 20th century: the first iron plough was produced. The first railway in India ran in what is today Maharashtra. The first textile mill too was built in Mumbai in 1874. Later, industrial activity gained in the hinterland, with even smaller princes providing patronage and support. Organised industry grew, mostly in and around larger urban areas, generating a large working class that later affected the course of social and political movements, including the birth of trade unions. Industrial workers were gripped by a new, larger consciousness beyond the immediate to become an integral part of the Indian Independence movement. They created a new stream of activists who were sensitive to class issues in addition to the caste issues of social and economic justice

If grassroots activism sustained movements, other civil society contributions came from a host of writers who dealt with social and political issues. Marathi theatre also took its cue, using mythological stories to communicate anti-British messages. The strong, reformist movement shaped many a leader who later came under Mahatma Gandhi's sway and played a tremendous role in shaping politics which was given a constructive social justice orientation. This platform, enriched by the freedom movement, helped build Maharashtra's vision of all-round development. The subsequent Samyukta Maharashtra Movement,

which successfully saw the bringing together of all Marathi speaking people living in contiguous areas into Maharashtra State, was a realisation of the fervent articulation of the literary people. It took just three turbulent years to acquire a full political dimension. The movement reached remote villages through political, social and cultural channels and did not limit itself to formation of a linguistic State but revived the agenda for social and economic justice. One major contribution of that campaign was the creation of a number of young, educated activists from the peasantry who later came to govern Maharashtra at different levels. Some of them remained in the Opposition, agitating continuously for social and economic justice.

If issues of land and water and economic justice had a strong political content, gender issues somehow stayed in the social domain. However, women played an active role in the Independence movement and post-1947 social movements. More recently reservation for women in Panchayati Raj institutions and Urban Local Bodies has also enhanced their political participation.

### Resource Optimisation

Land and irrigation, however, have been major areas of interest as well as concern for both the State and the people, both being related to productivity of the land as well as livelihood. Often droughts are the biggest concern for a State with an over-stretched agricultural resource base. In this context, Maharashtra would have been expected to focus on irrigating its lands rapidly. Even as growth in this sector was slow, civil society was also increasingly aware. Since 1975, there has been some movement toward optimising use of irrigation and ensuring equity. There have been several experiments that caught the imagination of even the Administration, ranging from *Pani Panchayats* (water co-operatives) concept where everyone has a right to water, to water conservation to recharge the underground aquifers. People have even built their own dams by capitalising on the availability of sand in a riverbed and planned equitable distribution of harvested water, not based

on landholdings individuals but as an entitlement even for the landless.

There has been no collaboration between the Government and Non-Government Organisations (NGOs) on two kinds of projects. In water conservation projects where bunds along contours arrest rainwater run-offs to charge village wells, funds have come from the exchequer and skill and effort from the people catalysed by voluntary agencies. With regard to Water Users' Associations (surface irrigation systems managed by NGOs for equitable distribution amongst the entitled of the canal), the Government acknowledged its usefulness and now as a policy would like all future distribution to be done by the users themselves.

### Grassroots Networking

Co-operatives in Maharashtra are perhaps the best example of people's initiatives and the State's facilitation coming together for the larger common good. In a situation where ambition and finances are mismatched but the drive exists, co-operatives are a critical aspect of economic decentralisation. Though the British Government adopted the Co-operation Act in 1904, its impact was felt after the formation of Maharashtra when political leadership actively promoted them and created mechanisms to provide critical financial inputs. Co-operatives are not limited to the sugar sector, though politically it is the most revered and dominant, but encompass dairying, poultry, fisheries and spinning mills. Co-operative credit institutions too began to grow since the 1970s

This movement played a vital role in creating major rural assets, which in turn triggered investments in higher education particularly in the rural areas. Not just rural credit but agro-processing, agro-marketing, consumer stores influenced life there. The movement includes co-operative housing, which is the norm in urban areas, is not only spectacular but unique, its success rooted in traditions of volunteerism. Slum-dwellers, who have no legal right to the lands occupied by them, too have moved to form co-operatives in initiatives supported by the State to

build improved habitation for themselves though this has had a very limited success. Even a sick industrial unit in Mumbai was taken over by a co-operative of employees. Though these two are not phenomenal successes, they certainly have a value in the effort itself.

The catalogue of inspiration and deeds can go on but at times, there are moments in the course of

a State's history when the need arises for stocktaking and a fresh look at the way things are done, or not done. Assessing the gains made, quantifying the shortfalls, enumerating the difficulties and finding solutions is a constant challenge. Perhaps one such moment to reflect is now, and the Maharashtra Human Development Report is an attempt in this direction.

[Chapter III →](#)

[← Contents](#)



## POPULATION TRENDS AND PROSPECTS





## Population: Trends and Prospects

It shocked even urban sensibilities when R.D. Karve, teaching in a Mumbai college, willingly suffered slights heaped on him by the community that considered him a maverick far removed from reality. Undaunted by this disapproval, often ridicule, Karve set up the country's first birth control clinic in 1921 in Mumbai, easily the most liberal city of even those times. He strove to educate people on birth control by use of contraceptives as a means to ensure the welfare of women and children.

He campaigned diligently, having spent his life educating women on issues of birth control, which to him was a sure path to their emancipation. He dealt with the issue of sexually transmitted diseases as well. He did not waver despite stiff opposition and till recently, his work went unrecognised. Though a non-official legislation supporting a State policy for birth control found support from B.R. Ambedkar, even that was defeated by the view that birth control was to be achieved by abstinence and self-control. This issue was to affect Maharashtra for a number of years even after Independence.

Awakened to the emerging realities, the city's Municipal Corporation too took a pioneering step, allowing family planning clinics to be set up in two of its maternity centres. By then, the realisation had begun to strengthen that mothers having too many children far too frequently, especially during the start and the middle of their reproductive age was detrimental to them and their families' health. With the civic body's move came perhaps the first official recognition and patronage, probably quite well in time, to the striving for smaller families. That the clinics remained largely under-utilised is another story; many a woman did not even believe planning a family was possible at all.

The Government of Maharashtra's family planning programme was launched ten years after the Municipal Corporation of Bombay's path-breaking effort, to bring the issue of birth control into the larger public domain. Another decade later, it was handed over to *Zilla Parishads* (District Councils) guided by the premise that decentralisation would accelerate the pace of implementation. Maternal and Child Health Services were integrated with the family planning programme, christening the entire approach 'Family Welfare'. It was characterised, as developments later showed, by massive participation of women who were relatively more willing to accept the methods on offer. The participation of men was restricted to the fringes, a feature not unique to Maharashtra.

### Achievements

Cash awards of Rs 25 million each for family planning achievements were given to the Government of Maharashtra for two successive years, 1982–83 and 1983–84. It touched a new high in 1990–91: 5,25,000 sterilisations against the target of 5,75,000 set by the Government of India. This 91 per cent realisation was the highest among the 15 major States. In the 25 years since 1967, more than half the couples came to be protected by family planning methods; 10 million sterilisations and about five million insertions of intra-uterine devices (IUDs) were recorded. The subsequent ten years' efforts culminated in another 5.1 million sterilisations.

During the first twenty-five years of family planning, Maharashtra spent Rs 5,750 million on the Family Welfare Programme. Expenditure from 1993–94 to 1998–1999 was also substantial: Rs 9,024.5 million with an estimated expenditure

for 1999–2000 being Rs. 1,707.1 million. For the subsequent year, the estimate is of Rs. 1,577.7 million.

## Second Most Populated

Eighty years after Maharishi Karve's pioneering work and subsequent massive public expenditure, the 2001 Census of India put the total population of Maharashtra at 96,752,247, which is 9.4 per cent of India's population. This makes Maharashtra the second most populated state after Uttar Pradesh among 28 major States. The silver lining, however, is that Maharashtra's contribution to the total is only about half of UP's 16.2 per cent. It is also about equal to what Bihar provided. In 40 years since its formation on a linguistic basis, Maharashtra's population had increased from 39.6 million to 96.7 million, the first three decades actually seeing the population double itself. The fourth decade was witness to an addition of another 18 million people. This addition is equal to the entire population of Jammu & Kashmir and Uttaranchal. The 40 years accounted for an increment equal to a little more than Rajasthan's present population.

The population scenario in Maharashtra is not rosy because of a growth rate that now hovers above two per cent. Government's efforts at curbing population by massive spending on programmes have been negated by the prevailing social norms that would have to be overcome to reduce the population growth rate. As teenage fertility is a vexing issue, the success of population control programmes would depend critically upon better governance aspects such as effective enforcement of laws pertaining to the minimum age for marriage.

## Troubling Features

The 2001 Census revealed several troubling demographic trends in Maharashtra. The density of population increased by more than two and half times from 129 persons per sq. km in 1961 to 314 persons in 2001. The 96.8 million size of the population is substantially more than the 92.9 million projected by the Population Foundation of India. The Expert

Committee's projection was much lower at just 91 million. Two other grim projections indicate that Maharashtra may well be host to anything between 123.6 million and 127.4 million people in 2021.

## Rural-Urban Mix

Being an almost even mix of the rural and urban, one assumption was that Maharashtra would benefit by a combination of industrialisation, higher income levels and history of social reform focused on woman's uplift and empowerment. The hypothesis was that it would leave its distinct positive imprint on population trends, that urban values and compulsions would bring about a favourable inclination towards smaller families. Despite 42.4 per cent of the population living in towns and cities, both growing in numbers, size and population densities, this did not happen.

Urbanisation attracted migrants who added the numbers, especially to that of Mumbai and other major cities. Mumbai, Thane and the region around urban Nagpur gained in population. Nearly half the population is in these urban areas and Pune division.

Maharashtra could not sustain a decline in fertility; fertility rates alone have the potential to make a difference between what is and what can or should be. Implications of smaller families for the health of the entire family, especially women and children, the consequent possibility of conserving the family's resources to spread it optimally on all children towards their education and well-being, seems to have been ignored. In fact, the percentage of couples exposed to specific family planning messages relevant to their use or situation—a key, initial input in the battle against burgeoning numbers—is far lower for Maharashtra in comparison to some other States including, notably, Kerala and Tamil Nadu, though it is better than in Andhra Pradesh and West Bengal.

During the Second National Family Health Survey, women's knowledge regarding different methods of family planning was assessed. It was found that 99 per cent of them only *generally* knew of at least one modern method of avoiding conception.

Queries on exposure to family planning messages list if a woman saw or heard a message on family planning from specific media like radio, television, cinema, newspaper, wall painting or folk dance etc. However such a message originating from any media is just one way of getting the relevant information. By and large, people came to know about family planning through *interpersonal* communication or by reading articles, etc., though they *may not give* a specific message.

### Impact of Migration

Migration to urban areas from other States and from within Maharashtra has left its impact on fertility since those from backward regions bring their social norms with them. They also seem to bring a preference for sons, early marriages and even teenage motherhood. Sex-selective migration, with many migrants leaving behind their families, has a depressing effect on fertility but the second stage of migration when earlier migrants bring their families to live with them changes the situation. Since most migrants come from rural areas of particularly less advantaged districts within the State or from other States, we witness a remarkable ruralisation of the urban areas, weakening the effect of urbanised demographic trends. Table 3.1 indicates the magnitude and trends of migration in Maharashtra, in term of its share in the overall population increase.

For instance, in Dharavi, Asia's biggest slum—a dubious distinction for Mumbai and Maharashtra—in the heart of Mumbai, a woman gives birth to 1.3 more children than an average woman in a non-slum area of the same metropolis. Box 3.1

shows that the trends in slum areas slow down fertility decline. The total fertility rate of 2.69 in the slums is only slightly lower than the 2.74 recorded for rural Maharashtra. One third of the births to mothers in slums are of a third or a higher order birth. For the rural population, this percentage is 43 while for the non-slum population in Mumbai it is about 25 per cent.

Rural and urban Maharashtra together did register a relatively lower decadal population growth between 1991–2001 at 22.6 per cent compared to 25.7 per cent in 1981–91. But it is much less than the impressive gains made in the four southern States of Kerala, Tamil Nadu, Andhra Pradesh and Karnataka, and even Goa; the growth rate of below two per cent has been eluding Maharashtra. It is alarmingly poised well above the country's exponential growth rate of

#### Box 3.1

#### Fertility Rates: Rural vs. Urban

Urbanisation has helped check population growth rates. As per NFHS data, urban fertility is much lower than rural fertility. But in Mumbai despite 100 per cent urbanisation, it is not as low as one would expect it to be.

According to NFHS-2, the total fertility rate of rural Maharashtra is 2.74. For urban Maharashtra other than Mumbai, it is 2.24, and for metropolitan Mumbai, 2.13. Within Mumbai, it is 2.69 for slum areas; for the non-slum areas it is 1.40, underscoring how fertility in Mumbai has not declined to the expected level because of relatively higher fertility in slum areas where about half of Mumbai lives.

Table 3.1

### Contribution of Net Migration to Population Growth in Maharashtra

Year	Annual Exponential Growth Rate (per cent)	Annual Natural Increase Rate (per cent)*	Annual Nett Migration Rate (per cent)	Net Migration as Per Cent of Growth	Estimated Net Migrants Per Year (million)
1981–91	2.29	2.06	0.23	10.0	0.16
1991–2001	2.04	1.65	0.39	19.1	0.34

\* Based on the difference between average Crude Birth Rate (CBR) and Crude Death Rate (CDR) for the two decades (based on the moving averages of CBR and CDR from SRS data from 1981–1999).

Source: Office of the Registrar General, Government of India, Sample Registration System.

1.93 per cent, which had declined from 2.14 per cent in the previous decade. Female sterilisation and use of IUDs—the predominant birth control method—did not help reduce fertility rates. The net migration rate too moved up from 10 per cent in 1981–91 to 19 per cent during 1991–2001. Table 3.2 indicates the steady increase in indicators pertaining to Maharashtra’s population size, density and rate of growth between 1961–2001.

### Infant Mortality and Teenage Fertility

Infant mortality rate (IMR) is also relatively high at 48 deaths per 1000 live births—a far cry from Kerala’s IMR of 14. It varies between 58 in the rural and 31 in urban areas, the gap itself indicative of the availability of education, health care and their access to people. Or, seen the other way, the people’s ability to access them.

Statistically, a woman in Maharashtra during her productive span of life gives birth to 2.7 children. Most women complete their childbearing by the time they are 35. A quarter of the contribution comes from teenaged mothers, some delivering their first child by the time they are merely 15. Mothers between the ages of 20 and 24 years contribute 40 per cent, which is the highest for all age groups. This highlights the alarming prevalence of marriages before the legally permissible age for girls, with all its negative implications of poor health of the mother and the child, resulting even in infant deaths.

High order child bearing, apart from early mar-

riage of girls, also means that there is low use of spacing methods, late sterilisation, high preference for sons and lower use of antenatal and natal services. Mothers who were illiterate or came from poorer families lost more children during birth and up to five years of the child’s life than those who had at least high school education or had better standards of living.

### Declining Sex Ratio

A declining sex ratio in the population is also strongly suggestive of the neglect of girl children and sex selective abortions where available medical services are used to realise two goals: a small family and more importantly, compliance with the persistent traditional attitude that favours a son. Not only has this preference for a male child led to a later acceptance of contraception but also to sex determination tests and eventual foeticide. To combat this practice, sex determination tests were banned, but the impact of this ban is yet to be assessed. The relatively better sex ratio in the remote tribal areas is one indicator of a positive bias in favour of girls.

### Alarming Status

Alarmed at this demographic status, a Study Group set up by the State Planning Board in 1992 recommended a broad sweep of policy options to curb the pace of population growth. Principally, it sought new incentives and simultaneous disincentives to encourage vasectomies and sterilisations after one or two children.

Table 3.2  
Population Growth and Density in Maharashtra, 1961–2001

Year	Total Population (million)	Absolute Decadal Increase (million)	Per Cent Decadal Increase	Change in Percentage Decadal Increase	Density (persons per km <sup>2</sup> )	Increase in density
1961	39.6	–	–	–	129	–
1971	50.4	10.8	27.3	–	164	35
1981	62.8	12.4	24.6	–2.7	204	40
1991	78.9	16.1	25.6	+1.0	257	53
2001	96.8	17.9	22.7	–2.9	314	57

Source: Office of the Registrar General, Government of India, Census of India, 1961, 1971, 1981, 1991, and 2001.

In 2001, the Government of Maharashtra announced its New Population Policy with the goal of reducing:

- Total Fertility Rate from 2.7 in 1997 to 2.1 in 2004 and 1.8 in 2010.
- Crude Birth Rate from 22.5 in 1998 to 18 in 2004 and 15 in 2010.
- Crude Death Rate from 7.7 in 1998 to 6.4 in 2004 and 5 in 2010.
- Infant Mortality Rate from 49 in 1998 to 25 in 2004 and 15 in 2010.
- Neonatal Mortality Rate from 33 in 1996 to 20 in 2004 and 10 in 2010.
- Maternal Mortality Rate from 310 in 1998 to 150 in 2004 and below in 2016.

These objectives were to be realised by various specific interventions linked to acceptance of a small family norm.

In any developing society decline in mortality precedes decline in fertility. According to Census Actuaries, Maharashtra had a death rate of 19.8 per thousand during 1951–61 and dropped to 17 during the next decade. As per Sample Registration System (SRS) data during the 18 years from 1971 the death rate declined further, to 7.5 per thousand from 12.3—a huge drop of 39 per cent—with the major decline of 24 per cent occurring between 1971 and 1981.

There is a wide gap between the crude death rate in rural and urban areas. In 1999, CDR was 8.7 in the rural and 5.6 in urban areas. To start with, the rural CDR in Maharashtra in 1971, for instance, was 13.7 and declined by 36 per cent in three decades. The urban CDR, however, declined by 41 per cent during the three decades after 1971 to 1999 but among the three decades, the last since 1991

### Box 3.2

#### The New Population Policy

When announcing the New Population Policy on 9 May 2001, the Government of Maharashtra put to the fore the reasons why the policy was formulated. In 60 years from 1901, the population of areas that now constitute Maharashtra had doubled. But in 30 years since 1961, it had doubled again. Of the several reasons the main was marriage of girls at an early age and preference for the male child.

The policy stressed the need to vigorously implement the existing laws under:

- The Child Marriage Restraint Act, 1978
- The Pre-natal Sex Determination Act, 1994
- Registration of Births and Deaths Act, 1969
- Energetic activation of the Women's Policy
- Provision of free education to girls.

As a disincentive, eligibility from 1 May 2001 for contesting to get elected or being appointed/nominated to Zilla Parishads, Panchayat Samitis, civic bodies from Municipal Corporations downwards, Government-owned corporations, co-operative societies, district co-operative banks, milk

producers' unions, etc., was restricted to those who have not more than two children. This was aimed at awakening the people to the need to restrict the size of the family as an ideal.

Gram Panchayats slowing substantial gains in restricting births get financial support for wells, public toilets, repairs to Gram Panchayat offices, school buildings and roads.

The Savitribai Phule Kanya Kalyan Yojana was revised to focus on couples below the poverty line and linked to the education of girls and their age at marriage. Couples under 40 years of age but with only one daughter and who opted for either a sterilisation or vasectomy become eligible for a Fixed Deposit in the girl-child's name till she attains 18 years of age. If the girl child completes her education up to the 10th Standard, she becomes eligible for another Rs 5,000 in a Fixed Deposit for another five years but encashable only if such girls marry after their 20th year. If the couple decide on sterilisation or vasectomy after two female children, the FD is limited to Rs 5,000 in the first instance but the post-10th Standard reward is unchanged.

contributed very little i.e., 1.8 per cent to this decline. (Table 3.3.)

**Table 3.3**  
**Mortality Transition in Maharashtra**

Years	Crude Death Rate			Infant Mortality Rate		
	Total	Rural	Urban	Total	Rural	Urban
1971*	12.3	13.7	9.5	101	109	81
1981*	9.4	10.5	7.1	75	84	52
1991*	7.8	9.0	5.7	59	67	41
1999	7.5	8.7	5.6	48	58	31
per cent decline						
1971–81	23.6	23.4	25.3	25.7	22.9	35.8
1981–91	17.0	14.3	19.7	21.3	20.2	21.2
1991–99	3.8	3.3	1.8	18.6	13.4	24.4
1971–99	39.0	36.5	41.1	52.5	46.8	61.7

\* Based on moving averages of SRS rates of the given year, previous year and the following year.

Source: Office of the Registrar General, Government of India, Sample Registration System.

### Wide Differential

Within Maharashtra the urban-rural differential too is wide. Though Maharashtra is ranked second among the major states with an infant mortality rate (IMR) of 48 per 1000 live births in 1991, it has been only 14 in Kerala. The rural and urban IMR

in Maharashtra is high, it being 58 for the former and 31 for the latter. If there are any changes in the variation in Maharashtra, they are only adverse. In 1971, the rural IMR was higher by almost 35 per cent than the urban IMR but has now become almost twice that. The urban IMR declined by 62 per cent in three decades while the rural rate declined much slowly by 47 per cent.

During the five years preceding 1999, IMR stagnated at 44 compared to the rate of 62 five years earlier. It was mainly due to the 36 per cent decline in post-neonatal mortality than deaths during the first month after birth. During these years, the rural IMR declined from 77 to 51 but in the urban areas, it remained more or less stagnant, dropping from 36 to just 33. The child mortality level, however, was much lower at per 1000 in 1999. More children were lost by illiterate mothers—63 per 1000 live births—than mothers who had at least high school education; their IMR was just 27. A similar differential is found between mothers from households with lower standard of living and those from a higher standard: 69 and 29.

While estimates of Census Actuaries indicate a birth rate of 39.6 per 1000 during 1961–71, the later National Family Health Surveys showed a decline to 32.2 between 1971 and 1997. During

**Table 3.4**  
**Phases of Fertility Transition in Maharashtra**

Phase	Year	CBR			TFR		
		Total	Rural	Urban	Total	Rural	Urban
I. Decline in CBR and TFR 1971–77	1971 (SRS)	32.2	33.7	29.0	4.6	4.9	3.0
	1977 (SRS)	26.2	26.8	25.0	3.4	3.5	3.1
II. Increase in CBR and TFR 1977–84	1984 (SRS)	31.1	32.1	29.3	3.8	4.1	3.3
III. Decline in CBR and TFR 1984–91 and further	1991 (SRS)	26.2	28.0	22.9	3.0	3.4	2.5
	1989–91 NFHS-1	26.7	28.4	24.4	2.9	3.1	2.5
IV. Further decline	1997 (SRS)	23.1	24.4	21.0	2.7	3.0	2.3
	1998–99 NFHS-2	23.0	23.8	21.6	2.5	2.7	2.2
	1999 (SRS)	21.1	21.6	20.3	n.a.	n.a.	n.a.

Sources: 1. Office of the Registrar General, Government of India, Sample Registration System.

2. Population Research Centre, Gokhale Institute of Politics and Economics, Pune and International Institute for Population Sciences, Mumbai (1992). National Family Health Survey 1991–92, Maharashtra.

3. International Institute for Population Sciences, Mumbai and ORC-MACRO, USA. National Family Health Survey-2, 1999, Maharashtra, (unpublished).

Table 3.5

### Age Specific and Total Fertility Rates and Crude Birth Rates from NFHS-1, NFHS-2, and the SRS by residence

Age-Group	NFHS-1 (1989–91)		NFHS-2 (1996–98)		SRS (1997)		
	Total	Urban	Rural	Total	Urban	Rural	Total
15–19	0.141	0.094	0.156	0.129	0.036	0.066	0.054
20–24	0.227	0.185	0.254	0.223	0.200	0.278	0.245
25–29	0.132	0.111	0.101	0.106	0.144	0.164	0.155
30–34	0.053	0.045	0.026	0.034	0.054	0.066	0.061
35–39	0.012	0.014	0.010	0.012	0.019	0.023	0.021
40–44	0.006	0.000	0.000	0.000	0.006	0.007	0.007
45–49	0.000	0.000	0.000	0.000	0.002	0.003	0.002
TFR 15–44	2.86	2.24	2.74	2.52	2.30	3.02	2.72
TFR 15–49	2.86	2.24	2.74	2.52	2.31	3.04	2.73
CBR	26.3	21.6	23.8	23.0	21.0	24.4	23.1

*Note:* Rates from NFHS-1 and NFHS-2 are for the period 1–36 months preceding the survey. Rates for the age group 45–49 might be slightly biased due to truncation. Rates from the SRS are for one calendar year. Age-specific and total fertility rates are expressed per woman.

*Sources:* 1. Sample Registration System, Office of the Registrar General, 1999.

2. Centre for Operations Research & Training, Vadodara and International Institute for Population Sciences, Mumbai, 2000, National Family Health Survey-2, Maharashtra Preliminary Report.

the same period, the total fertility rate (TFR) declined from 4.6 to 2.7—a 41.3 per cent drop. But this substantial change in both the crude birth rate and the total fertility rate during the period 1971 to 1977 was neutralised—actually what was seen was a set back—till 1984 due to the over-enthusiasm of the machinery chasing statistics during the Emergency by every means. The CBR reverted to 1971 levels in 1984. The fertility rate at 3.8 though higher than the 3.4 recorded in 1977 was lower than 4.6 recorded in 1971. The change was seen in both rural and urban areas.

### Sterilisations

Merely the sterilisation numbers do not necessarily have a linear correspondence with a decline in Total Fertility Rate (TFR). It depends on the age at which sterilisations are performed and the number of children already produced before accepting sterilisation. If accepted by most of the couples at a later age and after 3–4 children are born, then it has a much lower impact on fertility. The link between achievements of the programme and fertility impact had become so weak in Maharashtra that birth rate was stagnant around 28–29 for 1982–89 despite an increase in

recorded couple protection rate from 35 in 1980 to 55 in 1989.

It is possible there are some problems with the quality of official statistics on the number of sterilisations. What is more important is that in order to have a strong impact on fertility, family planning methods must be used effectively, at the right age and at low parity i.e., after 1–2 children. Mere numerical increases in sterilisations at any later age are not enough to bring about any fast decline in fertility.

There was a steady decline after 1984 in both CBR and TFR and by 1997, the former dropped by 26 per cent from 31.7 to 23.1 and the latter, by 29 per cent from 3.8 to 2.7. The decline among the urban population was faster. The rural area lagged behind, which necessitates a new agenda specifically for that segment.

### Migrants Compound Lag

The lag during six years during the Emergency and its consequent impact later delayed the fertility transition in Maharashtra. The compounding factor was the inflow of large number of migrants, espe-

cially in the peak age group, possibly neutralising the reduction in birth rates.

Marital fertility declined in all age groups above 35 by when the childbearing functions were almost over for most women. Even for those in the 25–29 and 30–34 years segment, it declined but the 1977–84 phase saw increases in these age groups as well. The age group of 20 to 24, which even in urban areas, provided substantial contribution of 41 per cent which was quite close to the 46 per cent recorded in rural areas. What causes worry is that Maharashtra has substantially high fertility amongst teenagers.

### Teenaged Mothers

A fourth of the total fertility is from mothers between 15 and 19 years of age. In addition, among the teenaged mothers who gave birth during 1996–1999, it was either a second or a third child at such young age. The urban regions witness 21 per cent of such occurrences and the rural areas, 28 per cent. Nearly a third of the rural women and a fifth of all women in Maharashtra in that age group are currently married. The National Family Health Survey in 1999 revealed that 23 per cent of currently married girls in rural Maharashtra who are between 15 and 19 years and 32 per cent of women in the age-group of 20–24 were married before they were 15 years old. This only underscores the lax implementation of laws relating to early marriages.

Table 3.6

### Vital Rates: Comparison of Maharashtra with Select States

Indicators	Maharashtra	Kerala	Tamil Nadu	West Bengal	Andhra Pradesh
Crude Death Rate (1999)	7.5	6.4	8.0	7.1	8.2
Crude Birth Rate (1999)	21.1	18.0	19.3	20.7	21.7
Infant Mortality Rate	48.0	14.0	52.0	52.0	66.0
<b>Total Fertility Rate (1997)</b>					
Total	2.7	1.8	2.0	2.6	2.5
Rural	3.0	1.8	2.1	2.9	2.6
Urban	2.3	1.8	1.8	1.8	2.1
TFR (NFHS-1) Total	2.9	2.0	2.5	2.9	2.6
TFR (NFHS-2) Total	2.5	1.96	2.2	2.3	2.3
Per Cent of Birth of Order	3+	39.1	21.0	23.1	36.5

Sources: 1. Registrar General's Office, Government of India Sample Registration Bulletin, 1997, 1999.

2. For last 3 rows IIPS, National Family Health Survey-1 and 2, Mumbai.

Of course, this alarming statistical profile is, in a way—though it cannot be much of a solace—an improvement over many years of what was actually much worse. Amongst the population of married women above 40, the proportion of those who were married before they were 15 was alarmingly high at over 50 per cent.

### Contraception Use

By 1992, 54 per cent of then married women were current users of birth control methods. It was an option exercised by 54 per cent of rural women and 53 per cent in the towns and cities. Actually, there has been a growth in use of contraception by couples from 35 per cent to 56 per cent from 1980 to 1992 and by 1999, it peaked to 61 per cent. However, even non-southern States are ahead in this. Protection is higher at 68 per cent in Himachal Pradesh, 67 per cent in Punjab and West Bengal, 62 per cent in Haryana, 64 per cent in Delhi.

### Female Sterilisation Leads

Though Maharashtra was a pioneer in the acceptance of vasectomies in the 50s and 60s, nearly 80 per cent of contraception is currently by female sterilisation. Use of intra-uterine devices (IUD), condom and pills was confined to a minuscule eight per cent of the currently married women. There has been an improvement in the use of IUDs, condoms



and pills over the years but that has not been significant enough. On the other hand, highlighting the regressive, reluctant participation of males in birth control, is the number of men who took to vasectomies: it declined from 6.2 per cent to 3.7 per cent between 1992 and 1999.

Maharashtra ranks high on the strength of some of its other indices among five States, including Kerala, Tamil Nadu, West Bengal and Andhra Pradesh (Table 3.6). Progressive, relatively better literacy levels, higher urbanisation, higher percentage of households with electricity and industrialisation mark it out as a key State with the country's highest per capita State income of Rs 23,398 at current prices in 1999–2000 which is higher than the All-India level.

The factors that can lead to fertility decline in Maharashtra are not very strong. The percentage of couples exposed to family planning messages is lower than all the selected States except West Bengal and Andhra Pradesh. Women generally marry early though there has been a slight improvement. Half the girls in Maharashtra are married by the time they are 16.4 of age. This age at which young girls marry is slightly higher in the other three southern States except Andhra Pradesh. Half—that is nearly 50 per cent—of the girls married and in the age group of 20–24 are those who were married by the

time they were only eighteen. In Kerala and Tamil Nadu, this percentage is significantly very much lower at 17 and 25 per cent respectively. A quarter of the contribution to the total fertility rates is from the youngest age group, which is much higher than in Kerala and Tamil Nadu though not higher than in Andhra Pradesh. (Table 3.7)

### Strong Son Preference

There is a strong son preference in Maharashtra. As the Table 3.7 shows 27 per cent women want more sons than daughters and 84 per cent want at least one son. Only 35 per cent of women with two children use contraception if they do not want a son. If a family has a son and a daughter, contraception is resorted to by at least 63 per cent of women. If the two children are boys, then the percentage jumps to 79 per cent. This preference has only led to delayed acceptance of contraception which promoted a pronounced distortion in the sex ratio.

Since trained health professionals attend to fewer deliveries and the attendance at antenatal clinics by women is much lower, acceptance of sterilisation is rather late in their productive life. In Maharashtra, professional health workers attend to only 59 per cent of deliveries. In Kerala 94 per cent and in Tamil Nadu 84 per cent of deliveries are

Table 3.7

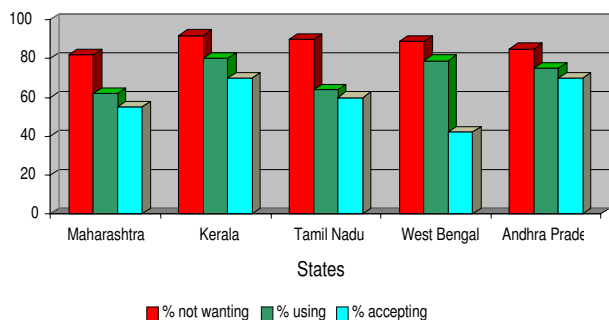
### Comparison of Maharashtra with Select States—Factors Leading to Fertility Decline

<i>Indicators</i>	<i>Maharashtra</i>	<i>Kerala</i>	<i>Tamil Nadu</i>	<i>West Bengal</i>	<i>Andhra Pradesh</i>
Per cent of women age 20–24 married by age 18	47.70	17.0	24.9	45.9	64.3
Median age at marriage (years)	16.40	20.2	18.7	16.8	15.1
Per cent of contribution of age 15–19 to TFR	25.60	9.9	18.9	23.4	59.6
Contraceptive use—Any Method (per cent)	60.90	63.7	52.1	66.6	57.0
Per cent sterilised	52.20	51.0	46.0	33.8	75.9
Per cent exposed to Family Planning message	62.20	80.6	75.7	56.5	19.8
Per cent wanting more sons than daughters	27.01	14.6	9.6	20.7	19.8
Per cent wanting at least one son	84.50	72.6	66.3	79.9	76.0
Per cent who received all recommended antenatal care	31.00	64.9	50.8	19.7	35.6
Per cent of deliveries attended by health professional	59.40	94.0	83.8	44.2	65.2

Source: International Institute for Population Sciences and MEASURE DHS + ORC-MACRO (2000), National Family Health Survey-2 (NFHS-2), India, 1998–99.

Figure 3.1

### Desire for No Children and Use of Contraception among Couples with Two Living Children



attended to by health workers leading to higher acceptance of sterilisation as a means to limit further births. Only 50 per cent of the women accept sterilisations in Maharashtra but in the other States, 80 per cent of women with two children do not want more children. However, of them, 70 per cent in Andhra Pradesh, and 60 per cent in Kerala and Tamil Nadu accept sterilisation. Only 31 per cent receive antenatal care in Maharashtra against 65 per cent of women in Kerala.

### Gender Selection

Gender selection by clinical prenatal methods is one of the many reasons for the poor overall sex ratio that was 936 in 1961 and declined to 922 in 2001. However, studies show that there is a difference in the sex ratio at birth for births to women who have gone for antenatal care (ANC) including sonography (893) and births to women who have not gone for any ANC (983). Maharashtra's lower than the national average sex ratio could be the result of low sex ratio in the 0–6 population cohort due to the strong son preference achieved by selective abortions, neglect of the girl child after birth with consequent higher infant and child mortality.

### Migration and Sex Ratio

When men migrate to places away from their homes in search of jobs, they add to the number of males in the towns and cities to which they belong. Since they leave behind—at least in most cases, if not in all—their families, they detract from the number of

males in the population left behind. Therefore, a net out-migration status of district, with more men than women leaving for better pastures in and around urban centres for economic reasons is an important factor in determining the sex ratio in Ratnagiri (1135), Sindhudurg (1077), Gondiya (1055). Even Satara (995) and Bhandara (982) have sex ratios much above the State average. But, in contrast, Mumbai (774), Mumbai (Suburban) (826), Thane (857), Pune (917) and Aurangabad (919) are the districts with sex ratio much below the State average (922). These districts are obviously magnets for migrants.

The drastic decline in the sex ratio in age group 0–6 in the past ten years is a serious matter. In 2001, it was 917, compared to 946 in 1991. Though the ratio is not as low or adverse as in States like Punjab (793), Himachal Pradesh (897), Haryana (820), and Gujarat (878), when taken in the context of the acute decrease within a short span of just ten years, is significant, indicating a pronounced negative trend.

Maharashtra's experience in this area is well within the finding that lower sex ratios in the 0–6 population cohorts are more likely to be prevalent in States which are developed enough to have a strong acceptance of small family norm as well as a traditional preference for a son. Kerala is, of course, an exception. Availability of doctors and health services in these States enable women translate the society's longing into the actual achievement of the sex composition they desire. Less developed States like Uttar Pradesh, Bihar also have a strong son preference but women in these States are more likely to go for more children until they get a son. Even if they want abortion, they do not have easy access to the services.

### Lowest Sex Ratios

In Maharashtra, Sangli (850), Kolhapur (859), Jalgaon (867), Aurangabad (884) and Satara (884) are the districts with lowest sex ratio in 0–6 age group in the State. Three of them belong to the prosperous sugar belt in Western Maharashtra and Jalgaon which cultivates banana as a cash crop. On the other hand, Gadchiroli, Nandurbar, Gondiya,

Bhandara and Ratnagiri are the districts with a high sex ratio (954–974). The first two are tribal districts where the status of women is likely to be high and Ratnagiri has high sex ratio perhaps because there the girl child is less neglected.

## Urbanisation

Maharashtra, the second most urbanised State in India with 42.4 per cent of the population living in towns, cities and a metropolis like Mumbai, has its own demographic tale to narrate (Table 3.8). This huge urban population accounts for 14.4 per cent of India's entire urban population. Till 1991, Maharashtra was the most urbanised State; that privilege has now gone to Tamil Nadu whose 43.9 per cent population is urban.

Table 3.8

### Level of Urbanisation in Maharashtra

Year	Urban Units	Urban Population (Million)	Urban as Per Cent of Total Population	Decadal Growth Rate of Urban Population
1961	266	11.2	28.2	21.3
1971	289	15.7	31.2	40.8
1981	307	22.0	35.0	40.0
1991	336	30.5	38.7	38.9
2001	378	41.0	42.4	34.3

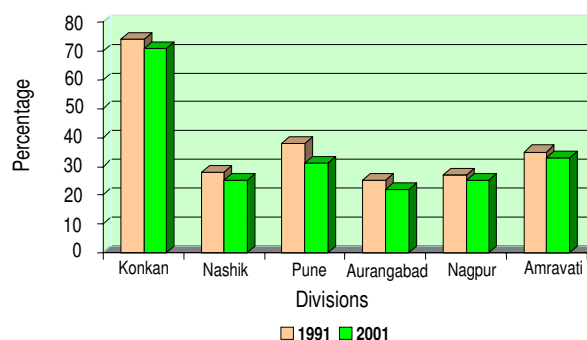
Source: Biswas, S.K., 2001, Provisional Population Totals for Maharashtra, Census of India, 2001, Series 28, Paper No. 1

Urban lifestyle and attitudes generally have a modernising influence on demographic behaviour in general, and health seeking behaviour in particular which can lead to fast decline in fertility and mortality. Though it is true that in developing countries like India, urbanisation is not always backed by vigorous industrialisation, its modernising influence is likely to be strong. The percentage of urban population can be considered an important developmental indicator for influencing the demographic situation.

Across Maharashtra, there are sharp variations

Figure 3.2

### Percentage Urban Population in Maharashtra, by Divisions, 1991, 2001



in the levels of urbanisation, in terms of both numbers of cities and towns as well as populations contained therein. In Konkan division comprising Mumbai, Mumbai Suburban, Thane, Raigad, Ratnagiri and Sindhudurg, 72 per cent of the population is urban but almost all of it is in Mumbai, Mumbai Suburban and Thane. In Pune and Nagpur divisions, one-third of the population is urban. In Nashik—Nashik and Pune divisions, which are contiguous covering all of Western Maharashtra—and Amaravati divisions one-fourth of the population is urban. Nagpur and Amaravati divisions take in their sweep all of Vidarbha. However, it is only one-fifth in Aurangabad division, which encompasses all of Marathwada (Figure 3.2).

The Konkan region is the most urbanised region in Maharashtra with two districts, Mumbai and Mumbai Suburban, being 100 per cent urban and Thane district having 73 per cent urban population. A tract of rural Thane district is tribal as well. Thus in Maharashtra, in the broad regional sense, Konkan is the most urbanised, Marathwada the least and Western Maharashtra is more urbanised than Vidarbha.

## Widespread Urbanisation

Cities like Mumbai and its satellites like Thane, Kalyan and Navi Mumbai are not the only urban regions though they are the major urban centres. Growing urbanisation is seen across the State, there being, by 2001, as many as 378 towns and cities. In 1961 this number was 266. During the same period, the urban population swelled by four times, from

11.1 million in 1961 to 41 million indicating how, while newer urban units came into being, older ones were growing in size, population and density Their decadal growth, which peaked to above 40 per cent in 1961–71, however has been slowing down since 1971. During 1991–2001, it slackened from 39 to 34 per cent. It has to be noted that not just the villages but these towns and cities are also the originating point for a substantial number of migrants into Mumbai and areas around it (Box 3.3).

Greater Mumbai, with its sheer size, opportuni-

ties and kinship between the new migrant and the earlier migrant, has its tremendous attraction for migrants. That has been one major, though not the only reason for Greater Mumbai's growth, which had a population of 4.15 million in 1961 and grew to 11.9 million in 2001 (Table 3.9).

Next to Mumbai, in both population and geographic size, are Pune and Nagpur. Pune grew during the decade of 1991–2001 to switch places with Nagpur to be the second largest city with Nagpur emerging as the third. Navi Mumbai moved from the

### Box 3.3

#### A Huge Urban Sprawl

Mumbai and Mumbai Suburban districts, which are huge, contiguous urban entities, and together known as metropolitan Mumbai, with a population of 11.9 million, constitute the most populous city in Maharashtra. This population is about 12 per cent of all of Maharashtra's population.

Across Maharashtra, the number of cities hosting more than a million people each is seven. Six have a population of between half a million to million.

In contrast, the average size of a village, population-wise, is 1,275; the average size, by the same norm, of an urban unit is 1,08,518.

Nashik had a growth rate, the highest among all urban areas, of 58.8 per cent during the decade.

Thane district, adjacent to Mumbai, an industrial hub in itself, and host to a combination of the urban and the rural, even tracts of tribal population, has the largest number of major towns for any district in Maharashtra. They include Thane city itself, Kalyan-Dombivli, Bhiwandi-Nizampur, Mira-Bhayandar, Ulhasnagar, Navi Mumbai.

And in turn, most of the residents of these towns, save perhaps Bhiwandi-Nizampur with its powerloom activity, depend on Mumbai for a living.

Table 3.9

Population, Annual Rates of Growth, Components of Growth of Greater Mumbai, 1951–91

Year	Population in '000s	Rate of Growth (per cent p.a.)	Decade Increase ('000s)	Natural Increase ('000s)	Net Migration ('000s)	Share of Migration (per cent)
1951	2994	5.1	1193	243	950	79.6
1961	4152	3.3	1158	558	600	51.8
1971	5971	3.6	1819	934	885	48.7
1981	8243	3.2	2272	1204	1068	47.0
1991	9926	1.9	1683	1387	296	17.6
2001*	11914	1.8	1989	1257	732	36.8

Note: Net Migration till 1981 estimated both by using Vital Statistics and Life Table Survival Ratio Method and that for the decade 1981–91 by Vital Statistics Method.

\* As estimated by Sudha Deshpande

Though the above data shows sharp decline in the growth rate and percentage share of net migration in 1991, it was primarily the result of under-enumeration of Mumbai's population. She estimates that if counted correctly in 1991, Mumbai's population would be 10.5 to 10.7 million, net migration 0.88 million to 1.13 million and its share in the 39 to 45 per cent and not 17.6 per cent.

Source: Census of India, Maharashtra, 1951 through 2001. Primary Census Abstracts for Greater Bombay; Mumbai Mahanagarpalika, Administrative Reports of the Municipal Commissioner and Public Health Department, 1951 through 1993 (Socio-Economic Review of Mumbai, 1997–98, Centre for Research and Development, Mumbai).

15th to 10th place during the same period. Except for the cities of Nashik, Pune, Solapur and Kolhapur, the decadal growth rates declined. These growth rates, though declining, need to also stabilise.

Migrants to this prime urban region of Mumbai are drawn from other districts in Maharashtra and other States of India (Box 3.4). The 1981 and 1991 Census revealed that just five States, Maharashtra, Uttar Pradesh, Gujarat, Karnataka and Tamil Nadu accounted for more than four-fifths of the rural and three-fourths of urban migrants into Mumbai. A

### Box 3.4

#### Mumbai Metropolis—Shifting Populations

Greater Mumbai's own decadal growth rate has been declining rapidly—perhaps one heartening feature for a city almost coming apart at its seams—since 1971. It declined from 43.8 per cent during 1961–1971 to 38.1 per cent during 1971–1981 and then to 20.41 per cent during 1981–1991 and finally to 20.41 per cent during the last decade.

The growth rate of Mumbai Suburban district too declined from 36.15 per cent during 1981–91 to 27.20 per cent.

The share of net migration in Greater Mumbai's population growth substantially declined from 47 per cent during 1971–81 to just 17.6 per cent during 1981–91. The volume of net migration is also seen to have declined from 1.07 million during 1971–81 to 0.29 million during 1981–91, raising doubts regarding the reliability of the count of heads in the Census, 1991.

Another possibility is the movement of the settled population within Greater Mumbai. Population moving from the island city to the suburbs within Greater Mumbai, thus switching the densities around a bit. Some have moved away to further suburbs or adjacent towns and cities.

Also, many newcomers to the city seem to opt for the Suburban District and then move on to the urban settlements on the periphery of Mumbai but in Thane District—Thane city, Kalyan-Dombivli, Navi Mumbai and Mira-Bhayandar, strengthening their dormitory character—while keeping the pressure on island Mumbai in particular and now Greater Mumbai in general.

little less than half of the rural and nearly a third of urban migrants came to Mumbai from other districts of Maharashtra.

#### *Intra-State Migrants*

These three divisions—Konkan, Pune and Nashik—accounted for nine out of every 10 migrants from other districts of Maharashtra. Migrants from Marathwada division contributed barely five to six per cent to the stock of intra-State migrants while Vidarbha accounted for much less, one to two per

It would appear that by putting to use residential premises in the busy, congested areas of South Mumbai which earlier had a residential-commercial profile for more commercial (shops or businesses) has not made any difference to the day-time densities of the various locations: they continue to teem with people. People who lived there earlier now, commute back and forth on packed trains from the distant suburbs.

One reason why a large number of new migrants are settled in Thane district or Navi Mumbai could well be the comparatively lower housing prices there, and greater gentrification of what was earlier considered the outback of the region, served by an umbilical cord-like suburban railway system.

Decongestion by shift of population, driven by economic considerations, including *pagdi* (cash for vacated premises), has not meant much. Only the character of the places has changed but not the pressures.

Population in the other far-flung areas of the urban agglomeration have been growing faster, as shown by the decadal growth rate during 1991–2001.

If the Municipal area of Greater Mumbai grew by 20.03 per cent, the growth of the entire urban agglomeration was of the order of 29.94 while the urban pockets in Thane grew by 66.78 per cent. The more telling growth came in Mira-Bhayandar and Navi Mumbai during the same decade: 196.29 per cent and 128.76 per cent respectively.

cent of total migrants. Five districts, Ratnagiri, Sindhudurg, Satara, Pune and Raigad together accounted for a little over two-thirds of male and over three-fifths of female migrants who came to Mumbai from other districts of Maharashtra.

Nearly one-third of urban migrants came to Mumbai from other districts of Maharashtra. Among the migrants to Mumbai from other districts of Maharashtra nearly half of the men and women came from the adjoining districts of Thane and Konkan, which includes the three districts Raigad, Ratnagiri and Sindhudurg. Almost one-third were from Pune division and one-tenth from Nashik division.

### *Intra-State Migration*

An earlier study of labour mobility in Mumbai's manufacturing sector done in 1990 revealed that 57 per cent of migrants were from other districts of Maharashtra itself. Migrants from Uttar Pradesh formed one-third. Those from Karnataka formed 15 per cent of the sample not born in Maharashtra. Gujarat and Kerala contributed 12 per cent each. Ratnagiri and Sindhudurg accounted for 47 per cent of male and 68 per cent of female migrants in Mumbai born in other districts of Maharashtra. Sangli contributed 13 per cent, while the contribution of Raigad, Kolhapur and Satara was nine per cent each.

### **Regional Distribution**

Regional demographic imbalance in Maharashtra is another area of concern. Western Maharashtra, Vi-

darbha, Marathwada and Konkan are four regions, which have distinct cultural as well as economic characteristics due to the historical factors that have not been fully overcome. Notwithstanding efforts over the past four decades to identify and fund the removal of backlogs in the investment in physical infrastructure that has a bearing on economic development, the levels of attainments between these regions vary. This has resulted into redistribution of population (Table 3.10).

If Mumbai and Thane, as also Nagpur region, gained population, Aurangabad division alone experienced a substantial decline in population growth rate during 1991–2001 as compared to 1981–91. Nearly half of the State's population (46 per cent) is concentrated in two divisions of Konkan and Pune.

There are extreme variations in the population-wise size of districts in Maharashtra. They range from Mumbai Suburban district with a population of 8.6 million in 2001 to the tiny Sindhudurg district with a population of just 0.86 million. All the five largest districts in Maharashtra, each with a population above 4 million are from Western Maharashtra including Konkan region: Mumbai Suburban, Thane, Pune, Nashik and Ahmednagar. They together account for one-third of the total population of Maharashtra State. Out of six districts in Konkan region, Sindhudurg and Ratnagiri have a population less than 2 million each while Thane and Mumbai Suburban, more than 80 lakh each. The remaining two districts Mumbai and Raigad are in the mid-sized category with population size of between 2 to 4 million.

Table 3.10

### **Population Growth of Divisions**

<i>Divisions</i>	<i>Per Cent of Population in 1971</i>	<i>Per Cent of Population in 2001</i>	<i>Per Cent Increase in 1971–81</i>	<i>Per Cent Increase in 1981–91</i>	<i>Per Cent Increase in 1991–2001</i>
Konkan	22.8	25.6	32.04	27.12	28.03
Pune	21.3	20.6	22.37	25.46	21.69
Nashik	16.7	16.3	23.09	24.82	21.83
Aurangabad	16.0	16.1	20.73	31.38	21.78
Nagpur	11.8	11.0	24.16	21.76	18.23
Amaravati	11.3	10.3	21.04	20.81	18.67
Maharashtra	100.0	100.0			

Source: S.K. Biswas; Provision, Population, Totals for Maharashtra, Census of India, 2001, Series 28, Paper No. 1.

In Western Maharashtra, Nandurbar and Dhule are small districts with population of less than 2 million each, while each of the three districts—Nashik, Pune and Ahmednagar—have populations of more than 4 million. The remaining five are in the middle category. In Vidarbha region, only Nagpur district is in the category of above 4 million. From the remaining 10 districts, six districts fall in the slot of those with less than 2 million. Four districts, Buldhana, Amaravati, Chandrapur and Yavatmal are in the middle category i.e., each having a population between 2 to 3 million. In Marathwada region, not a single district has a large population. Half the districts have a population below 2 million each and the half, between 2 to 4 million.

In Konkan, only a little over half (54.9 per cent) of Thane district's area is in the category of high growth rate of above 30 per cent while Mumbai, Ratnagiri and Sindhudurg have recorded decadal increase of less than 10 per cent. In Western Maharashtra, Pune is in the high growth rate (30+ per cent) category, only three districts Nandurbar, Nashik and Ahmednagar are in the medium growth category of 20–30 per cent while the remaining six districts are in the low growth segment of less than 20 per cent. Apparently, migration to high growth rate areas is one critical factor, apart from the weak urbanising effect, for its present status. In Vidarbha, not a single district is in the high growth category. Except Akola, Nagpur and Gadchiroli, which have medium growth, all others have low population growth rates of less than 20 per cent. In Marathwada, Aurangabad is the only district in the high growth category. Nanded and Latur are in the medium growth category. Population of all the remaining five districts increased at a slow rate during the decade 1991–2001.

### *Population Densities*

The Konkan region, mainly its northern extremity, is a very high-density region with three districts having a very high population density i.e., Mumbai (21,190 per sq. km), Mumbai suburb (19,255 per sq. km) and Thane (850 per sq. km). Pune and Kolhapur from Western Maharashtra and Nagpur from Vidarbha are the only three other districts with

density above 400 per sq. km. One district from Konkan, Sindhudurg and another, Osmanabad from Marathwada and five districts from Vidarbha, Gadchiroli, Washim, Wardha, Chandrapur and Yavatmal have low density below 200 per sq. km. All the remaining 22 districts have medium density between 201–301 per sq. km.

As far as the sex ratio for the overall population is concerned, in only three districts, Ratnagiri (1,135), Sindhudurg (1,077) and Gondiya (1,005) is it favourable to women. In the case of Ratnagiri, as is well known, it has been the result of out-migration of males to Mumbai for education and employment. At the other extreme are districts like Mumbai (774), Mumbai Suburban (826), and Thane (857), which have recorded a sex ratio that is extremely unfavourable to females. These three districts are magnets for migrants predominated by males from other districts of Maharashtra and from other States of India This explains the low sex ratio in these districts.

In the Konkan region, three districts report sex ratios below 940 per 1000 women and the remaining three record sex ratios above 970. In Marathwada, there is not a single district with a high sex ratio above 970, which is also likely to be the result of male out-migration. This is corroborated by the decline in the growth rate of Aurangabad division. Except Aurangabad (919), all other districts are in the middle category with a sex ratio between 941 and 970.

It is the sex ratio of the population in the age group 0–6 which has caused more anxiety after the results of 2001 census were released because of the possibility of its relation with sex selective abortions. One district from the Konkan region (Mumbai 898), six from the Western Maharashtra, Jalgaon (867), Ahmednagar (890), Satara (884), Sangli (850), Solapur (897), and Kolhapur (859) and two districts from Marathwada, Aurangabad (884) and Beed (898) report a sex ratio of less than 900 in the population age 0–6. Not a single district in Vidarbha falls in this category. In all 12 districts, three from Konkan, one each from Western Maharashtra (Nandurbar) and Marathwada (Nanded) and seven

from Vidarbha record high sex ratios (above 941). All the other 14 districts are in the medium category, with a sex ratio between 901 to 941.

### *Fertility Indicators*

Only Greater Mumbai and Sindhudurg had TFRs less than 3, according to 1991 Census data, while Thane, Raigad and Ratnagiri had TFRs between 3 and 4, not a single district having a TFR above 4. On the contrary in Western Maharashtra, Vidarbha and Marathwada not a single district had a TFR less than 3. All Marathwada districts except Osmanabad had a TFR above 5. Two districts from Western Maharashtra, Nashik (4.2), Solapur (4), four districts from Vidarbha, Buldhana (4.5), Gadchiroli (4), Akola (4.1), Yavatmal (4.1) and Osmanabad (4.6) from Marathwada had TFR between 4 and 5. The remaining 15 districts: three from Konkan, seven from Western Maharashtra and five from Vidarbha had TFRs of between 3 and 4.

District-wise TFRs for the latest period are not available but another indicator—percentage of births of order 3 and above available from Rapid Household Survey (LIPS, 2000)—may give some idea about regional variations in fertility levels. It reveals that in all nine districts, three from Konkan region, Mumbai, Raigad and Sindhudurg; four from Western Maharashtra, Kolhapur, Pune, Sangli and Satara and two from Vidarbha, Nagpur and Wardha have lower fertility as indicated by less than 30 per cent higher order births (3+). Not a single district from Marathwada is in this category. But all the districts in Marathwada except Osmanabad fall in the category of 40 or higher per cent of 3+ order births, indicating a disturbingly high fertility situation. Two districts from Vidarbha, Akola and Buldhana are also in this high fertility category. All the remaining 13 districts—two from Konkan, five each from Western Maharashtra and Vidarbha and one from Marathwada are in the middle category of 30–40 per cent higher order births.

### *Contraceptive Prevalence*

According to the Eligible Couple Survey (Rural) done in 1999, rural areas of nine districts in Maharashtra

have low contraceptive prevalence of between 50 and 59 per cent. Out of these four are from Marathwada: Nanded, Jalna, Aurangabad, and Latur. Only one, Buldhana is from Vidarbha and the remaining four are from Konkan region: Thane, Raigad, Sindhudurg, and Ratnagiri. There are seven other districts with high order contraceptive prevalence of above 70 per cent in the rural areas. Four out of these seven are from the Western Maharashtra viz., Pune, Sangli, Satara, Kolhapur and three are from Vidarbha, Nagpur, Amaravati and Wardha. Disturbingly enough, high contraception is not prevalent in a single district from Marathwada. The remaining 13 are in the middle category including the 100 per cent urban districts of Mumbai and Mumbai Suburban.

### *Male Literacy*

The range of variation for male literacy rate is from 66 per cent in Nandurbar district to 92.7 in Mumbai Suburban but a majority of the districts are in the narrow range of 80–92 per cent. In Konkan region all the six districts are in the category of high male literacy rate of above 85 per cent. At the other extreme, in Marathwada only Aurangabad district is in this category and all the others, except Jalna with low male literacy rate 79 per cent, are in the medium category of 80–85 per cent. In Western Maharashtra and Vidarbha, the situation is quite similar: one district each in low category—Nandurbar (66 per cent) and Gadchiroli (70 per cent), two each in medium category (80–85 per cent)—Dhule and Solapur in Western Maharashtra and Chandrapur and Yavatmal in Vidarbha. All the remaining districts in both the regions are in the literacy category of above 85 per cent.

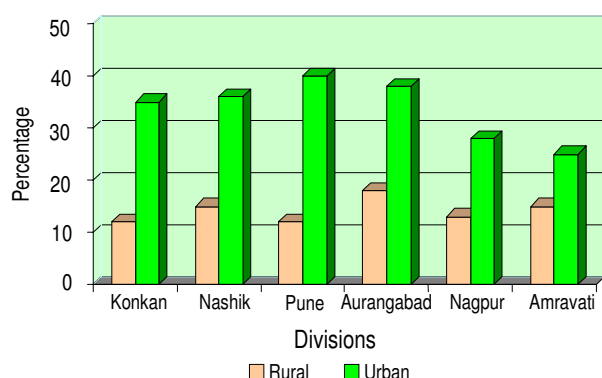
### *Female Literacy*

Compared to male literacy, the range of variations in female literacy in Maharashtra is very wide i.e., from 45.5 per cent in Nandurbar to 83 per cent in the Mumbai district. In Konkan, all except two (Raigad and Ratnagiri being in the medium range of 60–70 per cent) are in the high female literacy category of 70 per cent and above. At the other extreme, in Marathwada region, all are in the low



Figure 3.3

**Decadal Growth of Rural and Urban Population in Maharashtra by Divisions, 1991–2001**



female literacy category of below 60 per cent except two, except Aurangabad and Latur positioned in the middle category of 60 to 70 per cent. Not a single district is in the high literacy category here.

In both Western Maharashtra and Vidarbha, a district each, Nandurbar with 45.5 per cent and Gadchiroli with 50.6 per cent respectively are in the low category. In Western Maharashtra all the others except Pune (72 per cent) are in the middle category. On the other hand, in Vidarbha, five districts, Akola, Amaravati, Wardha and Nagpur are in the high category and the remaining six are in the medium category.

Literacy could well be one of the key factors in lower fertility. For instance, most of Marathwada with low female levels of literacy also have TFRs above 5. Greater Mumbai, apart from other factors like in-migration, has had a low TFR of 3 and so is the case with Thane and Raigad with a range of 3 and 4.

**Urbanisation Level**

Urbanisation promotes a lifestyle and an attitude that leads to a demographic behaviour that is aimed at improvement of the individual and the family in areas of health, education and employment. These in turn can lead towards a faster decline in both fertility and mortality. The level of urbanisation, often measured in terms of urban population's size itself can be an important developmental pointer to some extent influencing demographic situation.

Konkan division, mainly because of 100 per cent urbanisation of two districts, Mumbai and Mumbai Suburban, and substantial urban character of Thane, is 72 per cent urbanised (Table 3.11 and Figure 3.3). No other region matches this level of urbanisation. In Pune and Nagpur divisions, a third of the population is urban, in Nashik and Amaravati divisions one-fourth of the population is urban while in Aurangabad division urban population is just one-fifth of the total population.

Among the three other districts of Konkan, Sindhudurg and Ratnagiri have only above 10 per cent urban population while Raigad is in the middle category (21–40 per cent urban). At the other extreme, in Marathwada not a single district is in the 'high' category (40+ per cent urban). Out of eight, four, viz. Jalna, Beed, Osmanabad, Hingoli are in the low (less than 20 per cent urban) category and the rest are in the middle category (21–40 per cent urban). In Western Maharashtra and Vidarbha a district each, Pune and Nagpur are in the high category. In Western

Table 3.11

**Division-wise Rural–Urban Growth of Population, Maharashtra, 1991, 2001**

Name of Division	Total Population 2001		Per Cent Population 2001		Per Cent Population 1991		Decadal Population Growth 1991–2001	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Konkan	61.84	186.24	24.93	75.07	28.53	71.47	11.88	34.48
Nashik	113.33	44.41	71.82	28.16	74.54	25.46	17.43	34.71
Pune	124.79	74.95	62.48	37.52	67.46	32.54	12.71	40.30
Aurangabad	117.58	38.32	75.42	24.58	78.12	21.88	17.58	36.78
Amaravati	73.04	26.37	73.47	26.53	74.97	25.03	16.29	25.79
Nagpur	66.75	39.91	62.58	37.42	65.02	34.98	13.80	26.47

Source: Registrar General, Government of India, 2001.

Maharashtra only three districts, Ahmednagar, Nanded and Satara are in the 'low' category, while in Vidarbha five districts Yavatmal, Washim, Bhandara, Gondiya, Gadchiroli are in the 'low' category.

### Slums: A Proliferating Reality

In Maharashtra, where urbanisation as a trend is strong and the capacity to provide affordable housing stock limited, slums are a reality. To Mumbai goes the unenviable credit of being the host to Asia's as well as India's biggest slum: Dharavi, a sprawling entity, a microcosm of the far-flung country. It is a habitat as well as a place of enterprise, which has been its growth engine. Squalor is because of sheer overcrowding and absolute lack of amenities.

A slum is defined as a compact area of at least 300 population, or some 70 households of poorly built congested living quarters, often illegally on lands that do not belong to the owner/occupant of the tenements. The environment is unhygienic, the infrastructure to support the habitation is woefully inadequate or even non-existent.

As per the findings of the Census, 2001, Maharashtra has 10.6 million people in the slums, the largest among all States. Dharavi, of course, is unparalleled in its size and density. The Census 2001 reported for the first time, the population living in notified slums in towns with population of more than 50,000. And the figures are disturbing: 31.7 per cent of the 33.6 million people in 62 towns and cities reported living in slums.

Dharavi, of course, is not the only Mumbai slum—these shantytowns are virtually everywhere, with people spilling over on to the sidewalks as well as railway margins. Greater Mumbai has the most number of people living in slums. Nearly half of Greater Mumbai resides in them i.e., 49 per cent of the metropolis' total of 11.9 million.

Compare this to other cities and the contrast is sharp: Delhi—19 per cent of its total population; Kolkata—33 per cent; Chennai—1.1 million or 26 per cent and Bangalore—0.3 million or only 8 per cent.

As cities go, not only Mumbai but all the other major ones are hosts to slums, except that Nagpur and Pune have between a half and three-quarter million people in slums which means a third of Nagpur and a fifth of Pune are consigned to living in slums. The other major towns have less than a million living in such conditions, the remarkable aspect being that a relatively newer city like Navi Mumbai having about the same population (0.14 million) in such conditions as are to be found in Nashik or Aurangabad, which are older cities.

### *The City, the Slum and Fertility Issues*

Whatever the size of the town or city in Maharashtra, a slum is almost an inevitable feature, mainly because of unaffordable housing and migration from less endowed regions of the State and the country. The number of slums and the numbers of inhabitants of such slums, give it a larger dimension in major cities like Mumbai.

Alternative growth centres seem to be an option, tried but not with much success by way of felt impact on the earlier congested habitat which continue to remain that way, notwithstanding the movement away from major locations of concentrated populations. Slums have seldom disappeared naturally because people have abandoned them. They are in fact re-occupied by others.

Decentralisation would depend largely on the efforts at dealing with relocation of industrial activity and creating new employment opportunities outside Mumbai. If Navi Mumbai's experience is any indication, the efforts at population dispersal has not kept pace with expectations simply because hoped-for levels of new opportunities did not materialise.

In the long run, the population would have to be dispersed, though there has been intermittent debate on limiting or even stopping the influx of migrants. Such proposals, however, face constraints imposed by the Constitution, which gives freedom of movement, and by implication, choice of residence. However, decongestion of cities is the real solution, an inescapable requirement but least attended to.

Meantime, to contend with the issue of slums weakening the urbanisation effect, the present picture indicates the need to improve the health services for slum areas by strengthening the urban health infrastructure like urban health posts. No doubt, even today slum indicators in Mumbai on some aspects are better than other urban areas in Maharashtra though they are far worse than non-slum areas.

Table 3.12

**Slum and Non-Slum Population of Ten Cities/Towns in Maharashtra**

Town/City	<i>(in million)</i>		
	Slum Population	Non-Slum Population	Total Population
Maharashtra Class I and II Towns	10.64	23.16	33.80
Greater Mumbai	5.82	6.09	11.91
Nagpur	0.73	1.32	2.05
Pune	0.53	2.01	2.54
Thane	0.42	0.84	1.26
Amaravati	0.23	0.32	0.55
Solapur	0.23	0.64	0.87
Malegaon	0.21	0.20	0.41
Nashik	0.14	0.93	1.07
Navi Mumbai	0.14	0.57	0.71
Aurangabad	0.14	0.74	0.88

Source: Registrar General, Government of India, 2001.

Table 3.13

**Utilisation of Health Services and its impact on Fertility and Mortality**

Indicators from NFHS-2	Mumbai		Other Urban Areas of Maharashtra
	Non-Slum	Mumbai Slum	
Infant Mortality Rate	16.3	28.1	34.7
% Institutional Deliveries	92.0	84.0	79.0
% Receiving Antenatal Check-up	97.6	95.1	94.8
% Using Contraception	63.0	52.0	59.0
% Higher Order Births (3+)	25.0	35.0	33.0
Total Fertility Rate	1.4	2.7	2.2

Source: NFHS-2

NFHS-2 data shows that utilisation of health services in Mumbai's slums is a shade better than their use in other urban areas of Maharashtra though

it is not as good as non-slum areas (Table 3.13). Yet, fertility in slum areas is worse than not only non-slum areas and but also higher than other urban areas of Maharashtra. Even contraception use in slum areas is lower than other urban areas, despite better utilisation of antenatal services. It appears that efforts in slum areas to strengthen the family planning services to bring about change in their attitude regarding family size and to persuade them to accept family planning at an earlier stage is required. More efficient service delivery along with Information Education Communication activities to change the attitude in slum areas is called for.

**Cultural Variations**

Cultural variations also can influence acceptance of the small family norm and utilisation of health services and its impact on the process of decline in fertility and mortality. Religion and caste can be taken as a proxy for cultural practices. From this point of view, the imbalance in the composition of population by religion and SC/ST population in various districts can be discussed on the basis of the 1991 Census. After Hindus, Muslims with a 9.7 per cent content in the total population and Buddhists with 6.4 per cent are the two other major religious groups in Maharashtra.

In most of the districts, the Muslim population is much less than 10 per cent but in Marathwada all the districts except Osmanabad have a higher percentage of Muslim population of between 11 to 18 per cent. In the Konkan region, only Greater Mumbai has a relatively high percentage of 16.8. In Western Maharashtra, Nashik and Jalgaon districts have a 10 to 11 per cent Muslim population. In Vidarbha only in three districts, Buldhana, Akola and Amaravati, it is 12 to 14 per cent.

As per the same census, 6.4 per cent of the population in Maharashtra is Buddhist. In Konkan and Western Maharashtra all other districts except Ratnagiri (7.5 per cent), Greater Bombay (5.6 per cent), and Satara (5.1 per cent) have less than 5 per cent Buddhist population. In Marathwada half the districts—Aurangabad, Jalna, Parbhani, and Nanded—have a Buddhist population between 9–12 per cent.

In seven districts of Vidarbha: Nagpur, Bhandara, Chandrapur, Akola, Amaravati, Wardha, Buldhana this population is in the range of 12–17 per cent and one more district, Gadchiroli has 8 per cent of them.

About 11 per cent of the total population belong to the scheduled castes but all the districts in Marathwada had a higher percentage of scheduled caste population (11–19 per cent). In Western Maharashtra only five districts, Ahmednagar, Sangli, Solapur and Kolhapur report a higher percentage of scheduled caste population (12–15 per cent). In Vidarbha, majority of districts—Akola, Amaravati, Wardha, Nagpur, Bhandara, Chandrapur and Gadchiroli hosts a higher percentage (12–18) of scheduled caste population.

About 9 per cent of the population in Maharashtra are scheduled tribes, according to the 1991 census. Not a single district in Marathwada except Nanded (11.8 per cent scheduled tribe population) has more than five per cent scheduled tribe population. In the Konkan region, Thane and Raigad record 18.1 and 12.8 per cent population respectively. Two Western Maharashtra districts, Dhule with 40.9 per cent and Nashik with 24.2 per cent and three districts in Vidarbha, Gadchiroli (38.7 per cent), Chandrapur (19.7 per cent) and Yavatmal (21.5 per cent) have a high concentration of scheduled tribe population. Besides these, four more districts in Vidarbha, Amaravati, Wardha, Nagpur and Bhandara have around 14–16 per cent of tribals.

### *Cultural Constraints*

Though programmes and services are the same across the State, the efficiency of their implementation, the quality and the extent to which these services are accessible, efficient and utilised by the people differ from district to district. It depends on the attitude and the overall level of modernisation reached by the people, who are both—beneficiaries of the programmes as well as the workers who implement the programme. Education, urbanisation, exposure to mass media act as modernising forces which can change attitudes and improve the utilisation and quality of various programmes. At the same time,

many cultural practices and behavioural patterns continued over generations can act as constraints. If different regions have inherited different cultural traits, they do not progress at the same pace. So it is essential to see whether there are pockets where the forces are not congenial to such changes, and then design strategies to overcome constraints.

It is in this context that instead of treating the whole of Maharashtra as one homogenous entity, it may be prudent to adopt area-specific strategies. But 'area' here is not a geographical concept. It has cultural connotations due to certain historical factors in a State comprising broad, distinct regions like Marathwada, Vidarbha and Western Maharashtra and Konkan, each with a varying cultural nuance or attitude.

Marathwada, once part of the erstwhile Nizam's Hyderabad State, has distinct cultural traits inherited from there. It has a relatively higher Muslim population and later Buddhist population. Vidarbha is more attuned to the cultural practices of the Hindi belt, having been a part of it earlier.

Western Maharashtra is different from these two regions, but has extreme variations within it. The Konkan's Mumbai-Thane belt, plus Pune, industrialised and urbanised, has within it vast slum populations which again are not homogenous. It consists of people from various states. In the rest of Western Maharashtra too, on the one hand there are districts like Sangli-Kolhapur which are a part of the sugar-belt and consists of a new rich population with high aspirations, while on the other hand there is a heavy concentration of tribal population in Nandurbar and Nashik districts. Even the new rich sugar belt districts are facing challenges like a decline in sex ratio and widespread risk of HIV/AIDS.

By and large, the quality of Family Planning and health services has to improve. And more importantly, to generate demand for these services in all sections of the population, strategies need to be developed keeping in view the needs of different population groups, which are under-served or which do not utilise the available health and family welfare

services fully. Muslims, for instance, identify family planning with sterilisation, to which they are opposed to but might be favourable to spacing methods but have high order births compared to any other segment of the population. Tribals have their own distinct culture, diet pattern and system of medicine and they hardly resort to the modern system. Mumbai slum population consists of thousands of migrants who carry from their native place to Mumbai their own culture, attitude, and behavioural patterns, which influences their demographic behaviour.

Earlier research has shown that Muslim respondents generally do not favour sterilisation but they do not have objection to other methods. NFHS-2 data also shows that among Muslims, only about 37 per cent respondents have accepted while another 11 per cent use modern spacing methods. One per cent uses traditional methods. Among Hindus about 54 per cent opted for sterilisation and hardly eight per cent the spacing method. Even among Buddhists about 61 per cent have accepted sterilisation and among scheduled castes 57 per cent have accepted it.

The Survey does not show that scheduled caste or Buddhist populations have any opposition to sterilisation. Among scheduled tribes, the level of contraceptive use is much lower at 54 per cent than others (61–64 per cent). But even among them, about half accept sterilisation and hardly four per cent accept spacing methods. Comparison of the total fertility rates of different groups show that on an average, there are varying fertility rates among social groups of Muslims, Hindus and also among Buddhists, Scheduled Castes and Scheduled Tribes.

Therefore, new and effective culture specific strategies for the Muslim, the tribal and the slum population need to be designed to ensure that they use the services. The approach could involve a broader base of expertise, including medical practitioners with deep insights into the attitudes of these segments of population, the NGOs and community leaders. Because Maharashtra is already a 'developed State' the challenge of a heterogeneous population cannot be ignored. Actually, it cries out for attention.

## The Future

Maharashtra's population as per the 2001 census at 96.8 million has far exceeded the projected population estimates of the Expert Committee which put it at 91.03 million and also the estimate given by the Population Foundation of India, 92.99 million.

Four sets of population projections for the year 2021 are possible, based on the actual data of the Census 2001, where alternative assumptions regarding fertility and mortality are employed.

If the TFR of 2.01 which is the replacement level is the goal as envisaged by the Government of Maharashtra's New Population Policy is reached in 2004, the TFR of 1.8 which Kerala now has secured would be sometime in 2011. This would mean faster *fertility decline*.

If the decline in TFR is delayed by ten years, the replacement level would be attained only around 2014 and the Kerala's TFR would be reached in 2016 and not 2011—a delay of five years. That would be a *slow fertility decline*.

If the life expectancy at birth for males would increase from 66 in 2001 to 72 in 2021 and for females, increase from 69 to 75 in the same period, the IMR would drop from 38 to 18 in two decades from 2001 to 2021. That would be *slow mortality decline*.

If the expectancy of life at birth for males increases from 66 to 75, and correspondingly for females from 69 to 78 by 2001, the IMR during the two decades would decline from 38 to 10. That would be *fast mortality decline*.

Net migration levels and age distribution for both male and female migrants as assumed in the Expert Committee is also assumed for each decade for this set of projections. It would be close to the net migration for Maharashtra during 1991–2001.

If the health system and other forces that impinge on the demographic status do not lead to efficient

performance and if the fertility and mortality decline slowly, the population *would reach 126.1 million in 2001, adding 29.4 million to what the number is now.* If the health system and modernising forces are more efficient, both fertility and mortality will decline fast, *the population would be 125 million in 2001, adding 22.25 million to the population.*

On the other hand, if the mortality declines fast but fertility declines slowly, *then the projection is of a highest growth when the population would reach 127.4 million in 2001. A minimum addition can be foreseen if mortality declines slowly and fertility declines faster. In that event, the population would reach 123.6 million in 2001.*

In short, Maharashtra will face the challenge of at least a 124 million population. Even if the Population Policy succeeds in achieving both the goals pertaining to fertility and mortality, population in 2021 will be around 125 million, provided that migration trend continues unchanged. If it is able to achieve only the mortality goal and fails to achieve the fertility goal in the given time, the population will reach 127 million by 2021.

### Policy Implications

There is a need to adopt suitable policies and to strengthen the existing policies to accelerate the process of fertility and mortality decline in Maharashtra and to improve the quality of life.

The imperatives are as follows:

- Finding effective measures to reduce mortality of children within one month after birth.
- Strengthening the urban health infrastructure to deal with nearly stagnant urban neonatal child mortality.

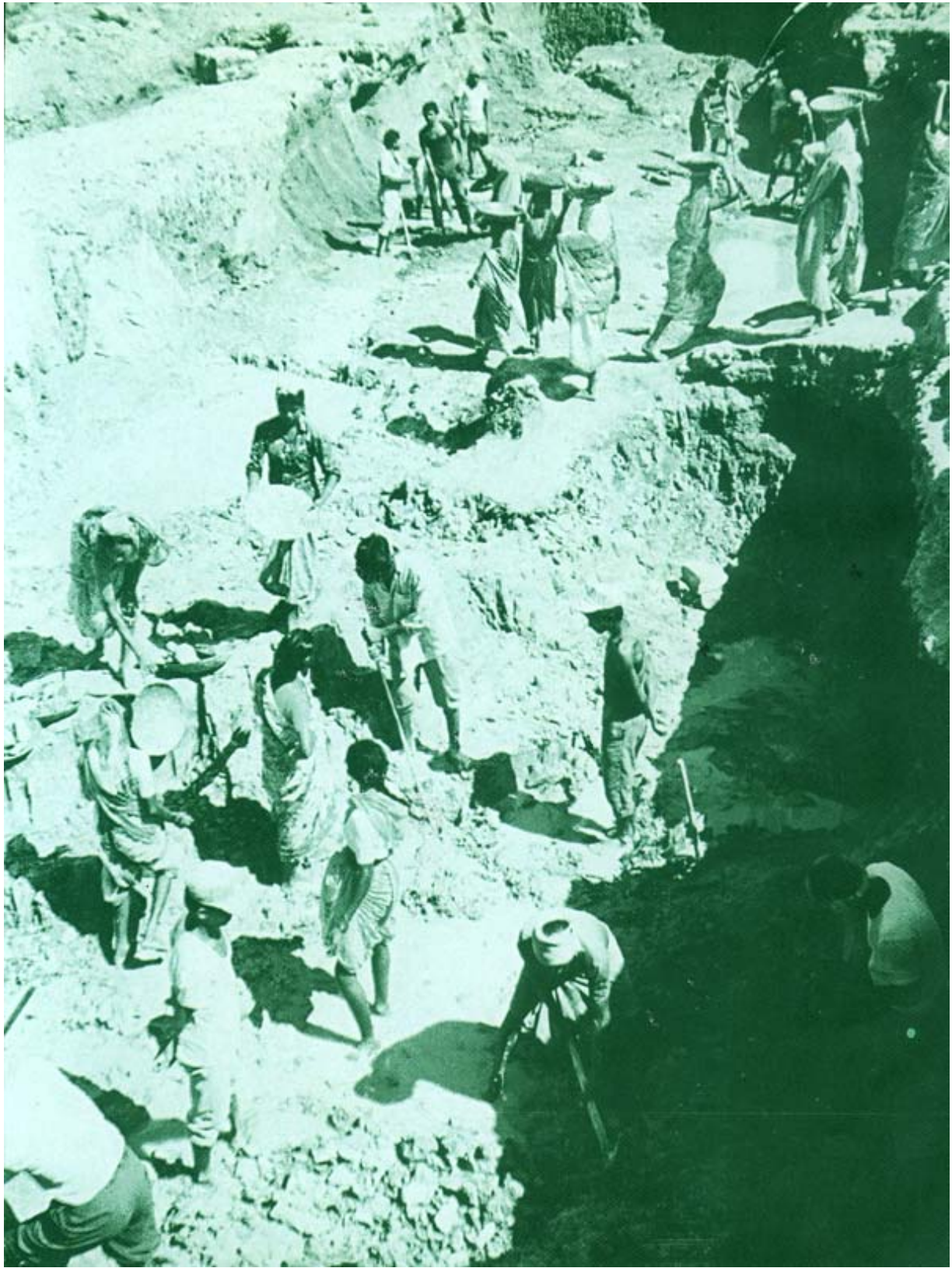
- Implementing strictly laws relating to the age of marriage, especially of girls, and strengthening extension activity to change the attitude of people towards early marriages and their adverse impact on health, family economics and resultant social implications.
- Promoting spacing methods among young couples to reduce teenage fertility.
- Efforts to emphasise early acceptance of spacing methods and sterilisation after two children, regardless of the sex composition of the family by that time.
- Strengthening of extension activities and efforts by non-governmental organisations to project a positive image of a girl to reduce son preference and prevent sex selective abortions.
- Serious and continuous efforts at improving the coverage and utilisation of antenatal services and promotion of deliveries attended by health professionals.
- Using the power of the electronic media for improving exposure to family planning messages directly and giving the message indirectly through its more innovative and imaginative use.
- Strengthening of health and family welfare services for slum population of Mumbai.
- Inter-sector co-ordination to strengthen efforts to reduce the regional imbalance by providing more employment opportunities, infrastructure etc., to improve the quality of life in less developed districts, especially in the Marathwada region which is least advanced in terms of most of the indicators.

More than mere direct incentives and disincentives, these long-term measures are more likely to accelerate the process of population stabilisation in Maharashtra.

Chapter IV →  
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# ECONOMIC DEVELOPMENT: GROWTH AND EQUITY







## Economic Development: Growth and Equity

**M**aharashtra has consistently done well for itself in terms of economic growth. Its State Domestic Product is the second highest among all States despite the poor quality of its arable land, scanty rainfall in the interiors and a skewed spatial distribution of its resource endowments. During the 1990s, Maharashtra's performance was next only to neighbouring Gujarat. In industrialisation too it ranks high and is constantly in race for further industrial investment with Gujarat. In terms of per capita income, it is only marginally lower than Punjab.

However, economic growth has necessarily to be judged in terms of its sectoral composition and regional distribution as well as its impact in terms of generating income and employment for the poor. As the foregoing analysis would show, the problem *is* the pattern of distribution where wealth has been unevenly distributed, leading to wide disparities.

This growth, a significant development experience in the country, has been rich and prismatic, achieved against odds. It has come largely from non-agricultural sectors, essentially in regions like

### Box 4.1

#### Informal Sector and Employment in Maharashtra

Data from the Economic Census and Sample Surveys in Maharashtra indicates that the informal sector in urban areas and urbanised districts is increasingly a predominant source of employment in the State.

Employment in Maharashtra has increased in absolute terms from 8.42 million to 9.47 million, between the years 1990 and 1998. During this period, the share of informal sector employment has increased from 52 to 59 per cent indicating the growing predominance of this sector in Maharashtra. The composition of employment generation in the informal sector has been shifting away from establishments towards own account enterprises (OAEs). An examination of the sectoral distribution of employment in OAEs revealed a growing proportion of employment in retail trade from 41 per cent to 18 per cent, while the share of the manufacturing sector declined from 24 per cent to 18 per cent.

At the regional level, over 70 per cent of non-agricultural employment in the State is being generated in urban areas over the past two decades. Further *five out of thirty* districts, viz., Mumbai,

Thane, Pune, Nashik and Nagpur accounted for 55 per cent of total employment in the non-agricultural sector. During the period 1990–98, there has been a distinct trend of growing informalisation of employment. A substantial proportion of employment, both in agricultural and non-agricultural activities, has been generated in own account enterprises.

There has been greater dependence on unorganised employment and a tendency of resorting to home-based employment opportunities, both in rural and urban areas and across districts. Lack of adequate employment opportunities in non-agricultural establishments, which is confined mainly to urban areas, has caused a trend of growing employment in home-based enterprises. As a result, the more industrialised districts of Mumbai, Thane and Pune continue to be the principal source of employment in the State.

While employment opportunities have increased at an annual rate of 1.56 per cent, substantial rise has been in the informal sector. This sector is typically characterised by underemployment and chronic income deprivation, accentuating the problem of poverty among the employed.

Mumbai and Thane, leading to both sectoral and regional imbalances in development. This growth, led by an urban-centric, non-agricultural focus has had its visible consequences: pockets of urban affluence with shades of poverty and a continuing draw for migrants. As Box 4.1 shows, the urban informal sector is now playing a major role in providing employment in the State.

The engines of growth in the rural economy need to be strengthened further, especially as the bulk of employment continues to be in the farm sector. A corrective required to neutralise the restriction of the capacity to absorb the rural labour into productive activities has been the much-lauded Employment Guarantee Scheme, a mechanism that ensures wages to the farm labour that finds no work on the farms for any reason, including droughts.

### Income Instability

Agriculture in the State is the laggard. It continues

#### Box 4.2

#### The Landless Farmer and EGS

The agricultural census of 1991–92 placed the number of small farmers holding between one and two hectares of land at 27,27,587. On the other hand, the number of marginal farmers holding less than one hectare of land according to the same census, was 32,74,761.

The number of persons engaged as agricultural labour, however, was higher than the total of the small and the marginal farmers: 83,13,223. And those who registered themselves for work because of perceived risk of unemployment during that time of distress numbered 45,18,974 of whom 21,46,560 were women.

These numbers underscore the profile of the large mass of people dependent on agriculture, instability of incomes and the extent of distress during droughts.

According to the Maharashtra Economic Development Council figures, in 1961, cultivators and agricultural labour accounted for 70 per cent of total workers in Maharashtra. In 1991, it was 60 per cent.

to be at the mercy of uncertain monsoons, which is either inadequate in precipitation or uneven in spread over the season, putting agriculture under tremendous stress. As a result, the rural population is subject to a high degree of instability in incomes and levels of living. As a means to counter this income instability, for instance, more women—twice in number than that of men—work as marginal workers, seeking to supplement family incomes. It also signifies low gains from agriculture as well as individual efforts to contain the impact of poverty.

Rainfall distribution is uneven, varying considerably across the regions, a major part being dry with rainfall below 800 mm annually. Even water availability for drinking is uneven, with some villages even now lacking adequate potable drinking water, the supply becoming quite scarce in summer. As early as 1984, Ahmednagar, Solapur, Dhule, Jalgaon and Buldhana, were categorised as drought prone. Estimates for 1999–2000 show that only 14.5 per cent of the net sown area in the State was irrigated, that too mainly because of irrigation by wells; some 55 per cent of the total irrigation is by wells. Farming being thus vulnerable to drought, the average yields of cereals per hectare and total food grains production is the lowest among the major States with the State producing only 90 per cent of its requirement.

### Smaller Landholdings' Impact

Rural economy is not diversified. Some 83 per cent of the operational holdings are devoted to crop production and 13 per cent to livestock. The average size of the landholding has decreased, from 4.28 per hectares in 1970–71 to 3.11 hectares in 1980–81, 2.64 hectares in 1985–86 and 2.21 hectares in 1990–91, impacting adversely on productivity though smaller holdings mean more people have some, though small, landholding now than they did in the past. The pressure of population on land is intense and increasing, as is evident from the fall in the average size of holdings. But this has been further compounded by an increase in the inequality in distribution of operational holdings. The Gini

coefficient being 0.526, 0.571 and 0.598 in 1970–71 1981–82 and 1991–92 respectively.<sup>1</sup>

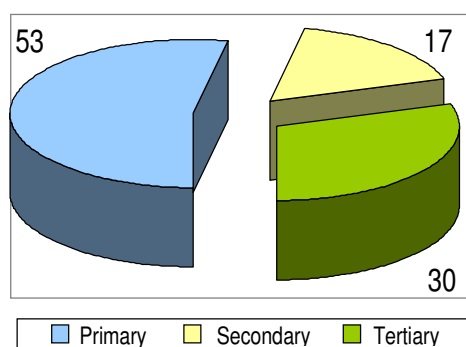
There is, thus, a limitation to the potential for agricultural growth in Maharashtra. So is the case with the scope for rural labour absorption and productive employment, rendering the State's economy a hostage to this lag. The unemployment rates in rural and urban Maharashtra for instance is high, and about two-thirds of the workforce is dependent on agriculture as a source of livelihood resulting in low levels of per capita income in rural areas. This constraint drove Maharashtra towards a path that led to pursuing growth options largely on the non-agricultural front. The record has been one where secondary and tertiary sectors have been the instruments of the growth process but not so with regard to absorption of a growing workforce. To make a difference, Maharashtra has to alleviate unemployment and poverty in the rural sector.

### Income and Undernourishment

Income levels indicate and determine partly the extent of human development. Its nuances, however, are better profiled not just by the levels but the periodic changes in their levels, aggregate as well as its composition. Such an empirical approach helps appreciation of the magnitude of the problem of underdevelopment and to identify the sectors that cause the lag.

Figure 4.1

State Domestic Products: Rs 21,22,160 million (1999–2000)



1. The Gini coefficient is a statistical measure to mark the extent of inequality, varying from '0' to '1'. When income is equally distributed, when everyone in society has the same level of income,

A major part of Maharashtra is poor in terms of income. There is a substantial incidence of poverty, statistical estimates for the State as a whole showing a decline in poverty over time but these are not corroborated by estimates of real consumption. Measured by quantities of cereal consumption and calorie intake, the population does not show any marked improvement. A large proportion of the rural and urban population is undernourished.

### Trends

In terms of income measure—which is one but not the sole determinant of human development—Maharashtra emerges as one of the richer States in the country. In 1998–99, the per capita State Domestic Product (SDP) was Rs 20,644, higher by about 40 per cent of the all-India average of Rs 14,712.

Provisional estimates for 1999–2000 show the SDP at current prices to be Rs. 21,22,160 million and the per capita SDP at Rs 23,398. A little more than half of the total contribution to this came from the tertiary sector which was, at 11,17,730 million or 52.67 per cent. The primary sector contributed 17.18 per cent with Rs 3,64,590 million, the secondary sector's share being 30.15 per cent, i.e., Rs 6,39,840 million, marking Maharashtra as having a large non-agricultural economy.

Table 4.1

Sectoral (%) distribution of workers: Maharashtra

Sector	1961	1971	1981	1991
Primary	72.07	66.73	64.03	61.51
Secondary	12.52	14.52	16.07	15.80
Tertiary	15.41	18.75	19.90	22.69
Total	100.00	100.00	100.00	100.00

Source: Census abstracts.

An important feature of this pattern of economic development is that the secondary and tertiary sectors together dominate the output generating activities in terms of *both* origin of income *and* employment of workforce. Maharashtra emerges as the most developed because, Punjab, though richer than Maha-

rashtra in terms of income, is predominantly an agrarian economy in terms of both income and employment criteria. But looking at only the sectoral share of employment, primary sector contributes the most in Maharashtra, as shown in Table 4.1.

### Economic Growth

Since its formation in 1960, Maharashtra's economy, in terms of net SDP grew at 4.73 per cent per annum till 1999–2000 and the per capita SDP at 2.43 per cent per annum. In comparison to the all-India performance over successive Plan periods, Maharashtra's performance shows the non-agricultural sectors playing a major role; neutralising the adverse implications of the poor performance of the primary sector. What is more important is that the growth rate has accelerated in successive decades.

Maharashtra's economy was virtually stagnant during the 1960s. Per capita SDP stagnated largely due to stagnation in the agricultural domestic product. The dominance of agriculture in the primary sector had considerable adverse implications for the rural economy, worsening the unemployment and poverty situation in rural Maharashtra. The decline in primary sector domestic product, however, was more than neutralised by positive growth rates in the secondary sector at 4.42 per cent per annum and tertiary sector at 4.31 per cent. As a result, the domestic product in Maharashtra's economy as a whole increased at a modest rate of 2.52 per cent per annum. The total SDP growth just managed to keep pace with the population growth rate.

Though agricultural performance improved during the subsequent decades, its progress was not sustained. It registered a growth rate of 6.64 per cent per annum during 1970–80, stagnated at a statistically insignificant 3.28 per cent per annum during 1980–90 and picked up at 4.39 per cent per annum again in 1990–00. The average agricultural growth rate during 1960–2000 was 2.92 per cent per annum, which barely exceeded the population growth rate of 2.24 per cent. The primary

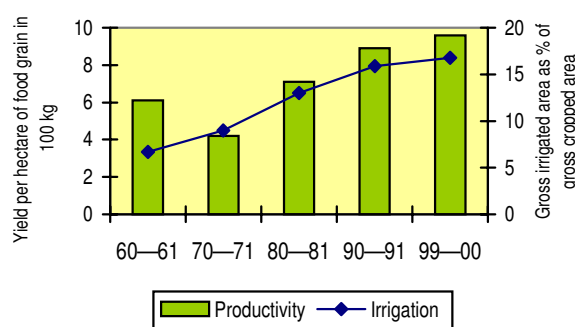
sector as a whole showed a growth pattern similar to agriculture.

### Irrigation Productivity and Livelihood

Irrigation is intrinsically related to the productivity of land and livelihood of a large number of people, droughts being a single major cause of socio-economic drag on the development, and Maharashtra would have been expected to focus on irrigating its land rapidly. This in turn is linked to a

Figure 4.2

### Comparison of Irrigation and Productivity over Four Decades



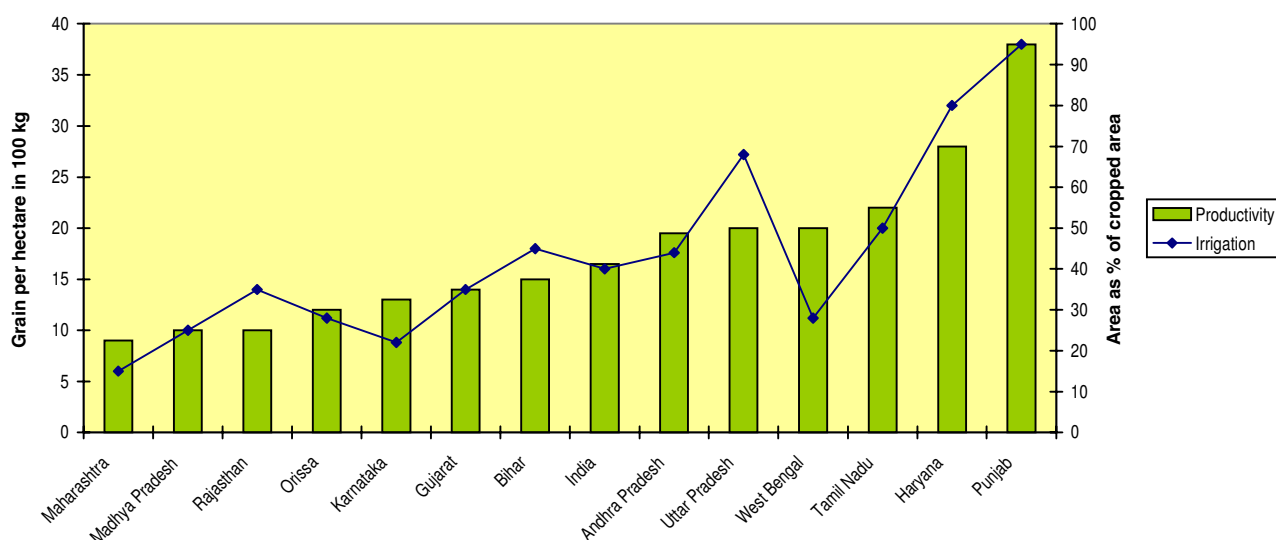
number of socio-economic issues confronting the State (Figure 4.2).

Maharashtra's position remained poor in terms of productivity of food grains production. Its relationship to irrigation is unmistakable (see Figure 4.3).

Since 1960, there has been a significant development of irrigation but its growth rate has not been maintained. Especially in the background of a national average of 33 per cent, this stagnation is striking. Many suggestions to optimally use irrigation, by an eight-monthly instead of perennial supply for crops like sugarcane, which consumes most of the irrigated water, have been propagated but not widely implemented.

When irrigation is scarce, Maharashtra has chosen water-intensive sugarcane as its principal cash crop and built an impressive rural socio-political and economic edifice, which is responsible for some one-third of sugar production in the country. More

Figure 4.3  
Comparison of Irrigation and Productivity of Land



than half of the irrigation goes to sustain a crop on three per cent of its cropped area.

Sugarcane requires 10-hectare cm per wetting, 30 wettings producing some 1,000 quintals. On the other hand, millet, often needing only supportive irrigation, can do with five-hectare cm per wetting, for just two wettings. These two crops, of course, are at the two extreme ends of a spectrum of crops with rice for instance falling somewhere in the middle, needing just seven-hectare cm per wetting for ten wettings. Grape and fruits require about the same quantum per irrigation as rice but

the crops need to be irrigated almost thrice the number of times. On the other hand, in respect of irrigation, the share of gross irrigated cropped to gross cropped area has risen from 6.48 per cent in 1960–61 to 15.41 per cent in 1999–2000 but that is hardly enough to ensure security to the agricultural sector.

The secondary and tertiary sectors, on the other hand, registered sustained improvement (Annexure Table 26). Consistent with the overall growth pattern of these two sectors, total SDP too improved. As a result, per capita SDP, which stagnated during

### Box 4.3

#### Participatory Irrigation Management: *Pani Panchayats* in Maharashtra

There has been a concerted effort at equitable distribution of irrigation water, mostly by NGOs across Maharashtra, with varying degrees of success. The *Pani Panchayat*, a concept of collective rights, believes that water is a community asset that has to be shared by all—including the landless—and Water User Societies that emerged by people's action on canals owned and operated by the Government have tried to make sure that its distribution was optimised. This has actually inspired the Government of Maharashtra to decide that in the next three years, it would move out of distribution of irrigation water and instead, allow co-operatives of farmers to deal with it to ensure that the missing

equity in entitlements are restored to water users as well as promote efficiency in utilisation.

A 21 June 2001 decision of the Government of Maharashtra is that unless farmers form such co-operatives, they would not receive irrigation water for their fields. Water from completed irrigation projects would be assigned on a volumetric basis for crops in a manner that suffices the irrigation needs of the *planned* cropping pattern and the distribution has to be by farmers themselves. In that event, the scope of preference for crops other than the pattern laid down in the command management programme would be minimised, ensuring equity in water shares.

the 1960s, started growing thereafter. It increased at about the same rate of 3 per cent per annum during the 1970s and 1980s and at an accelerated rate of 4.65 per cent per annum during the 1990s. In sum, per capita SDP increased at the compound annual growth rate of 2.43 per cent per annum during the entire period.

### Uneven Sectoral Growth

The growth process of Maharashtra is characterised by periodic fluctuations across almost all the sectors. Still there are some sectors, which played an important role in the growth process. For instance, as regards the secondary sector, manufacturing in both registered and unregistered segments, electricity, gas and water supply have been the most vibrant activities in the sense that they have shown a sustained growth record over the decades. Trade, transport, communication, banking and real estate dominated the scene with reference to the tertiary sector.

The uneven growth performance of the three major sectors is amply brought out by fluctuations in their respective shares in the total SDP. The primary sector's share declined gradually from 42.14 per cent in 1960–61 to 29.86 per cent in 1970–71, 27.69 per cent in 1980–81, 22.88 per cent in 1990–91 and finally to 17.44 per cent in 1999–

2000. This would clearly imply that the primary sector, agriculture in particular, has not shown the growth momentum to the same extent as the remaining sectors.

The secondary sector as a whole increased its share from 26.13 per cent in 1960–61 to 31.70 per cent in 1970–71 and remained at the same level for the rest of the period. Thus the secondary sector has kept up with the average pace of the economy since the 1970s. It is the tertiary sector, which seems to have grown consistently at a pace higher than the average for the economy. Its share increased from 31.73 per cent in 1960–61 to 38.44 per cent in 1990–91 and finally to 50.45 per cent in 1999–00. Trade and transport seem to be the major sub-sectors, which account for the observed growth performance of Maharashtra.

The primary sector, notwithstanding its declining share of output, continues to be the major source of livelihood in terms of employment. While its share of income has declined from 42.14 to 22.88 per cent between 1960–61 and 1990–91 its share of work force declined from 72.07 to 61.50 per cent. In other words, the percentage point decline in employment is less than the decline in share of output for the primary sector. The secondary sector increased its share of output as well as workforce.

#### Box 4.4

#### Sectoral Composition and District Incomes

Sectoral distribution of incomes across districts shows regional disparities in the level and nature of economic activities.

Greater Mumbai, once a huge base for manufacturing, has 36 per cent of its income accounted for by the secondary sector and 62 per cent by the tertiary. Structural changes as indicated by the relative decline, as was with Mumbai metropolitan region, where the primary sector declined but others gained ascendance to contribute more, is visible in Thane and Raigad districts. Pune, Nagpur and Aurangabad also followed this pattern.

At the other extreme are districts like Sindhudurg in Konkan, Osmanabad in Marathwada, Gadchiroli and Chandrapur in Vidarbha show a high share

of income from the primary sector which is as high as 40 per cent.

As per the Fourth Economic Census Report, 1998 of the total enterprises in Maharashtra, 15 per cent are in Greater Mumbai followed by 7.4 per cent in Pune, seven per cent each in Kolhapur and Thane districts.

In terms of jobs generated, Greater Mumbai holds the prime place, accounting for 27 per cent of the total employment in Maharashtra. Thane, Pune and Kolhapur follow with 8.8 per cent, 8.2 per cent and five per cent respectively. These four locations account for close to half i.e., 49 per cent of all jobs in Maharashtra, underscoring yet again regional disparities and their consequences.

Table 4.2

**Unemployment Rate (%) (Daily Status)\*: Maharashtra and All-India**

Survey Period	Maharashtra				All-India			
	Rural		Urban		Rural		Urban	
	Male	Female	Male	Female	Male	Female	Male	Female
1972–73	7.80	12.70	n.a.	n.a.	6.80	11.20	8.00	13.70
1977–78	5.85	9.31	8.99	15.75	7.10	9.20	9.40	14.5
1983	6.25	7.23	9.05	10.44	7.5	9.00	9.20	11.00
1987–88	2.90	3.50	8.50	9.20	4.60	6.70	8.80	12.00
1993–94	4.6	4.00	6.00	7.80	5.60	5.60	6.70	10.50
1999–2000	6.30	6.90	7.70	10.00	7.20	7.00	7.30	9.40

Note: n.a. – not available.

\* Incidence of person-day unemployment is defined as a ratio of unemployed person-days to labour force person-days.

Source: Government of Maharashtra (2001a).

Within the secondary sector, the manufacturing sector has played a major role in providing factory employment. On an average, it accounts for 92 per cent of the total daily factory employment of 1.23 million, involving a wide spectrum of sectors falling under consumer, intermediate and capital goods industries, accounting for 37.5 per cent, 29.2 per cent and 25.4 per cent respectively of total factory employment. Data on unemployment (Table 4.2) indicates rates that are lower than those recorded at the national level in rural areas, for both females and males. In urban areas the unemployment rate recorded in Maharashtra are higher than the national level. This points to a better performance in rural areas, which could partially be explained by the role of state specific employment programmes such as the EGS.

The tertiary sector, on the other hand, increased its share of workforce just by about seven percentage points. As a result, disparities in relative product per worker in the three sectors have increased over time. By definition, the relative product per worker is the relation of share in output to share in workforce of the given sector. While the relative product per worker in the primary sector declined from 0.58 to 0.37 that is by about 36 per cent during 1960–61 to 1990–91 those of the secondary and tertiary sectors have declined by less than six per cent.

The relative sectoral product per worker of the primary sector is about one-fourth of those of the secondary and tertiary sectors. Thus, poor technology and low level of output in the primary sector seem to

be a major factor constraining growth and poverty alleviation in rural Maharashtra. Such inter-sectoral disparities in growth performance has also implications for the regional distribution of income and poverty.

### Higher Labour Productivity

Due to technological progress, the level of labour productivity is higher in the secondary and tertiary sectors. But these sectors' share of workforce is relatively low. Hence relative product per worker is generally higher in these two sectors. The level of productivity is lower but share of workforce is higher in the primary sector. Hence, its relative product per worker is lower. As regards the primary sector in Maharashtra, its share in total output of the State declined because of industrialisation but not so with respect to workforce. Thus the relative product per worker is seen as having declined.

Table 4.3

### Relative Sectoral Product per Worker: Maharashtra

Sector	<i>(figures in percentages)</i>			
	1960–61	1970–71	1980–81	1990–91
Primary	0.58	0.45	0.43	0.37
Secondary	2.09	2.18	2.03	2.08
Tertiary	2.06	2.05	2.00	1.95
Total	1.00	1.00	1.00	1.00

Source: Government of Maharashtra (2001a)

Not just growth but its spread and its distribution are important determinants. Therefore, how much

and what has been the economy's spread across the districts and regions and how evenly? The Fact Finding Committee on Regional Imbalances in Maharashtra has gone into that question and districts have been classified based on a set of indicators for agriculture, industry, human resources and infrastructure.

### Dispersed Development

Inter-district disparities in growth performance may be verified in terms of the simple outcome measure, viz., district-wise estimates of income and its composition. The estimates for 1998–99 bring out the following features that are a cause for concern.

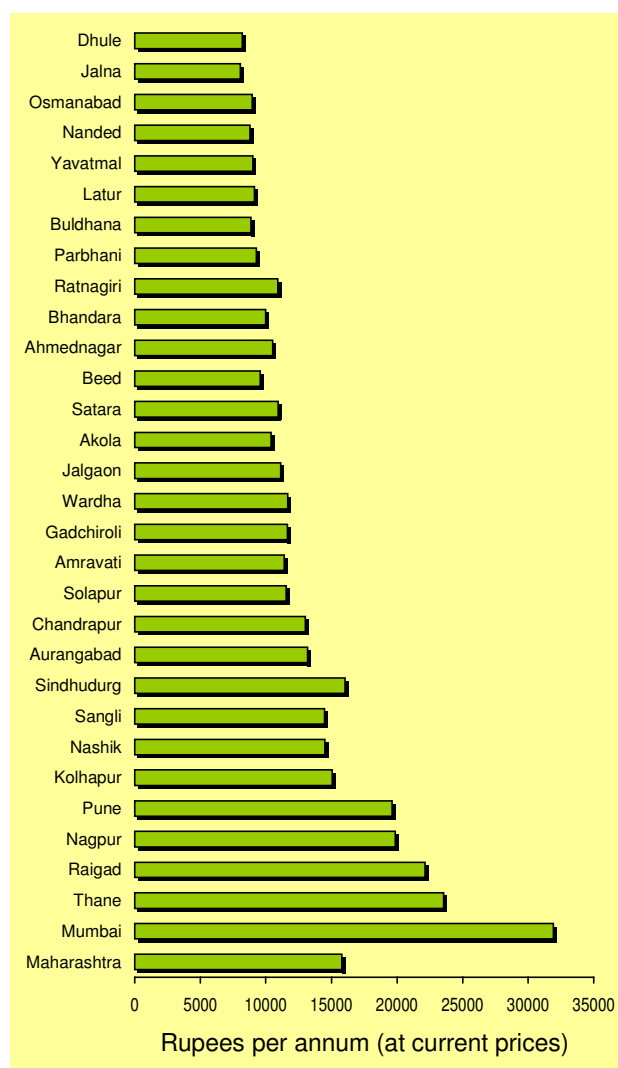
- Dhule, with a per capita domestic product of Rs 11,789, is the poorest district. Mumbai district on the other hand, has a per capita domestic product of Rs 45,471, which is almost four times the level obtaining in Dhule.

One approach to examine the uneven levels of development across districts could be to rank them on the basis of per capita district domestic product and classify them into four different ordinal groups, i.e., the poorest, lower middle, upper middle and richest quarter. This classification could be with reference to the three quartiles, that is, lower quartile, middle quartile (median) and the upper quartile. The three quartiles for 1998–99 are 13,827, 16,700.5 and 20,411 respectively.

- The districts of Dhule, Jalna, Osmanabad, Nanded, Yavatmal, Latur, Buldhana and Parbhani form the poorest quarter. They account for just 11 per cent of the total income generated in the State. Five of these eight districts belong to Marathwada.
- Ratnagiri, Bhandara, Ahmednagar, Beed, Satara, Akola and Jalgaon belong to the lower middle quarter. These districts, spread across the six different geographical divisions of Maharashtra, together contribute just 14.3 per cent to the total SDP.
- Wardha, Gadchiroli, Amravati, Solapur, Chandrapur, Aurangabad, Sindhudurg, and Sangli constitute the upper middle quarter. These districts are located in five different divisions. Their SDP share at 14.8 per cent is marginally higher than that of the lower middle quarter. Placing Gadchiroli in the upper middle quarter could be surpris-

Figure 4.4

Per Capita District Domestic Product: 1998–99\*



\* See Note at Annexure Table. No. 111.

ing since it is virtually a poor district. But estimates of income generated by districts are done by allocating State aggregates of SDP across regions with reference to its workforce etc., and a district like Gadchiroli ends up showing a statistically higher per capita District Domestic Product. It is thus placed in the second richest quarter but is actually the 17th poorest district.

- The richest quarter consists of Nashik, Kolhapur, Pune, Nagpur, Raigad, Thane and Mumbai. The Konkan division, because of Mumbai, Mumbai Suburban and Thane districts in its perimeter, dominates this group. Together they contribute about 60 per cent of the total SDP.
- Mumbai accounted for about 25 per cent of the State income followed by Thane (ten per cent), Pune (nine per cent) and Nagpur (five per cent).



In other words, these four urban or largely urban districts alone accounted for about 50 per cent of the State income in Maharashtra. On the other hand, Amaravati division, consisting of the districts of Buldhana, Akola, Amaravati and Yavatmal,

contributed just seven per cent of the total State income. Thus, a striking character of economic development in Maharashtra is the wide disparity in income across districts.

#### Box 4.5

### Tackling the Developmental Backlog in Maharashtra

Maharashtra was formed in 1960, merging the contiguous Marathi speaking areas of Bombay State, Madhya Pradesh and Hyderabad State. Of these three regions, the area from Bombay State was better developed both in economic and social indicators though the Marathi-speaking region lacked a distinct business class of its own. The other two were less developed or relatively backward and for years, these regional disparities were carried forward. Western Maharashtra, with the dominance of a successful political entrepreneurial class that emerged later kept the region ahead.

This triggered in 1984 the setting up of a Fact-Finding Committee on Regional Imbalance headed by the economist, V.M. Dandekar. The Committee quantified, at 1982–83 prices, the total developmental backlog for the entire State sans Greater Mumbai to be Rs 31,770 million, of which Konkan's share was Rs 2,956 million, Western Maharashtra-Rs 8,840 million, Marathwada-Rs 7,508 million and Vidarbha-Rs 12,465 million. This backlog in investment has been mainly in essential sectors like roads, irrigation, public health and technical education, which strengthened regional disparities though over the years, this historic burden was substantially corrected, but not completely neutralised.

In 1994, three Regional Development Boards, provided for by Article 371(2) of the Indian Constitution to give a statutory guarantee to the policy and process of removing regional disparities was set up, with the Governor having a special responsibility to ensure liquidation of the backlog. Between 1985–86 and 1999–2000, Rs 89,808 million was provided for remedial action but actually Rs 82,378 million was expended. Inflation played an additional role in keeping the gap alive; increasing and larger works being undertaken and rising prices and costs adding their bit.

This provision was activated for the first time in the country, a full 38 years after it was incorporated in the Indian Constitution, which also meant that there were no precedents to go by for Maharashtra. Article 371(2) enjoins upon the Governor to act to

secure equity in distribution of resources for even development of the State by neutralising backlogs. This he has to do 'notwithstanding anything in this Constitution.'

The spirit behind these Development Boards is to not only ensure equitable distribution of funds to fuel development but to wrench the system away from the traditional belief that planning means financial allocation and not actual achievements in terms of assets. Once the funds available at their disposal are allocated to various Government Departments by the Boards, they cease to have any control over its effective and timely deployment. Sometimes, funds meant for wiping out backlogs in crucial areas are sought to be spent on building gymnasiums or even wayside bus-shelters. This would call for a look at the way priorities are determined and a monitoring mechanism evolved and what exists, strengthened.

A subsequent committee which reviewed the indicators afresh in 1994, determined the then obtaining backlog at Rs 153,357 million at current costs per unit of development, spread over the three regions. The backlog for Vidarbha was Rs 69,610 million (45.33 per cent), Marathwada's share was Rs 46,260 million (30.13 per cent) and rest of Maharashtra—not just 'Western Maharashtra' Dandekar Committee referred to—had a share of Rs 37,682 million (24.54 per cent). The total backlog remaining to be tackled now, as of April 2001 is Rs 83,790 million after the post-1994 allocations made to neutralise the backlog.

The panel has shown that between 1984 and 1994 disparity had actually widened across the regions; the disparity indices for Vidarbha and Marathwada had increased by 28 and 29 per cent respectively but had actually declined in the case of Maharashtra by 33 per cent. Sectoral distribution of the backlog at that point of time indicated that Vidarbha and Marathwada had a higher backlog in physical infrastructure and the rest of the State accounted for a higher backlog in social infrastructure.

The estimates of backlog, as of April 2000, on the basis of cost of projects, were Rs 98,309 million.

- Not only is there a sharp disparity between Greater Mumbai and rest of Maharashtra but within the various regions too a substantial divergence exists. In Konkan, Thane and Raigad have a high per capita district domestic product than its other districts. In Western Maharashtra, Pune tops but Dhule and Nandurbar are at the bottom. In Marathwada, Aurangabad compares closely with most others in Western Maharashtra but within the region, has no peers; they in fact compare with Nandurbar. Buldhana, Yavatmal and Bhandara come in the same category.

The above discussion shows the extent and critical nature of inter-district disparities in Maharashtra. A strategy for balanced and equitable development would have to address the issue of redressing historical backwardness in the State as highlighted in Box 4.5.

### Mumbai's Pre-eminence

Mumbai district has no peers as its per capita domestic product exceeds the upper quartile by more than three times the inter-quartile range, which is the distance between the lower and upper quartiles. This is a statistical measure used to determine whether Mumbai is far removed from the remaining districts in terms of their general pattern. Mumbai, Thane and Raigad generate per capita income levels, which exceed the upper quartile by more than one-and-a-half times the inter-quartile range and are different from the rest of the State. Among the top three, Mumbai and Thane owe their pre-eminent position largely to the tertiary sector, which accounts for more than 50 per cent of the District Domestic Product, Raigad's status is based on the dominance of the secondary sector.

### Land and the Landless

Land is a major asset base but most of the arable land is of poor quality. Coupled with uneven rainfall patterns that service the farms, the level of income generated from the agricultural sector is low. It declined during the 1960s. This, coupled with the fact that Maharashtra has a very large proportion of

landless rural households further aggravated the rural unemployment situation. It worsened during the drought of 1972–73. Still agriculture accounted for 80.7 per cent of the total rural employment in 1977–78. Wage employment constituted 39.7 per cent of the total employment with more than half being casual workers.

Thus, the rapid progress in the non-agricultural sectors has, in totality, given Maharashtra the push towards a high level of income. This feature, along with the restricted geographical spread of economic development, implies that both the average level of income and the degree of inequality in its distribution across persons in the State would be high. For the same reason, unemployment and incidence of poverty would be high in the backward regions. The deprivation of the poor would worsen in any year of drought or even bad monsoon. This would call for explicit policy intervention of various forms in the economy to deal with drought, unemployment and poverty. If so, how did the government policy grapple with this question? How far has it succeeded in its efforts?

Against this background, the Government of Maharashtra followed a multi-pronged approach involving policies that sought to promote equity by direct institutional reforms and anti-poverty and productivity enhancing programmes in agriculture. Some of the anti-poverty programmes are implemented jointly with the Central Government and others independently by the State.

Though Maharashtra was formed on a linguistic basis, it was also a cobbling together of different regions that had distinct agrarian structures during the pre-Independence period. Konkan region had mainly small landholdings due to its geographical features and tenure systems. It had a double tenure system called *Khoti*, Western Maharashtra had the *Rayatwari* revenue system. Marathwada was under the Nizam's rule and the extent of inequality in the distribution of landholding ownership was much high than in Konkan and Western Maharashtra. Vidarbha belonged to the Central Provinces & Berar, where both *Rayatwari* and *Malgujari* tenurial systems prevailed. As a result,

it had a class of large landowners and high degree of inequality in the distribution of landholdings.

Efforts at reforming the agrarian system consisted mainly of measures to prevent fragmentation of holdings, abolish intermediaries, impose a ceiling on land ownership, tenancy laws to confer ownership rights on tenants, and redistribute land to the landless. In addition, the beneficiaries were also provided with financial assistance to meet the costs of developing the allotted land. About 14.9 lakh tenants have benefited to the extent of 17.4 lakh hectares of land. Yet, estimates of the extent of inequality in the distribution of operational landholdings as a whole has increased over time. Given the diverse agrarian and institutional structures in different regions, the regional impact of the reform efforts differed. The impact is marked in Vidarbha and moderate in Marathwada. In Konkan and Western Maharashtra, where land distribution had been more egalitarian, the impact as a consequence of the land reforms was felt much less.

### Drought Mitigation

The drought of 1972, often described as worst ever in recent memory, was a turning point in that it enabled the formulation and implementation of some important poverty alleviation and relief during scarcity. They have remained, since then, with improvements and changes brought in from time to time in some of the programmes and in the means employed by the government to assist the people combat adversities. The most imaginative and direct means employed towards this end is the Employment Guarantee Programme, executed from the State's own resources, specifically generated for the purpose. Programmes sponsored by the Central government too find a place in the many ways poverty is sought to be dealt with.

They include:

- Programme of Small/Marginal Farmers and Landless Agricultural Labourers aimed at land development, optimum use of water and land resources, improved agricultural practices, inten-

sive cultivation, development of small irrigation and animal husbandry.

- Scarcity Relief Programme to deal with scarcity and drought conditions.
- Crash Scheme for Rural Employment till 1974 for employment generation and asset creation.
- Pilot Intensive Rural Employment Project till 1977.
- Village Employment Scheme.
- Scheme for the Benefit of Artisans (1974).
- Drought Prone Area Programme (1974–75).
- Food for Work Programme.

### Employment Programmes

Presently, several employment programmes, sponsored by either the State Government or the Centre, whose avowed objective is to promote economic security of the poor by providing employment, both self-employment and wage employment, are available. Some of the Centre's programmes are:

- *Jawahar Gram Samridhi Yojana*, a centrally sponsored employment programme and a reincarnation of the *Jawahar Rozgar Yojana*, to promote infrastructure development involving scope for sustained employment opportunities at the village level.
- Employment Assurance Scheme started in December 1993, with the twin objectives of providing wage employment to the poor and creating durable assets to sustain growth and employment.
- *Swarnajayanti Gram Swarozgar Yojana* a restructured version of the Integrated Rural Development (IRDP) and other self-employment programmes to assist the poor families with bank credit and Government subsidy for acquiring income generating assets and cross the poverty line within three years.
- *Swarna Jayanti Shahari Rojgar Yojana* is an envelope for the Urban Self-Employment Programme and Urban Wage Employment Programme for the urban unemployed /under-employed poor and educated upto IX standard.
- Prime Minister's *Rojgar Yojana* seeks to provide self-employment to educated unemployed youths in the rural and urban areas.

The State Government sponsors its own programmes.

- Employment Promotion Programme wherein the educated unemployed are trained in skills to secure them employment.
- Employment Promotion Programme for Assisting Educated Unemployed under which 'Seed Money Assistance' to the extent of 15 to 22.5 per cent of the project cost.
- Programmes for training apprenticeship and promoting capacity for enterprise among the educated unemployed.

### Employment Guarantee Scheme

One major, and indeed unique, programme for poverty alleviation through employment generation and asset creation and which has elicited world-wide attention, is the Employment Guarantee Scheme. It is relevant even today despite being launched over a quarter of a century ago. It is based on the genius of using public works to play the role of a safety net by providing stabilisation benefit to the poor who lack skills of any kind except perhaps possess physical stamina. It has enabled the deployment of labour of the poor to build infrastructure for development. Its preponderant and immediate benefit every year, especially during times of distress due to droughts, is the effect of enabling the poor to handle the risk of decrease in consumption.

For instance, during April to December 2000, the EGS provided 88.4 million person-days of employment as against 27.3 million person-days under the *Jawahar Gram Samridhi Yojana* and Employment Assurance Scheme. With the shift in emphasis from pure wage employment generation to creation of social and economic infrastructure in the centrally sponsored special employment programmes, the demand on the EGS to provide additional employment opportunities may increase in the future.

The EGS tries to ensure that social security is a right. This programme was introduced in the rural areas as well as very small ('C' class) municipal towns when the unemployment situation worsened during the drought of 1971–74. This programme assures

employment on demand to even the unskilled. Its slogan is '*magel tyala kaam*' (whoever seeks work, will get it). The objectives are to protect the weaker sections of society and to build infrastructure and physical assets, which would insulate the rural economy against deleterious effects of subsequent droughts. The programme has statutory support in the Maharashtra Employment Guarantee Act, 1977, which became operational from 26 January 1979. It is a direct intervention, at huge cost: some 95 million person-days per annum by spending about Rs 5,000 million. Details of the working the EGS are given in Box 4.6.

Over a period, especially in the later part of 1990s, some changes were brought into the EGS programme, mainly to generate more employment as well as to promote the growth potential in rural areas. Because of these changes, wells could be dug on privately owned lands and plantations raised.

*Jawahar Wells:* This was introduced in September 1988 to provide wells for the small and marginal farmers. The beneficiary composition was to be such that 30 per cent belonged to SC/ST/NT/Neo-Buddhist households having holdings up to 2 hectares, another 30 per cent to small farmer households with up to 2 hectares and 40 per cent from size-holding class of more than 2 hectares.

*Horticulture:* By linking it with the programme on horticulture since 21 June 1990, this change permits horticulture programmes on the land of any farmer and plantations on up to a minimum of 0.2 hectare and a maximum of 4 hectares of the beneficiary. The government would bear the entire cost for projects on lands belonging to SC/ST/NT and small farmers. As regards others, government would bear the cost on only the unskilled portion of the work and only 75 per cent of the cost on the skilled portion.

*Social Forestry:* The Government has also undertaken social forestry since 1992–93, on private barren land to promote soil and water conservation as well as raise the physical access to fuel wood, grass and other types of wood.

*Tuti Tree Plantation & Sericulture:* Since agriculture's potential to absorb labour is limited, rural labour

gets employed for only a part of the year. To enhance this potential on time and income criteria, the government introduced plantation of tute trees and sericulture. This scheme is a feasible proposition as the climate is conducive and the business is commercially viable as well profit yielding. The scheme has been in operation since 1992–93 in Amaravati,

Yavatmal, Wardha, Solapur, Kolhapur, Jalgaon, Dhule, Ahmednagar, Nanded and Latur districts.

### EGS: An Assessment

The EGS has really been undertaken on an impressive scale. It began, on a small scale in May 1972,

#### Box 4.6

##### How does EGS work?

All adult residents of villages and 'C' class municipal towns are eligible to apply for jobs under this programme. A minor within the age group 15–18 years too can apply if the family does not have the support of any older earning member.

The *Talathi* or *Gram Sevak* is the authority with whom the job seeker has to register and seek employment under the EGS from the *Tahsildar* by undertaking to work for a continuous time interval of at least 30 days. The job seeker is to be provided employment within fifteen days, failing which the applicant is entitled to an unemployment allowance of two Rupees per day. Interestingly, an increase in this amount was never sought, nor given.

Upto 60 per cent of the total cost of a work is earmarked for wages. Any work spot has to employ a minimum of 50 persons. The programme guarantees work but it is restricted to unskilled manual work in the local district. Generally jobs are offered at sites within the Panchayat Samiti area. If the work sites fall beyond a distance of eight kilometres from the residence of the job seeker, then the Act provides for camping arrangements and travel expenses.

Government departments like Irrigation, Public Works, Agriculture, Forest and Zilla Parishads implement the programme seeking to ensure the durability and reliability of the system.

The EGS permits only productive works. The overriding concern is to insulate the vulnerable population and the economy against the harmful effects of drought. Hence, priority is attached to projects concerned with conserving moisture and water.

From this perspective, the public works are ranked as follows: highest priority is assigned to labour intensive pieces of major and medium irrigation projects, canal works, minor irrigation, percolation and storage tanks and underground *bandharas*. Next in order are works related to soil conservation

and land development, afforestation and social forestry, roads and flood protection.

Choice of projects for the EGS is restricted to those involving intensive use of unskilled labour. Towards this end, the programme stipulated a wage component of at least 60 per cent for the cost structure. For exceptional cases like canal works of major and medium irrigation projects, the floor is set at 50 per cent.

Wages are fixed on a piece rate basis, with reference to tasks like digging, breaking rocks, shifting earth and transplanting. Rates are fixed such that an average person can earn by putting in seven hours of work or at least an amount equal to the minimum wages prescribed for agricultural labour in the corresponding zone till 1983. Earlier, this parity was avoided to ensure that labour did not flow out and away from agricultural operations. EGS programmes are implemented with reference to a plan and work schedule.

The beneficiaries are provided with drinking water, shelter for rest, First Aid Box, crèches and shelter, ex-gratia payment to workers in the event of death or injuries during work since all work is manual and virtually unskilled in nature. There is an arrangement for maternity benefit of 15 days leave of absence to those female labourers who have worked for an uninterrupted interval of 75 working days before delivery.

The resources for this programme are raised by special taxes on professions, trades, callings and employment. Additional tax is by way of cess on motor vehicles and on Sales Tax, a special assessment of irrigated agriculture land, surcharges on land revenue and a tax on non-residential urban lands and buildings under Maharashtra Education Cess Act. A matching contribution annually from the State Government equal to the net collection from these sources is provided.

as soon as the impact of the drought was felt. It generated employment to the extent of 4.5 million person-days at a cost of Rs 18.8 million during 1972–73, thus safeguarding food security of the vulnerable sections, minimising the social cost of drought measured in terms of excess mortality, economic and nutritional insecurity. Soon it expanded to reach 205.4 million person-days of employment involving an expenditure of Rs 1,092.3 million during 1979–80. The annual generation of work was close to 94.9 million with a staggering expenditure of Rs 4,939.7 millions by 1999–2000 by when the number of person-days of employment stabilised. The average monthly labour attendance was about half a million during 1975–90 and 0.19 million during 1991–2000 at an average cost of Rs 28 per person-day at 1993–94 prices. Of course, this was possible because of the priority assigned to wage employment and the considerable expenditure on the programme. Ever since its inception in 1972, wages alone have accounted for about 67 per cent of the whopping expenditure of Rs 62,890 million on the programme. This estimate is some measure of cost-effectiveness of the programme in poverty alleviation and its magnitude provides a good account of the efficiency with which the EGS transfers income to the poor.

The programme succeeded in providing employment during the lean season within a year and drought years over time. Month-wise labour attendance under the EGS during 1975 to 2001 provides evidence that labour attendance peaks during the lean season (March–May) and is minimum during the peak season (September–November) (Figure 4.5). The EGS provided the maximum number of 205.4 million person-days of employment during 1979–80 and also some of the highest number of person-days of 178 million, 190 million and 188 million during 1984–85, 1985–86 and 1986–87 respectively. This has helped in insulating the incomes and levels of living of the weaker sections against seasonal as well as periodic fluctuations in the agricultural economy. The decline in unemployment in rural Maharashtra during the 1970s and 1980s bears ample testimony to the effective role the EGS programme has played in this respect.

The EGS is claimed to have served two purposes: those of raising the average wage level and reducing the variability in the wage rate. Better wages were the major attraction for the landless agricultural labourers. Average EGS wage was increased from 90 paise per person-day in 1976–7 to Rs 2.23 (at 1960–61 prices) in 1999–2000. Currently, the daily wage, worked out on the basis of volumetric work done, ranges between Rs 45 and Rs 51 which is on par with the wages prescribed for farm labour. In other words, it has more than doubled during this period. But there is little evidence to corroborate that the EGS has really raised market wages. EGS has, in fact, followed the farm wage structure. Guaranteed employment during the off-season and drought years seems to have ensured some stability in real wages in Maharashtra.

Of course, EGS has also generated second-round effects on income generation thanks to the emphasis on strengthening rural infrastructure. However, the rural rich seem to have benefited disproportionately more than the poor from such assets, but political support for the EGS continues and is a show-case project though monitoring could improve. The programme is neighbourhood based and provides for childcare facilities. In addition, wage payment to female workforce without any gender discrimination has provided ample incentive for female labour participation in the EGS in the rural areas. Female participation in the EGS programmes has ranged between 30 to 50 per cent.

Annual project-wise estimates of expenditure show that generally works relating to irrigation, agriculture, forestry, roads and others, including Shram Shakti, Horticulture and Jawahar wells received substantial allocation. During 1990–91 to 1999–2000, irrigation accounted for 15.4 per cent of the total expenditure incurred under the EGS; agriculture 15.5 per cent, forests 11 per cent, road 19 per cent, others 12.5 per cent and Horticulture/Shram Shakti/Jawahar wells 26.6 per cent.

Till December 2000, the EGS has provided for a total of 0.36 million projects of different types, most (95 per cent) of which have been completed.

Majority (63 per cent) of these projects were related to soil conservation and land development and 13 per cent were irrigation works.

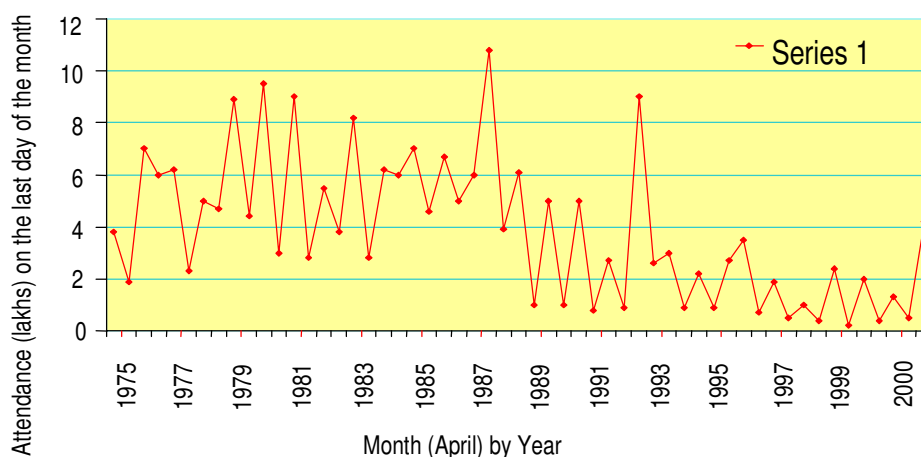
Effort has been taken to ensure equity in the spatial allocation of EGS expenditures. Of the total EGS expenditure during 1972–73 and 1999–2000, the backward Aurangabad division alone accounted for about 30 per cent, followed by the other divisions; Nashik (20.2 per cent), Nagpur (16.1 per cent), Pune (15.9 per cent), Amravati (10.5 per cent) and Konkan (7.3 per cent).

The programme appears to be reasonably self-targeted, that is, given the requirement physical labour, largely the poorest opted for this type of employment. They belong to Scheduled Castes and Scheduled Tribes and other economically backward communities. There is some evidence to support this claim: The National Sample Survey findings for 1987–88 and 1993–94 show that the extent of participation in public works like the EGS is remarkably higher in the lowest monthly expenditure classes in Maharashtra.

Thus, the EGS seems to have been successful in terms of absolute magnitudes of employment generated during the 1970s and 1980s. It seems to have lost steam during the 1990s, with a possible rationing of employment when the wage rates were pushed up (Annexure Table 27 and Figure 4.5). This is also the period when unemployment had gone up (Table 4.2).

Figure 4.5

Labour Attendance under the EGS: 1975–2001



Food and Nutrition Security

Despite being a food grain deficit state, the Public Distribution System’s (PDS) role in promoting food security of the vulnerable sections by ensuring regular availability of food grains has been recognised only of late. The average annual quantity of cereals delivered was 25.8 kg per capita during the 1970s and 1980s. The PDS came to be relied upon only in drought years, when quantities delivered increased. As a result, cereal quantities delivered fluctuated between a low of 16.77 kg and high of 45.37 kg per capita per annum during the 1970s and 1980s.

The PDS is aimed at promoting physical availability of rice and wheat and other household consumption items like edible oils, sugar and kerosene at reasonable prices. At present, this programme is implemented through a network of 46,705 ration/fair price shops of which 35,708 are located in the rural, including tribal areas and 10,997 in the urban. In 1999–2000, the fair price shops lifted about 0.69 million tonnes of rice and 1.07 million tonnes of wheat for delivery for the beneficiary households; Mumbai alone accounted for about 15 per cent of this. The programme involves a three-tier supply card scheme whereby benefits are targeted only at the vulnerable families that are both rural and urban. In addition, the State Government implements a ‘Specially Subsidised Public Distribution Scheme’ in 68 talukas of 15 districts for the tribals which provides pulses, iodised salt, tea powder,

toilet and washing soaps in addition to the items sold through the PDS network.

The Government implements different programmes to promote the nutritional status of the vulnerable groups. The Integrated Child Development Services in rural and urban areas provides nutritious supplementary food to children under the age of six years, pregnant women and nursing mothers from poor families. Similar in scope and action but restricted to the vulnerable groups in urban slums are the Special Nutrition Programmes for Urban Slums. 'Policy for Women' seeks to remove constraints of any type on the personality development of women while the Department of Women and Child Welfare undertakes programmes to promote their welfare.

A National Social Assistance Programme, undertaken with complete Central assistance, provides for social assistance to the poor and vulnerable families. In particular, it involves an old age pension scheme of Rs 75 per month to each of the destitute who are 65 years and more. It has a **National Family Benefit Scheme**, which provides households with a grant of Rs 10,000 in the event of death of its breadwinner. The State Government has introduced **Sanjay Gandhi Niradhar Anudan Yojana** under which an old/ disabled/ handicapped destitute gets a dole of Rs 250 per month. Similar in scope is the **Indira Gandhi Bhumihin Vriddha Shetkari Mazdoor Sahayya Yojana** but restricted to rural agricultural labour born in Maharashtra.

Besides these programmes, the government also undertakes a series of measures to provide shelter to the weaker sections like the **Slum Rehabilitation Scheme**, **Shivshahi Punarvasan Prkalp Ltd.** in the urban areas and the **Indira Awas Yojana** in the rural domain.

### **Growth and Equity**

How far have the policies to promote growth and equity succeeded in poverty alleviation over time and across space in Maharashtra? Poverty estimates are in terms of proportion of rural and urban population

having a consumption level less than the normative consumption to ensure sufficient energy measured in calories for an active and healthy life. This *minimum* is called the poverty line.

These are summary measures based on statistical estimates of consumption in value terms; and poverty lines adjusted for price changes with price indices defined for a fixed basket of goods for the base year. But such estimates may throw up a misleading picture during a period of structural transformation of the economy involving changes in consumption and production patterns, technology and relative prices. This is all the more so because of methodological changes in the NSS during 1999–2000, which render these estimates not comparable with those for the earlier periods in a strict sense. One option is to verify them with reference to quantitative estimates of cereal consumption, a major source of calories, and actual intake of calories, protein and fat available for some years up to 1993–94. Such estimates are presented in Annexure Tables 25, 25A and 25B. A desegregated profile of poverty by rural and urban sectors at the district level could be obtained only for a single year 1993–94.

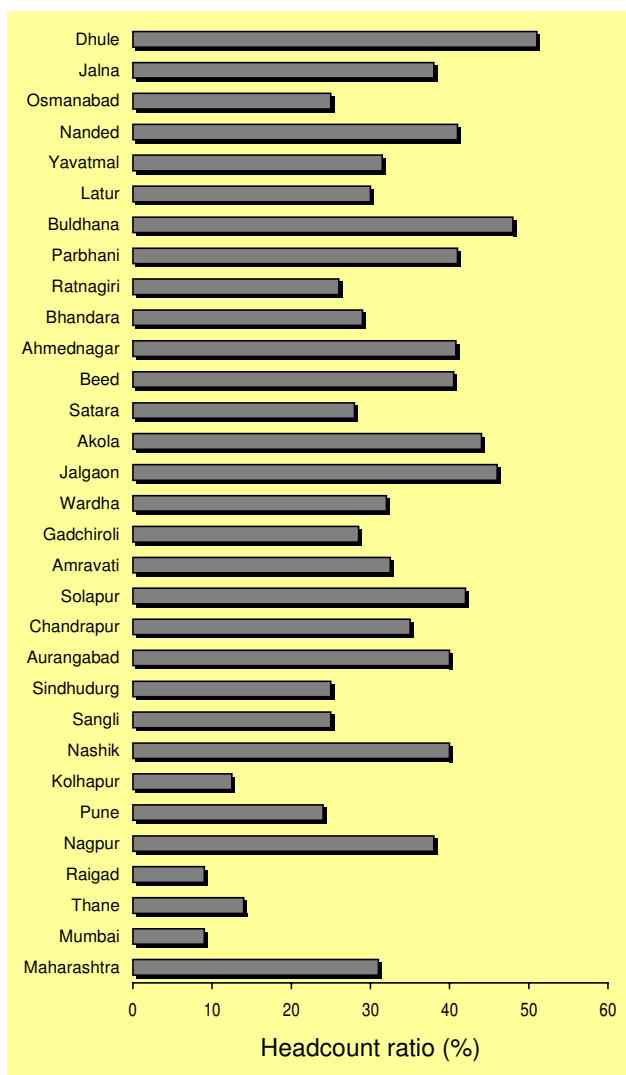
The findings are as follows:

- Incidence of rural poverty increased between 1973–74 and 1977–78 and declined thereafter. At the all-India level, it declined till 1987–88, increased during 1993–94 and declined thereafter. The percentage point reduction in incidence of rural poverty between 1973–74 and 1993–94 was at a higher level in Maharashtra (35.49) than at the all-India level (28.52). The number of poor has also declined between these two years. The decrease was more pronounced in rural Maharashtra at 42.53 per cent than in rural India as a whole: 24.47 per cent. As a result, incidence of rural poverty in Maharashtra, which was always above the national average, fell below it in 1991–2000 (Annexure Table 21, Figure 4.6).
- Urban poverty declined since 1973–74 in both Maharashtra and countrywide with the difference that there was a marginal increase in Maharashtra between 1983 and 1987–88. Further, the reduction in urban poverty between 1973–74 and 1999–2000 was less in Maharashtra—16.32 per-



centage point—than in all-India—23.16 percentage point. However, the decrease in poverty ratios was not sufficient to neutralise the growth in urban population; the number of the poor increased in urban Maharashtra and urban India as a whole. The increase in the number of urban poor was

**Figure 4.6**  
**Incidence of Poverty across Districts:**  
**Maharashtra (1993–94)**



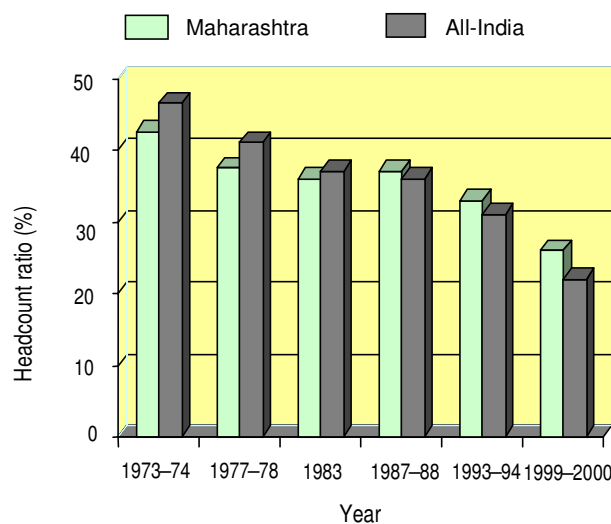
Source: See relevant Table.

more in Maharashtra at 38.04 per cent than in all-India 17.42 per cent (Annexure Table 21). Incidence of urban poverty in Maharashtra was less than the national average till the mid-80s. It has crossed the national average since then (Figure 4.7).

- With this pronounced decline in rural poverty and the predominant size of the rural sector, poverty in Maharashtra as a whole declined since the mid-70s. Between 1973–74 and 1999–00, the propor-

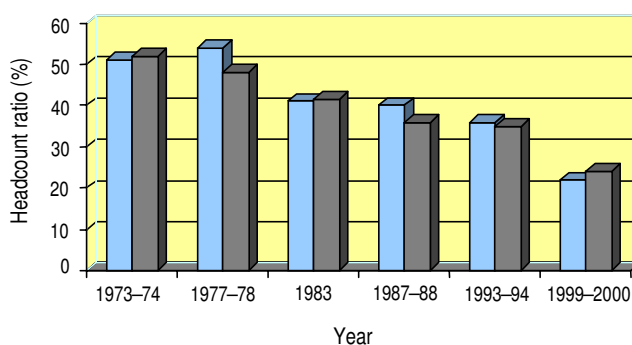
tion of poor population in Maharashtra declined by 28.90 percentage points as compared with 27.63 percentage points at the all-India level. The percentage reduction in the number of poor was higher in Maharashtra (21.42 per cent) than in India as a whole (16.80 per cent) (Figure 4.8).

**Figure 4.7**  
**Incidence of Urban Poverty: Maharashtra and**  
**All-India**



Source: See relevant Table.

**Figure 4.8**  
**Incidence of Poverty (Rural and Urban**  
**Combined): Maharashtra and All-India**



Source: See relevant Table.

The statistical estimates of poverty discussed above are obtained by comparing estimates of consumption distribution with those of poverty lines, both measured at current prices. Current price estimates of the poverty lines are obtained using price indices defined for a fixed basket of consumption items. Such fixed-weight price indices are subject to measurement errors because they cannot account for

changes in consumption due to changes in relative prices, in quality, and introduction of new products. The shortcoming is all the more serious in a developing country undergoing structural changes in production, consumption and the markets.

### Changing Consumption

One such change in Maharashtra is the change in cereal production and consumption pattern in favour of superior but costlier cereals like rice and wheat. There have also been changes in consumption in favour of non-cereal food items in Maharashtra. Accordingly, the finding of a decline in statistical estimates of rural poverty is not at all corroborated by estimates of cereal consumption and calorie intake for rural and urban Maharashtra (Annexure Table 25).

- Cereal consumption has declined in rural Maharashtra since 1961–62. Total monthly per capita cereal consumption of the rural population as a whole has declined from about 13.5 kg during the mid-70s to less than 11.5 kg during the 1990s. The estimates do not show any significant improvement in cereal consumption of the bottom decile groups. Urban cereal consumption has virtually been stagnant.
- Average calorie intake in rural Maharashtra decreased from 2,280 in 1960–61 to 2,144 in 1983 and further down to 1,939 in 1993–94 (Annexure

Table 25). What should cause worry is the fact that there was a decline in the calorie intake of all the decile groups of rural population between 1983 and 1993–94. The proportion of rural population with a calorie intake less than the normative minimum of 2,400 calories, though it has declined from 86.56 per cent in 1972–73 to 78 per cent in 1983, has increased to 89 per cent in 1993–94. As regards the other two nutrients, protein intake declined and intake of fats increased between 1983 and 1993/94.

- In urban Maharashtra, average calorie intake increased from 1,916 in 1960–61 to 2,028 in 1983, which again declined to 1,889 in 1993–94 (Annexure Table 25). However, the bottom 40 per cent of the urban population experienced progressive improvement in terms of calorie, protein and fat consumption. As a result, incidence of calorie deficiency in urban Maharashtra did not worsen; it declined from 70.14 per cent in 1972–73 to 67.82 per cent in 1983 and remained about the same level (68.30 per cent) in 1993–94.

In sum, majority of the rural and urban population remains undernourished. The observed decline in cereal consumption and calorie intake could be due to changes in consumer tastes and the reduction in calorie intake called for in the context of improvement in methods of production, health facilities and standard of living. How serious is the

#### Box 4.7

#### Energy Intake and Undernutrition

- Low dietary intake is the most important cause of under-nutrition in children.
- Low birth weight, poor infant feeding practices and infections are other major factors responsible for under-nutrition.
- Notwithstanding low dietary intake, prevalence of severe under-nutrition is low in Kerala because of more equitable distribution of food between income groups and within the family and better access to health care.
- Despite higher average dietary intake, under-nutrition rates are higher in Uttar Pradesh, Madhya Pradesh and Orissa because of lack of equitable distribution of food and poor access to health care.
- Screening and identification of undernourished

children and appropriate nutrition and health intervention are essential for reduction in under-nutrition in children.

#### Imperatives

- Remove or minimise the intra-state differences by replicating the progress achieved in better performing districts.
- Undertake realistic Primary Health Centre (PHC) based decentralised area-specific micro-planning, tailored to meet local needs.
- Involve Panchayati Raj institutions in micro-planning and monitoring at the local level for effective implementation of the programme and ensuring effective community participation.
- Achieve incremental improvement in performance in all districts.

extent of shortfall would depend upon the relevance of the calorie norm of the 1950s today.

Estimates of rural poverty at the district level for the year 1993–94 show that rural poverty has virtually been eliminated in the prosperous district of Raigad (4.94 per cent), followed by Kolhapur (6.97 per cent) and Thane (8.29 per cent) (Table 4.4). However, incidence of rural poverty was the maximum in Dhule (45.6 per cent), the district which also ranks the lowest in terms of per capita district domestic product. Incidence of poverty in

rural Maharashtra as a whole was 26.60 per cent, which, as can be expected, lies between the estimate based on the State sample (17.05 per cent) and that based on the Central sample (37.61 per cent).

Incidence of urban poverty is the lowest in Gadchiroli (6.11 per cent), followed by Mumbai (7.84 per cent). More than two-thirds of the urban population had consumer expenditure levels below the poverty line in the urban sectors of Ahmednagar (68.06 per cent), Akola (71.39 per cent) and Buldhana (74.09 per cent). About 31 per cent of the

Table 4.4

**Average Consumption, Inequality and Poverty across Districts: Maharashtra (1993/94)**

District	Rural			Urban			Combined	
	District Per Capita Consumption Per Month (Rs at current prices)	Incidence of Poverty (%)	Lorenz Ratio (%)	Average Per Capita Consumption Per Month (Rs at current prices)	Incidence of Poverty (%)	Lorenz Ratio (%)	Average Per Capita Consumption Per Month (Rs at current prices)	Incidence of Poverty (%)
Ahmednagar	269.18	33.37	26.80	316.39	68.06	30.60	276.65	38.86
Akola	260.30	30.78	23.03	299.41	71.39	26.78	271.50	42.41
Amaravati	281.97	24.21	24.35	394.45	45.39	27.02	318.63	31.11
Aurangabad	283.16	34.88	30.88	511.80	46.00	42.90	358.05	38.52
Beed	251.78	34.23	24.31	344.48	57.82	30.84	268.41	38.46
Bhandara	293.42	23.26	24.39	397.48	56.51	31.11	307.04	27.61
Buldhana	245.16	37.76	24.13	283.33	74.09	26.49	253.02	45.24
Chandrapur	284.73	32.04	27.77	430.07	35.55	25.90	325.48	33.02
Dhule	232.31	45.57	23.58	329.25	62.32	25.65	252.19	49.00
Gadchiroli	301.44	28.63	29.97	622.46	6.11	20.39	329.41	26.67
Jalgaon	239.83	37.22	23.88	340.01	63.01	28.99	267.32	44.30
Jalna	280.78	31.26	30.84	349.85	58.45	34.19	292.46	35.86
Kolhapur	375.02	6.97	25.36	470.21	25.07	24.01	400.08	11.73
Latur	343.59	24.66	32.54	404.23	42.35	27.76	355.95	28.2
Nagpur	310.22	24.24	26.85	464.28	42.09	34.27	405.40	35.27
Nanded	287.25	34.16	31.55	369.67	57.03	31.95	305.15	39.13
Nashik	270.84	35.98	28.36	417.52	42.91	28.18	322.98	35.44
Osmanabad	369.92	16.67	34.56	349.10	58.81	33.45	366.76	23.07
Parbhani	301.82	28.55	31.97	323.57	60.10	27.81	309.46	39.63
Pune	318.73	17.89	25.89	575.56	27.27	34.14	449.04	22.65
Raigad	398.75	4.94	23.51	601.63	24.36	32.19	435.29	8.44
Ratnagiri	311.53	24.69	29.98	445.59	29.31	25.13	323.79	25.10
Sangli	401.56	14.43	33.54	386.59	53.26	24.21	398.16	23.26
Satara	300.11	22.64	24.92	461.78	39.75	32.98	320.94	24.84
Sindhudurg	256.76	20.55	21.54	389.07	53.31	27.24	234.52	23.04
Solapur	278.25	31.16	26.86	331.40	62.92	26.69	293.54	40.30
Thane	430.92	8.29	29.84	635.27	15.74	29.06	563.02	13.11
Wardha	308.81	27.40	28.14	412.68	39.08	27.00	336.40	30.50
Yavatmal	270.39	25.74	22.37	355.08	53.03	24.81	284.94	30.43
Mumbai	–	–	–	721.59	7.84	28.39	721.59	7.84
Maharashtra	302.90	26.60	28.76	537.19	31.24	33.77	393.57	28.4

Source: Department of Economics and Statistics, Government of Maharashtra.

urban population in Maharashtra lived below the poverty line in 1993–94.

Combined estimates for the district as a whole indicate that incidence of poverty was the least in Mumbai (7.84 per cent) and highest in Dhule (49 per cent), with the average for the State being 28.40 per cent. There is significant negative correlation between the ranks of districts in terms of per capita domestic product and incidence of poverty. That is, incidence of poverty is generally higher in those districts, which are economically backward in terms of per capita domestic product. Naturally, this calls for efforts at securing a balanced regional development of Maharashtra.

## Conclusion

Maharashtra's economy has demonstrated a strong track record of growth and is a visible success story for the rest of the country but its weakness is its uneven distribution of the gains of the growth. The implications are clear: the urban-centric growth of economic activity, where more of it is centred around the secondary and enlarging tertiary sector, has drawn more and more people to urban areas, adding to the strains to the urban sector. This has also added to the difficulties of living in a rural region where the primary sector, dominated by agriculture with relative poor returns by way of incomes, fails to meet the economic requirement of the people.

The policy options, should therefore, be multi-focal, including in its canvas both the urban and rural domains to:

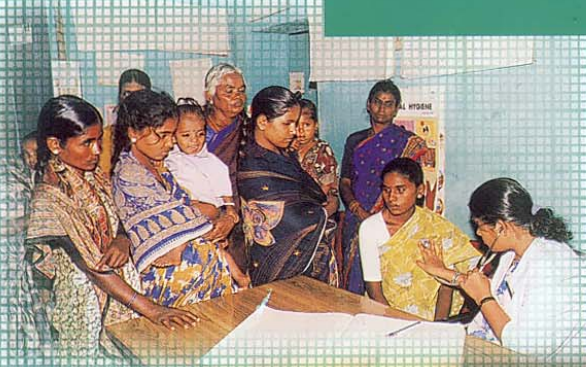
- Encourage investment in the primary sector to boost growth and reduce acute unawareness in development.
- Help improve the growth in the secondary and sustain it in the tertiary sector.
- Give greater attention to enable the spread of

economic gains evenly across the regions, and reduce the disparities between the urban and the rural populations. Intra-state differences can be minimised only by replicating the progress achieved in the better performing districts in the backward areas.

- Mitigate the hardships caused by poverty, reflected mainly in the lower calorific intake by a substantial portion of the State's population, by building on the principles that anchor the income generation for the rural poor through the Employment Guarantee Scheme.
- Develop the Public Distribution System in a manner that it reaches out to the rural and urban poor since EGS alone has not completely eradicated incidence of poverty but only helped reduce it. Improved access which would enable higher off-take of food grains by the economically vulnerable sections is vital; access does not mean just more PDS outlets but timely availability of food grains at affordable prices.
- Improve the reach of irrigation facilities, if not by immediate increases in capital investment by ensuring equity and greater spread in distribution of water by reducing coverage extended to water-intensive crops. The fact that regardless of the willingness, ability or desire to increase capital outlays, the built-in limitations increasing irrigation to arable areas because of natural constraints like the availability of water resources, has to be recognised and equity in distribution under every project built and those being built guaranteed.
- Put greater emphasis on dry land agriculture by increasing investments in watershed development and water conservation activities.
- Emphasise diversification of agriculture, encourage value addition through proper policy packages, promotion of technology processing etc.
- These could help reduce the motivation to migrate from rural areas to urban zones and even assist in encouraging reverse migration.

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# HEALTH AND NUTRITION





## Health and Nutrition

Income levels alone do not determine the well being of a people but it is a criterion that cannot be circumvented. But more importantly, a true reflection of an individual or a society is to be found in the nutritional and health status attained which can be measured by life expectancy at birth, infant mortality rate and nutritional attainments. In Maharashtra, where average per capita income is higher than national levels but is unevenly distributed, the other test would be on attainments in the area of improvement in life expectancy at birth and whether infant mortality is declining and how well nourished are the people.

Once these levels are established, other aspects of health, including the means to find and ensure correctives arise. Much depends, naturally, on the access to healthcare, the quality and the spread of its facilities. The issue of health infrastructure is therefore a major one. What is the status of health-care infrastructure, how much of it is run by public resources and how well is it utilised by all sections—the urban and the rural, the rich and the poor? How close are the health attainments in Maharashtra to the Alma Ata Declaration (1978) of Health for All by 2000?

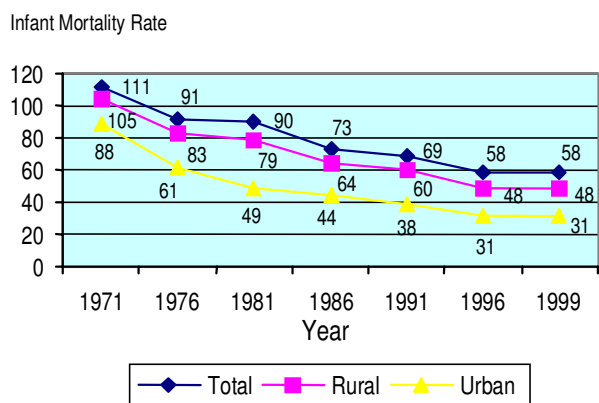
On two counts, Maharashtra has done fairly well, though there is room for improvement—raising life expectancy at birth and reducing infant mortality rate (IMR). Life expectancy levels are higher for women and the differential in IMR between males and females is only marginal. The nutritional status, however, does not correspond to other attainments, including economic measures. More than half the households in the State fall below the prescribed standard norm for nutrition and these households receive less than 90 per cent of the required level of 2,700 calories per day per consumer.

### Infant Mortality

From 105 in 1971, the infant mortality rate (IMR) declined to 48 per 1,000 live births in 1999, with the differential across males and females being only marginal to the extent that it barely exists (Figure 5.1). In the case of life expectancy at birth it is favourable to females. From 54.5 years during 1970–75, it improved to 63.8 years for males in 1993–97; whereas in the case of females it increased over the same period from 53.3 years to 66.2 years, which is remarkable. What stands out, however, is the urban-rural differential; men have a relatively lower life expectancy in the villages compared to women but the life expectancy is higher for both sexes in towns and cities. The rural-urban differentials in mortality are also quite marked, reflecting its influence on life expectancy at birth. Latest estimates indicate that life expectancy at birth is 67.7 years and 61.7 years for urban and rural males respectively. It is 71.2 years and 63.9 years for urban and rural females respectively.

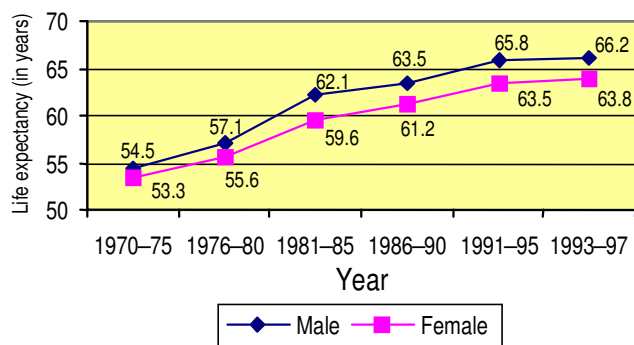
This differential is marked between the two areas in the case of IMR as well, which in 1999 was 58 for the rural population and 31 for the urban population (Figure 5.1). Though the overall IMR has gradually declined, the gap in the accomplishment between the urban and rural regions in this segment has been slowly declining, causing concern. Infant and child mortality data, when seen in detail (Figure 5.3), also reflect a declining trend but the urban-rural gap persists here as well. In the rural areas, the number of deaths per 1,000 live births within a month of life is twice of what prevails in towns and cities. In these critical areas, as in the case of life expectancy, the future focus would have to lie in bridging this differential which is obviously closely associated with the availability of and

**Figure 5.1**  
**Trends in Infant Mortality, Maharashtra 1971–99**



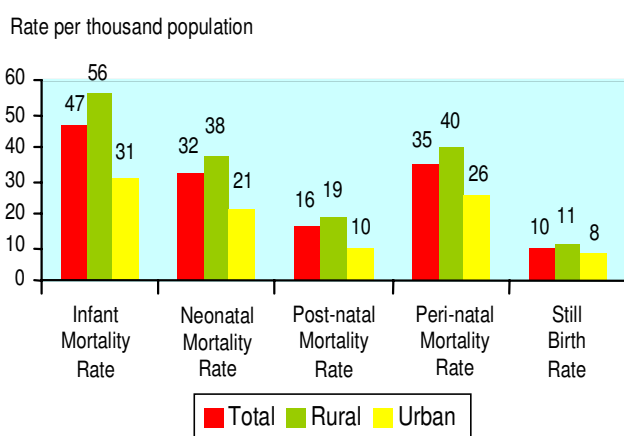
Source: Refer relevant Table.

**Figure 5.2**  
**Trends in Life Expectancy at Birth, Maharashtra 1970–97**



Source: Refer relevant Table.

**Figure 5.3**  
**Rural-Urban Differentials in Infant Mortality Indicators: Maharashtra 1997**



Source: Refer relevant Table.

accessibility to health services, which is better in the urban areas.

For instance, Greater Mumbai—a 100 per cent urban region comprising two districts—offers a stark contrast to the rest of the State. According to the Registrar General of India’s findings in 1991, the overall IMR was 37 for Mumbai and the child mortality rate was 50. It was greater than 100 in Akola, Yavatmal and Gadchiroli districts, higher than 74 in Ratnagiri, Nashik, Jalna, Buldhana, Amaravati, Wardha, Nagpur, Bhandara and Chandrapur districts. Female IMR was particularly high at 126 in Yavatmal, 101 in Chandrapur and 117 in Gadchiroli districts. It is in Vidarbha that one finds the IMR higher than the State average.

### Morbidity

In understanding the health status of a population, the morbidity profile is equally relevant, being a subjective phenomenon influenced not only by actual burden of illness but also by education, exposure to healthcare services, health expectations and even recall periods used in a survey. The morbidity rate for a two-week recall period was 52 per thousand in rural areas and 48 per thousand in the urban. But the rate of hospitalisation was 19 per thousand in the rural areas while it was 26 per thousand in urban areas, the large differential being a function of access to hospitals, which vary vastly for the rural and urban areas. Women in the urban regions have reported a higher level of morbidity for both acute and other ailments.

Morbidity stems from both diseases of poverty as well as those induced by affluent living but the focus has to be on the diseases afflicting the poor since it is a major cause of worry. Their diseases are classified as those due to poor living conditions and preventable by immunisation and improving access to nutrition. Those preventable by improvements to living conditions are typhoid, pneumonia, tuberculosis, gastro-enteritis, cholera, dysentery, jaundice and fevers including influenza. Diseases that can be prevented by immunisation are measles, whooping cough, diphtheria, polio and tetanus.



Mumbai, the cradle of slums—the city has the most number of people living in slums, in both absolute and relative terms, among all Municipal Corporations not just in Maharashtra but all of India, at 5.8 million or 49 per cent of the city's 11.9 million population as per the Census 2001—has a high prevalence of diseases that can be ascribed to poor living conditions. They can be attributed to congestion and overcrowding which in turn worsened the living conditions. Prevalence of diseases otherwise preventable by immunisation was also the highest in Greater Mumbai.

Disaggregated data across consumption classes and social groups (Table 5.1) highlights the importance of access factors in defining morbidity. The poorer classes and the tribals, whose access to health-care services is restricted due to lack of purchasing power, report lower morbidity rates, especially for hospitalisations and chronic ailments. Further, across these groups one sees lower differentials in reported morbidity in urban areas in contrast to rural areas because the former have better access to public health services.

### Mortality Profile

The causes of deaths, however, are not so well documented, mainly because death registration has an incomplete netting of about only 70 per cent.

Only deaths relating to serious causes, including major ailments, are likely to get reported, as for instance, the 1993 medical certification data showing that of all such deaths, 10.05 per cent were due to tuberculosis (Registrar General India–1998). This can give a distorted picture and to overcome this, the Sample Registration System (SRS) Survey of Causes of Death can be relied upon, but this survey relates only to the rural areas. Between 1981 and 2000 there has been an overall change in the mortality profile mainly due to the declining trend in deaths due to digestive disorders and causes peculiar to infancy. There is an increasing proportion of deaths due to circulatory disorders, and also accidents and injuries (Table 5.2). A major surge is seen in the cited causes of death: bronchitis and asthma, the two being reflective of the deteriorating environmental conditions for human health. Heart attacks too are on the rise.

### Nutrition

The status of nutrition in Maharashtra is not encouraging. As much as 57.4 per cent of households in rural areas and 54.8 per cent in the urban consume less than the standard 2,700 calories per day. Only about a quarter of all households in the rural and 28 per cent in the urban areas belong to what is actually an average calorie intake ranging between 90 per cent to 110 per cent. If there is any improvement, it is in

Table 5.1

### Prevalence of Ailments and Hospitalisation by Monthly Per Capita Consumption Expenditure (MPCE) Fractile Group and Social Group, Maharashtra 1995–96

	<i>Monthly Per Capita Consumption Expenditure Fractile Group</i>								<i>Social Group</i>		
	<i>0–10</i>	<i>10–20</i>	<i>20–40</i>	<i>40–60</i>	<i>60–80</i>	<i>80–90</i>	<i>90–100</i>	<i>Total</i>	<i>ST*</i>	<i>SC*</i>	<i>Others</i>
<b>Rural</b>											
Acute ailment	34	19	30	33	38	50	60	37	32	33	39
Chronic ailment	4	17	7	9	230	20	25	15	7	16	16
Any ailment	37	36	37	41	57	70	84	52	40	49	55
Hospitalisation	10	9	11	14	19	34	40	19	15	20	20
<b>Urban</b>											
Acute ailment	31	27	34	38	35	35	40	35	26	40	35
Chronic ailment	10	6	12	11	12	21	14	13	7	10	13
Any ailment	41	34	46	48	47	56	53	48	33	49	48
Hospitalisation	17	20	22	24	22	33	39	26	29	28	26

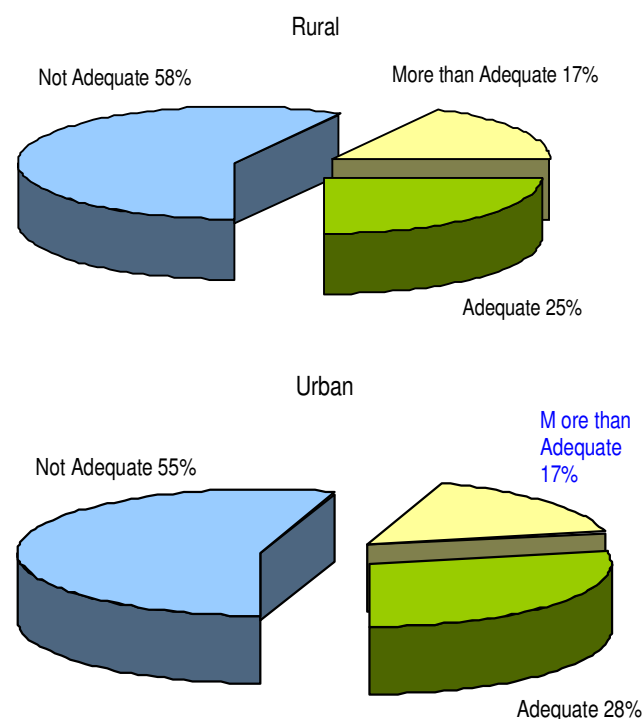
\* ST: Scheduled Tribes; SC: Scheduled Castes.

Source: NSSO 1998.

the urban areas. Per capita production of food grains also reflects a decline from 172 kg per capita in 1986 to 140 kg per capita in 1999. The adequacy of calorie intake is reflected in Figure 5.4. Such a low level of food intake impacts the nutritional status of women and children. Nearly half the ever-married women between 15 and 49 years suffer from anaemia, which is marginally higher in the rural areas at 51.2 per cent than in the urban areas, where it is 44.8 per cent. The proportion of women in the clutches of mild, moderate and severe anaemia is 31.5 per cent, 14.1 per cent and 2.9 per cent respectively. Of the children under three years, 76 per cent were also suffering from anaemia, the levels being comparatively higher in rural areas. Mild anaemia was prevalent among 24.1 per cent, its incidence was moderate among 47.4 per cent and severe among 4.4 per cent.

NFHS-2 (1998–99) also gives additional information on nutritional status based on age, height and weight of women and children. The average height of an ever-married woman in 15–49 age group in Maharashtra was 151 centimetres, similar to the average height of an Indian woman. Chronic energy deficiency is usually indicated by body mass index (BMI) of below 18.5 kg/m<sup>2</sup>. About 40 per cent of the women in Maharashtra have a BMI of below 18.5 kg/m<sup>2</sup>. As in the case of women, a large proportion of the children too were undernourished. It can be seen that the percentage of children under 3 years who were found to be undernourished

Figure 5.4  
Adequacy of Calorie Intake in Maharashtra



Source: Refer relevant Table.

in terms of nutritional status indices, weight for age, height for age and weight for height was 50, 40 and 21 per cent respectively.

Some quantification is available on the impact of the lower nourishment in terms of undernourishment and stunting respectively for the districts of Maharashtra (Table 5.3). There are two measures

Table 5.2

Percentage Distribution of Deaths by Major Cause Groups in Rural Maharashtra (excluding Senility) 1981–1994

	1981	1991	1994	2000
<b>Causes of Death</b>				
Coughs	31.3	25.7	25.4	8.1
Causes peculiar to infancy	21.1	19.4	16.7	8.8
Disorders of circulatory system	8.2	12.8	13.7	21.0
Fevers	3.7	3.8	2.3	0.8
Other clear symptoms	9.2	12.8	16.4	14.5
Digestive disorders	10.4	4.8	4.6	2.9
Accidents and injuries	8.3	13.4	13.5	11.6
Diseases of central nervous system	4.7	5.7	6.5	8.1
Child birth and pregnancy	1.1	1.6	1.0	0.2
Others	2.0	–	–	–

Source: RGI, respective years.

of deprivation—severe deprivation and mild malnutrition. Maharashtra does have a high percentage of undernourished children. By the weight-for-age norm, the percentage of undernourished children below two years of age is high, i.e., at about 20 per cent and more in Ratnagiri in Konkan, Ahmednagar and Pune in Western Maharashtra, Beed in Marathwada, and districts of Vidarbha including Amaravati, Bhandara, Chandrapur and Gadchiroli.

Data on height-for-age indicator reflects a high incidence of severe stunting in most districts of Marathwada—Aurangabad, Jalna, Beed, Nanded, Parbhani and Osmanabad—and Vidarbha's Buldhana, Amaravati, Yavatmal, Nagpur, Bhandara and Chandrapur, Western Maharashtra's Jalgaon, Ahmednagar and Pune with the percentage being higher than 30 per cent in these districts. Data for Dhule and Nandurbar has not been reported but a similar situation may be assumed to exist.

Concepts of prevention of communicable diseases and nutritional deficiencies and the use of modern medicine have been identified as important factors that can lead to curbing higher incidence of under- and malnourishment and mortality. But health workers working amongst the tribal people trace the non-utilisation of health services by them to traditional beliefs and superstitions. Cultural alienation of healthcare providers including doctors, nurses and the alien design and culture of healthcare institutions like hospitals and PHCs have been cited as another impediment to increased utilisation of healthcare facilities.

Nutritional inadequacy in individuals, especially in the formative years of life, could mean undernourishment and consequential stunting apart from making individuals susceptible to infections resulting in higher mortality. Nutritional insufficiency is higher among tribal populations and its implications are clear.

### Integrated Child Development Services (ICDS)

Use of the Integrated Child Development Services

### Health and Nutrition

Table 5.3

### Incidence of Undernutrition of Children (below two years of age)

No.	District	Weight for Age		Height for Age	
		Below 2 SD	Below 3 SD	Below 2 SD	Below 3 SD
(1)	(2)	(3)	(4)	(5)	(6)
1	Mumbai	n.a.	n.a.	n.a.	n.a.
2	Mumbai (Subn)	n.a.	n.a.	n.a.	n.a.
3	Thane	38.2	13.7	46.2	24.7
4	Raigad	30.3	7.9	38.7	18.2
5	Ratnagiri	45.9	20.1	50.8	28.0
6	Sindhudurg	29.9	11.0	44.0	26.3
7	Nashik	40.8	16.1	48.8	26.3
8	Dhule	n.a.	n.a.	n.a.	n.a.
9	Nandurbar	n.a.	n.a.	n.a.	n.a.
10	Jalgaon	42.8	15.1	56.8	36.5
11	Ahmednagar	46.8	24.2	63.6	38.3
12	Pune	42.2	19.8	60.6	34.5
13	Satara	37.8	15.3	49.6	28.2
14	Sangli	33.6	13.4	49.9	23.8
15	Solapur	38.2	13.8	49.5	24.3
16	Kolhapur	31.9	10.5	42.6	18.9
17	Aurangabad	45.5	17.8	57.0	34.9
18	Jalna	32.3	14.8	59.1	32.7
19	Parbhani	40.9	12.5	58.0	32.2
20	Hingoli	n.a.	n.a.	n.a.	n.a.
21	Beed	43.2	19.3	55.9	37.8
22	Nanded	39.8	15.4	59.1	35.8
23	Osmanabad	31.4	7.0	55.9	31.8
24	Latur	31.7	12.3	52.7	27.1
25	Buldhana	49.9	17.9	65.9	45.0
26	Akola	39.8	12.0	47.5	28.9
27	Washim	n.a.	n.a.	n.a.	n.a.
28	Amaravati	49.7	20.9	64.9	42.7
29	Yavatmal	43.8	13.0	56.6	33.5
30	Wardha	n.a.	n.a.	n.a.	n.a.
31	Nagpur	40.4	16.8	61.7	34.2
32	Bhandara	48.5	20.2	68.9	45.3
33	Gondiya	n.a.	n.a.	n.a.	n.a.
34	Chandrapur	51.1	25.8	60.3	40.6
35	Gadchiroli	50.8	15.9	54.6	31.7
	District Total	40.6	15.9	54.6	31.7

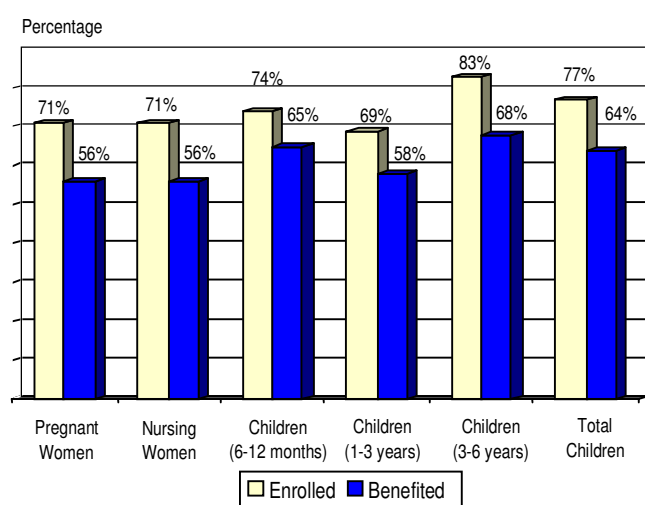
Note: Each index is expressed in Standard Deviation Units (SD) from median of the international reference population. Children who are more than 2 SD below reference media are considered to be undernourished and those who fall more than 3 SD from reference median are considered to be severely undernourished. Below 2 SD includes below 3 SD.

Source: Salunke *et al.* (1997).

(ICDS) to improve the nutritional status of women and children has met with some success with the State Government providing for supplementary nutrition to children under six years of age, pregnant women and nursing mothers belonging to poor families enrolled at *Anganwadis*. But even here, a somewhat disturbing picture emerges in that the number of beneficiaries is always lower than those eligible and though over the years, more individuals are being brought into the net, their percentage fluctuates without showing any substantial increase.

For instance, service statistics indicate that about 0.24 million pregnant women, 0.25 million nursing mothers and 3.13 million children—all poor and targeted by *Anganwadis* benefited from these schemes in March 2001, accounting for 56.1 per cent, 55.6 per cent and 63.9 per cent of the eligible population (Figure 5.5). A year earlier, the coverage was higher, being 0.28 million pregnant women, 0.30 million nursing mothers and 3.20 million children, which is 60.7 per cent, 59.97 per cent and 64.53 per cent respectively of the eligible population. In March 1996, some 62.5 per cent pregnant and 61.7 per cent of nursing mothers and 60.9 per cent children benefited. But the proportion of eligible women and children who were enrolled and benefited from ICDS schemes does not seem

**Figure 5.5**  
**Percentage of Eligible Women/Children Enrolled and Benefited under the ICD Scheme in Maharashtra State (March 2001)**



Source: Refer relevant Table.

to cross the 70 per cent barrier between the two reference points used here. The overall nutritional status of the State would have been better if there had been a wider coverage of the ICDS schemes. Not just enrolment, but even, the accrual of benefits among the enrolled must be enhanced.

### Disease Control

With the exception of leprosy, the prevalence of other diseases is still quite high without any visible declining trends. Use of vaccines has helped the crude death rates to decline but morbidity and mortality due to communicable diseases like tuberculosis, malaria, leprosy continue to account for a major share. Poor sanitation and solid waste management has been another factor that has contributed to the prevalence of communicable diseases.

### Malaria

During 1998–99, 16 districts—Raigad, Thane, Ahmednagar, Dhule, Jalgaon, Nashik, Pune, Nanded, Yavatmal, Chandrapur, Amaravati, Bhandara, Gadchiroli, Nagpur, Wardha and Mumbai—were classified as high-risk districts for malaria. District Malaria Control Societies have been established and registered for each tribal district in the State but the profile on account of malaria is disturbing (Annexure Table 40).

NFHS surveys recorded the prevalence of malaria for a period of three months prior to the survey and over the two periods of the survey and established that there has been a substantial increase in incidence from 3,742 (1992–93) to 4,098 (1998–99) per 1,00,000 population. The reproductive and child health (RCH) survey around the same period as NFHS-2 recorded a lower incidence of 3,526. While the incidence of malaria, as per the NFHS surveys, in urban areas has nearly doubled over the same period, it has shown a decline in rural areas. The RCH survey also records higher rural morbidity (Table 5.4).

An audit on the malaria programme by the Comptroller and Auditor General (CAG) has listed some reasons why the National Malaria Eradication

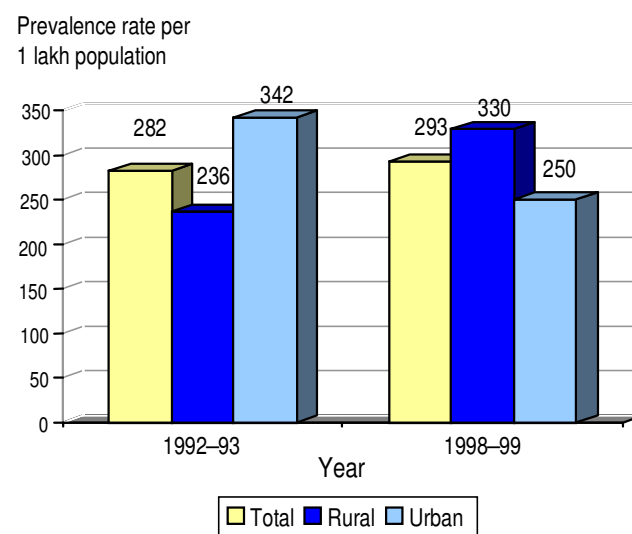
Programme did not make a significant dent on the incidence of the disease. Delay in treatment, failure to provide treatment, sub-standard anti-malarial drugs for treatment and use of sub-standard insecticides, shortage of staff as per prescribed norms and not even carrying out entomological surveys during 1992–93 and 1995–97 were cited as important causes. This, however, is only as far as the government programmes go, where the major emphasis is on prevention. Since an overwhelmingly large proportion of care is provided by the private health sector, a large responsibility for the failure of tackling malaria lies with the private providers. Malaria as a disease has a simple regimen of treatment at one level; at another, it needs a sanitary environment through prevention and promotional programmes. Both areas need attention.

## Leprosy

The programme dealing with Leprosy is a success story. There are many facets to it but the most important is that leprosy as a disease is handled almost

Figure 5.6

## Prevalence of Tuberculosis, Maharashtra: 1992–93 and 1998–99



Source: Refer relevant Table.

wholly by the public sector. It continues to be a vertical programme, has been allocated adequate resources over the years and has used innovative methods in management of the programme. To improve efficiency and effectiveness of this approach, district

Table 5.4

## Prevalence of Selected Diseases in Maharashtra

<i>Malaria (3 month prevalence) per 100,000 population</i>					
	Total	Male	Female	Rural	Urban
NFHS-1 1992–93	3742	3630	3850	5100	1800
NFHS-2 1998–99	4098	–	–	4509	3551
RCH-RHS 1998	3526	3356	3707	3800	2943
<i>Leprosy (point prevalence) per 100,000 population</i>					
	NFHS-1 1992–93	NCAER 1994	RCH-RHS 1998		
Urban	30	–	28.24		
Rural	100	65	81.56		
Total	72	–	64.45		
<i>Tuberculosis (point prevalence) per 100,000 population</i>					
	NFHS-1 1992–93	NFHS-2 1998–99	NFHS-2 1998–99 (Medically Treated TB)	RCH-RHS 1998	
Rural	330	236	191	255	
Urban	250	342	282	169	
Total	293	282	230	228	
<i>Blindness (point prevalence) per 1000 population NFHS-1</i>					
	Total	Male	Female	Rural	Urban
Partial Blindness	32.1	28.5	35.9	36.5	26.1
Complete Blindness	3.2	2.7	3.7	4.1	3.2

Source: Sundar 1995; PRC and IIPS 1995; IIPS 2000; IIPS and ORC Macro, 2000.

leprosy societies were set up and this strategy helped substantially.

Maharashtra has historically had one of the highest endemicity of leprosy in the country but over the last decade has led others in reducing it, as well as providing successful treatment of cases. The multi-drug treatment has contributed significantly to the sharp decline in its prevalence.

The NFHS and RCH provide evidence supporting the comprehensive coverage of the NLEP surveys (Table 5.4). The estimate of leprosy prevalence generated through these surveys is comparable to the performance figures under the government programme, verifying the fact that it succeeded mainly because it was a public programme with the relative non-involvement of the for-profit private health sector. A number of NGOs have also been active and working in collaboration with the public health programme. These surveys, however, also reveal that worryingly rural prevalence of leprosy is nearly thrice that in urban areas, indicating the slower progress in the rural domain.

## Tuberculosis

There are 29 district TB centres and 2,491 peripheral health institutions, which include Rural Hospitals, Cottage Hospitals, Primary Health Centres, Nagar Parishad Dispensaries, etc., where the anti-TB programme is implemented through Multipurpose Health Workers of the primary healthcare programme. To control TB more effectively, a Revised National Tuberculosis Control Programme (RNTCP) is being implemented since 1998–99. The operational objective of RNTCP is to cure 85 per cent newly detected sputum positive cases through Directly Observed Treatment Short Course Chemotherapy (DOTS). To facilitate this a State TB Society was formed and registered in 1998. District TB Societies have also been formed in Raigad and Pune (Rural) districts and Mumbai, Pimpri-Chinchwad and Pune Municipal Corporations.

TB is the biggest challenge among the spectrum of infectious diseases. Although the prevalence rate

appears to have declined (Table 5.4), greater efforts are required to reduce it further. The overall prevalence of TB across the two NFHS rounds has been nearly constant at 293 per 1,00,000 population (NFHS-1) and 282 (NFHS-2). This makes for a caseload of over 2,60,000 TB cases at any point of time. Again the rural urban differences are wide but here it is expectedly the urban areas that bear the brunt. Between the two rounds, the picture has reversed. Surprisingly the RCH survey, which indicates near identical overall prevalence of TB, shows a reversed rural-urban picture with rural areas having a higher prevalence.

The inadequate performance of the programme lies in late detection. Most of this happens because the private doctors treat TB patients in the earlier stages of the disease for cough and other respiratory infections. This delayed diagnosis and consequent worsening of the cases end up with the public sector health services. Studies have shown not only the incapacity of the private health sector in handling TB but also their contribution to drug resistance due to misuse of drugs (Uplekar and Rangan, 1996). Further, with the rising threat of HIV/AIDS, tuberculosis becomes an even greater danger.

## HIV/AIDS

The challenge of HIV/AIDS is an important issue for Maharashtra given that it has the highest prevalence of the disease among Indian States today. Given the complexity of the issues surrounding HIV, such as awareness, harm reduction and elimination of stigma and discrimination, it becomes increasingly important for all stakeholders in the fight against the epidemic to mainstream a rights-based development approach. Box 5.1 examines the poverty-disease correlates, showing that HIV/AIDS needs to be tackled not only as a communicable disease but also as a regular development issue in Maharashtra.

The National AIDS Control Programme, a 100 per cent centrally sponsored scheme is being implemented to help Maharashtra tackle the challenge of HIV/AIDS. In its first phase the project was sanctioned for the period September 1992 to March

## Box 5.1

### HIV/AIDS and Human Development in Maharashtra

The relationship between disease and destitution is a complex and mutually reinforcing one. The social and economic terrain of HIV/AIDS in Maharashtra is related to variables such as high degrees of labour mobility (often male migration to urban areas), persistent poverty and endemic hunger that often drive the commercial sex work in the State.

In May 1986, Maharashtra's first AIDS case was detected in Mumbai. Today, the State records the highest incidence of HIV in India, accounting for over 50 per cent of all HIV/AIDS cases in the country. According to the NACO classification, the State is categorised as Concentrated-Stage I, with HIV prevalence rate in antenatal clinics exceeding 1 per cent (2.4 per cent).

Surveillance site data from Maharashtra shows that HIV infection has spread rapidly among Commercial Sex Workers (CSWs), as indicated by those attending STD clinics. It is rapidly spreading in low risk population groups, the average time lag being 3 to 5 years as the virus spreads from CSWs to their clients who act as the 'bridge population' to the low risk groups such as their wives. In 1999, HIV seroprevalence among STD patients in Maharashtra was 19 per cent. In Mumbai, prevalence of HIV among STD patients had risen in 1999 to 56 per cent from 1 per cent in 1987.

Findings of a Behavioural Sentinel Survey (July–October 2000) in selected areas of Maharashtra, including urban areas of Mumbai, Pune, Thane and rural and urban areas of Sangli district, indicate that awareness of HIV and the need for condom use was

high among both brothel-based (over 91 per cent) and non-brothel-based CSWs. However, while 64 per cent of non-brothel-based CSWs used condoms with all their paying partners, only 32 per cent used condoms consistently with their non-paying partners during the last 12 months.

The spread of HIV is not a random event, but is caused by specific behavioural patterns, with strong socio-economic implications. The correlates of HIV with human deprivation are now increasingly being researched. According to a NACO study, HIV prevalence tends to indicate a positive relationship with the following variables—poverty ratio, migration, urbanisation and child mortality. Given that Maharashtra has a high incidence of all these factors, the challenge of HIV/AIDS is formidable indeed in the State.

In view of this link, it may be useful to design anti-HIV interventions not only in the areas of harm prevention and reduction, but also develop social security and livelihood interventions for high-risk groups such as the commercial sex workers for many of whom the fear of declining incomes after 'prime age' increases the propensity to maximise clients, even if it involves unprotected sex.

The fear of HIV is overshadowed by the fear of old age. In order to address this, a human development strategy for Maharashtra must address issues of stigma and discrimination (especially for people living with AIDS) and strive for ensuring that a caring society guarantees rights of access to basic services to all.

*Contribution:* Human Development Resource Centre (HDRC), UNDP, New Delhi.

1999. Going by the success of Phase I, Phase II is being implemented, except in Mumbai, through the Maharashtra State AIDS Control Society (MSACS) set up in 2000. It is responsible for planning, coordination, implementation and monitoring of AIDS prevention and control programmes at the State level. For implementation of NACP in the city of Mumbai, the Brihan Mumbai Municipal Corporation has set up Mumbai District AIDS Control Society (MDACS).

The entire focus of the NACP is awareness

campaigns and education, and surveillance of specific groups of population. For instance, surveillance is done through screening of blood samples from STD clinic patients and women seeking antenatal care. The surveillance data collected from various sites (STD clinics and ANC clinics) shows wide variations across sites.

Whatever data is available on the incidence of HIV/AIDS (Table 5.5) is itself disconcerting since it reflects only a tip of the iceberg, most of the data coming from only the public healthcare system.

Table 5.5

### HIV/AIDS Status in Maharashtra Indicators, August 1986 to October 2000

Indicator	August 1986 to October 2001
No. of Blood Units Screened	5,348,320
ELISA Reactive	72,856
HIV Positivity Rate (General Population)	1.4
No. of persons tested (High Risk Behaviour)	668,402
No. of HIV +ve persons	92,479
HIV Positivity Rate (High Risk Groups)	13.8
No. of AIDS Cases	10,160
No. of AIDS Deaths	966

Source: Maharashtra State AIDS Control Society, Mumbai.

Available data from Maharashtra State AIDS Control Society shows that between August 1986 and October 2001, 72,856 units out of 5.34 million units of blood screened tested positive for ELISA Reactive tests i.e., 1.36 per cent. During the same period, of the 6,68,402 persons in the High Risk Behaviour, 92,479 tested positive i.e., 13.8 per cent.

There is hardly a district in Maharashtra without AIDS. Only two, Osmanabad and Wardha reported no cases. Though 13 districts reported cases of AIDS between 1986 and 2001, they reported no deaths. What is intriguing is that some of these districts have fairly large number of AIDS cases—116 in Chandrapur, 92 in Akola and 40 in Aurangabad (Table 5.6) but even these did not report any AIDS related deaths. This could be a pointer to possibly poor reporting.

Both by incidence and fatality, Sangli and Mumbai lead with a high number of AIDS cases: 2,952 cases out of a total of 6,644 cases across Maharashtra and 200 deaths of the total of 696 deaths between August 1986 to February 2001. Mumbai is a major reservoir but smaller towns like Sangli (2,077 cases and 267 deaths), Kolhapur (314 cases and 113 deaths), Satara (380 cases and 26 deaths) and Pune (375 cases and 53 deaths) throw up a disconcerting picture of the situation. These four districts account for some 47 per cent of the total cases in Maharashtra; Mumbai for about 44 per cent. The data from the four districts, however, does not indicate the urban-rural differentials that could be present.

Table 5.6

### District-wise number of AIDS cases reported and deaths reported in Maharashtra, August 1986 to February 2001

Surveillance Centre	AIDS Cases			AIDS Deaths		
	Male	Female	Total	Male	Female	Total
Raigad	57	10	67	4	1	5
Ratnagiri	14	5	19	0	0	0
Thane	79	16	95	5	2	7
Ahmednagar	9	12	21	1	1	2
Nashik	4	1	5	1	1	2
Dhule	1	1	2	0	1	1
Jalgaon	12	9	21	1	1	2
Pune	216	159	375	14	39	53
Satara	280	100	380	24	2	26
Solapur	8	5	13	1	1	2
Kolhapur	231	83	314	81	32	113
Sangli	1461	616	2077	198	69	267
Sindhudurg	5	2	7	3	1	4
Aurangabad	30	10	40	0	0	0
Beed	9	0	9	0	0	0
Jalna	7	1	8	0	0	0
Nanded	1	0	1	0	0	0
Osmanabad	0	0	0	0	0	0
Latur	4	2	6	1	1	2
Parbhani	6	0	6	0	0	0
Akola	78	14	92	0	0	0
Amaravati	2	0	2	0	0	0
Buldhana	3	0	3	1	0	1
Yavatmal	1	1	2	0	1	1
Bhandara	0	0	0	0	0	0
Chandrapur	95	21	116	0	0	0
Gadchiroli	1	0	1	0	0	0
Nagpur	7	3	10	5	3	8
Wardha	0	0	0	0	0	0
Mumbai	2432	520	2952	164	36	200
Total	5053	1591	6644	504	192	696
Other states	248	57	305	17	9	26
Foreigners	4	3	7	2	2	4
Grand Total	5305	1651	6956	523	203	726

Source: Directorate of Health Services.

Both the incidence and fatality are higher among males than among females. It may be useful to study why, apart from Mumbai, the Pune-Satara-Sangli-Kolhapur belt has there been such high incidence in comparison to other, districts. This, however, may not be an accurate picture since the system of reporting and actual screening may be somewhat inadequate. The treatment component is as yet absent in this programme. As regards awareness and education



a wide array of groups like high school and college students, truck drivers, sex-workers, eunuchs, street children, migrant workers etc. are targeted, as is the general public through the mass media. Much of this is done through NGOs, whose role is especially critical since they form an interface between the government programme and the target population.

### Blindness

Blindness is a major problem in Maharashtra with over 3.5 per cent of the population having either partial or complete blindness, cataract being the main reason with 80 per cent of the blindness attributed to cataract as per the Performance Budget report of the Government of Maharashtra. Since 1994, to expedite cataract surgeries, World Bank assistance of Rs 83 crores has been pumped into this programme. To effectively implement the project and to reduce the backlog of cataract blind people in the State, District Blindness Control Societies have been set up in each district.

NFHS-1 is the only source that provides a survey-based data on blindness. It reveals that the overall prevalence of partial blindness was 32 per 1000 and that of complete blindness was three per 1000. The prevalence of both partial and complete blindness is higher among women and in rural areas.

### Water Supply and Sanitation

Access to safe drinking water and sanitation facilities is one of the significant determinants of health status in the population. Available data indicates that in 1991, 54 per cent rural and 91 per cent urban households had safe drinking water facilities. (Table 5.7) NFHS data shows that the drinking water situation between 1992 and 1999 has shown little improvement.

Sanitation too has a major public health impact and here both urban and rural areas are inadequately provided. Though around 75 per cent of households in urban areas have latrine, drainage system and garbage disposal (Table 5.8), the public health consequences of inadequate sanitation facilities are

greater in densely populated urban areas where 32 per cent of the population is residing in slums (RGI, 2001). Even in many municipal towns, underground drainage is not a common feature, which in turn triggers several health risks.

### Family Welfare Programme

Given the formidable challenge of population control in Maharashtra, Family Welfare Programmes have been centre stage. When the Government of India abolished the method-specific approach in 1996 where targets for all activities were fixed at national level, Maharashtra adopted its own strategy, where expected levels of contraceptive use for each district were estimated using criteria based on birth rates and death rates. The district level officers drew the targets. Unlike in the earlier approach geared to meet set targets while quality of services and health-care facilities received lower priority, the emphasis of the target free approach is on better quality of service. Personnel in the PHCs were trained and the focus shifted to topics like quality of care, informed choice and the assessment of community needs.

Table 5.7

#### Percentage of Households having Drinking Water and Sanitation Facilities in Maharashtra

	1992-93	1998-99
Drinking water from pump/pipe	78.5	81.9
Any toilet/latrine facility	40.8	45.9

Source: IIPS 1995; IIPS and ORC Macro 2000.

Table 5.8

#### Percentage of Households having Water Supply and Sanitation Facilities in Maharashtra

Type of Facility	Rural	Urban
Safe drinking water (1991)	54.0	90.5
Latrine (1993)	7.7	76.5
Underground sewage (1993)	0.0	19.5
Drainage system (1993)	31.0	77.6
Garbage disposal (1993)	32.0	74.2

Source: CSO 2000; NSSO 1998.

The family welfare programme is a high priority programme. Under this programme as revealed by

the assessment survey supplies are reasonably good and hence the share of the public sector in services provided is very high. Tables 5.14 and 5.15 corroborate this. In the 1990s the programme has been re-designated as the Reproductive and Child Health (RCH) programme, introducing the element of quality of care in the services for women and children. Table 5.9 indicates that Maharashtra's achievement in terms of selected RCH indicators, 55 per cent of women are receiving full antenatal care, 57 per cent of the deliveries are in medical institutions with 61 per cent of deliveries being safe deliveries and 58 per cent of ever-married women using family planning methods. Immunisation has covered 80 per cent of the children.

Differentials between rural and urban areas are sharp for safe/institutional deliveries as well as for ANC coverage which is a cause for concern but in the case of contraceptive use and immunisation of children, rural areas measured up to the urban areas. In the case of differentials across social groups and type of housing which has been used as a proxy for socio-economic class, the SC/ ST group and those staying in *katcha* houses showed markedly lower utilisation of such services with the gap being least for contraceptive use.

### Child Survival and Safe Motherhood Programme

CSSM is an integrated package of interventions for improving the health status of women and children so as to reduce IMR and MMR, and it includes services that sustain and strengthen the ongoing

programme of immunisation, Oral Re-hydration Therapy (ORT), Vitamin A prophylactic, Iron Folic Acid supplementation. It also expands the coverage of antenatal care, professionally attended deliveries, and the Acute Respiratory Infections (ARI) Control Programme and care of the newborn. This programme is now renamed as the Reproductive and Child Health (RCH) programme and includes various components discussed below.

#### Immunisations

The Expanded Programme on Immunisation (EPI) was initiated in India in 1978 to immunise children against preventable killer diseases such as tuberculosis, polio, diphtheria, pertusis (whooping cough), tetanus and measles. This was modified as the Universal Immunisation Programme in 1985–86 to achieve 100 per cent immunisation.

The service statistics do not indicate the level of coverage and NFHS surveys have to be relied upon. It is clear that coverage of different vaccinations is increasing but its 100 per cent target is yet to be realised. The proportion of children who have received no vaccines fell from eight per cent to two per cent over the six-year period between the two NFHS rounds, and the fully immunised increased from 64 per cent (NFHS-1) to 78 per cent (NFHS-2) (Table 5.10). Across districts and regions, Konkan, Nagpur and Pune divisions are better performers. The best districts are Ratnagiri and Sindhudurg.

#### Antenatal Care

Proper antenatal care, crucial for the good health of both mother and the child, has seen some

Table 5.9

#### Differentials in Level of Key Indicators of RCH by selected Background Characteristics—1998–98

*(figures are in percentages)*

	Residence		Social Group		Type of House			Total
	Rural	Urban	SC/ST	Others	Katcha	Semi Pucca	Pucca	
Full ANC Coverage	52.2	59.0	48.2	57.8	46.2	56.8	61.5	54.8
Institutional Deliveries	41.2	84.8	41.8	63.0	34.6	59.7	78.8	57.1
Safe Deliveries	47.1	86.3	45.5	67.5	39.9	64.1	81.9	61.2
Contraceptive Use	59.5	56.5	56.4	59.2	55.8	58.5	60.2	58.3
Full Immunisation of Children	80.0	78.7	73.8	82.3	74.5	80.3	85.0	79.7

Source: IIPS 2001.

improvements in the coverage of ANC services over the six-year period from NFHS-1 to NFHS-2. Institutional deliveries and deliveries supervised by trained health professionals (PRC and IIPS, 1995; IIPS and ORC Macro, 2000) also increased, facilitating safe delivery and better health of the mother and child. The differentials across regions and districts are similar to that for immunisation. Konkan, Pune and Nagpur divisions did better than the State average for ANCs and the former two for institutional deliveries. As expected, Mumbai topped for both ANCs and institutional deliveries, followed by Sindhudurg. The worst districts were Nashik, Dhule and Parbhani for ANCs and Gadchiroli, Bhandara and Jalna for institutional deliveries.

### *Childhood Diarrhoea*

The Oral Re-hydration Therapy Programme was initiated in Maharashtra since 1986–87 in phases to prevent deaths due to diarrhoea among children below five years of age. All districts were covered under this scheme by 1989–90. The programme focuses on training, health education and supply of ORS packets. The percentage of children who had diarrhoea showed an increase in NFHS-2 as compared to NFHS-1 and may be due to the seasonal variations during data collection, which affects the prevalence of diarrhoea. Knowledge of ORS packets has increased from 47 per cent to 65 per cent. Percentage of children who were given ORT had also increased over the same period indicating improvements in the use

### *Reproductive Tract Infections*

This is a recent initiative. But not much information is available in the performance budgets except that

there is a World Bank and Central government supported RCH programme for which in 2001–2002, Rs 680 million was allocated, 97 per cent of this is towards materials and supplies, mostly for contraception and immunisation services. At the healthcare delivery level there is no evidence of any substantial inputs into dealing with RTIs which the recent RCH survey clearly revealed that 27 per cent of women and 10 per cent of men reported having had at least one such episode in ‘last three months’. Across districts there was substantial variation with Akola (43 per cent), Nanded (38 per cent) and Jalna (37 per cent) reporting high prevalence for women and Bhandara (17 per cent), Yavatmal and Wardha (14 per cent) and Nanded (13 per cent) for men (Annexure Table 47) indicating a large potential demand for such services, that needs to be met.

## Healthcare Delivery and Utilisation

The public delivery system is organised on the basis of population and geographical entitlements. At the apex are the tertiary institutions or teaching hospitals, located in Mumbai and other larger cities like Pune, Solapur, Nagpur, Thane, Aurangabad etc. Presently there are 11 such hospitals, owned and run by the State Government in addition to two run by the Central Government and four by Municipal Corporations. District headquarters, at the next level, have Civil Hospitals, usually of 100–500 beds with most basic specialities and of late, some of the larger ones among them are used as teaching hospitals. There are 21 civil hospitals with 5,910 beds. These hospitals are core centres for referral medical care for the rural areas, catering also to the district towns where they are located. Many taluka and other towns have

Table 5.10

### Percentage receiving selected Antenatal Care Services

	NFHS-1 <sup>1</sup>			NFHS-2 <sup>2</sup>		
	Rural	Urban	Total	Rural	Urban	Total
Received 2 or more doses of Tetanus Toxoid	65.4	79.8	71.0	72.0	79.4	74.9
Received iron and folic acid tablets or syrup	69.6	72.2	70.6	82.3	88.6	84.8
Received antenatal check-up outside home from:						
1. Doctor	45.3	85.7	61.0	55.3	89.6	68.7
2. Other Health Professional	11.8	2.8	8.3	24.7	4.4	16.8

Source: 1 PRC and IIPS 1995; 2 IIPS and ORC, Macro 2000.

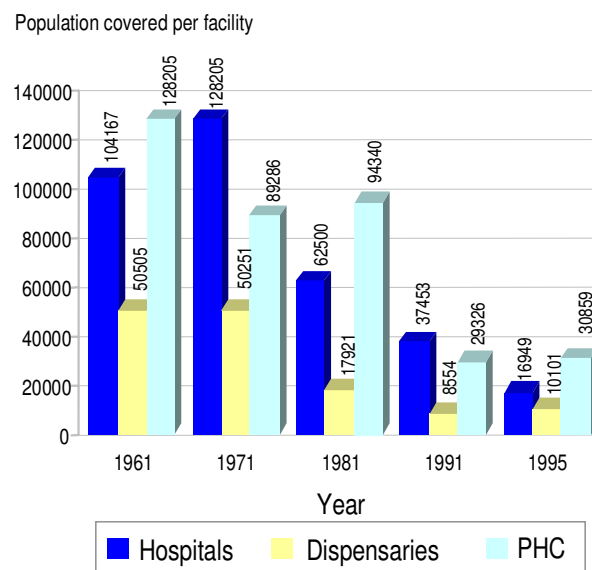
smaller hospitals or sub-divisional hospitals run by local self-governments. In the rural areas, at the 30,000-population level—it is 20,000 for tribal and hill areas—Primary Health Centres (PHCs) and sub-centres with two health workers per 5,000 population are in place. These health centres have one doctor with six beds and para-medical personnel, providing the first contact care to villagers. Presently there are 1,762 PHCs, 169 PHUs, 61 mobile health units and 9,725 sub-centres.

During the expansion of the rural health infrastructure, under the Minimum Needs Programme in the 1980s, Rural Hospitals were set up or some or the older PHCs upgraded as Community Health Centres, to make first referral care available to the rural population closer to where they live. These 30-bedded hospitals had four basic specialities—Medicine, Surgery, Obstetrics and Gynaecology and Paediatrics. Maharashtra has 345 Rural Hospitals, each reaching out to about 1,50,000 population (one per 5 PHCs). In some cities, urban health centres on the pattern of PHCs are being set up under the India Population Project supported by the World Bank and other similar projects. (Table 5.14)

There are teaching hospitals in the private sector as well, in addition to Government run teaching hospitals. Some of these private teaching colleges are dependent on public hospitals for infrastructure support. Most of these private large tertiary hospitals operate as non-profit making institutions while small private hospitals and nursing homes mostly operate on commercial basis. Their share in hospitals is 87 per cent, in dispensaries it is 88 per cent and in beds it is 47 per cent. The increasing number of private medical colleges being set up reflects a greater commercialisation of medical education facilities. Nine district hospitals have been allowed to be used by the private medical colleges on payment basis for performing the functions of the teaching hospitals, indicating a shift towards private-public partnership in providing medical education and health services.

Both qualitatively and quantitatively, there is a wide gap in the healthcare infrastructure available

**Figure 5.7**  
**Growth of Health Care Facilities, Maharashtra, 1961–1995**



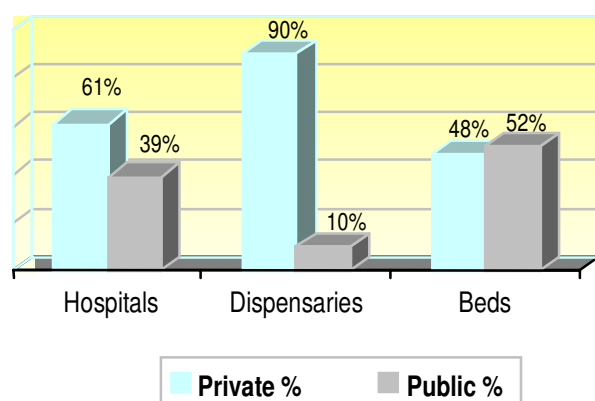
Source: Refer relevant Table.

in the rural and urban areas. Urban areas have both a concentration of hospitals and nursing homes as well as qualified doctors, it being true as much with the public sector as it is with the private (Figures 5.7 and 5.7A). Most of the public hospitals are in the cities, district and sub-divisional towns. Disproportionately, over 80 per cent of the beds in the public hospitals are in urban areas where 42.4 per cent of the population lives. So is the case with the private sector. This has led to a much better availability of health services in the urban areas. For example, in the year 2000, the number of doctors per 1,00,000 population in urban areas is 139.8 as compared to a mere 23.7 in rural areas (Table 5.12). Similar disparities are evident across other related indicators. This is in contrast to Punjab and Kerala, where the services are more evenly spread between the urban and rural regions, perhaps explaining why these States do better in the health domain than Maharashtra (Tables 5.11 and Annexure Table 48). Apart from the patent urban-rural differentials, Maharashtra also has a wide variation across districts and regions. For example, Mumbai, Pune, Wardha and Nagpur have a better ratio of population to facilities (Annexure Tables 48 and 49).

Compared to other developed States, the overall

Figure 5.7A

### Health Facilities in Public and Private Sector, Maharashtra



Source: Refer relevant Table.

health sector in Maharashtra is weaker, not having kept pace with its general economic attainments (Annexure Table 50). Its intra-state differences are a cause for greater concern. The urban areas, especially in and around Mumbai and in south-western Maharashtra are well provided for but the rest lags behind in health infrastructure. Its rural infrastructure of PHCs and SCs are as per the defined norms but they are not adequately supported by inputs needed to run a proper healthcare system. Public investment and health expenditures are not only inadequate but have declined in the 1990s. Maharashtra's position relative to other States has also worsened (Table 5.13) (Annexure Table 51).

Table 5.11

### Number of Hospitals, Beds and Dispensaries per lakh population across States and by Rural and Urban Areas

States	Hospitals			Beds			Ref Year	Dispensaries			As on
	Rural	Urban	Total	Rural	Urban	Total		Rural	Urban	Total	
Andhra Pradesh	1.7	10.6	4.2	19.8	189.8	65.5	1-1-94	0.4	0.4	0.4	1-1-93
Gujarat	0.6	15.1	5.6	24.3	422.5	161.7	1-1-95	8.2	31.2	16.1	1-1-95
Haryana	0.1	1.5	0.4	4.0	152.8	40.6	1-1-96	0.3	4.1	1.2	1-1-93
Karnataka	0.1	1.7	0.6	10.4	233.5	79.4	1-1-96	1.8	1.6	1.7	1-1-94
Kerala	6.5	7.5	6.7	198.0	414.2	255.1	1-1-94	6.4	6.4	6.4	1-1-94
Maharashtra	0.9	8.3	3.8	20.7	219.7	97.7	1-1-93	0.7	24.4	9.9	1-1-93
Punjab	1.8	2.2	1.9	62.9	156.2	90.4	1-1-96	7.7	3.6	6.5	1-1-96
Tamil Nadu	0.2	1.7	0.7	11.8	232.9	87.5	1-1-90	0.4	1.9	0.9	1-1-90
West Bengal	0.2	1.4	0.5	11.7	237.0	73.7	1-1-96	0.8	0.7	0.7	1-1-96
All India	0.7	4.3	1.6	19.4	212.7	69.1	1-1-96	1.7	6.7	3.0	1-1-96

Source: Based on CBHI, 1998.

Table 5.12

### Availability of Medical Care Facilities in Maharashtra

Type of Facility	Number per 1,00,000 population		
	Total	Rural	Urban
Allopathic hospital (1995) <sup>1</sup>	5.9	1.0	13.2
Allopathic Dispensaries (1995) <sup>1</sup>	9.9	2.6	21.3
Avurved, Unani, Homeopathy Institutions) <sup>1</sup>	2.4	n.a.	n.a.
Beds (1995) <sup>1</sup>	153.9	44.7	324.7
Doctors-Allopathic (2000) <sup>2</sup>	72.5	23.7	139.8
All System Doctors (2000) <sup>2</sup>	167.6	77.8	290.3
Nurses (2000) <sup>2</sup>	140.5	65.4	244.3

Source: (1) Based on data in Government of Maharashtra (2000).

(2) Supplied by Directorate of Economics and Statistics, Government of Maharashtra, Mumbai.

The rural-urban distribution for doctors and nurses in 2000 provided by respective medical councils are on the basis of the 1991 census distribution ratios.

### Medical Care

Household based national surveys by the National Sample Survey Organisation and the National Council for Applied Economic Research provides information on utilisation for medical care facilities (Table 5.17). These surveys show a declining trend in the use of public facilities in Maharashtra over the years. The NSSO surveys reveal that use of public hospitals for in-patient care has declined

Table 5.13

## Average Population Covered by PHC, CHC and Sub-Centre

	<i>(As on 31-3-1991)</i>			<i>(As on 30-6-1999)</i>		
	<i>Average population covered by a</i>			<i>Average population covered by a</i>		
	<i>Sub-Centre</i>	<i>PHC</i>	<i>CHC</i>	<i>Sub-Centre</i>	<i>PHC</i>	<i>CHC</i>
Andhra Pradesh	6,175	37,995	10.5	4,949	31,972	2.2
Gujarat	3,793	30,888	1.8	4,116	30,964	1.4
Haryana	5,400	31,427	3.0	6,303	36,136	2.3
Karnataka	3,988	27,430	2.1	4,201	20,409	1.4
Kerala	4,204	23,509	4.0	4,384	23,212	2.8
Maharashtra	5,167	29,379	1.7	5,401	30,913	1.7
Punjab	5,012	7,022	2.1	2,693	32,978	1.5
Tamil Nadu	4,234	25,721	5.0	4,494	27,168	5.4
West Bengal	6,269	31,966	5.7	6,878	44,287	5.6
India	4,753	28,011	3.2	5,164	30,854	2.4

Source: Computation based on data from Rural Health Statistics (1992 and 2000) and expert committee on population projection (1996).

from 45 per cent of the cases in 1987 to 31 per cent in 1996 and for ambulatory care, the use of public facilities has dropped from 26 to 18 per cent during the same period. The urban areas have marginally higher utilisation rates in the public sector as compared to rural areas. The declining use of public health facilities in the context of high levels of poverty is a symptom of the deterioration of the public health system. This is clearly evident from the assessment of public health facilities done by the Government (Box 5.2).

Table 5.14

## Healthcare manpower availability in Rural Areas of Maharashtra as on 30-6-1998

	<i>In Position</i>	<i>Sanc-tioned</i>	<i>% in Position</i>
Female ANMs	11,590	11,915	97.3
Health Worker/MPW (M)	7,978	12,440	64.1
Health Assistant (F)	1,698	1,536	110.5
Health Assistant (M)	3,691	4,549	81.1
Doctors at PHC	2,993	3,068	97.6
Specialists (Surgeons, Obstetricians, Gynaecologists, Physicians and Paediatricians)	753	1,207	62.4
Radiographer	330	414	79.7
Pharmacist	1,839	2,080	88.4
Lab Technician	1,350	1,480	91.2
Nurse Midwife	3,121	3,386	92.2
Block Extension Educator	292	320	91.3

Source: DGHS 2000.

Information on the utilisation of various services is also available from recent national level surveys (National Family Health Surveys and Reproductive and Child Health-Rapid Household Survey), which were largely confined to information on reproductive and child health services (Table 5.18). The latter also gives data at the district level (Annexure Table 53).

Table 5.15

## Availability of at least 60 per cent of critical inputs in District Hospitals, First Stage Referral Units and Community Health Centres, Maharashtra, 1999-2000

<i>Item</i>	<i>No of Dis-trict Hospi-tals having</i>	<i>% of FRUs having</i>	<i>% of CHCs having</i>	<i>% of PHCs having</i>
Infrastructure	9	100	97	88
Staff	8	34	28	60
Supply	2	50	8	87
Equipments	10	34	10	96
Total number of units listed	10	50	71	645

Source: IIPS 2001.

These studies reveal that over 48 per cent of the women had availed antenatal care services from public sector (53 per cent rural and 40 per cent urban) and for pregnancy complications, 40 per cent (50 per cent in rural areas and 30 per cent in urban areas). From those who had delivered in an institution, 49 per cent had used public facilities

(53.3 per cent rural and 43.2 per cent urban). Among the women who experienced post-delivery complications, around 36 per cent had sought treatment from the public sector.

The public sector is also a major provider of contraceptives in the State accounting for 75.2 per cent of all acceptors of modern methods. Level of utilisation of contraceptives from public sector varied

Table 5.16

**Healthcare Facilities in Mumbai, Rural and Urban Maharashtra by Public and Private Sector**

	<i>Public Facilities (Govt. + Local Body)</i>				<i>Private Facilities</i>			
	<i>Mumbai</i>	<i>Other Urban</i>	<i>Rural</i>	<i>Total Public</i>	<i>Mumbai</i>	<i>Other Urban</i>	<i>Rural</i>	<i>Per Cent Private</i>
Teaching Hospital	4	13	–	17	1	16	–	50
General Hospital	76	192	–	268	1,416	–	–	–
Rural Hospital	–	–	345	345	–	2,849	–	–
PHC/PHU/HP	176	206	1,990	2,372	–	–	–	–
Sub-centre	–	–	9,725	9,725	–	–	–	–
Dispensary	235	507	–	742	1,832	3,914	–	88
Hospital beds	20700	29288	20862	70850	23202	38827	–	47

*Source:* The data in this table has been worked out from the Performance Budget (2001–2002 Budget) for State Government for the year 1999 and from the Statistical Abstract for local bodies and private sector for 1995 (Government of Maharashtra, 1998). However Mumbai data has been compiled from the records of the BMC for 1999, and hence totals do not match with the Statistical Abstract since the latter does not record complete information. The private sector data is an under-estimate and also refers to 1995, except for Mumbai where it is based on a survey by CEHAT.

**Box 5.2**

**Assessment of Healthcare Facilities in Public Sector**

Analysing the facilities available in selected public health care institutions gives a brief idea about its functioning. The RCH Facility survey (1999–2000) undertaken by Ministry of Health and Family Welfare, has reviewed all public healthcare facilities available in selected districts in each State. A total of 13 districts were covered in Maharashtra and facilities required for proper functioning of district hospitals, first stage referral units, community health centres and primary health centres were evaluated. (Annexure Tables 30–35)

**Physical Infrastructure and Medical Equipment**

The district hospitals and most of the Community Health Centres (CHCs) seem to be self-sufficient in terms of water, electricity, vehicles and operation theatre facilities. Two of the district hospitals and majority of first stage referral units lacked separate aseptic rooms and any linkage with blood bank facility. Availability of these facilities is inadequate in CHCs and PHCs. Though the district hospitals had most of the essential medical equipment, severe shortage of these facilities was seen in FRUs and CHCs. More than 50 per cent of FRUs and CHCs did not have even a Boyle’s apparatus, oxygen cylinder, high-pressure steriliser and ECG Machine.

**Medical Personnel**

Almost all the public healthcare units had general duty doctors, staff nurses and laboratory technicians. But a majority of them did not have services of specialist doctors like an obstetrician and gynaecologist, paediatrician, RTI/STI specialist pathologist and anaesthesiologist. A majority of the PHCs did not have laboratory technicians as well as women medical officers.

**Contraceptives and Vaccines**

The PHCs and the district hospitals had adequate stocks of contraceptives and vaccines but the FRUs and CHCs were not as well stocked. Vitamin A was deficient in all the institutions.

**Overall Inputs**

The share of public healthcare units that were having at least 60 per cent of the critical inputs showed a mixed picture. While most district hospitals had problem with supplies, the FRUs, CHCs and PHCs suffered shortages of staff and the first two of supplies and equipment as well.

Table 5.17

## Utilisation of Public and Private Facilities in Rural and Urban Maharashtra

	<i>Inpatient Care</i>				<i>Outpatient Care</i>			
	<i>Rural</i>		<i>Urban</i>		<i>Rural</i>		<i>Urban</i>	
	<i>Public</i>	<i>Others</i>	<i>Public</i>	<i>Others</i>	<i>Public</i>	<i>Others</i>	<i>Public</i>	<i>Others</i>
NSSO 1986–87	43.6	56.4	46.2	53.8	26.7	73.7	25.0	75.0
NCAER 1993	30.5	69.5	58.8	41.2	43.8	56.2	32.5	67.5
NSSO 1995–96	31.2	68.8	31.8	68.2	16.0	82.0	17.0	81.9

Source: NSSO 1992; Sundar 1995; NSSO 1998a.

from 18.1 per cent for the oral pill to 93.1 per cent for male sterilisation. The level of utilisation for female sterilisation from the public sector was also high (82.3 per cent), while 29.8 per cent and 19.9

per cent of users had got their IUDs and condoms, respectively, from the public sector.

The role of the public sector in providing

### Box 5.3

#### Private Healthcare—Evidence through Utilisation Studies

Organised documentation on the private health sector is scarce but what is available is due to some basic statutory requirements like registration of doctors with their Councils and of hospitals with local governments. The Central and State Governments in their statistical reports, which invariably are plagued by incomplete reporting, report these. The professional associations of doctors and hospitals have neither documented basic information about their profession and institutions nor make it public.

Data from government statistical reports show that two-thirds of the hospitals and over 40 per cent of hospital beds are in the private sector. The incompleteness of this data, especially on the private sector, makes it difficult to substantiate the growth that is taking place with regard to the private health sector. Hence the only evidence available on the working, size and the character of the private health sector is household studies of healthcare seeking behaviour. At the national level the NSSO surveys from the 42nd and 52nd Rounds and the NCAER studies help here. There are smaller micro studies at the State or district levels (Annexure Table 39).

The two NSSO surveys clearly show that between 1987 and 1996 private health sector utilisation in Maharashtra increased from 56 per cent to 68 per cent in rural areas and from 54 per cent to 68 per cent in urban areas for inpatient services. In case of outpatient care, the private health sector was already accounting for three-fourths share in 1987 and this increased marginally to 77 per cent

in 1996. This period coincides with the declining investments by the State in public healthcare. The NCAER studies also tell more or less the same story. The smaller studies done at different points of time in Maharashtra also indicate a very large and growing share of the private health sector.

Given the large size of the private healthcare sector, there are two major concerns, which need to be addressed. First is the issue of quality and minimum standards for the services provided. While studies of public institutions have shown complacency, long waiting time, non-availability of doctors and medicine etc., as its ill, the study of private institutions and providers have shown absence of any minimum standards, both clinical and physical as well as irrational drug use, etc.

Secondly, the private health sector operates in an unregulated environment. The professional medical bodies have not shown any concern towards setting up basic rules while the government, despite some regulations, does not implement them. Both these issues require some concern today, both at the level of policy making as well as in the profession. In Mumbai, there is an initiative called Forum for Healthcare Standards to help set up an accreditation system which would help set up basic norms and monitor its practice towards quality care. The State Government has undertaken an initiative for drastic changes in the Medical and Clinical Establishment Act to regulate quality and minimum standards in healthcare provision.



## Box 5.4

### Whys of Private and Public Investment

An analysis of facilities shows that in the public and publicly aided medical institutions, where the indicators considered are hospitals, dispensaries, PHCs and number of beds in all institutions per lakh of population per square kilometre, Greater Mumbai has the biggest concentration. Other districts lag behind.

At the other extreme, Dhule-Nandurbar in Western Maharashtra, Beed and Osmanabad in Marathwada and Gadchiroli in Vidarbha are lower down on the scale of availability of medical facilities.

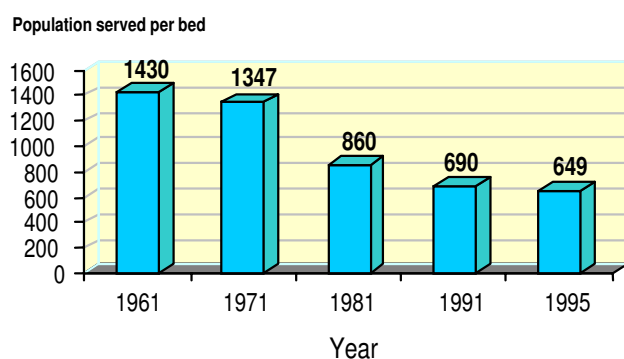
In the matter of medical education, the two sectors, public and private, have played a role but the nature of education and health makes it imperative for governmental intervention, this dimension indicated by government expenditures on the creation and maintenance of social infrastructure facilities.

Government expenditure on the revenue account and capital account represent political commitment towards the development of social sectors. Expenditures on the revenue account indicate allocations towards recurrent costs while those on the capital account represent allocations towards the development and maintenance of infrastructure facilities.

A notable feature of the education and health system is that the private sector coexists with the government sector, the latter expected to foster an egalitarian arrangement. It is the desire for a better quality of social amenities that creates a demand for private sector facilities.

Figure 5.8

### Population Served Per Hospital Bed, Maharashtra, 1961–1995



Source: Refer relevant Table.

immunisation services to children was even higher as we can see that 83 per cent of children were immunised in public healthcare facilities. The proportion of children who were immunised from the public sector ranged from 89 per cent to 67 per cent in rural areas and urban areas, respective.

In the case of outpatient care services, only a small proportion of children were taken to public health services for treatment if they were suffering from diarrhoea and pneumonia. The levels of utilisation of the public sector for treating these ailments was 13.6 per cent, 10 per cent and 12.5 per cent in rural areas, urban areas and combined, respectively. This is much lower than the NSSO data for treatment of general morbidity in the public sector.

The above analysis clearly indicates that of all healthcare services the public sector dominates only in delivering contraceptive and immunisation services. A sizeable proportion of the population was found to be depending on public sector for reproduction related services, and for inpatient care serv-

Table 5.18

### Per cent of users of Public Health Facilities in Maharashtra

Type of Services	Rural	Urban	All
1. Inpatient care services <sup>3</sup>	31.2	31.8	–
2. Outpatient care services <sup>3</sup>	16.	0	17.0
3. Antenatal care services <sup>2</sup>	53.0	39.6	48.8
4. Pregnancy complications <sup>2</sup>	50.0	29.8	40.0
5. Delivery care <sup>2</sup>	53.3	43.2	48.7
6. Post delivery complications <sup>2</sup>	36.3	36.7	36.5
7. Contraceptive methods <sup>1</sup>			
(a) Pill	28.6	10.6	18.1
(b) IUD	*	28.1	29.8
(c) Condom	27.3	14.4	19.9
(d) Female Sterilisation	89.9	69.4	82.3
(e) Male Sterilisation	96.4	77.0	93.1
(f) All Modern Methods	85.5	59.1	75.2
8. Immunisation of children <sup>2</sup>	89.1	67.1	82.7
9. Diarrhoea and Pneumonia (for children) <sup>2</sup>	13.6	10.0	12.5

Note: The figures are per cent using public facilities from amongst all users. The balance users used private facilities

\* number using IUDs in rural areas are very few.

Source: 1 IIPS and ORC, Macro 2000; 2 IIPS 2000;

3 NSSO 1998a.

ices. And there is clear evidence of declining trends in use of public facilities for medical care and other health services. Overall, the utilisation pattern seems to be closely associated with government policy with a larger emphasis on reproductive and child health issues. The private health sector in contrast has expanded rapidly in the last decade. However, few micro-studies have been undertaken in this area, which indicate the penetration of the private health-care system to even the remotest areas, though the providers are not necessarily either qualified or certified. They seem to be filling a gap and even the poor have begun to use it in large numbers, as demonstrated by both micro studies and national surveys (Annexure Table 52).

### Private Sector

The private healthcare sector in Maharashtra is both the largest in the country as well as better developed, with some of the largest and well-known private hospitals being located here, especially in Mumbai. These large hospitals, expensive and sophisticated, though private, are registered as non-profit institutions, which is a peculiar feature not found to the same extent elsewhere in the country. Though only the well heeled find its facilities easily accessible, legally in lieu of tax benefits the hospitals are sup-

posed to provide free services to 20 per cent to 30 per cent of their total clients. But in reality, not all such free services accrue to the poor, which is their entitlement.

### Public Expenditure on Health

The share of health expenditure in the government budget has decelerated over the years, which may have an adverse impact on long-term growth and may lead to further human deprivation.

Health expenditure reckoned here includes expenditure borne by Ministries of Health and Family Welfare and therefore, excludes water supply and sanitation. It thus includes curative care i.e., hospitals and dispensaries, preventive and promotional programmes such as control of diseases, family planning, immunisation, medical education, Employee State Insurance Scheme (ESIS), Food and Drug Administration, etc.

Health expenditure as a percentage of NSDP at current prices declined from the levels of 0.8 per cent in the 80s to 0.6 per cent in 1998–99. As a proportion to total government spending from over 6.5 per cent in the 1980s, it dropped to 4.6 per cent in 1998–99 (Table 5.19 and Annexure Table 51).

#### Box 5.5

##### Accreditation initiative in Mumbai

A stakeholder based, 'Healthcare Accreditation Council' has been recently formed in Mumbai. Uniquely, the Council includes a range of stakeholders—representatives of hospital owners, professional bodies, consumer organisations and NGOs. The council has been an outcome of a research study undertaken by CEHAT, Mumbai in 1997–98, to assess the need, views and willingness of various stakeholders to evolve a framework for an accreditation system.

Presently, the council is in the process of developing standards for small private hospitals with a focus on certain key aspects which include structural design, equipment, wards, labour rooms, operating theatres, essential drugs, reception rooms, consulting rooms, medical records and waste management among other aspects. It is examining

systems and process related issues, including grading, method and periodicity of assessment and financing of the body as well as other areas (e.g. Indicators). Subsequently the forum plans to develop standards and indicators for specialities and super specialities.

The Council would be a non-profit body and the founding members have contributed the initial funds for establishing the body. This initiative is an attempt to create a more positive environment within the established private health sector by involving them more meaningfully with other stakeholders in a quality assurance mechanism. This should help begin a process of ending a number of ills prevailing in the private health sector and lead towards some form of accountability towards the users of such services.

Table 5.19

## Public Expenditure on Healthcare in Maharashtra

States	<i>(in Rupees million)</i>				
	1980–81	1985–86	1990–91	1995–96	1998–99
Total Public Health Expenditure	1307	4782	4976	9061	11855
Per capita (Rs)	20.99	69.12	63.67	105.46	132.20
Per cent to revenue expenditure	6.53	10.65	5.68	5.28	4.62
Per cent of NSDP	0.80	1.70	0.80	0.60	0.60

Source: Finance and Revenue Accounts, Government of Maharashtra, various years. Population and income data used from Statistical Abstract of India.

Revenue expenditure on health as a share of total government expenditure too has shown a decline despite increasing healthcare demands of the population. Curative care in urban areas receives disproportionate attention when compared to the healthcare needs of rural population while public expenditure should actually, as per World Health Organisation norms, should ideally be five per cent of the State's Public Expenditure.

Expenditure on National Disease Control programmes also shows a declining trend. There has been an increase in non-plan expenditure, mainly on account of salaries and a weakened commitment in plan expenditure. Further desegregation of expenditure on National Disease Programme shows that spending on Malaria, Leprosy, TB and Blindness control programme accounts for nearly ninety per cent of the total disease programme expenditure. Among the

Table 5.20

## Percentage distribution of Medical Expenditure in Public Healthcare Selector by selected Line Items in Maharashtra, 2000–2001

Expenses on item	District hospital	Women's hospital	Cottage/	
			Other hospitals	Dispensaries
Medicine	19.56	14.52	9.53	4.87
Diet	1.66	2.62	1.13	n.a.
Linen	1.21	0.97	1.30	n.a.
Salaries, TA etc.	70.29	77.36	77.42	76.40
Other	8.49	5.51	11.92	18.73
Total expenses	100.00	100.00	100.00	100.00

Source: Government of Maharashtra, Performance Budget 2001–2002, Public Health Department.

four; the share of Malaria (50 per cent to 70 per cent) and Leprosy (15 per cent to 30 per cent) is very high. In 1998–99 the share of Malaria touched 71 per cent because of the flow of funds from World Bank

## Box 5.6

## Decentralisation of Primary Healthcare

One special feature of Maharashtra's health system is the early devolution of primary healthcare implementation to the *Zilla Parishads* (District Councils). Right from the start of the State in 1961, primary healthcare, school education and other social sector programmes/ schemes were given to the Zilla Parishad's to implement. The Zilla Parishad's get grants in aid as establishment and purposive grants under section 182 and 183 respectively, of the Maharashtra Zillah Parishad and Panchayat Samiti Act, 1961 for handling:

- Vaccinations
- School health clinics
- Primary health centres

- Primary health units
- Mobile health units
- Allopathic dispensaries
- Construction and upgrade of PHCs and sub-centres
- Examination of ashram school children
- District local board schemes

This early devolution helped Maharashtra gain an early lead among States to expand the rural healthcare infrastructure. Maharashtra was one of the first States to establish the norm of **one PHC per 30,000 population and one sub-centre per 5,000 population** in the early 1980s itself.

Assisted Malaria Control project. It is also revealed that over the years there is a rapid increase in the share of salary component and a decline in the share of non-salary component (Tables 5.21, 5.22 and 5.23).

Expenditure on family welfare programmes has been increasing steadily and in 1995–96 stood at

14.8 per cent of the total government expenditure. Spending on maternal and child health (MCH) during the same period showed the same upward trend. This is when the Child Survival and Safe Motherhood (CSSM) programme was introduced to reduce maternal and child mortality. The emphasis on family welfare is on rural welfare services, but here too the bulk of expenditure is on salaries.

Table 5.21

**Expenditure on Malaria Control Programme by Line Items (in percentage), Maharashtra**

Year	Salaries	Travel	Drugs	Others	Total (in Rs millions)
1988–1989	61.08	3.58	2.14	33.20	323.65
1992–1993	84.09	0.00	15.91	0.00	415.62
1995–1996	80.89	2.11	7.51	9.49	544.01
1998–1999	87.28	1.16	7.72	3.84	1005.21

Source: Performance Budgets, Government of Maharashtra, respective years.

Table 5.22

**Expenditure on Leprosy Control Programme by Line Items (in percentage), Maharashtra**

Year	Salaries	Travel	Drugs	Diet	Others	Total (in Rs millions)
1988–1989	72.29	9.21	4.83	0.31	13.36	111.32
1992–1993	n.a.	n.a.	n.a.	n.a.	n.a.	179.20
1995–1996	53.80	3.49	3.76	0.06	38.89	220.96
1998–1999	76.52	7.03	3.63	0.59	12.23	221.68

Note: n.a.: Break-up not available.

Source: Performance Budgets, Government of Maharashtra, respective years.

Table 5.23

**Expenditure on National Tuberculosis Control Programme by Line Items (in percentage), Maharashtra**

Year	Salaries	Travel	Drugs	Diet	Others	Total (in Rs millions)
1988–1989	51.43	2.71	34.24	3.29	8.33	90.55
1992–1993	n.a.	n.a.	n.a.	n.a.	n.a.	128.79
1998–1999	66.57	2.80	22.37	2.42	5.84	209.59

Note: n.a.: Break-up not available.

Source: Performance Budgets, Government of Maharashtra, respective years.

Table 5.24

**Average out-of-pocket Medical Expenditure on Treatment of an Ailment in Outpatient Care and Inpatient Care Units, 1986–87 and 1995–96**

Source of Treatment	Figures in Rupees							
	Inpatient Care				Outpatient Care			
	1986–87 <sup>1</sup>		1995–96 <sup>2</sup>		1986–87 <sup>1</sup>		1995–96 <sup>2</sup>	
Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	
Public	400	439	1439	1529	52	87	73	91
Others	1928	901	5345	3836	99	153	161	175
All	1499	842	3997	3089	87	132	140	163

Source: 1 NSSO 1992; 2 NSSO 1998.

All this has implications on utilisation of public health services, and data from national surveys clearly reveal a declining share of public services in healthcare (Table 5.17). And this also means increased burden in out-of-pocket expenditures for healthcare. Between the two NSSO rounds, out-of-pocket costs have increased three-fold for in-patient care and by about 50 per cent for outpatient care. The increases are even higher for those using private healthcare. Urban users are spending significantly larger amounts on both in-patient and out-patient services.

### Box 5.7

#### The People's Health Campaign in Maharashtra and improvement in Health Services

The People's Health Campaign is an innovative, grassroots-to-global movement for *Health for All*, a campaign for better health that has been active since July 1999, to enquire into the current state of health services and to demand better healthcare. In Maharashtra, over 60 health and science-related organisations, women's and other organisations of diverse backgrounds have formed a broad front to highlight health as a vital social and political issue affecting the life of every citizen. The background to this campaign is a global wake-up call being given to governments around the world, reminding them of their promise and pledge made in 1978 to provide 'Health for All by 2000 AD'. India took the lead in this campaign and over 2000 organisations and NGOs, including 19 national networks, in 20 States are involved in the Peoples Health Assembly (PHA) process.

The main objectives of the campaign in Maharashtra has been to seek basic improvement in public health services, social regulation of the private medical sector and ask that health services to be sensitised to women's needs.

'Health Dialogues' were carried out at the grassroots level, in about 40 talukas of 15 districts—Pune, Beed, Osmanabad, Thane, Kolhapur, Nashik, Nanded, Raigad, Ahmednagar, Chandra-pur, Satara, Sangli, Gadchiroli, Wardha and Ratna-giri. An 'enquiry' was conducted into the status of health services using a standard checklist of 15 mandatory health related services. Following this people approached the block level health authorities for a

*Contributed by Dr Anant Phadke, CEHAT, Pune.*

### Health Sector Reforms

Maharashtra's public health sector was viewed with a great deal of pride, and pressures to privatise were strongly resisted, largely due to the history of social reforms and progressive public actions. The first change came via GR No. HFR-1087/3653/8-9 dated 2 February 1988, which prescribed charging users of district hospitals, the rationale being, as per the NSS 42nd Round findings, use of the private facilities by even the poor which was seen as the willingness to pay

dialogue seeking specific improvements in various services found lacking, while also offering their co-operation, with mixed response from both authorities and private doctors, ranging from the defensive to the supportive. Various different forms were used in the process, such as *kala jathas*, poster exhibitions, street plays and demonstrations to press the people's claim to better health services. In Mumbai and Pune, the state of public dispensaries and hospitals was documented.

#### People's Monitoring of Healthcare Services

One tool in this process is the 'Health-Calendar', a specially prepared blank monthly calendar for display at prominent places in the villages. It shows the planned visits to the village by ANMs, MPWs etc. Since the people know when the health worker is to visit, they can remain in the village on that day to avail of their services. On the actual days of their visit, they would sign on this calendar, publicly recording the visit. Experience shows that this simple tool has increased the visits and utilisation of health services, helping bridge the gap between the people and the health-services.

#### Realising the dream of Health for All

Making healthcare a fundamental right, enacting a social legislation on minimum standards in the private medical sector, doubling the public budgetary allocations for health and initiating a scheme for a village based healthcare provider arc some of the issues being raised through this platform at the State and National levels.

Its immediate impact was reflected in the Performance Budget report of subsequent years, which showed drastic declines in OPD and in-patient users at most district hospitals. After this experience, most hospitals began to ignore the GR that was never seriously implemented, bringing back the patients to the district hospitals.

The recovery of user charges varied from 0.1 per cent to 0.18 per cent of the total public health expenditure from 1989 to 1996. Caught in the dilemma of increasing resource crunch with the public bodies on the one hand and the crying need to create more public health facilities, public-private partnership—a new initiative seems to have been adopted in the post-SAP (Structural Adjustment Programme) era. For instance, patients from public hospitals are being referred to private institutions for sophisticated investigations like CT Scans and MRIs, often when public institutions should have their own such facilities. Similarly, facilities in nine district hospitals have been allowed to be used by private medical teaching colleges for a small sum of Rs 10.8 million a year. The Government spends the same amount to train 10 graduate doctors.

In Mumbai, the Municipal Corporation has agreed on a policy initiative to privatise all peripheral hospitals and maternity homes which between them have nearly 6,000 beds in 42 institutions. The non-clinical services have been privatised and a study shows that while the unit costs went down the quality deteriorated (Bhatia and Mills, 1997). Again in Mumbai, the Maharashtra Government has entered into partnership with a multinational pharmaceutical major to equip and run one of its hospitals. This is perhaps the beginning of new system of private-public partnership in delivery of health services.

In the footsteps of Andhra Pradesh, Punjab and West Bengal, Maharashtra too has taken up a health systems development project supported by the World Bank to improve secondary hospitals, that is CHCs, sub-divisional hospitals and district hospitals. The broad objectives of this are:

- To improve the systems performance and quality

of healthcare services in secondary healthcare institutes;

- To narrow current coverage gaps by increasing access to healthcare delivery and
- To improve efficiency in the allocation and use of health resources.

Since the project is very recent no impact assessment is possible but issues like user-charges, privatisation of non-clinical services, supporting private hospitals in blocks which do not have CHCs, extension of honorary system to district hospitals and CHCs etc. are being considered. Other features include strengthening a referral system so that secondary hospitals do not have to deal with first contact care, supporting hospitals with speciality facilities to becoming training centres for private and public doctors to facilitate CME since now re-registration is compulsorily linked to a definite number of hours of CME etc.

While the Health Systems Development Project may have a number of positive features; it lacks teeth to bring about structural reforms. The strategy is basically to make piecemeal changes and not structural changes. Serious reforms imply structural changes. When we look at budgetary allocations we do not find an encouraging picture. Despite the World Bank supported initiative, budgetary support to the public health sector is declining. The secondary institutions would then have improved infrastructure, their capacities enhanced with external assistance but with overall declining support to public health services there is a likelihood that the upgraded institutions will not be able to give upgraded services.

## Conclusions

Some trends are very clear, like the rural-urban disparities with the former needing more attention that has been given but this do not imply that urban health services are good; they are also considerably stress under the New Economy. It has been compounded by inter-regional disparities with a clear pattern of districts in Vidarbha, Marathwada and

Western Maharashtra at a considerable disadvantage in terms of the existing health resources in these regions as compared to Mumbai and Western Maharashtra. Other trends indicate that improvement in inputs have definitely made a positive impact in overall results. In case of preventive care, the public health services continue to play a lead role and this has been critical to overall improvements in health outcomes.

During the 1980s when the public health infrastructure expanded in rural areas one even saw the rural-urban and inter-regional gap in health status reduce substantially but presently the reduction in public health investment and expenditures has slowed further gains, especially in rural areas. There is a clear need for more resources for healthcare in the public domain to achieve better equity in health outcomes, the focus being on both qualitative and quantitative aspects, making it affordable to the people. Only such a strategy will strengthen the public health sector and be of benefit to the people, especially the poor and deprived sections of the population.

### Suggested Policy Options

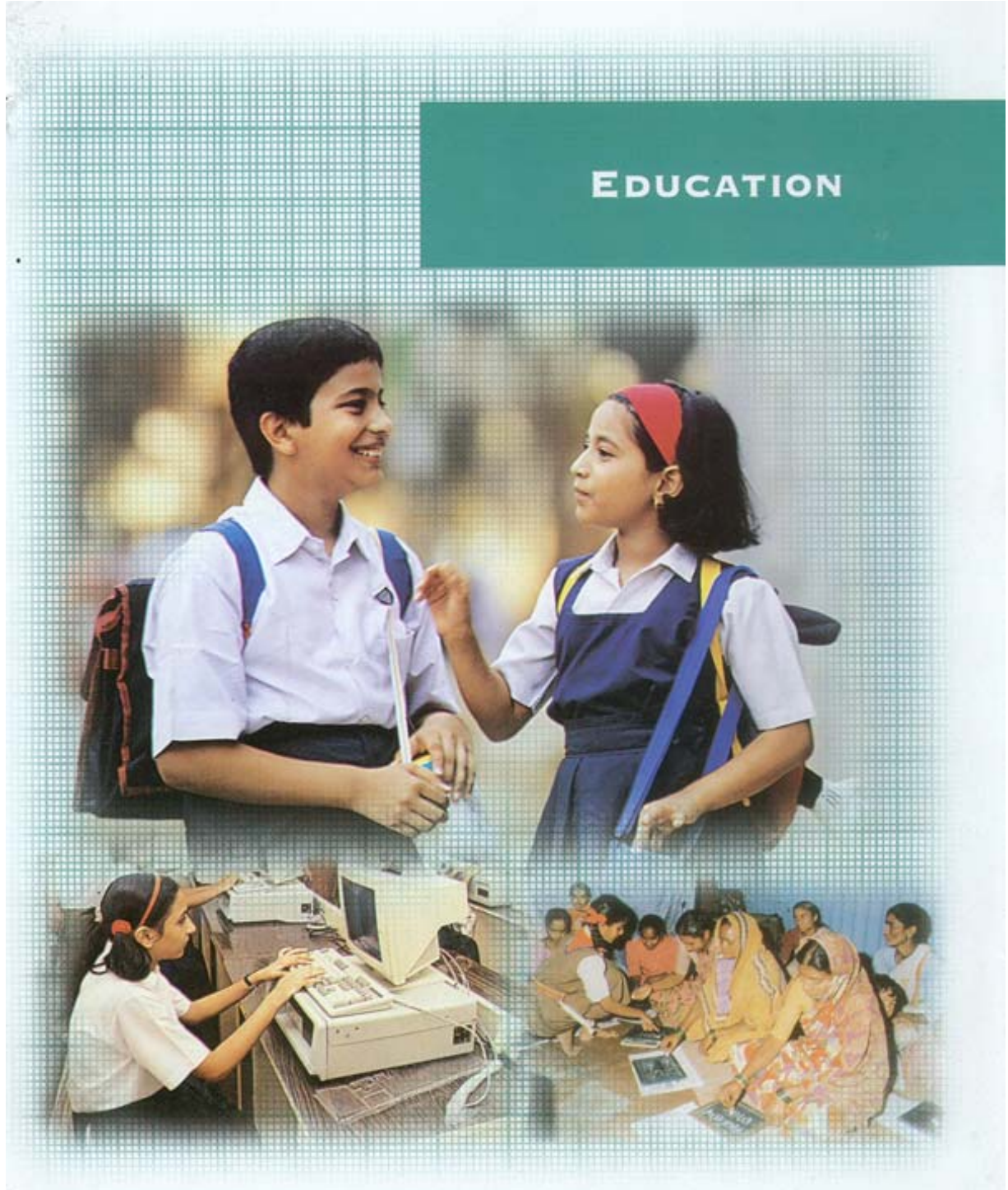
- Widen the coverage under ICDS, given that nutritional status of more than half of the population is impaired. The netting has to be higher than the 70 per cent that is seen as achieved.
- While strengthening the rural health infrastructure, enhance its capacity to deal with curative

aspects of healthcare without diluting its traditional thrust on immunisation and reproductive-health coverage. The access to the healthcare infrastructure in the rural areas and its utilisation has to be enhanced. This may require funding consistent with the requirements. Financial allocations would have to be continually upgraded since health is a key element in human development.

- Sustain the coverage in reproductive-health coverage and improve upon it. Maharashtra is yet to reach the replacement growth rate of two per cent, has high levels of fertility including among teenaged mothers.
- Strengthen the monitoring of the private health system, ensuring that physical and clinical standards are established and followed.
- Focus on HIV/AIDS, especially on the reasons why they have shown alarming incidence in Mumbai and the Pune-Satara-Sangli-Kolhapur belt. Ensure that mainline development programmes address issues of social security and livelihood, and ensure rights-based access to basic services. Improve databases and reporting systems, including from the private sector healthcare system.
- Ensure that the private sector healthcare system which runs non-profit hospitals as Trusts, mainly in the urban centres, adhere to the legal commitment of free treatment to the poor.
- Ensure a progressive movement towards public spending of up to five per cent of the State public expenditure on healthcare.

Chapter VI →  
← Contents

# EDUCATION







## Education

**E**ducation is critical for improving the human condition. It is an enabling process leading to social progress. Economists stress its role in human capital accumulation, human rights activists press for it as a basic right, and politicians realise it raises awareness and leads to greater participation in civic life. As the thrust towards human development intensifies, education will continue to be one of the essential mechanisms to bring about a change in people's life chances. In other words, education will be the key.

Human development depends on expanding opportunities and increasing skills. The underlying assumption is that each stage of education leads to higher capacities because an individual learns more at every step. It also assumes that education implies an increased ability to make better choices. While tracing education's role in human development, two broad sets of factors over time have to be focussed upon:

- Opportunity and access: have they increased and are they widely distributed in the population?
- Outcomes: are more people participating in it and is the proportion rising? Moreover, are a greater number of people getting more education? Are the attainments distributed widely among the population?

In this context, where is Maharashtra placed?

Historical trends have shaped both the contemporary status of education and its policy underpinnings. Four major threads have had a profound and lasting influence on its fabric:

- Historical evolution in the nature of agrarian relations.
- Role of social movements in bringing education to the historically disadvantaged group.

- Influence of leading thinkers and social activists on the position of women.
- Participation of voluntary organisations and private groups in the provision of education.

### Challenge to Orthodoxy

During the nineteenth century, a complex combination of economic, social and administrative factors led to a more widespread distribution of opportunities in the agricultural sector than elsewhere in the country and social stratification patterns were not very sharp. This had its implications for the spread of education in later periods.

In the nineteenth and twentieth centuries, two important social and political processes were visible. Social movements influenced by thinkers and activists such as Mahatma Jyotiba Phule and Shahu Maharaj challenged orthodoxy and laid emphasis on the uplift of historically disadvantaged groups through education. At the same time, there was a tide of political activity in reaction to colonial rule, what is interesting is that these two processes ran parallel to each other. Peasant caste organisations challenged some of the nationalist leaders who were perceived only as representing the interests of urban educated elite.

### Key to Improvements

The guiding philosophy of reform movements in Maharashtra, starting from the *Satyashodhak Samaj* of Mahatma Phule was to enable workers and peasants to overcome their social and economic disadvantages and enjoy their natural and human rights. Education was the key that opened the doors to further improvements in their lives and livelihoods. An egalitarian thrust led to multifaceted innovations

and interventions in education including starting of hostels for children of all castes, reservations for *dalits*, schools for girls. To start with, a princely state, Kolhapur institutionalised many of these changes motivated by reform thought and strategy; education not only became free and enrolment upto primary levels compulsory but measures were designed to encourage peasants to send their children to school.

In the hundred years preceding Independence, many a social reformer and political leader in Maharashtra actively organised educational opportunities and teaching at different levels even as serious thinking and action on the status of women was taking place. Mahatma Phule started the first school for girls, a pattern that found favour with other social thinkers too, provoking a discussion on women's issues. The aim was to secure social progress at every level. Thus the relative gender equality in contemporary

### Box 6.1

#### Private Efforts

Private initiative and voluntary action in facilitating education has been a strong characteristic of Maharashtra.

During the British era, voluntary groups and education societies, led by Brahmins fuelled much of the effort on education while self-propelled citizens' movements, like the *Rayat Shikshan Sanstha* spread education to the villages, focussing on those who have been traditionally out of it and bring them to the mainstream.

Importance of institutional mechanisms for providing primary and secondary education in the agricultural hinterland on a large scale was recognised and acted upon. This Sanstha set up and ran hostels and schools around the State, developed systems for contributions in kind from village communities so that schools could be self-sustaining.

Now, in the realm of higher education, especially technical and medical, a whole lot of enterprise fuelled by co-operatives of agro-processors, especially sugarcane, have helped spread colleges across Maharashtra, often in places which were earlier scarcely imagined as likely locations.

Maharashtra's education system is a legacy of the historical trends. This imprint of historical trends is visible today. Private initiative and voluntary action in facilitating education has been a strong characteristic of Maharashtra. (Box 6.1)

### Access, Participation and Achievement

The levels of State expenditure and resource allocation across different sectors are crucial indicators of the thrust of Government policy and the strength of its political will. In the last two decades, there has been increasing attention paid to social sector expenditure by researchers, international development agencies and policy makers.

Nationally, the proportion of plan outlays allocated to the education sector i.e., 6.79 per cent, was the highest in the First Plan (1951–56). It declined steadily thereafter and ranged between 4.34 per cent and 4.90 per cent respectively between the Second and Fourth Plans, reached a low of 2.59 per cent in the Sixth Plan and increased to a level of over 4 per cent only in the Eighth Plan. In the case of health and family welfare, the allocations were around 3 per cent of total allocations in most Plans. Various committees and government initiated commissions—for example, Education Commission and Ramamoorthy Committee, both of 1991—have suggested that the government should spend at least 6 per cent of its GNP on education. India has been well below this level.

The share of elementary education in the total education outlay was as high as 56 per cent in the First Plan. This share steadily decreased, and in the Seventh Plan this sector was allotted only 34 per cent of the education budget. In the Eighth Plan, the allocation increased to 42 per cent. The share of expenditure going to higher education and technical education in the period between the Second Plan and the Fifth Plan was in the range of 34 per cent to 49 per cent. Although the share of higher education has dropped considerably, it still remains higher than 20 per cent. Rising salaries of teachers have absorbed much of the higher levels of expenditure on elementary education. Thus, the increased

expenditures do not necessarily lead to their improvements in quantitative coverage or qualitative upgrading of the education system.

In Maharashtra, resource allocation patterns are not very different. Social service expenditure as a percentage of State Domestic Product has remained less than 6 per cent since mid-1980s. The share of education in the SDP was 3.17 per cent in 1988–89. This ratio dropped to 2.75 per cent by 1995–96.

Within the education budget, the proportion of elementary education was around 45 per cent from 1988–89 to 1995–96. Secondary education's share was in the range of 39 per cent to 40 per cent and the rest went to higher and technical education. It is clear even from these basic figures that a disproportionate share of spending has been on higher and technical education in the State, which again is a reflection of the broader national trend. It is worth noting that the share to adult education in Maharashtra has been less than one per cent for most of the 1980s and 1990s. Nationally, the share of adult education in the Plan documents has risen from one per cent in the Fourth Plan to eight per cent in the Eighth Plan.

Compared to other States, the proportion of total Plan and non-Plan expenditures going to education at 17.3 per cent in Maharashtra is lower than the national average of 19.5 per cent. Maharashtra's annual expenditure per primary school student at Rs 951.90 is considerably lower than the national average of Rs 1,396.30 but the situation with secondary school resource allocation is exactly the reverse and amongst the highest in the country. (Table 6.1)

Human Expenditure Ratio (HER) is the percentage of state income devoted to human priority concerns such as elementary education, preventive healthcare, water supply, sanitation and nutrition. UNDP suggests that 5 per cent is essential if a country is to do well on the human development front but in Maharashtra, the human expenditure ratio had been around 2.2 per cent in 1988–89 and dropped to 1.84 per cent by 1995–96. Which means Maharashtra's

resource allocation patterns neither reveal any major departures from national trends nor do they reflect any concerted thrust on education as a major development priority for the State.

### Provision and Access

Since 1960, the growth of educational institutions at all levels has been impressive. Primary schools doubled in their numbers in forty years even as of secondary schools have grown phenomenally by five-fold. During the same period, the number of colleges and other institutions of higher learning have increased tenfold. The numbers of secondary and higher secondary schools have been steadily increasing each decade. (Table 6.2)

In 1960, there were fourteen primary schools for each secondary school. This has declined to 4.5 primary schools for each secondary school. In terms of availability of secondary schools, their number increased considerably to absorb students from primary schools. Again, in 1960, there were 427 primary schools for each college. By 1998, there were 75 primary schools per college (Table 6.3). In many Indian States, the education pyramid is typically quite steep, with a large number of primary schools that feed few secondary schools and even fewer colleges. In Maharashtra, trends in the relative growth patterns of educational institutions at different levels indicate a flattening out of the education pyramid between 1960 and 1998.

Figure 6.1  
Growth of Primary and Secondary Schools:  
Maharashtra, 1960–1998

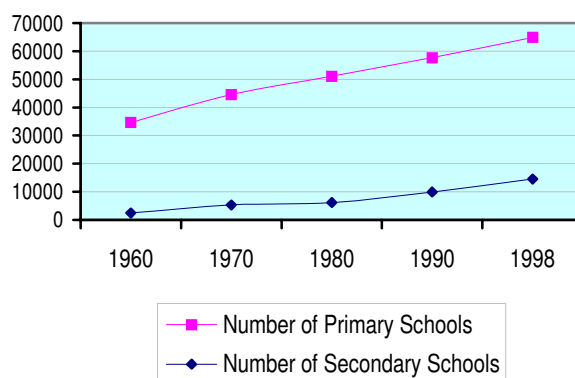


Table 6.1

## Resource Allocations: Maharashtra and Some Major States, 1997–1998

State	Percentage of Total (plan and non-plan) Budgeted Expenditure on Education	Expenditure on Education (Rs millions)	Percentage of Education Expen- diture on Prim- ary Education	Percentage of Education Expen- diture on Second- ary Education	Per Student Expenditure: Primary (Rs)	Per Student Expenditure: Secondary (Rs)
1 Andhra Pradesh	16.2	17571.8	42.3	33.3	690.7	5481.9
2 Karnataka	18.0	16526.8	49.8	30.2	935.2	2533.9
3 Gujarat	20.9	18149.4	53.4	32.4	1193.6	4483.7
4 Madhya Pradesh	16.3	16195.0	64.1	18.5	761.8	1465.2
5 Kerala	25.0	16238.0	48.7	30.6	1724.9	4574.2
6 Maharashtra	17.3	36714.0	44.1	39.3	951.9	4870.6
7 Tamil Nadu	20.4	22179.0	49.5	34.1	1055.2	3405.4
India	19.5	324587.0	48.5	31.9	1396.3	4170.5

Table 6.1A

## Actual Expenditure on Education

Description	(Rs in millions)		
	Actual Expenditure during 1996–97	Actual Expenditure during 1997–98	Actual Expenditure during 1998–99
Elementary education	18698.0	21482.2	23271.9
Secondary education	16555.2	19578.8	20657.5
Adult education	90.3	85.9	84.3
Language development	00.5	00.5	00.7
General	508.4	828.4	622.3
Sports etc	904.0	2099.8	1899.7
Removal of regional imbalance	113.5	14.8	28.5
Total expenditure	36869.9	43040.4	46564.9
<b>School Education Department</b>			
% of expenditure on primary education to total expenditure	50.71	49.88	49.98
Expenditure on primary to total expenditure	44.90	43.09	44.36
Primary school enrolment	11971690	1216955	12291051
<b>Standard 1–7</b>			
Secondary school enrolment	4337446	4585542	4748310
<b>Higher Secondary</b>	3035159	3143043	3250367

Table 6.2

## Growth of Schools and Colleges in Maharashtra, 1960–1998

Year	Number of Primary Schools	Number of Secondary and Higher Secondary Schools	Number of Institutions of Higher Education	Ratio of	
				Primary School Per Sec. School	Primary School Per College
1960	34594	2468	81	14.0	427.1
1970	44535	5313	264	8.4	168.7
1980	51045	6119	407	8.3	125.4
1990	57744	9972	650	5.8	88.8
1998	64918	14579	866	4.5	75.0

Source: Education Department, Government of Maharashtra.

Although there is some variation across districts in the ratio of secondary to primary schools, in every district there has been an increase in the number of secondary schools over time (Annexure Table 81).

Over the last thirty years (Table 6.3) there has been a steady growth in a number of dimensions. There has been approximately 15 per cent increase in every decade in the number of primary schools. The average number of students in each school has also risen from approximately 140 students per primary school in 1970 to about 190 in 2000. The average number of teachers, however, has remained between four and five teachers per primary school with each teacher handling about 40 students each. The overall picture for Maharashtra suggests that the State has managed to remain on a stable path regarding student-teacher ratios. The average size of primary school has also remained manageable.

Secondary schools are on a different pattern. They tend to be larger in size and draw from a bigger catchment area. The average size of secondary school, which was about 391 students in 1970 is now of about 560 students in 2000. Despite the increase in size, the number of teachers per school has remained remarkably steady between fourteen and sixteen teachers over a span of thirty years. The decade of 1980s saw a sudden increase in the number of secondary schools. The increase in the number of secondary schools was well over 100 per cent between 1980 and 1990. Much of this sudden growth can be attributed to the change in schooling structures across the country. In the mid 1980s, the New Education Policy brought in the era of 10+2 in which up to Standard X the student was in a secondary school and then shifted to a junior college or higher secondary school to complete the last two years of formal schooling.

Table 6.3

**Growth of Schools, Teachers and Students: Ratios over Time**

	1970	1980	1990	2000
<b>Primary School</b>				
Total number of schools	44535	51045	57744	65586
Total number of school teachers	177946	222070	268322	313656
Total school enrolment	6199325	8392356	10421602	12694398
<b>Secondary School</b>				
Total number of schools	5313	6119	9978	14767
Total number of school teachers	74685	114065	181842	235490
Total school enrolment	2077127	3309333	5794120	8274750
<b>Primary School Ratios</b>				
Number of teachers per school	4.0	4.4	4.6	4.8
Number of students per school	139.2	164.4	180.5	191.3
Number of students per teacher	34.8	37.8	38.9	40.1
<b>Secondary School Ratios</b>				
Number of teachers per school	14.1	18.6	18.2	16.0
Number of students per school	391.0	540.8	581.0	560.4
Number of students per teacher	27.8	29.0	31.9	35.0
<b>Primary School Increase</b>				
Percentage increase in last 10 years:				
Number of primary schools	–	14.6	13.1	14.9
Number of primary school teachers	–	24.8	20.8	17.9
Number of children in primary school	–	35.4	24.2	21.8
<b>Secondary School Increase</b>				
Percentage increase in last 10 years:				
Number of secondary schools	–	15.2	63.0	48.1
Number of secondary school teachers	–	52.7	59.4	29.9
Number of children in secondary school	–	59.3	75.1	42.8

Source: Directorate of Education, Government of Maharashtra, various years.

For every 100,000 population there are 13,265 students in primary school, 8633 secondary school students and 1335 students in colleges (Annexure Table 82). Except in Gadchiroli district, there is no village in Maharashtra having a population of 200 without a primary school within a radius of 1.5 km.

### Improving Access

The Government of Maharashtra has specific programmes and schemes to target particularly vulnerable populations. Free passes to travel by State-owned transport system was incorporated as a special motivation and facilitating element to encourage girls to attend schools, if the schools were away from their villages. For example, in 1996, schools were created for children of sugarcane workers to provide continuity in education despite seasonal migration. The new *Vasti Shala* scheme's design provides schooling opportunities in inaccessible locations or if there is no primary school within half a kilometre of a habitation. Special facilities, such as free textbooks, free uniforms and writing material are available for primary school students (Standard I to IV) in educationally backward areas of 103 blocks. To encourage scheduled caste and scheduled tribe children to attend school, uniforms and writing material is provided—the expenditure on this account is fixed at Rs 70 per pupil for clothes and Rs 10 per pupil for writing materials. There are other supplementary schemes like the Book Bank scheme for supplying textbooks to poor children especially SC and ST. Attendance allowance is paid to encourage enrolment and attendance of girls in primary school at the rate of rupee one per day for all girls in areas and for girls whose parents are below the poverty line. Tribal students in Standard V to X are paid a stipend (Rs 40 per month to boys and Rs 50 to girls in Standard V to VII and for Standard VIII to X Rs 50 per month for boys and Rs 60 per month for girls) if they attend school at least 75 per cent of the working days.

The bottom line for any school improvement plan is whether there are enough funds sanctioned *and* spent to achieve the goals. For Maharashtra, as in the case of several other States, additional external sources

of funds from Government of India and from donor agencies or governments was made available through a number of different projects such as DPEP and PEEP. The schemes did become operative in the latter half of the 1990s with the commitment of Government of Maharashtra being approximately Rs 2,000 million. The implementation of these schemes, however, varies considerably by programme/ project and across districts. For example, 60 per cent of those targeted in the Book Bank scheme for Standard I to IV receive the books, and only 40 per cent of the targeted in Standard V to VII group actually benefit (Annexure Table 83). Even in effectiveness, there is variation across districts: for the Standard I to IV Book Bank Scheme, 100 per cent of targeted children in Osmanabad, Bhandara and Amaravati receive books, but only 23 per cent of the eligible children in Buldhana and 31 per cent in Akola get them. The scheme of providing stipend to tribal students reaches almost 80 per cent of all targeted children.

### Teacher Training

Based on national policy guidelines (National Policy on Education 1986), a new curriculum was approved in 1995. New textbooks were prepared by the year 1997. From 1997–98, the implementation of the new curriculum started in Standard I and II. It was extended to Standard III and IV in 1998–99 and for Standard V in 1999–2000. In the current year, focus has been on the introduction of English in primary classes.

An intensive teacher training was put in place to support the new curriculum. Termed as SMART PT (State-wide Massive and Rigorous Training for Primary Teachers) it has covered almost all primary school teachers in Maharashtra. In 1997–98, 1,68,290 teachers of Standard I and II were trained. During 1998–99, 1,70,353 teachers of Standard III and IV were trained and in 1999–2000, 98,104 teachers of Standard V were trained. The large-scale teacher training effort undertaken by the State Government in the late 1990s has been remarkable, the other significant element in this being the appointments of Central Primary School Co-ordinators and decentralised monitoring and academic guidance.

## Box 6.2

### State Education Policy and Programmes

Keeping within the framework outlined by National Education Policy of the Government of India formulated in 1986, Maharashtra set up a task force to develop its programme of action, in a bid to meet its own needs based on the prevailing status of education. This was the first exercise by a State government to prepare a policy paper on education, subsequent to the National Education Policy of 1986. The task force consisted of government officers, education experts and representatives of the main educational institutions in the State. In 1994, the Programme of Action, outlining the framework and approach as well as programmatic details of how to make primary education universal was announced.

Literacy programmes were also detailed. Written in simple language that could be understood by a cross-section of people, this document was widely circulated. It communicated a strong conviction that primary education is a critical investment that will lead to sustained development over time and without which participation in the emerging global economy and benefiting from technology will not be possible.

The goals set out in the action plan are:

*Every child beyond the age of six to be in school.*

- Every child to attend school regularly at least till the age of fourteen.
- Every child to master the content laid down for each standard.

*The document spells out a detailed plan of action of how the objectives are to be met.*

- Access to schools especially in unserved habitations or where schools are at a distance; expansion of existing school facilities, balwadi or anganwadis close to the primary school were planned. Non-formal centres were designed to cater to children who had dropped out or for some reason could not go to school.
- Predominantly tribal blocks and districts in Marathwada region of Maharashtra would receive special focus as compared to the State average, these areas have a higher number of single teacher

schools and lower than average number of upper primary schools. The performance of these areas on key outcome measures such as completion rates is also relatively low. *Ashram shalas* run by the tribal welfare department do not receive adequate educational guidance and therefore the level of education remains less than satisfactory. A variety of schemes targeted at overcoming the problems faced by disadvantaged children and educationally backward areas were conceptualised: book bank, scholarships, uniforms and writing materials, midday meals, support for travel costs. These programmes were designed to encourage and raise participation in education.

- A particularly noteworthy feature of the action plan document has been a stress on education in the mother tongue. Even though Maharashtra is a predominantly Marathi speaking State, the State Government believes that children should be taught in their mother tongue. In fact Mumbai's primary schools are conducted in eight different languages, textbooks are developed in several languages other than Marathi and made available despite the relatively higher research and development costs. Grants are provided to institutions running secondary schools in other languages.
- To improve the teaching-learning environment, a comprehensive set of measures was planned. This included in-service training and textbooks based on competency standards laid down for each standard, and more child-centred methods of teaching. In the years since 1995, Maharashtra conducted widespread training for all its primary school teachers.
- The action plan documents weaknesses in the current systems of monitoring the education system. Monitoring systems are not effective because officers have to spend much of their time in administration and do not have enough time to focus on quality improvements in education. Data that is generated is old and not useful for local planning. A self-evaluation grading tool for schools is available but not in use widely. Better organisation and more effective delivery was planned in the succeeding years to improve overall monitoring and reporting.

Source: Government of Maharashtra.



## Child Participation

At the primary level, are most children of school-going age going to school in Maharashtra? How widespread is child labour? There are no straightforward answers to these questions. Different sources of data show different trends.

Data from school sources show a very high enrolment rates but estimates from household surveys as part of the National Sample Survey (NSS) shows much lower participation in the education system and this gap, however, is as true for Maharashtra as it is for all of India. Since 1981, the census has grouped children by age and categorised the main use of their time on a regular basis. Four mutually exclusive categories are used: attending school and not working, attending and working, not attending school and working and, not attending school and not working.

A quick analysis of the 1981 census figures for Maharashtra as a whole shows that 63 per cent of

children in the age group 6 to 10 attend school and do not work. About three per cent work and do not attend school, and the remaining 34 per cent neither attend school regularly nor work (Annexure Table 83). For the older age group of children between the ages of 11 and 14, some 60 per cent are in school and not working, 19 per cent are not in school and not working and almost 17 per cent are child labourers who do not go to school. By 1991, a marked change is visible: the proportion of children going to school and not working among the 11 to 14 year-olds has risen to 77 per cent. The percentage of children who are not in school and working has declined to 10 per cent. Also the children who are not regularly engaged in any activity whether it is work or school has also fallen from 18 per cent in 1981 to 13 per cent in 1991. The compilation from the 2001 census data is not available as yet.

The second round of the National Family Health Survey 1998–99 also asked all members of the respondents' household who are between the ages of 6 and 17 whether they are currently attend-

### Box 6.3

#### Night Schools for Day Workers

Night schools are numerous in metropolitan Mumbai, most of them located in the Mumbai district, catering mostly to the poor who had to drop out to earn a livelihood or migrants who are school dropouts working in the informal sector. Most students join these schools, driven by their passion for bettering their own lot but the reality is that it is tougher to go to work during the day and study at night.

Some of the functioning night schools are at least a 100 years old and are recognised by the Education Department, though lower attendance, slow learning and poor results are a feature of this system. It is not uncommon for the schools to get notices from authorities to explain poor performance. The difference in these schools and the ordinary day schools is not in the syllabus to be covered—it is the same, actually—but the time available. They need to manage in half the time what other schools can in the ordinary course of 5–6 hours per working day.

In Mumbai, to ensure that the percentage of passes at the school leaving stage is better, pre-

examination crash courses have enabled improvement in the results. But the night schools continue to be bogged down by the problem of pupils having to contend with break in their earlier studies, burden of work during the day and the lower attention by the time they come to attend the classes at the end of a hard working day.

Night schools are scattered across Maharashtra, but their concentration is the highest in Mumbai, especially the island city. The first night school emerged in Mumbai around the time Jyotiba Phule took up adult education as a means of empowerment of the disadvantaged. The first one, now known as The Bradely Night School, in Mazgaon's working class areas started by a missionary woman came up around 1885. The second night school was started in the working class area of Parel in 1922 but from 1951, in a short span of some five years, some 100 such schools were set up. Now, some 150 are known to be working.

Most of the students finance their own education, paying fees out of their earnings during the day.

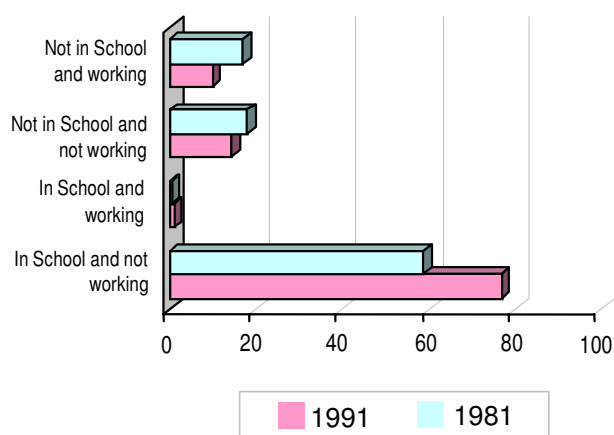
ing school. Although there are some rural-urban variations, the compiled data shows that over 84 per cent of boys and 79 per cent of girls in this age group in Maharashtra are going to school. Although the same indicators show a much higher level for Kerala, the Maharashtra numbers are considerably higher than the national average, which is 78 per cent for boys and 66 per cent for girls.

Enrolment rates calculated from school data shows a much more positive picture: enrolment rate for boys and girls appears to be close to 100 per cent in the late 1990s.

Enrolment in all levels of education has increased for boys as well as for girls. Since 1960, the growth rate in enrolment in secondary level of education has been higher than in the primary stages with the biggest increase coming in the decade of the 1970s (Table 6.4). Secondary school enrolment rates, have remained high through the period indicating continuous and rising participation of the population in post-primary levels of education. In industrialising economies, higher levels of urbanisation and industrialisation are correlated with increasing enrolment in post-primary education. This trend is visible in Maharashtra too.

Figure 6.2

**Main Activity of Children (Age 11–14): Percentages of Total Child Population**  
**Percentages of Total Child Population Census Data**



Source: Census figures.

Table 6.4

**Participation of Girls in Different Levels of Education**

Year	% of Primary Students	% of Secondary Students	% of Higher Secondary Students	% of Higher Education Students	Women as % of Primary School Teachers
1960	35.8	26.8	–	24.0	22.1
1965	37.8	28.7	–	25.4	24.8
1970	39.3	30.6	–	25.5	26.4
1975	41.3	34.1	33.3	27.4	29.1
1980	43.0	36.0	31.0	31.7	31.5
1985	44.7	37.3	33.9	32.3	35.9
1990	46.0	40.6	36.6	34.7	38.4
1994	47.2	43.1	38.7	38.6	40.1
1995	47.5	43.7	39.4	38.8	41.1
1996	47.6	44.2	40.4	40.6	41.1
1997	47.9	44.6	41.1	42.1	41.9
1998	48.0	45.3	42.0	42.8	41.6

Source: Directorate of Education, Government of Maharashtra, various years.

Boys and girls have been studying together in primary and secondary schools both in urban and rural areas for a long time and in recent years, especially among the more elite urban schools, a tendency for non-coeducational schools is also visible. A variety of different indicators of female participation in education show that girls position relative to that of boys is better in this State than in many other Indian States. In 1960, close to 36 per cent of students in primary schools were girls. By 1998, this proportion has risen to 48 per cent.

Only a quarter of secondary school students and students in institutions of higher education in 1960 were female. In both these levels of the education system, the proportion of women has risen well over 40 per cent by the end of the 1990s. The proportion of girls who attend primary school has increased from 22 per cent in 1960 to 41.6 per cent in 1998, and it is often thought that presence of women teachers induces a higher turnout of girl students in schools. Whether it is a cause or an effect, it is a fact that there are a large number of women teaching in Maharashtra's schools.

A closer look at the ratio of girls in each standard shows that all through primary and upper primary

levels, the proportion of girls remains high at approximately 48 per cent of the total student population in Standard I to VII (Annexure Tables 86 and 87). Girls participation in higher secondary and junior college at around 40 per cent is lower than in primary school. In rural areas, distance of secondary schools and junior colleges may be an important factor that keeps girls participation down in the higher levels.

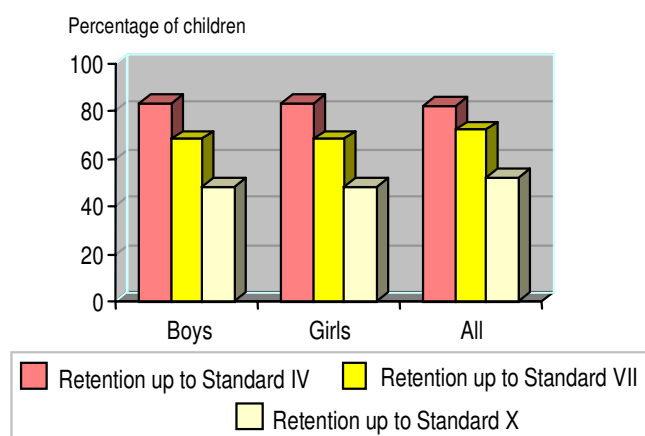
### High Enrolment, High Dropouts

The dropout rates for the State show a strong increasing trend for each succeeding level of the school system. Data for the school year 1998–99 indicate that by the time children reach Standard IV only 85 per cent of the boys and 86 per cent of girls out of the cohort size of 100 who started in Standard I four years ago remain in school. These fractions dip further in Standard VII 69 per cent of boys and 66 per cent of girls survive and by Standard X only 47 per cent of the original group of boys and 40 per cent of the same for girls remain. (Annexure Table 87)

While the dropout rates for boys and girls are quite similar at Standard IV, as they get older this ratio begins to diverge. By Standard X, a substantially lower percentage of girls remain in the education system as compared to boys. The standard-wise dropout rates also show a steady increase through the school years. (Table 6.5).

Figure 6.3

### Drop-out Rates at Different Stages, 1998–99



Source: Directorate of Education, Maharashtra State, Pune.

Figure 6.3 shows the aggregate picture for Maharashtra as well as the trends in two districts: Pune, which is above average and Jalna, which is well below average. In both cases, it is clear that the trends for boys and girls are quite similar. The gender difference is smaller at the lower grade levels and increases as children get older and is most acute in the backward districts.

From the aggregate State-level or district-wise data, it is not possible to say who stays in school and who drops out and why. Even if disaggregated data were available, it is difficult to disentangle the push and the pull factors. On the push side, there are concerns about quality of schools. A poorly performing student is more likely to drop out of school as compared to a high achieving student. The NHFS-2 recorded over 40 per cent of boys in the age group of 6–17 saying they were not attending school as they were ‘not interested in studies’ and only 13.8 per cent were quoted as saying that it ‘costs too much’. Why a large proportion of children lag behind academically, the causes are often connected with the teaching-learning situation in the schools more than the characteristics of individuals.

Another important ‘push’ factor especially beyond the elementary school level has to do with private secondary schooling. In Maharashtra, the majority of students attend primary schools run by the zilla parishad or the municipality (Annexure Table 84). However, more than 90 per cent of

Table 6.5

### Dropout Rates by Standard in Maharashtra, 1989–99

Standard	Boys	Girls	All
Standard 2	8	7	7
Standard 3	7	6	7
Standard 4	15	14	15
Standard 5	18	20	19
Standard 6	26	28	27
Standard 7	31	34	32
Standard 8	37	43	40
Standard 9	40	49	44
Standard 10	53	60	56

Source: Directorate of Education, Government of Maharashtra.

Table 6.6

## Primary and Secondary Schools by Management Type, Maharashtra 1998–99

Sr. No.	Type of Management	Number of Primary Schools	Percentage of Primary Schools	Number of Secondary Schools	Percentage of Secondary Schools
1	Central Government	33	0	65	0
2	State Government	442	1	293	2
3	Zilla Parishad	53169	82	612	4
4	Municipal	4396	7	205	1
5	Private aided	3743	6	9644	69
6	Private unaided	3135	5	3191	23
	Total	64918	100	14010	100

Source: Education at a Glance, Directorate of Education, Maharashtra State 1998–99.

secondary schools in Maharashtra are privately run. There is a great deal of variation in private schools.

### Educational Attainment

There are a variety of indicators of educational outcomes starting from the basic measure, 'literacy' to different levels of educational attainment. In any discussion of educational outcomes, it is important to discuss what learning is supposed to take place for any given level of schooling and assess what proportion of students in their educational career achieve mastery of the level of learning/skills prescribed for that stage. Such information lays out the learning or achievement patterns in an education system but is not easily available in India. Pass percentages in annual board exams are the only kind of figures available for discussion. Despite its shortcomings, this measure at least indicates how many students in any given year are meeting the standards for Standard X and Standard XII laid down by the government. In the absence of good quality and reliable achievement norms it is hard to judge the 'quality' of the educational outcomes produced by the educational system in the State.

### Literacy Rates

The overall trends in literacy in the State reflect large increases in every decade (Table 6.7). Both male and female literacy levels have increased substantially in 40 years since Maharashtra was formed. Resource allocations to adult literacy or adult education programmes have remained minimal in the State despite literacy campaigns in various districts. Therefore, the rising levels of literacy can be attributed to other

factors such as the expansion of school enrolment, widespread provision of basic education as well as to general improvements in the economic condition of the masses. However, historically disadvantaged groups such as scheduled castes and tribes lag behind. Districts with large tribal populations also indicate a lower literacy level as in several districts of Vidarbha and Marathwada.

Table 6.7

## Trends in Male and Female Literacy Levels, Maharashtra 1951–2001 (per cent)

Year	Persons	Males	Females
1951	27.91	40.49	15.56
1961	35.08	49.26	19.80
1971	45.77	59.40	31.00
1981	57.24	70.06	43.50
1991	64.87	76.56	52.32
2001	77.27	86.27	67.51

Note: Literacy rates for 1951, 1961 and 1971 relate to population aged five years and above. The rates for the years 1981 to 2001 relate to the population aged seven years and above.

Source: Census figures.

Literacy level is a commonly used indicator in social science research and analysis. In the Indian context, it is important to raise questions about how it is measured and therefore what this measure stands for. Although literacy rates have gone up considerably over time, the methods and tools for measurement of literacy have remained relatively crude. According to categorisation in the Census, a literate is one who can write his or her own name. This ability does not automatically translate into even being able to read or write simple sentences for a vast majority of

uneducated people. Although it is obvious that literacy is a convenient and easily available indicator for most countries and states, the actual content of the parameter and the method of measurement should be kept in mind when interpreting trends.

Between 1961–2001, during the forty year span since Maharashtra was formed, the literacy rate more than doubled from 35.08 per cent to 77.27 per cent, the increase being particularly rapid in the decade 1991 to 2001 when the literacy rate increased by 12 percentage points. It must be noted however, that the literacy rates for 1961 relate to population aged five years and above. The rates for 2001 relate to the population aged seven years and above. In 1991, the literacy rate among the Scheduled Castes (SC) was 56.5 per cent (70.5 per cent for males and 41.6 per cent for females). The literacy rate in 1991 among the Scheduled Tribes (ST) was 36.8 per cent (49.1 per cent for males and 24 per cent for females).

In terms of district-level data from the 2001 Census, the highest literacy rates of about 87 per cent prevailed in Mumbai and Mumbai Suburban. Several other districts also had above 80 per cent literacy rates (Table 6.8). These include Nagpur, Amaravati, Akola and Wardha in Vidarbha region, Thane and Sindhudurg in Konkan and Pune in Western Maharashtra. The lowest literacy rate of 56 per cent was in Nandurbar, also in Western Maharashtra. On the lower side of attainment were several districts of Marathwada including Jalna, Parbhani, Hingoli, Beed and Nanded; and Gadchiroli in Vidarbha.

As per the 1991 census outside Mumbai region, the highest literacy rate (7+) of 75.81 per cent (Table 6.8) was recorded in Sindhudurg district of Konkan while the lowest rate of 42.89 per cent was recorded by Gadchiroli district in Vidarbha. In 2001, Gadchiroli continued to remain at the lower end of the scale of attainment in literacy while Sindhudurg seemed to have been taken over by several other districts. In 1991, while all districts of Konkan and most districts of Western Maharashtra and Vidarbha had achieved above 60 per cent literacy, not a single district belonging to the Marathwada region had achieved 60 per cent literacy.

By 2001, all Marathwada districts crossed 65 per cent literacy levels with Aurangabad, Osmanabad and Latur touching 74 per cent, 70 per cent and 72 per cent respectively but when attainments are measured by literacy rates, Marathwada lags behind rest of Maharashtra.

Disparate levels of literacy are a historical legacy of the State. Literacy rates were higher in the Bombay region than in Hyderabad and Madhya Pradesh regions even during colonial times. The percentage of literates to total population in the erstwhile Bombay region was 6.98 per cent in 1911, whereas in Central Provinces and Berar region, parts of which were included in Maharashtra subsequently, the literate constituted only 3.57 per cent of total population. The situation with respect to female literacy was even more deplorable with Bombay and Central Provinces recording literacy rates of 1.45 and 0.32 per cent respectively.

Inter-regional disparities in literacy rates seems to be declining as evident from the decline in the value of the coefficient of variation from 32.61 per cent in 1961 to 9.21 per cent in 2001.

The 55th Round of NSSO (1999–2000) indicate that the percentage of not-literate in the 6–14 age group in rural areas was 5.39 for self-employed in non-agriculture, 5.17 for agricultural labour, 9.32 for other labour and lower at 4.41 for self-employed in agriculture. In urban areas the percentage of not-literate was lower at 3.94 for self-employed and 3.03 for regular wage/salaried persons. However, the percentage of not-literate is higher for casual labour in urban areas at 4.80. Across social groups, not-literate are higher in the age group 6–14 in rural areas than in urban areas. 7.33 per cent of Scheduled Castes and 7.38 per cent of Scheduled Tribes in the 6–14 age group in rural areas are not-literate while the corresponding figures for urban areas were 3.41 and 4.96 per cent.

Literacy campaigns spread across Maharashtra and given their intensity stimulated a high degree of voluntarism among the adult literates within the local communities, especially in the countryside.

Interestingly, school students, a sizeable proportion of whom were girls, formed more than a third of the number of instructors deployed. The rest came from among the cultivators, agricultural labour, housewives and even the self-employed and those who had only casual employment. They have succeeded in creating a human resource base of persons interested in the effective delivery of education at

the micro-level, the continual interfacing between the instructors and the members of village education and village literacy committees helping consolidate the process of community participation.

Seen from a wider perspective, this community bonding will help in the long-term in giving prominence to education at the decentralised level and

Table 6.8

**District-wise Literacy and Rates: 2001**

No. Districts		Literacy Rate (Age 7+)		Mean Years of Schooling		Dropout Rate (per 100) 1998–99			
		2001 (per cent)		(Std. 1–7) 1999–2000		7 Standard		10 Standard	
1	2	3	4	5	6	7	8	9	10
1	Mumbai	86.82	2	5.852	6	19	4	53	13
2	Mumbai (Subn)	87.14	1	5.852	7	19	5	53	14
3	Thane	81.00	6	5.460	13	34	16	62	24
4	Raigad	77.32	13	5.313	17	43	27	66	31
5	Ratnagiri	75.35	19	4.921	20	19	6	57	19
6	Sindhudurg	80.52	8	6.356	1	15	2	34	1
7	Nashik	75.10	20	4.151	28	23	8	64	27
8	Dhule	72.08	26	3.836	30	45	28	56	16
9	Nandurbar	56.06	35	3.836	31	45	29	56	17
10	Jalgaon	76.06	17	5.131	19	29	10	50	11
11	Ahmednagar	75.82	18	4.550	22	41	26	60	22
12	Pune	80.78	7	5.740	9	30	13	50	12
13	Satara	78.52	12	5.425	14	18	3	42	4
14	Sangli	76.70	15	5.600	10	31	14	60	23
15	Solapur	71.50	27	4.228	26	38	24	65	30
16	Kolhapur	77.23	14	5.768	8	11	1	41	3
17	Aurangabad	73.63	23	4.207	27	37	22	57	20
18	Jalna	64.52	33	2.870	35	51	34	73	35
19	Parbhani	67.04	31	3.017	33	47	31	72	33
20	Hingoli	66.86	32	3.017	34	47	32	72	34
21	Beed	68.48	30	4.116	29	45	30	62	25
22	Nanded	68.52	29	3.507	32	53	35	69	32
23	Osmanabad	70.24	28	4.249	25	40	25	62	26
24	Latur	72.34	25	5.306	18	35	20	59	21
25	Buldhana	76.14	16	4.305	24	37	23	64	28
26	Akola	81.77	5	5.355	15	34	17	49	9
27	Washim	74.03	22	5.355	16	34	18	49	10
28	Amaravati	82.96	4	5.586	11	35	21	56	18
29	Yavatmal	74.06	21	4.263	23	47	33	64	29
30	Wardha	80.50	9	6.258	3	31	15	46	6
31	Nagpur	84.18	3	6.286	2	19	7	36	2
32	Bhandara	78.68	10	6.104	4	29	11	47	7
33	Gondiya	78.65	11	6.104	5	29	12	47	8
34	Chandrapur	73.07	24	5.551	12	27	9	45	5
35	Gadchiroli	60.29	34	4.872	21	34	19	54	15
Maharashtra		77.27	–	4.970	–	31	–	53	–

Sources: Column 3: Biswas (2001), Columns 7 and 9: Data provided by the Directorate of Economics and Statistics, Pune.

further the objectives of various development arms of the Government of Maharashtra. The committees, being decentralised and voluntary, have the potential for being instruments for social accountability of the primary education system. This is the crucial appeal of the programme, intended or otherwise. The coming together of learners in literacy classes provided

them with a welcome break from monotony of their lives and for women particularly, gave a platform for social interaction. This peer-bonding has helped, studies show, in promoting higher levels of motivation among women who seek upward social mobility within the community, an enhanced sense of self-worth and nurture the formal education of their

Table 6.9

**District-wise Gender Dimensions in Educational Attainment: 2001**

No.	Districts	Literacy Rate (Age 7+), 2001 (per cent)		Dropout Rate (per 100), 1998–99			
		Males	Females	7th Standard		10th Standard	
				Boys	Girls	Boys	Girls
1	2	3	4	5	6	7	8
1	Mumbai	89.95	82.71	15	23	51	55
2	Mumbai (Suburban)	92.65	80.39	15	23	51	55
3	Thane	86.06	75.00	44	33	62	61
4	Raigad	86.40	68.06	41	55	63	69
5	Ratnagiri	86.28	65.98	19	19	49	65
6	Sindhudurg	90.21	71.67	15	15	32	37
7	Nashik	85.19	64.16	20	25	59	69
8	Dhule	81.90	61.76	44	46	52	62
9	Nandurbar	66.32	45.55	44	46	52	62
10	Jalgaon	86.53	64.95	28	32	48	51
11	Ahmednagar	86.21	64.88	36	43	54	64
12	Pune	88.55	72.32	33	28	48	52
13	Satara	88.45	68.71	15	21	34	50
14	Sangli	86.25	66.88	29	34	56	65
15	Solapur	82.28	60.07	34	39	60	71
16	Kolhapur	87.67	66.38	10	12	33	49
17	Aurangabad	85.07	61.28	35	39	52	62
18	Jalna	79.17	49.25	47	55	65	80
19	Parbhani	80.58	52.98	43	51	66	79
20	Hingoli	81.11	51.96	43	51	66	79
21	Beed	80.69	55.38	41	50	56	70
22	Nanded	81.14	55.12	51	54	64	78
23	Osmanabad	82.03	57.55	37	43	54	69
24	Latur	83.63	60.28	31	39	54	65
25	Buldhana	87.17	64.55	34	41	57	71
26	Akola	89.22	73.82	34	34	44	54
27	Washim	86.01	61.32	34	34	44	54
28	Amaravati	89.28	76.21	40	30	56	55
29	Yavatmal	84.47	63.01	46	47	62	64
30	Wardha	87.70	72.80	33	29	46	46
31	Nagpur	90.25	77.65	21	20	37	34
32	Bhandara	89.11	68.11	29	28	45	48
33	Gondiya	89.54	67.89	29	28	45	48
34	Chandrapur	83.19	62.56	28	27	45	45
35	Gadchiroli	69.72	50.64	37	29	51	57
	Maharashtra	86.27	67.51	34	32	60	56

Source: Columns 3 and 4: Biswas (2001), Columns 5, 6, 7 and 8: Directorate of Economics and Statistics, Pune.

children. The jump 15.2 points in literary rates for women compared to 9.7 for males across Maharashtra—the highest ever achieved in a decade—is testimony to this.

### Gender Dimensions

Female literacy has reached the all time high of 68 per cent in 2001 (Table 6.9). However, female literacy rate was lower than that of males in all districts of the State. Almost all the districts of the State have achieved 60 per cent female literacy levels in 2001. Exceptions to this are the districts of Nandurbar (46 per cent), Jalna (49 per cent), Parbhani (53 per cent), Hingoli (52 per cent), Beed (55 per cent), Nanded (55 per cent), Osmanabad (58 per cent) and Gadchiroli (51 per cent). It may be observed that most of these districts belong to Marathwada region.

The dropout rate for girls and boys at the Standard VII level and Standard X underscore some important aspects. For girls, it was often lower than for boys at Standard VII in several districts while it was higher or equal to that of boys at Standard X in all districts, except Nagpur, Thane and Amravati. The drop out rate for girls was considerably lower than that for boys in Standard VII for the districts of Thane, Pune, Amravati, Wardha and Gadchiroli. It may be observed that except for the district of Gadchiroli, the remaining districts have high literacy rates. The omission of Mumbai in this category needs to be noted.

### Literacy Rates for Social Groups

Literacy rates for Scheduled Castes are in line with overall trends. Districts in Konkan region recorded higher literacy rates for Scheduled Castes, followed by the districts in Vidarbha and Western Maharashtra. Nashik and Dhule in Western Maharashtra and Amravati, Yavatmal, Wardha, Nagpur, Bhandara, Chandrapur and Gadchiroli in Vidarbha have a larger proportion of between 30 and 50 per cent SC and ST in the total population. These districts, with the exception of Gadchiroli, registered literacy rates of 45 to 60 per cent for SC indicating the use of opportunities provided by the Government. Marath-

wada has the lowest literacy rates for this social group. Literacy rates for Scheduled Tribes are lower than those for Scheduled Castes in most districts. Literacy rates amongst Scheduled Tribes range between 34 to 52 per cent for the districts of Amravati, Yavatmal, Wardha, Nagpur, Bhandara and Chandrapur (the districts with larger proportion of SC and ST population). However, Scheduled Tribes in Nashik, Dhule and Gadchiroli (also with large proportion of SC and ST have lower literacy rates. (Table 6.10).

Table 6.10

### District-wise Literacy Rates for Rural and Urban 2001 (per cent)

No.	District	Rural	Urban
1	2	3	4
1	Mumbai	—	86.82
2	Mumbai (Subn)	—	87.14
3	Thane	64.77	86.88
4	Raigad	74.13	87.14
5	Ratnagiri	73.45	89.92
6	Sindhudurg	79.54	89.66
7	Nashik	69.35	83.98
8	Dhule	67.36	85.25
9	Nandurbar	51.40	80.27
10	Jalgaon	72.77	84.10
11	Ahmednagar	73.53	85.00
12	Pune	72.60	86.56
13	Satara	77.16	86.59
14	Sangli	74.22	84.22
15	Solapur	68.47	77.87
16	Kolhapur	73.41	86.13
17	Aurangabad	67.92	83.30
18	Jalna	61.85	75.82
19	Parbhani	62.26	76.79
20	Hingoli	64.85	77.60
21	Beed	65.75	80.84
22	Nanded	65.28	78.61
23	Osmanabad	68.20	80.95
24	Latur	69.54	81.33
25	Buldhana	74.00	84.00
26	Akola	79.24	85.75
27	Washim	72.16	82.76
28	Amravati	79.58	89.23
29	Yavatmal	71.09	86.65
30	Wardha	77.53	88.64
31	Nagpur	75.76	88.75
32	Bhandara	76.75	88.99
33	Gondiya	77.18	89.17
34	Chandrapur	67.90	83.70
35	Gadchiroli	58.54	83.16
	Maharashtra	70.84	85.76

Source: Biswas (2001).



## Rural-Urban Variations

Urban literacy rates are higher than rural literacy rates for all districts. Inter district variation in literacy rate is higher for rural areas than urban areas as reflected in the higher co-efficient of variation (9.12 and 4.64 respectively in 2001). According to the 1991 census, rural urban disparity was the lowest in Sindhudurg district of Konkan and in Akola. According to the 2001 census, low spatial disparity is observed for the districts of Sindhudurg in Konkan; Satara, Sangli and Solapur in Western Maharashtra; Buldhana, Akola and Amaravati in Vidarbha. Rural urban disparities are the highest in the districts of Nandurbar, Gadchiroli and Thane (Table 6.10). These districts are also characterised by a high proportion of tribal population. Low levels of literacy amongst the Scheduled Tribes probably explain the high rural urban disparity among these districts. (Annexure Table 4).

## Years of Schooling

Duration of schooling (measured in years) is a commonly used measure as a proxy of the level of education in a country, state, region or city. Data for Maharashtra on this aspect is available from a number of sources. For example, the National Family Health Survey 1998–99 shows that median years of schooling for both males and females is much higher than the national median. In Maharashtra, median years of schooling are 7.4 years for men and 4.1 years for women.

Table 6.11

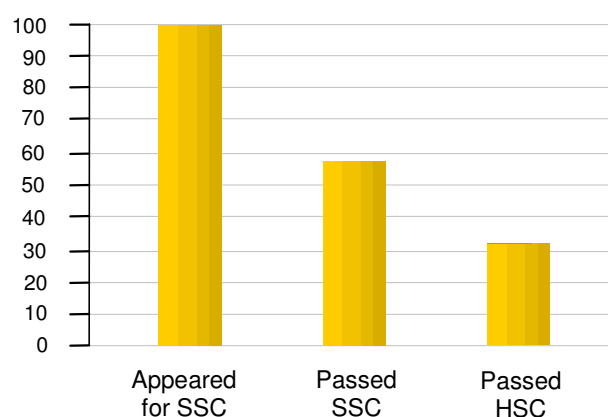
## Years of Schooling, Maharashtra and Other States

Description	Maharashtra		Kerala		India	
	Male	Female	Male	Female	Male	Female
Illiterate	17.3	38.6	7.2	14.9	25.5	48.6
Literate but not completed primary school	21.6	18.1	18.4	16.9	21.1	17.1
Primary School completed	19.0	17.8	23.4	21.4	18.4	14.5
Middle School completed	16.0	10.8	17.4	16.0	13.0	8.1
High School completed	12.8	7.9	21.2	18.5	10.7	6.0
Higher Secondary and above completed	13.3	6.9	12.4	12.3	11.2	5.6
Missing	0.0	0.0	0.0	0.0	0.0	0.0
Total percentage	100.0	100.0	100.0	100.0	100.0	100.0
Median years of schooling	7.1	4.1	8.1	7.6	5.5	1.6

Source: National Family Health Survey-2, 1998–99.

Figure 6.4

## Percentage of Students who pass Board Exams: Maharashtra, 1998–1999



Source: Education at a Glance 1998–99, Directorate of Education, Maharashtra.

## Performance in High School

Through its system of the State-wide board exams (Standard X and Standard XII), the State Government sets the standards for high school students to successfully ‘graduate’ from school education. The level at which students pass these exams is a measure of the student’s own ability and diligence as well as the effectiveness with which secondary education was delivered to these students. If a student fails in the exam, his or her aptitude and ability can be the cause. However, if large numbers of students fail, then questions can be raised about the effectiveness of the schools to prepare children for the standard expected of them. Poor pass percentages are a reflection of the quality of the education received.

Table 6.12

### Percentage of Students Passing Board Exams in Maharashtra

	<i>Percentage of Students 1998</i>
Appeared for SSC	100
Passed SSC	57
Passed HSC	32

*Source:* Education at a Glance 1998–99. Directorate of Education, Maharashtra.

Data from 1998–1999 show the pass percentages for the secondary school examinations as well as for the higher secondary examination (Table 6.12). Overall, for the State as a whole, the board exam pass percentages are not impressive; 60 per cent pass percentage for a cohort of students means that there is wastage for 40 per cent of the student group (Figure 6.4). Dropout at this stage has a strong correlation with the quality of the education system. For every 100 students who take the SSC exam, 57 pass. If the same set of students goes on to take the HSC exams two years later, only 32 of the original 100 students survives successfully. Without disaggregated data, it is hard to pinpoint who passes and who fails, but even with the aggregate district level data it is obvious that lack of adequate preparation is the major ‘push’ factor at this stage.

There are, however, considerable variations in pass percentages or ‘survival rates’ by district (Annexure Table 78). It has seldom, if at all, been higher than the 70 per cent mark. The districts of Marathwada and Vidarbha perform poorly as compared to the State average. The secondary and higher secondary exam results are an indicator of how economically and educationally backward districts remain backward in overall terms of development as well.

Secondary school opportunities have increased across Maharashtra and enrolments have risen substantially over time. Even as late as 1998, the school system is unable to prepare almost half the children to attain the high school degree. Therefore, while Maharashtra has made major strides in the quantitative provision of secondary schooling, it has managed to retain favourable student-teacher ratios in the secondary schools. Yet the quality of the process

and of the product remains in serious doubt. By its very definition, human development implies enhancement of productive capacity of people and their skill base. The secondary education scenario in Maharashtra is unable to effectively translate schooling opportunities into actual educational attainment in terms of learning.

### Population Groups and Educational Attainments

The 55th Round of the National Sample Survey provides data on educational attainments for different groups in the population. Apart from the classification by sex and age, the dataset provides figures for Scheduled Castes and Scheduled Tribes as well as for different occupational categories (self-employed in agriculture, in non-agriculture, agricultural labourer etc) and with which the distribution of educational attainment for different groups of the population can be analysed.

Although this is a cross-sectional data set, it is possible to track changes over time by comparing younger age groups with older age groups. Except for the young people sampled in this round who may still be studying, others have already acquired their education while they were young. For the purpose of investigating changing patterns over time, two age groups have been selected: the young adults (aged 15 to 29) and a middle aged group (aged 40 to 49). On an average there is a 25-year age gap between these two groups. Those who turned forty in 2000 were born when the State came into existence in 1960. A comparison between the educational attainments of these two age groups will show whether each of these occupational or social groups has been able to translate available schooling opportunities into educational attainment.

The data from the 55th Round allows a further refined analysis of different occupational and social groups. Again, for the purpose of simplicity, two groups in the population have been chosen for comparison from the many groups that were available. Here, Scheduled Caste men and women are compared to non-SC/ST/OBC men and women, and

agricultural workers are compared with those who are self-employed in agriculture. For lack of better data, these two categories can be seen as proxies for landless wage labourers and landowners or tenants.

### Literacy among Agricultural Labourers

Among male agricultural labourers, the dramatic increase in literacy is visible when the older and younger age groups are compared. (Table 6.13) Among the younger group, a much higher proportion of men have completed elementary schooling. Almost 15 per cent of the younger men have completed either secondary, higher secondary or graduation as compared to less than 5 per cent of older men who had attained these levels. The percentage decline in illiteracy among the male self-employed is almost the same as that among the agricultural labourers, however the illiteracy level was much lower for this group of older men. Self-employment in agriculture automatically implies land ownership or land taken on lease. Among farm owning households especially younger men, illiteracy levels are extremely low (well under 10 per cent).

A noteworthy aspect of the education of agricultural labourers and self-employed men in agriculture is the pattern of distribution of educational attainments among the younger male agricultural labour is somewhat similar to the distribution among the older self-employed men. Some 63 per cent of the younger agricultural labourer and 44 per cent of the older self-employed men have completed elementary

schooling i.e. primary and middle. But in the secondary schooling category, the percentage of older self-employed men (at 28.5 per cent) is significantly much higher than the percentage of younger agricultural labourers i.e., 3.6 per cent. These numbers suggest that the ability of the male agricultural labourer today to access and complete secondary schooling in Maharashtra is still extremely low. Even 25 years ago, over a third of rural self-employed men could obtain these higher levels of education.

Taking secondary and higher secondary categories together, and comparing the younger men from Figure 6.5

### Educational Attainments: Workers in Agriculture, Maharashtra NSS 55th Round

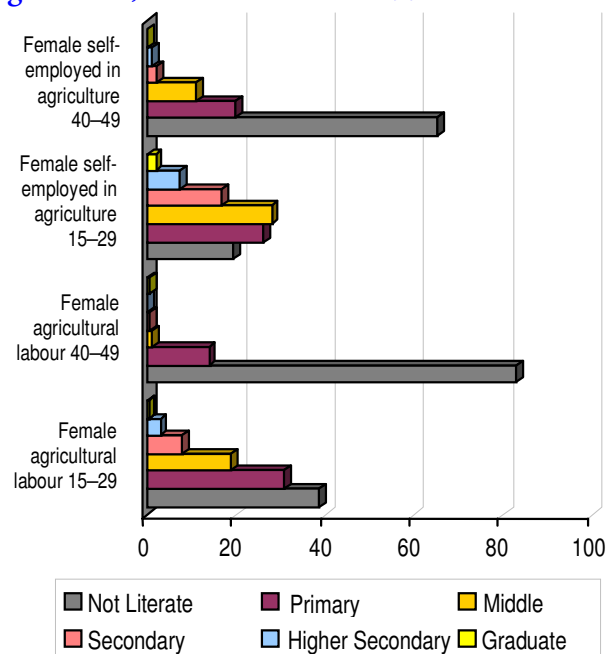


Table 6.13

### Percentage of Educational Attainments of Workers in Agriculture in Maharashtra

Description	Not-literate	Primary	Middle	Secondary	Higher	
					Secondary	Graduate
Male agricultural labour 15-29	17.7	21.5	30.1	21.5	7.2	1.9
Male agricultural labour 40-49	55.3	30.2	8.0	5.0	1.4	0.1
Male self-employed in agriculture 15-29	7.3	13.1	27.7	31.8	13.5	6.6
Male self-employed in agriculture 40-49	25.3	33.5	18.1	15.7	4.5	3.0
Female agricultural labour 15-29	33.8	30.9	18.9	8.1	2.9	0.4
Female agricultural labour 40-49	83.3	13.9	1.3	0.7	0.0	0.7
Female self-employed in agriculture 15-29	19.6	26.2	28.0	16.9	7.3	1.9
Female self-employed in agriculture 40-49	65.4	20.1	11.2	2.1	1.2	0.0

Source: NSS 55th Round.

both occupational categories, the differences in secondary and higher secondary attainments are stark. In the 15–29 age group, about 11 per cent of agricultural labourers have completed secondary or higher secondary levels. For the same age group of self-employed, the percentage attaining the secondary or a higher secondary level is 45 per cent.

There possibly could be a big gap in secondary school attainment among men of the same age between these two rural occupational groups for without more detailed empirical evidence and better contextual data, there can be no definitive answers. Widespread provision of primary education through zilla parishad schools has fuelled the rise in primary school attainment across the board. But secondary schooling may be too expensive for agricultural labourers.

### Age and Illiteracy

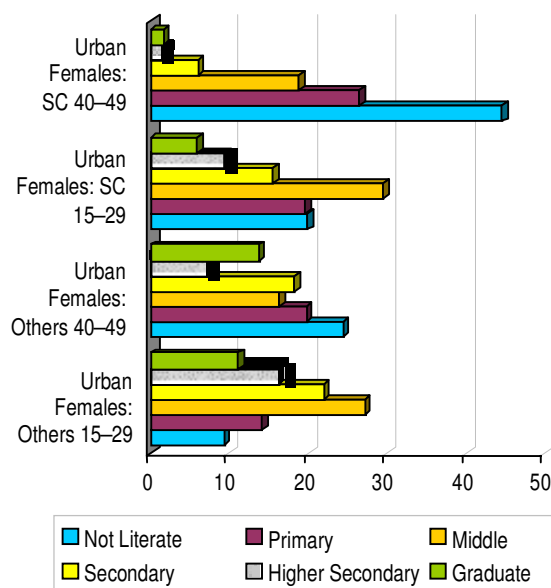
Illiteracy is high among the older age group of women; more than 80 per cent of female agricultural labourers and more than 60 per cent of women from landholding families cannot read or write. For the younger generation, illiteracy levels are significantly lower. However, more than 40 per cent of agricultural labourers even in the age group 15–29 remain non-literate. NSS data shows that younger women who are agricultural labourers have had some education. Thirty-two per cent completed the primary level and 20 per cent have studied up to Standard VII. Higher education attainments are negligible. For self-employed women in the age group 15–29, the trends are more favourable: 27 per cent have primary schooling, another 27 per cent have completed the elementary stage and a further 16 per cent have secondary school degrees.

Women lag behind their male counterparts in the same age group in each occupational category. The distribution of educational attainment among younger women from landholding families is inferior to the distribution of educational attainment among men of the same age group who are agricultural labourers. Thus, educational disadvantage rests not only on occupational or economic background but is compounded by gender.

### Education

Figure 6.6

### Educational Attainments: Social Groups NSS 55th Round, Maharashtra



### Social Trends

What trends characterise the distribution of educational attainment of different social groups? When Scheduled Caste groups are compared with a group that is not scheduled caste, tribe or from other backward castes, there is hardly any difference in the proportion of urban males in the secondary and higher educational category between the two age groups. Both age groups have a little more than 50 per cent of their population who have either secondary or higher degrees. Even among the scheduled caste urban males, there is little difference in percentage of the secondary and higher categories between the older and younger age groups. Opportunities and attainments have remained stable in urban areas for those seeking high school degrees, whether they are from scheduled castes or others. For higher education degrees, the younger Scheduled Caste urban males have made considerable gains (19 per cent with higher secondary and college degrees) as compared to their older counterparts (5 per cent) (Annexure Table 89).

Over 29 per cent of younger rural Scheduled Caste men have secondary and higher attainments—a small difference over their older counterparts

Table 6.14

## Government of India and State Share of Resources for DPEP Project

<i>Funds Released by Government of India</i>			<i>State Share Released</i>			<i>% Share of State</i>
<i>Upto 1998–99</i>	<i>1999–2000</i>	<i>Total</i>	<i>Upto 1998–99</i>	<i>1999–2000</i>	<i>Total</i>	
9551.51	1500	11051.51	1592.05	349.22	1941.27	14.9
1608.86	1900	3508.86	256.74	533.74	790.48	18.4

Source: DPEP Document 2001.

(25 per cent). Among rural SC women, the proportion gaining secondary and higher levels is approximately 14 per cent—a bigger gain over their older women counterparts. Younger rural Scheduled Caste men are far ahead of women in their educational attainments. Still, the proportion of rural Scheduled Caste men and women who have gained secondary and post secondary education has not changed very dramatically in the last 40 years.

The higher proportion of urban scheduled caste younger men gaining college degrees may be a function of reservation and quotas. It may also be due to the fact that growing urbanisation has generated more opportunities for highly educated people. But what accounts for the relatively stable and unchanged scenario as far as secondary education is concerned? Lower secondary school attainments among women may be due to low returns to education for Scheduled Caste rural women. The stable pattern of secondary school attainment among rural Scheduled Caste men seems to suggest that neither demand nor supply forces have changed dramatically in these areas over the last several decades.

### Special Projects

There are two special focus areas, apart from the primary and secondary education in Maharashtra: comprehensive primary school improvement initiatives in educationally backward districts and the handling of issues regarding the education of disabled children. One of them, the District Primary Education Programme (DPEP) was aimed at universalising primary education.

Across Maharashtra, the progress in primary education especially in terms of access and enrolment

since 1960 has been impressive. Yet there remained a set of districts, particularly in Marathwada, that have been historically backward educationally. Under the State Government's new Plan of Action announced in 1994, the DPEP (District Primary Education Programme) was a major new programme to be introduced to deal specifically with improving primary education in these educationally backward districts. Maharashtra was amongst the first DPEP states.

Under DPEP, the attempt at universalisation was through formal schools and non-formal or alternative centres, increasing retention and improving learning. A specific focus was also on reducing disparities between social groups and between boys and girls. In the first phase, in 1994, the programme was introduced in the five low literacy districts of Marathwada i.e. Aurangabad, Parbhani, Latur, Nanded, and Osmanabad. In 1997, four more districts—Beed and Jalna from the same region, and Dhule from Western Maharashtra and Gadchiroli from Vidarbha, were added. All these districts had an adult female literacy level lower than 39 per cent according to the 1991 census.

DPEP goals envisaged a comprehensive approach to educational improvement. The intervention included building physical infrastructure, teacher training, creation of new teaching methods and materials, a wide variety of programmes to increase community participation. Girls education and tribal education were special focus areas. A major portion of the funds was from external sources that came through the Ministry of Human Resource Development, Government of India. The State Government also contributed resources. (Annexure Table 3 supplement indicates the relative shares of both contributors).

Table 6.15

**Literacy Percentage: Rural Areas/DPEP**

<i>District</i>	<i>1981</i>	<i>1991</i>	<i>2001</i>
Aurangabad	36.8	47.8	67.9
Parbhani	33.5	40.8	76.8
Nanded	31.7	42.5	78.6
Latur	36.1	51.6	81.5
Osmanabad	39.6	51.2	80.9
Beed	37.2	45.2	80.8
Jalna	29.6	42.0	75.8
Dhule	40.1	43.8	67.4
Gadchiroli	39.9	40.2	83.2

Source: DPEP Document, Department of Education, Government of Maharashtra.

Unlike some other States, Maharashtra's contribution to the project in terms of financial resources has been at the targeted level of 15 per cent and appears to have been timely. This is another indication of a serious commitment of the State Government to improving education in its more educationally backward areas.

Without more detailed data it is difficult to disentangle cause and effect, but some clear trends are visible from these nine districts (Table 6.16).

**Literacy Rates**

The nine districts were selected for inclusion in the programme primarily on the basis of low literacy levels. In 1991 these were among the lowest literacy districts in the State. While there has been a secular rise in literacy rates across the country and across the State, it is interesting to note that there is a sharper increase in literacy levels in all project districts in the decade 1991 to 2001 as compared to the previous decade.

Part of this increment in literacy must be attributed to the DPEP intervention and to the literacy programmes.

The DPEP database provides figures for school enrolment and out of school children for the school year 1999–2000. There are 28,71,072 children in Standard I to V in the nine districts covered by

Table 6.16

**Estimates of Enrolment and Out of School Children DPEP Nine Projects Districts, 1999–2000**

<i>Number of Children in School in Std I to V</i>	
Boys	1490941
Girls	1380131
Total	2871072
% of girls in total Std I to V enrolment	48.10
<i>Number of children out of school</i>	
Boys (age 6–9)	80210
Girls (age 6–9)	80890
Total (age 6–9)	161100
% of girls in total number of children out of school (age 6–9)	50.2
Boys (age 9–14)	164084
Girls (age 9–14)	171206
Total (age 9–14)	335290
% of girls in total number of children out of school (age 9–14)	51.1
<i>Number of disabled children identified</i>	
Boys	18639
Girls	13541
Total	32180
<i>Number of disabled children enrolled in school</i>	
Boys	11180
Girls	8006
Total	19186
<i>% of all disabled children who have been enrolled</i>	
Boys	60.0
Girls	59.1
Total	59.6

Source: DPEP Document 2001.

DPEP. A massive household survey in all 12,533 villages in the summer of 1999 when highly urbanised areas were omitted showed that 1,61,110 children in the age group 6 to 9 and 3,35,290 children in the age group 9 to 14 were out of school. Unfortunately the data for in school children is by grade level whereas the data for out of school children is by age group. Therefore age-specific school enrolment figures cannot be computed from this data. Still, a quick look at the available numbers suggest that the proportion of out of school children even in the rural areas in these districts is not high.

In order to ensure education for all children, a large number of new schools and Standard V classes were started. For example, in DPEP Phase 1 districts, 441 new schools and 1017 Standard V classes were started. The numbers for DPEP II districts is higher at 871 new schools and 1599 Std V classes, these figures being for 1999–2000. In addition there are alternative schooling centres, contract schools and special schools for children of sugarcane workers. There are a total of 1,715 alternative schooling centres across the nine districts covering more than 40,000 children.

The available figures for in school children and out of school children do not show any significant disparity between boys and girls. Gender inequality in access to school is low. The figures for disabled children indicate that there are fewer girls who are identified as disabled than boys. Whether this is a reflection of actual trends or a bias in reporting is not clear. Nonetheless, the percentage of disabled girls who have been enrolled in school is exactly the same as that of boys. DPEP's focus on inclusion has been instrumental in identification and enrolment of disabled children.

Creation of new schools, expansion of new schools, enrolment drives, increased level of community participation, improvement of teaching in schools—all initiatives undertaken under DPEP may be the possible reasons for children going to school and staying in school.

Compared to enrolment or attendance, data for dropout rates and achievement levels are always more difficult to collect and to interpret available data is also not straightforward. Further, the data that is available is usually cross-section for one point in time. Therefore it is not possible to understand if there have been significant changes over time for the different cohorts of children who have been going through primary school over time.

There has been, however, one cohort analysis conducted for schools in the project districts which had Standard I in 1996–97 and offered instruction up to the end of Standard IV or V by 1999–2000/

2000–2001. The study covered 13,216 schools and 5,53,169 children and pointed to several important findings:

- *Transfers:* On average 14.6 per cent students took a transfer certificate and left schools in which they had started their formal education. Children who left with transfer certificates were left out of further analysis.
- *Duration of staying in the same school:* Of the children who did not take a transfer certificate, an average of 76.6 per cent children stay within the same school which offers up to Standard IV and about 66.2 per cent children stay in the same schools which have up to Standard V. The rest of the children left school due to a variety of other reasons. The researchers suggest that the 'persistence of high drop out rates in some districts is a major cause of concern' (DPEP, 2000).
- *Completion rates:* 62.1 per cent in the schools which had up to Standard V. There is however considerable inter-district variation in completion rates, but the completion rates are similar for boys and girls.

The available figures and analysis of completion, dropout and achievement levels for children in the DPEP districts are indicative and instructive on several counts: first, more in-depth study of educational processes and outcomes is being undertaken. Better data and more sophisticated analysis are becoming available to understand the underlying patterns of educational change. Without a better understanding, solutions cannot be designed. Second, a range of inputs have gone into the education system; some of these changes like infrastructural development, massive training of teachers and changes in teaching methodology, decentralised patterns of planning and implementation, higher community participation and targeted schemes for special groups. While it will not be possible to say which of these inputs had the greatest impact of increasing access or improving achievement, it is clear that the comprehensive 'package' has led to better performance on at least the indicators that are easy to measure—enrolment and access. Third, improving achievement levels and completion rates

## Box 6.4

### Education of Children with Disabilities

In all the documents produced by the Directorate of Education, there is no mention of children with disabilities though, approximately one in twenty children are disabled, and increasing numbers of children with medical conditions now survive.

Social policy research has revealed that families with disabled children experience a range of social and economic problems when trying to school the children. Unfortunately, historically, education of disabled seems to be an ignored area, both in the country and in the State.

Disability and poverty are very closely linked. Parents of disabled children are not aware of their roles and responsibilities towards their disabled wards. It is assumed that all disabled children need special inputs of special educators and have to be sent to the special schools. Special schools are very few, are disability specific and are run by the voluntary sector. These schools are expensive and do not provide other incentives such as fee exemption, free uniforms, textbooks etc. Naturally parents cannot afford the high cost of special education and disabled children have a very low literacy rate—only 17 per cent in the most serviced Mumbai area where there is a heavy concentration of special schools (NSSO 1991).

Programme on Integrated Education of Disabled Children or PIED was initiated to promote inclusion of disabled in the mainstream, with a provision for a special educator for every eight children. The school was paid the salary of the itinerant teacher and children were given special grants for aids and appliances including Braille books, crutches, hearing aids etc. Although the blind schools in India are more than 100 years old, the blind have been fighting for their right to be a part of the mainstream.

There are several itinerant teachers even in remote areas and blind children seem to have benefited from the PIED scheme. Unfortunately the rest of the disability sector did not take advantage of the scheme. A study of the PIED scheme in Maharashtra by the SCERT showed that there are 17 times more children attending integrated schools than those attending special schools.

Implemented from 1995 to 2001, DPEP had a mandate for integrated education. In Maharashtra

it involved 1767 children in various schools in 177 villages in nine selected blocks. Block and district education officers, teachers, head teachers and senior officers of DPEP were trained with help from disability consultants. Special educators, one each with a specialisation in mental retardation, physical disabilities, blindness and hearing handicaps were appointed at the district level. It was proposed that they would do the training at the block level and the trained education officers would cascade the training to village level.

The DPEP programme also carried out structural modifications to make schools accessible to all children. Even toilets were adopted in a few schools. One of the major achievements of the programme in Maharashtra was to create awareness and sensitise policymakers and senior officers to the issues of disabled children.

In 1995, a landmark legislation was adopted on anti-discrimination and equal opportunities. The law has a special chapter on education of disabled children and has a mandate for providing education in the least restrictive environment. This law was publicised very widely and has given disabled children a right to be educated in regular neighbourhood schools.

Finally, in June 2001, Government of Maharashtra took a step towards inclusion by reserving three per cent seats for disabled in all education institutes including higher education. This positive discrimination has seen a sudden growth of children with disabilities in schools. In a survey of 25 schools in Mumbai (which had never admitted disabled children in their 30 years or more of existence), now have between 30 and 50 children attending regular classes.

Integration of the disabled will have indirect implications for appropriate interventions and improved service delivery to a vulnerable client group. It will provide important new data for the sociology of childhood, and for disability studies, broadening and deepening our understanding of these areas of social life. Inclusion and positive action would pave the way for more specific studies of particular aspects of disabled childhood, and demonstrate the importance of child-centred approaches.



is much more difficult than increasing enrolment and takes longer time. It is conceivable that the comprehensive set of inputs that have gone into the education system and processes in the DPEP districts in the last five years will lead to substantial changes in learning and completion rates over a longer period of time.

Both DPEP and the Primary Education Enhancement Programme have contributed to the basic approach to education development, especially school improvement in the State. Both projects share important similarities: (a) focus on backward districts and on disadvantaged areas and populations, (b) a comprehensive approach that includes infrastructure development, quality improvement in teaching-learning, academic support to regular schools, alternative schools to serve unserved habitations or for difficult group. (c) Decentralised decision-making processes in line with the 73rd amendment to the Constitution, and (d) as part of a larger DPEP and PEEP network across other districts in the State, learning from widely shared experiences. Achievement studies done as part of both programmes suggest that learning gains are visible in both target areas and populations.

## Conclusion

Since human development is expansion of enabling opportunities such as education and improving the population's capabilities, where does Maharashtra stand? Have enabling opportunities indeed increased, and at the same time, whether and how, are human capabilities being enhanced. Tracking provision or access is relatively straightforward: the number of schools and colleges and their distribution across space and time is easy to see. The question of whether human capabilities are increasing, at least as they relate to education, is much more difficult to trace and analyse.

There are data and measurement issues. For any meaningful evaluation, adequate evidence is needed. For a comprehensive analysis of education in Maharashtra, better data on several key areas would be needed, for instance, with regard to:

- Reliable estimates of out of school children.
- Accurate data on school attendance.
- Appropriate methods for tracking dropouts.
- Achievement or learning data for different levels.

Although a majority of children in the age group 6 to 14 are in school, it is the marginal groups who remain outside the 'education net' and who are the most difficult to deal with. Different sources of data like the census, national sample surveys and other household surveys provide estimates of age specific enrolment rates or estimates of out of school children and working children. Household survey sources generate figures that vary considerably from school sources. To design programmes or policies to address these disadvantaged children, it is important to understand their magnitude and location and reasons for being out of school.

Enrolment numbers simply state that children are on the rolls of the school register. Attendance indicates the extent of students' actual 'attachment' to school. The effective delivery of education needs continuous attendance. Unfortunately, attendance figures although collected regularly at the school level are rarely available at an aggregated level. Similarly, the dropout rate is a good indicator of the efficacy of the school system; the current mode of measuring dropout rate is crude. In fact, the current dropout statistics vary vastly from district to district and there is no *a priori* reason for the source of these variations.

## Human Capability

Finally, while human capabilities can be defined quite broadly, the basic foundations on which other human capabilities can be built, is the learning that is expected to take place in primary and secondary school. In terms of analysing if human capabilities are increasing or not, it is imperative that we understand what children are able to learn at each level (or grade) in the educational system. *Learning achievement data is rarely collected and aggregated.* Available studies suggest that low levels of learning are endemic in the Indian education system. Therefore, the reliability or appropriateness of 'years of

schooling' as a good proxy for higher capabilities is called into question. If, on average, the achievement levels of children in Standard IV are not significantly different from that in Standard II, then the indicator 'years of schooling' has no traction. Reliable and accurate data on learning levels needs to be collected, aggregated and discussed. Without information on this topic being available and widely disseminated, the critical issue of student learning cannot even enter the domain of public debate and concern.

### Status of Education

As far as education is concerned, today's Maharashtra presents a mixed picture of plenty and poverty, of widespread development accompanied by pockets of deprivation. While the quantitative expansion of schooling opportunities have been impressive, quality remains a question.

Has the provision of educational opportunities increased? Has its distribution spread more widely in the population? Are more people participating in educational activities? Are more people getting more education? Is the population become more capable, at least in terms of competencies? Are increasing proportions of people participating in different levels of education? Are different levels of educational attainment distributed widely in the population?

Modern Maharashtra's education system is built on a strong progressive legacy of the past. It is visible in patterns of participation in education of girls and women as well as rising educational attainment among the historically disadvantaged groups. Education was a core arena of activity for Maharashtra's social reformers and political leaders in pre-independence India. But with the increasing dependence on State provision and support since 1960, the role of progressive and voluntary activism in education has declined substantially. At the same time, there is rising involvement of private and commercial interests buttressed by political leadership's local initiatives to consolidate their hold on the socio-economic underpinnings of the community to be served, in secondary and post-secondary education.

On the quantitative side, there is no doubt about the impressive increases with respect to access to basic education. The numbers of primary schools and secondary schools per capita population have increased substantially. Despite increasing enrolments at all levels, the government has managed to keep teacher-pupil ratios remarkably stable. There are exceedingly few habitations anywhere in the State without schools. Practically all teachers of government schools have received intensive in-service training in the last five years. Whether primary or secondary, the distribution of schooling opportunities has been relatively even across the State. Thus, the broad picture that emerges is that provision has increased and the distribution of educational opportunities has widened.

Over time, in each age group, a larger proportion of the population is participating in education. The differences between boys and girls in Maharashtra are much smaller than in most States. In fact, the participation of boys and girls is quite similar till higher levels of the education system. Although enrolments are rising among scheduled castes and tribes, their performance lags behind that of the rest of the population.

Although access to schooling is high in the State, dropout levels are also high. Rapidly rising higher secondary and college enrolment is accompanied by poor rates of success in school board exams. Very little information is publicly available about how many children in school know or have learned as compared to what they are expected to know. However, from learner achievement studies conducted by DPEP and from learning achievement estimates available in urban municipal primary schools, it is apparent that quality of basic education still remains to be improved.

Widespread State provision of primary schooling is found side by side with high levels of private activity in the secondary stage. Whether the private (aided and unaided) provision of schooling at the secondary stage implies that post-primary education remains out of reach of the lower income groups needs to be studied carefully.

Overall, since 1960, there has been no marked reallocation of expenditures to education, and within the education budget to elementary education. There has been no major restructuring of expenditure in favour of districts with poor educational participation levels or attainment levels.

At least for elementary education, through the new curriculum, textbooks and intensive large-scale in-service teacher training, the State government is attempting to upgrade learning levels of students. The longer run impact of these inputs on student

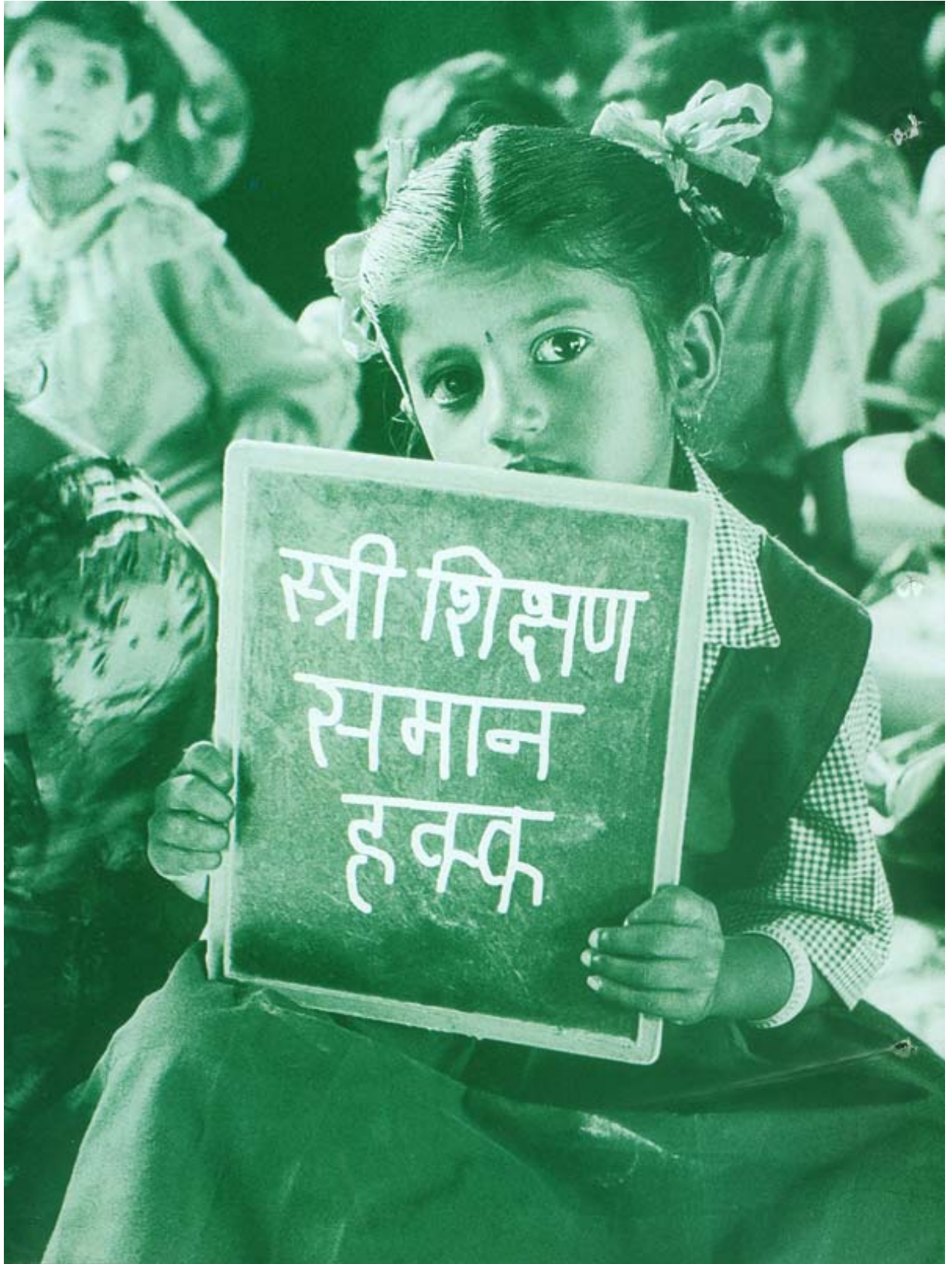
outcomes will take time to bear fruit. A similar thrust needs to be designed and executed for secondary education as well. For a time bound and rapid universalisation of literacy and of elementary education, to ensure that every child in the State is in school and learning, a serious high priority push is needed. This will need higher commitment of resources than is visible right now. It is only when all adults are literate and all children are in school, that the basic foundation of human development of Maharashtra will be strong and sustainable.

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## GENDER ISSUES



## Gender Issues

A female must first survive, then grow and flourish. For this, she requires capabilities that equip her to increase the range of options to decide what kind of life she wants to lead. She needs freedom to pursue her needs and interests. But female deaths at different ages result in warped female-male ratio in the population at different ages. Within this imbalance is the story of gender discrimination and deprivation. When compared to a son, she is seen by society to be of negative worth, and this is followed by her trials and tribulations as a reproductive being. At what age she marries and how many children she bears, how many she can avoid are actions subject to social norms, not her choice though it influences her health and limits her abilities including her education.

Records of nutritional deficiencies indicate the lack of growth possibilities for women. Reproductive years are women's most vulnerable years when support for maternity and limiting births is crucial. How well are infants and children of both sexes protected by healthcare so that planned births do not pose a risk of losing the now fewer children and thereby induce more births as compensation is important. Education is a major capability for improving women's opportunities for participation in society in many rewarding ways through better care of self and families, better employment; better ability to take part in cultural, social and political activities.

By gainful employment women can acquire an independent income and secure entitlements to both productive and consumption resources in society. The kind of employment she gets, the terms and conditions under which she retains it, the rewards she gets for her paid or unpaid work, the possibility of a variety of jobs at different levels of skill and prestige determine her access to resources

including monetary reward, rest, leisure and escape from drudgery.

Women's entitlements are not limited to income but by socially determined norms over which she has little control. Even her independently earned income might not often enhance her entitlement or her freedom but it does open up this possibility. Participation in political activities, presence in different rungs of government, community affairs, and organised activities at collective level to promote women's interests speak of her empowerment.

Gender equality thus has two elements: women's development and empowerment. Development confers capabilities but to make use of them, the women have to be able to participate in activities that lend them authority and voice in private and public space, which in turn require resources, economic and social. Some important indicators of empowerment would be ownership and control of critical productive resources like land, access to credit, membership in non-family groups, community organisations, active participation in co-operatives, trade unions and other professional organisations, representation in decision-making bodies from the local to the apex levels. As citizens, they have a right to deliberate and make decisions on behalf of society but more importantly, in decisions that affects their lives.

### Maharashtra's Landmarks

Historically, Maharashtra has better achievements on women's rights than most others. As a society and as a State, its catalogue of concern and action on issues relating to deprived women, driven as it is by the rich political and socio-cultural history of reform as well as vigorous women's movements. The

state has been pro-active in promoting policies for women's development and empowerment. It is a State where a woman from Pune secured maternity benefits as a single, unwed mother on grounds that Maternity Benefits Act did not stipulate that a woman has to be married to bear a child.

There are several Centrally Sponsored Schemes such as IRDP, DWCRA, TRYSEM, Nehru Rozgar Yojana, ICDS, that include as a component, the provision of pre- and post-natal care for women, nutrition and immunisation for children. In addition, Maharashtra itself has specific programme, which include the Employment Guarantee Scheme where maternity leave with wages is a norm. Nearly 40 per cent of beneficiaries of EGS have been women.

As early as 1975, Maharashtra pioneered the concept of a development corporation—Mahila Arthik Vikas Mahamandal—for economic support to women seeking self-employment if they were below the poverty line, providing them with training, credit and marketing facilities. The Government provides 100 per cent financial assistance to women's co-operatives. Since 1993, the Mahila Samruddhi Yojana provides attractive interest on small deposits. Widows get monetary aid towards wedding expenses of their daughters. Working Women's Hostels are supported. A State Women's Commission has also been set up.

However, multiplicity of schemes has led to resources being spread thin and is perhaps a deterrent in making a real dent on women's economic situation. The government is unable to meet the requirements of all deserving aspirants to aid. While selection of projects could be more imaginative, administrative costs far outweigh actual benefits to the recipients. Most efforts tend to be *ad hoc* assistance even as the exclusive economic focus ignores the problem of unequal gender relations within the family. This necessitates other measures like gender sensitisation of all levels of government, community and households.

A Policy for Women in 1994 after a separate department for Women and Child Development

was created a year earlier but this document of well-meant and lofty intents requires spirited implementation. Already, a new incarnation of the Policy for Women has come into being, marking out five areas for special emphasis:

- To eliminate violence
- To improve the economic status of women To promote women-friendly personnel policies
- To explore use of mass media
- To increase the participation of women in local self-government and in community

The proposal include changes in law pertaining to marriage, succession and property and would require strong back-up action since there is already a prevailing 30 per cent reservation for women in Government jobs. But this affirmative quantification of entitlement does not specify as to the levels up to which these quotas are available.

Around the time the Policy for Women was unveiled, a remarkably progressive move required all housing allotments made through State or Central schemes to be jointly made to the husband and wife. Laws governing co-operative housing was also changed to enable bylaws that make it easier for jointly owned flats to be transferred to the woman in the event of her husband's death. The woman's right to her matrimonial home is also admitted in law but in the event of a divorce, problems have arisen in cases where a joint family has been in residence there and/or the accommodation is too small. Now, activists seeking to secure rights to the women are campaigning for recognition that a matrimonial home is a place where the husband and wife reside regardless of who owns the premises so that a woman cannot be thrown out because an in-law has legal title to it. As of now, a husband can will away his property.

The Government of Maharashtra recognised the need for special protection to women, using a draft outlined by the State Women's Commission, with inputs from several NGOs in the women's sector, is drafting a law, which would need to be enacted by the State Legislature. Maharashtra Government's

commitment to such a law in principle stems from the acknowledgement that women who suffer from socio-economic hardships do not lodge complaints fearing social and economic repercussions including possible loss of family ties, shelter and sustenance. Also, that they fear their witnesses are intimidated even as lengthy criminal proceedings pose further hardships. More significantly, the women see persons and institutions responsible for their security abandoning their responsibilities. Article 15(3) of the Indian Constitution enables the States to enact such special laws and if enacted, would be the first ever in the country. Box 7.1 documents the local

procedures whereby women are protected against sexual harassment in Maharashtra.

If and when such a law is enacted, its observance would be mandatory for all government, semi-government organisations, local bodies and also such entities which are promoted, licensed, recognised or assisted by Government; defaults would attract withdrawal of grants, aid, permission and licences.

Maharashtra has decided to make the Women's Component Plan an integral part of the State's development plan. Ten per cent of revenue receipts

### Box 7.1

#### To Protect the Vulnerable

The proposed law requires District Vigilance Committees headed by a Commissioner of Police, Collector or a Superintendent of Police, with officials including the Sessions Judge, the Government Pleader, Chief Executive Officer of Zilla Parishads, Social Welfare Officer dealing with ICDS and a representative of Woman and Child Welfare Department, to be formed. Against these seven members from the government side, there would be another 11 representatives of social organisations working for women on it.

The proposed law has provisions for Women Welfare Magistrates (WWM), Inspecting Social Workers and Reconciliation Committees, the last operating under the District Free Legal Aid Committees that are already in place. All the functionaries under the proposed law would be deemed to be public servants and no civil or criminal proceedings can be initiated against them without the prior permission of the State Women's Commission.

Once a woman comes for help as a victim of sexual harassment or betrayal, her complaint would be required to be registered in a confidential register, ensure her personal security and well-being and inform the District Vigilance Committee and the Magistrate.

The Magistrate also refers the issue to the DVC which in turn, would recommend the bonds required to be obtained, give a right to an audience before the WWM and move the Reconciliation Committee. The WWM will help secure shelter,

maintenance security and well-being of the women pending the proceedings in a court. The WWM may obtain bonds at any stage.

The Reconciliation Committee, irrespective of the conditions of eligibility, shall arrange for rapprochement and irrespective of the woman's consent, find out if it is in her full interest. Help includes removing genuine fears about intimidation of witnesses so that the victim is enabled to pursue her case freely in a court of law.

Witnesses and the victim would be questioned only at places of their convenience to avoid inhibited articulation or embarrassment to their modesty. No part would be made public without the consent of the victim. Remand of up to 30 days for offenders is allowed.

As regards bonds, no appeal against the order of the WWM is permitted and appeal is possible only in the High Court. WWM's interim orders are to be deemed as interlocutory orders. Detention and bonds can be till the final disposal.

Courts, while dealing with these cases decide the issue of guilt or innocence and the responsibility for maintenance or security separately. The State would not be saddled with the financial responsibility of maintenance but the persons primarily responsible for her maintenance and those who caused disruption would bear it.

Trials would be speedy, with a notice on the lawyer deemed to be a notice to the client and witnesses and adjournments for the convenience of the lawyers being given only in exceptional cases.



of urban bodies net the committed expenditure is to be spent on women and child welfare. The urban and other local bodies would have to prepare five-year plans for women's empowerment.

In another pioneering move, the Government of Maharashtra has signed a Memorandum of Understanding with the United Nations Fund for Women (UNIFEM) and the Tata Institute of Social Sciences for setting up and developing 10 special cells for women and children within police stations. These cells will assist police stations to register criminal complaints and in other matters like placement of distressed women and children in institutions or refer them to family service organisations.

Family Courts are also working in the State for some years now. To enforce the Child Marriage Restraint Act, the government proposes to make registration of marriages compulsory. Besides these efforts, women's voluntary work is widespread in the State. There are women's organisations, set up as long ago as in the last century, which continue to this day. According to a 1999 survey by the SNTD University, there are currently 300 women's organisations in the State but this could be a gross underestimate as the figure is derived through mailed questionnaires.

Maharashtra has many such 'firsts' to its credit. It has a long list of policies and programmes, all well thought out and yet, it has not excelled in human and women's development (Annexure Table 95). The reasons for a lag between intent and achievement are many and complex. At lower echelons of the administrative hierarchy, many progressive measures get considerably diluted, underscoring that it is not enough only to have enlightened policy making. Only when the mindsets of people and whole communities change towards a liberal stance on women's rights and to the extent the educational system, the mass organisations or party cadres accord priority to promote new ideas of gender equality would this change. Otherwise, it would be difficult to change or eradicate the deeply entrenched traditional ideas about women in society. Even our data system needs to be made gender sensitive to enable fruitful monitoring of policies and programmes (Box 7.2). A better evaluation of policies and their impact to enable correctives at the ground level is needed.

### Chances of Survival

Births and deaths result in a particular size, age and gender composition of a population. Demographic indicators such as the sex ratio (SR) and life expectancy at birth (LEB) are a telling comment on how

#### Box 7.2

#### Data Inadequacies

Under reporting of women's economic activity has been a concern for many decades and despite some improvements in the Censuses of 1991 and 2001 and also the NSSO, the problem remains acute. This is particularly so with regard to the classification 'marginal worker' where aggregate figures are available but sub-categories like dairying, horticulture where women are known to be engaged in large numbers are not published. Neither the numbers nor their contribution to the economy can therefore be measured.

Similarly, for instance, is the National Industrial Classification (NIC). It does not give details for four-digit level occupations where women are engaged. State departments dealing with these do not give any figures relating to this area.

Membership of women in general co-operatives is not recorded as a number.

Programmes for general welfare or programmes specifically targeted at women give allocations and expenditures but provides no idea as to who and how many are the beneficiaries from amongst the female population and to what extent these programmes have reached the target population.

Another example is free education for girls. Education statistics do not give any idea as to how much of subsidy is involved, whether enrolment has increased and if so, where and amongst what income/class categories.

Thus, devising, monitoring or evaluating suitable programmes become difficult.

conducive the conditions prevailing in a society are, to the survival of women and the quality of life they can expect to have.

The life expectancy at birth (LEB) for women in Maharashtra stands at 65.4 years—higher than for men which is 63 years and much higher than the corresponding figure for women in the country as a whole (59.7 years). Only in two other States in the country—Kerala and Punjab—do women have higher LEB, 74.7 and 67.6 years respectively. The State’s high LEB is not in itself a cause for gratification because of the other disturbing feature, viz. a declining sex ratio.

In the absence of gender discrimination, a population should contain as a norm at least 1,050 women for every 1,000 men, because of the inherent biological superiority of women. However, as far back as 1901 the sex ratio in the State was much lower at 978. It has been declining ever since, falling rather sharply from 934 in 1991 to 922 in 2001. In absolute terms, the deficit of women has been rising steadily from slightly more than 2,00,000 in 1901 to nearly four million in 2001, jumping by more than a million in the last decade (Annexure Table 98, Figure 7.1). A deficit of this magnitude is a sure sign of socio-economic conditions that are so punitive to women as to wipe out their biological advantage. Even when there are modest gains, they do not wipe out the overall deficit of women that has accumulated owing to historic patriarchy.

This social phenomenon continues to be an enduring conundrum. The State’s low sex ratio is the

combined effect of increased migration of men, a decline in the proportion of girl children born and a high mortality rate for girls and young women. After eliminating the influence of migration, the relative effects of the last two factors on the sex ratio can be measured by examining Sex Ratio at Birth (SRB) and the age-specific Mortality Rates for women in the State.

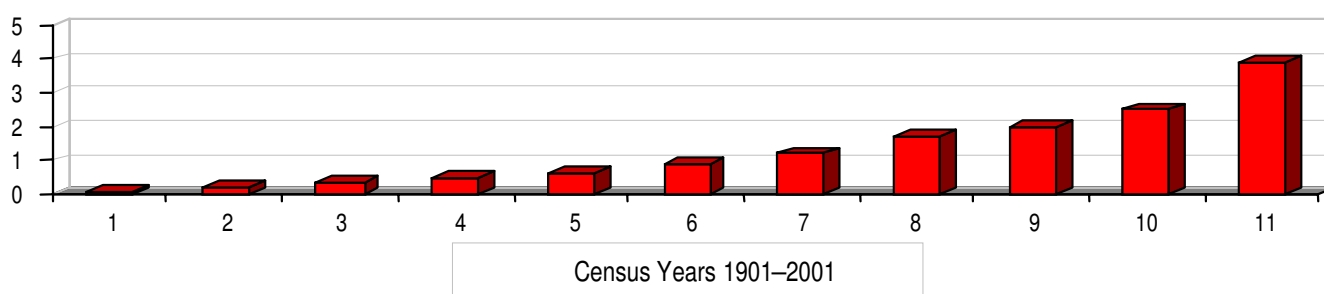
In the absence of reliable data on SRB one can look at the Child Sex Ratio (CSR): The CSR is the Sex Ratio for the age group 0–6 years and as such is free of the influence of migration. The CSR for Maharashtra, recorded in Census 2001 is 917. It translates into a deficit of at least 83 girl children for every 1,000 boys born in the last six years, which is a definite worsening of the chances of survival for females in the State. Commenting on declining Child Sex Ratios, the Census Commissioner rightly remarks,

*‘One thing is clear—the imbalance that has set in at this early age is difficult to be removed and would remain to haunt the population for a long time to come’* (Census of India 2001, page 96).

Within the State there is a great deal of variation in CSR: all the districts of prosperous Konkan, tribal Eastern Maharashtra and all but one district of Vidarbha have CSR higher than the State average. The highest Child Sex Ratio of 974 is reported in the tribal belts of Gadchiroli. The fully urban Greater Mumbai and all districts of Western Maharashtra, in contrast, exhibit CSR lower than the State average, (Annexure Table 90) the inter-regional differences inviting investigation.

Figure 7.1  
Missing Women

Deficit of women in millions



## Mortality Rates at Different Ages

Data on Age-Specific Mortality reveal the effect of the neglect of women in general and of the girl child in particular. Under-five mortality rate for females is much higher than the corresponding rate for males (Table 7.1) which the National Family Health Survey, 2000 also reflects: the under-five mortality rate for Maharashtra is 58.1 per cent compared to the national average of 94.9 per cent. Women between 15–19 years also have a higher mortality rate than their male cohorts all of which is the cumulative effect of neglect of girls in their early years which takes its toll on their health. Nutritional deficiencies, particularly anaemia of girls and women, is well documented. Early marriage, often before the legally permissible age and pregnancy, in their teens, high levels of fertility as well as complications during childbirth such as toxæmia and bleeding of the puerperium, pose high risks. Mortality rates for women at higher ages, however, are lower than for men. In addition, unmarried, widowed and separated women face another set of problems (Box 7.4). Women, it is evident, must pass the constraints that threaten their childhood and youth to finally take advantage of a longer life span.

Table 7.1

### Age-Specific Mortality Rates for Maharashtra: 1996

Sr. No.	Age Group	Mortality Rates %		
		Female	Male	Total
1	2	3	4	5
1	0–4	13.9	12.4	13.1
2	5–9	1.0	1.1	1.0
3	10–14	0.7	0.8	0.7
4	15–19	1.5	0.8	1.1
5	20–24	1.5	1.8	1.7
6	25–29	2.0	2.2	2.1
7	30–34	1.9	2.9	2.4
8	35–39	2.5	3.5	3.0
9	40–44	2.0	6.0	4.1
10	45–49	4.6	6.7	5.7
11	50–54	6.6	8.6	7.6
12	55–59	11.2	15.6	13.4
13	60–64	20.3	31.9	25.8
14	65–69	30.8	40.6	35.7
15	70–74	62.1	67.5	64.6
16	75–79	89.5	111.3	99.6
17	80–84	91.5	134.4	111.4
18	85+	181.6	164.5	173.6
	All Ages	7.0	7.8	7.4

Source: Sample Registration System, Statistical Report 1996. Registrar General of India, New Delhi.

### Box 7.3

#### Son Preference

Sons, in the Indian context, are traditionally seen as assets in economic, political and ritualistic terms by a male-dominant society. Social norms, values, and customs, especially those pertaining to property *make* the girl child the lesser child so that the birth of a daughter in a family is a matter of regret. Consequently, the girl child is neglected, decreasing her chances of survival in a society focused on masculinisation.

At another level, development and consequent prosperity has not only left the traditional premium for the son untouched but has provided the means of obtaining this premium. New emerging technologies such as pre-natal sex determination tests and XY chromosome separation help eliminate girl children in the womb itself. The population policy in India,

which has promoted the small family norm through a system of incentives and disincentives, has ironically reinforced girl rejection.

A majority of Indian women live under oppressive social conditions that deny any choice to them in matters relating to whether and how many children they can have, forcing their involvement in their own elimination. Practices like sex determination after conception through amniocentesis, ultrasonography and other techniques were rendered illegal in 1986 due to pressure from women's groups. This law, 'The Maharashtra Regulation of Pre-natal Diagnostic Techniques (PNDT) Act,' though one of the earliest steps taken by any State in India has not been effectively implemented. These practices continue.

## Box 7.4

### Single Women and Deprivation

Unmarried, widowed, separated and divorced women across class and communities suffer from dependency and are considered a burden to the family and the society. Most family laws are weighed against women such that maintenance in the event of divorce, most unilaterally by the man, is meagre or non-forthcoming.

Remarriage is more difficult for women than men. Widowed, divorced and separated women in the State together number around 8.8 million and constitute 9.1 per cent of the population, as compared to men in similar circumstances who constitute only 2.1 per cent of the population. Of these, women above 60 years constitute more than 52 per cent of the widowed, divorced or separated.

Shorn of their roles as wives and potential mothers, they have the lowest status amongst women. These women are also prey to post-menopausal diseases like osteoporosis and are, thus, the most vulnerable, yet ignored section of the population besides girls under five.

Two case studies focus the dire need for directional efforts in providing equity and equality, which are the rights of all women.

Of 600 women surveyed by Samajwadi Mahila Sabha in Dhule district from 1987–93, 400 were deserted due to lack of dowry, because their husbands did not find them attractive or were addicted to drugs and liquor. Another 150 were deserted for inability to bear children. They were labelled infertile without having medical tests conducted. About 50 were deserted because they bore only female children or fell ill too often. Of these women, 400 were aged between 19–25, 150 between 26–35 and 50, 35–50.

In a 1993 TISS study, 81 per cent of 16 deserted women in rural and urban areas of Maharashtra mentioned domestic violence as the primary problem in their marriage. Sixteen out of 18 women had been married between the age of 12–17, because of this desire to marry girls off early, girls are not provided enough education or skills to support themselves when their marriage breaks up.

## Violence against Women

Violence is an extreme form of social chastisement that women face. In recent years, all types of crimes against women are reported to be rising in India in general and in Maharashtra in particular. Since available statistics are based only on registered cases, the actual number is estimated to be many times higher.

The total number of cases of crimes against women has increased in the State: an increase from 13,913 in 1993 to 16,567 in 1996 or, 19 per cent over just three years. Crimes against women including those committed within the family are generally classified into six types: rape, kidnapping and abduction, dowry deaths, torture, molestation, and eve-teasing.

Data reveals torture was the most widespread of all crimes: in 1996, it constituted 55.27 per cent. While instances of kidnapping, dowry deaths and eve-teasing have declined between 1993 and 1996, torture has registered the steepest increase (35.72 per cent), followed by rape (30.44 per cent) and molestation (7.71 per cent) (Annexure Table 96).

Maharashtra, in fact, had the highest number of torture cases (28.1 per cent) in the country in 1995. Box 7.5 reveals the nature and scale of trafficking in women especially girl children.

## Box 7.5

### Trafficking in Women

There are no official figures for sex workers and trafficking in women. The number of women and girl sex workers for the country as a whole is estimated to be over 0.9 million of which Mumbai has a little under half: 0.4 million. An estimated 30 per cent of these comprise minor girls. There has been an annual increase in child prostitution of eight to ten per cent, according to published media reports.

In Maharashtra's cities, child sex workers constitute over 0.1 million. Of them, 93 per cent were raped, kidnapped or abducted. Even though we have a law against traffic in women, there has rarely been any conviction. Sex workers also face the scourge of HIV/AIDS. These women live under exploitative conditions trapped in the nexus between brothel keepers, pimps and the police.

Statistics from the National Crimes Records, Bureau show a decline in the number of crimes registered with the Maharashtra Police during 2000–2001, the decline being visible across all types of crimes. Of the 10,875 cases registered up to September 2001, rape–1012, kidnapping–669, dowry deaths–89, cruelty at home or torture–4,383, molestation–2,108, eve-teasing–1,101 and abetment to suicide–921. Torture continued to be the most widespread crime.

The National Crimes Records Bureau ranks Maharashtra high in terms of the number of crimes against women with 173.81 crimes per year per million population. This gives Maharashtra the dubious distinction of being the State with the fourth highest incidence, Rajasthan with 208.16, Madhya Pradesh with 206.97 and Delhi with 197.14 crimes per year per million population.

Since most instances of physical and mental torture occur within the family, the increase in country as a whole (59.7 years). Only in two other States in the country—Kerala and Punjab—do women have higher LEB, 74.7 and 67.6 years respectively. The State's high LEB is not in itself a cause for gratification because of the other disturbing feature, viz. a declining sex ratio.

### **Growing Up Healthy and Strong**

The complex interplay of macro level social policies, the socio-cultural environment and the household dynamics result in a rather gloomy picture of women's health. As per available statistics, life expectancy of women has increased; infant mortality rates have come down. While this positively implies lowered risk of death among women, these figures also hide the high levels of ill-health and absence of healthy conditions for living.

### **Household Amenities and Health**

India is committed to Alma-Ata Declaration of 1978 to provide Health for All (HFA) and HFA is an integral part of social and economic development of the community through provision of adequate food

and proper nutrition, safe drinking water, promotion of personal hygiene and basic sanitation. Health services have to be integrated to include curative; preventive, promotive and rehabilitative services. Household amenities such as sufficient availability of water and sanitation facilities are crucial for the health of all household members but more so for women and children. Women's mobility is restricted due to various reasons and rural women are more vulnerable as a large majority i.e., 81 per cent of rural households in India have no toilet facility at all. Similarly, 73 per cent of rural households in India rely mainly on fuel wood, indicating a health hazard. Women have to walk long distances to collect fuel wood that puts great strain on their energy. The quality of fuel has deteriorated which affects cooking time. Women and children get exposed to smoke which cause respiratory health problems.

Household amenities in Maharashtra are creditable in some ways but inadequate in other ways. 82.1 per cent of households have electricity and 81.9 per cent have drinking water piped or from a hand pump. But hardly 45.9 per cent—an improvement on all-India figures—have toilet or latrine facilities. Biomass fuel is used for cooking in 51.9 per cent of households. Very few households—28.3 per cent—have *pucca* houses. With an average of 3 persons per room, most live in overcrowded residences, not conducive to good living. (Data from NFHS-2, Table 2.12)

### **Physical and Mental Health**

Given the rigid gender roles and gender inequalities in society, women are more prone to sexually transmitted diseases (STDs) and HIV infection. When unsafe abortions end unwanted pregnancies, women succumb to a range of reproductive tract infections (RTIs). Fear of being accused of promiscuity drive women into avoiding any medical help. The study conducted by the agency SEARCH in Gadchiroli district, found gynaecological diseases among 92 per cent women. The average number of such diseases per woman was a remarkably high 3.6 per cent. Infections such as vaginitis, cervicitis and other inflammatory diseases (PID) relating to the pelvis were contacted by half of the sampled women.

The survey also found that because female-based contraceptives usually have burdensome or painful side effects, women tend to avoid them. It is imperative that family planning be preceded by attention to RTIs and gynaecological diseases.

For every maternal death there are 16 to 17 women who suffer morbidity that can last their entire life time. Married women are highly susceptible to contracting PIDs and HIV infection from husbands. It is difficult for women to negotiate safe sex in the Indian patriarchal family where males hold the ultimate power to decide on sexual activity. Infected women face additional risk of becoming infertile or producing low birth weight babies. Fear of being abandoned prevents them from seeking early treatment.

Women have special needs for protein, iron, fat, carbohydrates, vitamins and minerals. Without sufficient nutrition their growth in adolescence is stunted, and thus leads to poorly developed bones and muscles. The body weight and height too are low. Malnutrition, added to the hard and strenuous physical work, drains their energy. It also results in foetal wastage and low birth weight babies when they attain motherhood. Anaemia due to iron deficiency

impairs functional efficiency, immuno-competence and learning ability. It contributes to maternal morbidity and mortality.

The National Family Health Survey (NFHS-2) collected data on various types of food intake from ever-married women in terms of how often they consume various types of food (daily, weekly, occasionally or never). Women who live in towns, are educated, have a good income generally eat good, nutritious food, have greater awareness, higher purchasing power and better supply of various types of fruits and vegetables.

Height-weight data (NFHS-2 Table 7.5, p. 246) sum up nutritional status. The mean height for ever-married women in India is 151.2 cm. It varied between 150 and 155 cm between different states, the mean height for women in Maharashtra being 151.4 cm, which is slightly higher than the national average. Thirteen per cent of women in India are very short—less than 145 cm in height—but in Maharashtra 12 per cent of women are very short.

The Body Mass Index (BMI) assesses both thinness and obesity. The mean BMI for women in India is 20.3, for Maharashtra it is 20.2. BMI of less than

### Box 7.6

#### Helping Victims of Violence

A large number of NGOs are working on women's issues in Maharashtra. Included amongst these are organisations that help victims of violence.

These organisations are distinguished by the variety of strategies they follow ranging from information dissemination on health, child care, literacy etc., building awareness through street plays, counselling, legal aid, training in self-defence, mobilisation of savings of the community, mobilisation of loans from governments and other sources, vocational training and establishment of work centres to provide economic independence to the victims.

One interesting and innovative strategy adopted by one organisation is described in a TISS study:

*Extracted from: Nishi Mitra (2000), Domestic Violence as a Public Issue—A Review of Responses, Unit for Women's Studies, Tata Institute of Social Studies, Mumbai.*

'Another noteworthy initiative targeted a village that was given a new 'name' because of its notorious record of dowry deaths.'

'In village "Patan" in Dhule district the Samajwadi Mahila Sanghatana organized a mass meeting of ten gram panchayats, which after deliberations decided to change its name to "Soon Mare" literally meaning in Marathi "the village which kills its daughters-in-law".'

'The village became the butt of much public ridicule. Accompanied by a massive propaganda, parents of young girls in neighbouring villages were persuaded not to give their daughters in marriage to families in *Soon Mare*. This public boycott had such a significant impact that even to this date,

18.5 indicates chronic energy deficiency. There are 40 per cent of women in Maharashtra against 36 per cent all-India who have a BMI below 18.5. These women are acutely starved.

The nutritional inputs for girls and women are insufficient to meet their energy expenditure. Deficiency of iron, folic acid, Vitamin B12 and other nutrients lead to anaemia. Anaemia is a major cause of maternal and perinatal mortality and low birth weight of babies. Anaemia remains a serious problem among pregnant women. Half of the women (49 per cent) in Maharashtra are anaemic. Those with mild, moderate and severe anaemia were 31.5 per cent, 14.1 per cent and 2.9 per cent respectively. (NFHS-2).

### Gender Bias in Child Nutrition

Three summary indices of nutritional status are weight for age, height for age and weight for height. The children suffering from chronic and acute under nutrition could be underweight, short, thin, wasted or stunted for their age. As high a figure as 68 per cent children are underweight revealing the magnitude of the situation with regard to child health. The height-for-age index shows that 54 per

cent are stunted and weight-for-height index indicates that 24 per cent of children are wasted. Maharashtra is characterised by high levels of wasting among children compared with the all India average of 18.3 per cent. (NFHS-2)

The NFHS report does not give us State-wise percentages for male and female children but points that 'overall girls and boys are about equally undernourished, but girls are slightly more likely than boys to be underweight and stunted, whereas boys are slightly more likely to be wasted'. How good the food intake is for a child, depends on whether she or he is first born or later as well as the birth interval between two children. (NFHS-2)

The Nutritional status of children is strongly related to maternal nutritional status and to the household's standard of living. Education of the mother plays a significant role. Children of illiterate mothers are likely to be twice as under nourished compared to children of mothers who have completed at least high school. Inadequate nutrition is a cause of serious anaemia prevalent among children in India (NFHS-2). Overall, nearly three quarters i.e., 74 per cent of these children between the age 6 and 35 months have some level of anaemia. In

#### Box 7.7

#### Child Marriage and Teen Pregnancy

In India, the legal age of marriage for girls is 18. But many girls are still married much before that age and are engaged in hard manual labour and household tasks as well.

A girl requires 4–5 years for physical growth after she attains menarche. The data from the National Nutrition Monitoring Bureau confirm that between their 14th and 18th year, the girls gain on an average 6–8 kg in their body weight and 5 cm in their heights.

If girls are married soon after the onset of menarche and if their marriages are consummated immediately, it may lead to pregnancy. Such adolescent mothers have to compete for threefold nutrient demands—the demand for repair and maintenance of their own tissues, for foetal growth and development and for their own future growth.

The mean age at marriage for females in Maharashtra has shown improvement from 17.6 years in 1971 to 19.7 in 1991 Census. According to NFHS-2 in 1999, it rose from 19.7 to 19.8 years (Annexure Table 99). Rural females marry at an age lower than the national average, but what is inexplicable is that this is also true for both sexes in urban areas.

According to the Reproductive and Child Health Survey, a sizeable number i.e., 30.9 per cent of girls marry below the age of 18. Child marriages were very high in some districts of Marathwada. The proportion of such marriages in total were 63.7 per cent in Nanded, 59.4 per cent in Beed, 58.1 per cent in Latur, 55.6 per cent in Jalna, and 50.9 per cent in Aurangabad. At the other end of the spectrum, in Sindhudurg only 3.8 per cent of the girls marry before the age of 18.

Maharashtra, slightly more than three-quarters i.e., 76 per cent children were found anaemic. There is a strong positive relationship between the haemoglobin levels of mother and the prevalence of anaemia among children. Diarrhoeal disease is also responsible for nutritional loss among children.

### **Fertility Levels, Sex Selection and Family Planning**

The number of children born to a woman is usually a matter of worry for population policy. It has a different bearing on women. What affects her health and her work burden is determined by the number of children, the spacing and ability to control births by less harmful means and the number of years she has to bear the burden of child bearing. Motherhood cuts into their time and mobility to engage in other pursuits like employment, participation in social, cultural and political activities unless special support services are given.

Earlier, it used to be said that women spend three-fourths of their lives in pregnancy and lactation which no longer need be true since availability and use of contraception is a major instrument of women's liberation. The more schooling a woman has, the fewer the children she bears. Urban women and women in households with a high standard of living have fewer children than women in rural and lower income households (NFHS-2, Table 4.3 and 4.4).

There is a continued dominant preference for a son with 27 per cent of sampled women wanting more sons than daughters while only a minuscule two per cent wanting more daughters (NFHS-2, Table 4.25). At least one son was wanted by 84.5 per cent while 79.3 per cent sought at least one daughter. More than one son was the ideal for many.

There is considerable spread of knowledge on family planning with currently married women of age 15–44 years knowing all five modern methods of contraception—male and female sterilisation, IUD, pills and condom being 88.1 per cent in Greater Mumbai. This was followed by 84.5 per cent in Thane, 80.8 per cent in Nagpur and 80.5

per cent in Akola. The number of couples practising family planning by any method was observed to be 68.6 per cent for Wardha and 68.1 per cent for Satara with a low of 47 per cent in Sindhudurg due perhaps to migration of men. There are also couples/women who desire contraception but have not had access to it for whatever reason. These constitute 19.6 per cent in the State, varying with 30.5 per cent in Aurangabad and Nanded to 10 per cent in Satara district where levels of urbanisation and rural infrastructure have made a difference.

On the other hand, a surprising 41.5 per cent of currently married women were not using any family planning method in urban Maharashtra compared to 37.3 per cent in rural areas (NFHS-2, Table 5.7). This gain of more than four per cent in rural areas is not much to gloat over for rural women use more terminal than spacing methods. Female sterilisation of 52 per cent outstripped male sterilisation, which is about five per cent. Preference for female sterilisation persists in urban areas as well—an urban female sterilisation rate of 44 per cent to 1.5 per cent for males underscoring male reluctance to take responsibility for contraception. Annexure Table 100 indicates that over a period of nearly two decades the share of vasectomy has drastically come down from 15.67 per cent in 1980–81 to just 0.27 per cent in 1998–99. Terminal methods are not only drastic but also pose especially serious health hazards for women.

The number or years a woman endures child-bearing tasks is another indication of 'child bearing' burden. Child bearing in India begins at a very early age and is spread over 10 years. The median age at first and the last birth in Kerala is 21.1 and 27.9 while in Maharashtra, the median age at first birth is 18.8 years and 27.1 at last birth. Child bearing begins earlier and ends earlier shortening the reproductive span to 8.4 years where as in Kerala the span is 6.8 years, beginning late and ending at a higher age. Some 83 per cent women had not used any other contraception before sterilisation (NFHS-2, p. 150). What all these figures stress is how gender-unequal is the burden of managing the size of the family, whether in decisions, methods, or the timing



and their consequences. Disconcertingly, terminal methods of family planning take place at very low ages that are below 25 years in Maharashtra.

### Maternal Care

Maternity management involves proper care during pregnancy and providing safe conditions for delivery and post-birth follow-up to ensure that the mental and physical health of the women as well as the baby is normal. Weak women produce weak babies who in turn become weak mothers. According to the Rapid Household Survey under the Reproductive and Child Health Project of the Indian Institute of Population Sciences (Annexure Table 101), antenatal care during pregnancy covers 87.8 per cent women in Maharashtra. Sindhudurg does better with 100 per cent performance while the lowest at 64.4 per cent is in Nashik. But at the level of complete and full antenatal care availability, the record is not so favourable. Only 54.8 per cent of women received at least one anti-tetanus injection and iron-folate tablet in all-Maharashtra, with 81.8 per cent in Greater Mumbai, which is the highest, and 31.5 per cent in Nashik, which is the lowest. Although all pregnant women in Sindhudurg receive some antenatal care, not all receive *full* care. Greater Mumbai does better as it has better health infrastructure.

Institutional delivery has reduced maternal mortality. Institutional deliveries are resorted to by, 93.2

per cent of pregnant women in Greater Mumbai, 76.7 per cent in Sindhudurg, 75 per cent in Pune, 73.7 per cent in Kolhapur and 71.2 per cent in Thane. The State average drops to 57.1 per cent because other districts have not achieved much in this area. At the other extreme, only 16.5 per cent children have hospital births and 20.5 per cent of the safe deliveries in Gadchiroli, a tribal district. Overall, only 61.2 per cent of the women in the Maharashtra have safe deliveries, attended by a doctor/nurse/auxiliary nurse-midwife (ANM). Greater Mumbai with 94.1 per cent safe delivery tops all districts. Some other districts with good performance are Sindhudurg (81.2 per cent), Kolhapur (79.4 per cent), Pune (77.7 per cent), Thane (73.3 per cent) and Sangli (72.4 per cent).

### Sexually Transmitted Infections

About one-fourth of women in Maharashtra had some symptoms of RTI/STI. The highest number of such cases were reported in Akola (43.5 per cent).

Awareness and knowledge regarding sexually transmitted diseases is essential for sexual and reproductive health for men and women, the level of awareness depending on how frequently rural health functionaries visit rural women. On an average, 62 per cent of women across Maharashtra reported having knowledge of HIV/AIDS, the highest (94 per cent) being in Greater Mumbai. Awareness depends on how frequently rural health functionaries visit

Table 7.2

### Number of Women Engaged in Household Duties

Division	Sex Ratio: Females per 1000 Males							
	Rural				Urban			
	Cultivators	Agricultural Workers	Household Industry	Other Workers	Cultivators	Agricultural Workers	Household Industry	Other Workers
1 Konkan	1186	1338	821	314	517	876	892	155
2 West Maharashtra	845	1434	945	330	411	1106	1583	202
3 Khandesh	715	1310	855	229	400	976	842	149
4 Marathwada	751	1325	886	256	242	910	1276	146
5 Vidarbha	581	1153	541	247	195	799	770	156
6 East Maharashtra	725	1463	1472	271	628	1309	1409	177
7 Greater Mumbai	Nil	Nil	Nil	Nil	251	453	515	190
Maharashtra	789	1311	928	289	346	928	945	175

Source: Census of India, 2001, Maharashtra, Directorate of Census Operations, Mumbai.

rural women. Families in Gadchiroli were better attended in the sense that ANMs' visits cover 80 per cent women. At the other extreme is Aurangabad where only 16 per cent rural women reported such visits.

### Women's Access to Resources

Work, being central to human life, confers prestige and social identity, stimulates social interaction, develops skills and contributes to national income. It is a well-known fact that all women work and that most of the work done by them is undervalued both by custom and perception. Although domestic work is part of the process of raising a family, it is often arduous (like fetching water), has a demanding element (such as childcare), is time-consuming and expenditure saving (like food processing and gardening). Yet, it is considered 'natural' or of little economic value even though it has well-defined opportunity costs.

Even specific contributions to economic production within the family are invisible since they are not paid for in cash or kind (Table 7.3). Even paid work is imperceptible because it is unregulated and takes place within the house. Because of these conceptual and measurement difficulties, our data systems routinely fail to record fully the economic contribution of women's work. Work Participation Rates (WPRs) merely measure participation of women in paid work but WPRs are nevertheless important as they indicate the extent of women's control over resources as well as their entitlements to assets and credit.

Table 7.3

#### Proportion of Women Engaged in Domestic Work in Maharashtra: 1999–2000

Area	% Women Engaged in Domestic Work
Rural	30.64
Urban	46.50
Person	36.88

Source: NSS 55th Round, 1999–2000, Quick Tabulation.

The issue of recording female-headed households is examined in Box 7.8.

### Box 7.8

#### Female Headed Households

Official data records headship of the households in terms of who is declared so by the household. This creates a severe anomaly between actual economic contribution and the head as recognised by the household.

The official figures of female headed households therefore are not necessarily the same as households economically totally or for the major part, supported by females, due to absence of earning males or unemployment of males. This figure is estimated by field studies as close to 30 per cent.

This caution needs to be kept in mind while interpreting the data on female-headed households: among the estimated rural households of 10,778,100 in the State, some 9,28,200 are female-headed which, is 8.6 per cent of the total. In urban areas, among a total of 73,83,800 households 49,01,00 are headed by women, constituting 6.6 per cent of the total. (NSS, 55th Round, 1999–2000).

### Womens Work in Rural Maharashtra

Agriculture, as elsewhere in the country, is the biggest employer of women in Maharashtra. By Census 2001 estimates, of the 12.7 million women working in rural areas of the State, 89 per cent are employed in agriculture, 41 per cent as cultivators and 48 per cent as agricultural labour. A small percentage also works in household industry and in other non-farm occupations. More women than men work as farm workers for wage—1,311 per every 1,000 males—and 789 women for every 1,000 males are cultivators themselves (Annexure Table 10). This significantly alters the popular image of 'the farmer as a man'. Also, Census data reveal a higher increase in the proportion of women cultivators than of men implying that more men are moving out of agriculture and a process of feminisation of agriculture is under way. The overall pattern of the predominance of women in agricultural labour is reflected in four agro-climatic regions of the State. Only Konkan has a predominance of women cultivators over men because more men have migrated out and Eastern Maharashtra has more women than men working in household enterprises.

In places where there is heavy male out-migration such as Ratnagiri, Sindhudurg and Raigad, women shoulder the entire burden of agricultural operations. What is worrying is the larger increase in the proportion of agricultural workers as compared to cultivators in the female population over the 1990s, marking a relative lack of growth in their economic status. There is also some indirect evidence that women have diversified into activities allied to agriculture during the same period, an example being the dairy sector. Cow and buffalo milk production in rural Maharashtra has increased substantially along with an increase in the participation of households in this activity.

Time allocation studies in the Warana Milk Co-operative show that women spend four to eight times the time spent by men in tasks such as collection of fodder, cleaning and feeding of animals, milking and preparation of dung cakes. Thus, though official data generally categorise dairy as an activity involving participation of households, it is the women who do most of the work. From 1970 to the late 1980s, horticulture, dairy and poultry received a boost, with the government pro-actively enabling ownership of milch cattle, setting up of insemination centres, etc. Consequently, milk production emerged as an important allied activity so much so it has even become the main source of income for some families. While women did most of dairy work, men did the marketing. The growth of horticulture too has been significant but gender-wise data on employment in this sector is not available. Women in rural areas are also shifting to the non-farm sector but, unlike in the case of men, this is taking place mostly in traditional, home-based industries.

### Quality of Women's Work in Agriculture

Census as well as NSS data throw light on the nature and quality of women's work: a larger proportion of women than men participate in subsidiary and marginal work. Moreover, more than half of the employed women work as casual labour with no more than 1.5 per cent working on a regular basis. There is, in fact, greater shift towards casual work by women in the State than in the country as a whole.

Taken together, these factors explain why employment of women fluctuates between peak and lean seasons and why weekly and daily rates of unemployment amongst women are much higher than their usual status (Annexure Table 102). Thus, women in rural Maharashtra rely on impermanent and insecure employment and are therefore, in and out of the labour market in consonance with changes in agricultural activity. It is natural that under such conditions of employment, the illiterate rather than the educated enter the labour market in largest numbers (Annexure Table 80). Entitlements depend on endowments—of education, skills, and assets such as land ownership and freedom for mobility. Given that these are low for women, their opportunity to build capabilities is minimal.

### Women's Work in Urban Maharashtra

The distinctive feature of women's participation in the urban sector is the low rate of participation: only around 13 per cent of the female population are in the work force. A large rural-urban gap has always existed and is partly a reflection of the very different conditions faced by women in the two labour markets. The agricultural context allows the combination of home management with outside work, requires relatively low skill levels, on-job training is easy and therefore more women are able to participate in the rural sector. In contrast, urban markets demand greater skill levels, given the organised nature of work and literacy requirements and on-job training, which may not match women's endowments. Distance between the home and the workplace create problems of time and money and are also incompatible with childcare requirements. Only 9.2 per cent (Annexure Table 104) are engaged in urban household industry. This, however, may not be an accurate picture since most field studies indicate that some women are doing home-based work.

As regards the educational attainments women in the urban labour market, there is bipolar distribution: those at the lowest level, that is illiterate and those at the highest level, with higher education participate in larger numbers in the urban labour market.

## Quality of Women's Work in the Urban Sector

The largest number of women in the urban sector is self-employed (45.3 per cent) and comprise mainly domestic workers, hawkers and ragpickers. Next in magnitude is the category of regular employees (33.3 per cent). Only a relatively small percentage, i.e., 21.4 per cent is engaged in casual labour. The clubbing of principal and subsidiary workers makes it difficult to get a correct estimate.

## Non-farm Occupational Pattern

In rural Maharashtra, women in the non-farm sector are concentrated in manufacture, trade and hotel/restaurant and public administration/education/commercial service etc. as per the 55th NSS round. Of these a very small fraction i.e., less than one per cent, are in occupations requiring high levels of skill, education and training such as professional and technical workers, scientists, medical professionals and administrative, executive and managerial cadres. The situation is better in the urban job market.

As per the NSS 55th round, the bulk of the urban women in the non-farm sector are concentrated in (i) public administration, education, commercial services, (ii) in the hotel industry and (iii) in manufacturing units, the largest percentage i.e., 36.9 per cent employed in the first mentioned division. This is corroborated by data from the Fourth Economic Census (1998) also support that conclusion (Annexure Table 108). There is a concentration of women in gender-stereotyped jobs. This implies less scope for enhancing entitlements. The silver lining is that various levels of government and quasi-government bodies have been hospitable to women. There has been an increasing trend in employment at various levels in spite of a decline since 1996 in total employment. More than 16 per cent of government employees in 2000 were women. Of these, Local Government employed around 49 per cent, the rest almost equally divided between the State and Central Governments. Quasi-government organisations of both the Centre and State, employ 22 per cent. No data is however

available on women's employment at various levels of government hierarchy.

## Monetary Rewards

Customary notions about skill levels influence wage differences by gender. Even when women do the same work, the Equal Pay for Equal Work Act is often not implemented. NSSO data supports this view, especially in the agricultural sector, where identical work/activity by women fetches only 60–75 per cent of the male wage. A woman engaged in casual labour in public works earns on an average, Rs 26.85 per day, while one engaged in other works earns Rs 25.28 compared to the man who makes Rs 49.38 and Rs 38.06 respectively. Wage disparities are wider in the urban market where a woman is paid Rs 29.18 compared to the man who earns Rs 61.70 per day. These rates are also found to be less than the corresponding national averages.

## Women's Literacy and Schooling

For improving skills, the bare minimum is literacy. The relationship between educational attainments and awareness of hygiene, improvement in family health, child health, girls' education and general family welfare is well established. Formal education delays marriage, kindles a desire for a small family, increases the chances of survival of children and has thus a positive effect on fertility reduction. It increases a woman's earning capacity and the potential for her empowerment. It is one of the most important tools of expanding social opportunity.

Maharashtra's literacy rates are well above the national average, ranking tenth among the major States and Union Territories with an overall literacy rate of 77.27 per cent compared to the national average of only 65.38 per cent. It is eighth among India's twenty-eight States in terms of its male literacy rate (86.27 per cent) but eleventh in terms of female literacy rate, which is 67.51 per cent. The comparable national averages are 75.85 per cent and 54.16 per cent respectively. This level of female literacy have been achieved mainly through the Total Literacy Campaign and an active public policy

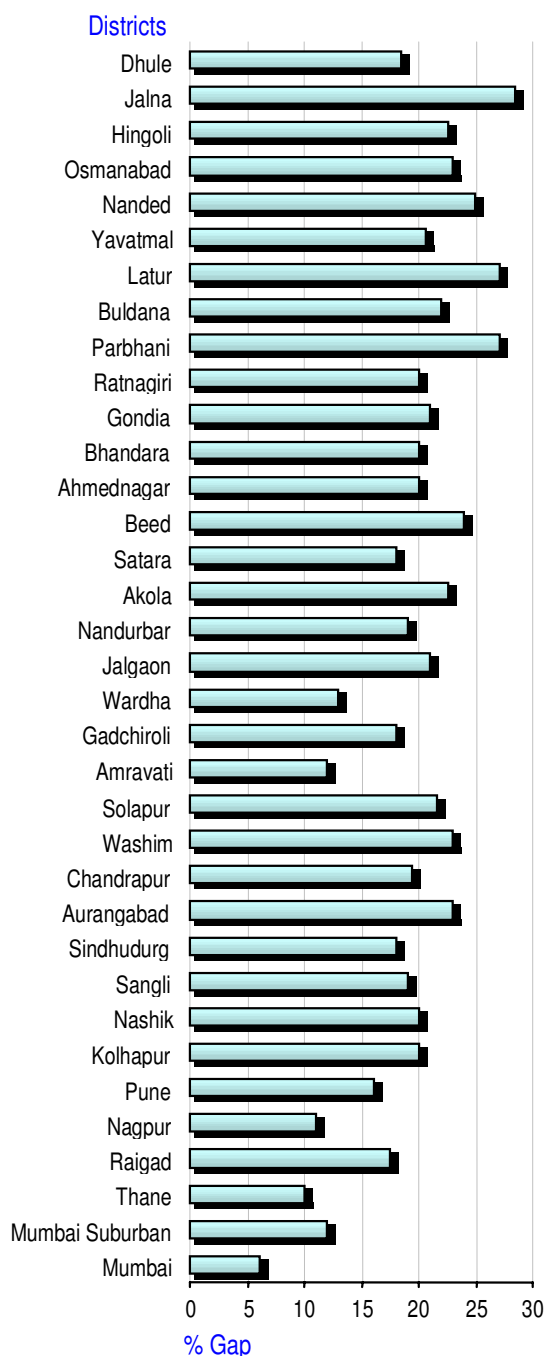
aimed at attracting girls into the system of formal education.

Literacy campaigns were first initiated in Maharashtra in the districts of Sindhudurg and Wardha in 1990. By March 2001, it extended to all 35 districts, of which 32 completed the three primers. Women have been more enthusiastic than men. Of the targeted 6.41 million adults, 5.27 million were enrolled of whom 4.87 million completed the programme. The post literacy programme has been completed in eleven districts and is underway in eleven others.

Formal education is free for girls up to the 12th Standard and for boys, up to the 10th so that education is truly universalised at the primary school level, particularly for girls. The target now is to have a primary school within 1.5 kilometres of a habitation of at least 200 people. The norm for tribal areas is only half a kilometre and a minimum of 15 students. Girls studying in standards V to X in rural areas are provided free travel on State-run buses to attend secondary schools outside their villages. English is now a subject in all non-English medium schools, with a view to helping students compete better at the national and international levels. In spite of such informed policies, there are today around 19 million non-literates in the State which of course includes the elderly. Of this, 13 million are women (Annexure Table 93).

District-wise, only 13 of the 35 have female literacy rates higher than the State average. These fall into the Konkan, Western Maharashtra and Vidarbha regions. Of these, Greater Mumbai, Nagpur, Amravati, Thane, Akola, Pune and Sindhudurg have achieved literacy rates of more than 70 per cent. The difference between male and female literacy levels has narrowed but the decadal rate of growth of female literacy in these districts has declined. Special strategies are now needed for removing residual illiteracy. This residual category comprises women from very poor or households headed by women, who eke out a living in the informal sector, their daughters who need to supplement the family income and/or support their

Figure 7.2  
District-wise Gaps in Male/Female (M-F %) Literacy Rate, Maharashtra 2001



mothers in managing the home chores and siblings. It includes women from the scheduled or backward castes and itinerant tribes.

Twenty-two districts of Khandesh, Marathwada and East Maharashtra regions have literacy rates below the State average. Of these, Osmanabad, Beed, Nanded, Parbhani, Hingoli, Gadchiroli, Jalna and Nandurbar have female literacy of less than 60

per cent but show relatively high rates of growth in female literacy in the last decade. If the momentum is sustained, these districts should be able to bridge the large gaps that exist at present between male and female literacy rates. Nandurbar has the lowest rate of female literacy at 45.55 per cent (Annexure Table 93, Figure 7.2).

The inter-regional differences in literacy can, to an extent, be explained by historical factors. Horticultural development in Konkan, the social reform movements in Western Maharashtra and early development of a market economy in Vidarbha facilitated the transition of these regions from caste dominated, subsistence agricultural economies to developed market economies, paving the way for the spread of literacy. In contrast the still prevalent feudal structure of Khandesh, Marathwada and Eastern Maharashtra has inhibited the spread of literacy. Tribal belts have been poor performers.

### Schooling

Maharashtra catalogues 66,050 primary, 14,748 secondary and 3,614 higher secondary schools in 2001, of which, 1980 (3 per cent) primary, 850 (5.8 per cent) secondary and 235 (6.5 per cent) higher secondary schools are exclusively for girls. For higher education there are eight universities offering both professional and non-professional courses with their colleges dispersed all over the State. In addition, there is the SNDT University, India's first and Maharashtra's only women's university established in 1906 by Maharishi Karve.

For the majority of males and females in the State, primary school is the end of schooling. In urban areas, an equal proportion of men and women manage to reach middle school education. Of the total enrolment of 12.32 million in primary, 7.78 million in secondary and 1.34 million in higher secondary schools in 2000–2001, girls constituted 49 per cent, 45 per cent and 42 per cent respectively. The dropout rates in Maharashtra for 1999–2000 were 17 per cent at the primary stage, 40 per cent at the middle school level and 52 per cent at the secondary school level for boys but higher at 18 per cent, 42 per cent and

59 per cent respectively for girls. This means that out of every 100 boys and 100 girls enrolled in 1990–91 in class I, only 48 boys and 41 girls completed standard X in 1999–2000.

Inability to continue in education has been, for long, a major difficulty for children especially for girls in spite of policy measures designed to encourage girls' education. Though these measures have succeeded in increasing enrolment of girls, it could not retain them in the system for the required number of years. The reasons for this are diverse: social and economic returns from education of girls is not perceived to be high because the traditional mindset defines women's role only in terms of bearing and rearing of children and housekeeping. Even if so perceived, there is reluctance to invest in girls because the benefits are expected to accrue to the marital family of the girl. Sons on the other hand will presumably earn and support parents. In addition, non-availability of schools in many villages or absence of adequate transport facilities are other inhibiting factors as also practical difficulties such as the lack of synchronisation of bus timings with school hours. Fear and anxiety for the safety of their girls prevent parents from sending them to schools outside their village. Not only the monetary costs, part of which the State endeavours to meet but also time spent on girls' schooling is seen as better spent on the family. The private economic and social costs of maintaining the girl child in school appear to them to be far too large to be compensated by the subsidies paid by the State.

### Boys and Girls in Schools

On an average, only 64.5 girls appeared for the Standard X examination for every 100 boys in 1999 but girls do better; five per cent more girls than boys passed the examination. Girls excel boys at the Higher Secondary Examination too (Annexure Table 105).

Yet, girls do not get a chance to fulfil this promising start. More girls dropout before completion of a course right up to higher education, professional and non-professional. This in turn results in the future segregation of women in the job market.

Women students gravitate towards certain areas of study like humanities, home science, nursing, music and dancing, oriental studies and in the area of medicine, homeopathy, dentistry and Unani. These 'soft' options limit employment openings for them in better paying areas. Men dominate the areas of fine arts, social work and library science, traditionally perceived to be the domain of women.

### Development to Empowerment

For 87.5 per cent women in Maharashtra, the only domain where the woman's writ runs is kitchen. Nearly half of the women cannot seek healthcare for themselves or purchase jewellery or other major household items. Half or more could not visit or stay with their parents or siblings, go to the market or visit friends without permission from their family members. For 35.8 per cent women, husbands and other senior members of the family control their earned incomes. In comparison with other States, Maharashtra has a mixed record on women's autonomy. It is in the middle range with respect to all the indicators. (NFHS-21)

### In Politics

Women in Maharashtra have taken political positions as is reflected in this song of the tribal women who were members of the Sharmik Sanghatana in Dhule district:

*Let's enter politics, continue our struggles  
And take leadership.  
Can't put up with oppression anymore,  
O Venubai, why do you remain repressed?  
Come out and join our rally.*

In the early 1970s, women demanded protection against unemployment through schemes like the Employment Guarantee Scheme. They also sought land rights for women. To them, politics was a collective endeavour for social transformation against all oppression, exploitation, injustice and degradation.

Women in Maharashtra have a collective political past. Various mass movements, including the

freedom movement and later, various protests, have seen them play a major role. Their involvement in peasant and ecological movements has been strong. Tens of thousands of them were caught up in the anti-price rise protests of 1972 and their participation was keen in the Chandwad Conference in 1986 where women demanded that economic and social issues that concerned or troubled them be redressed. *Stree Mukti Andolan Sampark Samiti*, (a joint forum of several women's groups, acted as an effective pressure group).

Despite this strong involvement, women are not yet fully integrated into the formal political structure. They have two roles here: as voters and candidates. As voters, there are fewer women than men voters. There has been a decline in the gender gap though it continues to persist. Currently, the gender gap is 5.32 per cent though it is higher in (parliamentary) constituencies such as Rajapur (11.19 per cent), Parbhani (10.99 per cent), Amaravati (10.34 per cent), Akola (10.08 per cent) and Washim (9.96 per cent). As voters, their turnout at the polling booths has been growing, not so much because of their own political consciousness but because of mass mobilisation of women by political parties. Nevertheless, as candidates who made it to the political destination, they have fared rather poorly. In the 1999 Lok Sabha elections, only four were returned from out of 48 constituencies.

Neither is the story concerning the Maharashtra State Assembly a happier one. The highest participation was in earlier times, when in 1957–62, 12.87 per cent of the MLAs were women. Moreover, the post 1990s trend does not show any improvement in women's share despite improvement in female literacy. The women in the Legislative Council—Maharashtra has a bicameral system—accounted for 13.88 per cent of total members during 1952–58. It is worth noting that the percentage of women in the Legislative Council is now at an all time high (20.5 per cent) since 1937.

The low representation of women, is attributed by studies to special difficulties women face since they do not have independent access to finance and

other resources to fight elections. They are also seen as being reluctant to enter mainstream politics because of criminalisation of politics and even fear of character assassination. This leads to the conclusion that the poor presence now in the electoral political arena as caused by the poor status of women in society; an all round empowerment of women is a prerequisite for their political participation. The Women's Reservation Bill, on the other hand, is now virtually in cold storage (Annexure Table 106).

### In Panchayat Raj Institutions

Panchayati Raj, introduced in 1962 has seen women being nominated in the 1970s, not elected to positions in gram panchayats and zilla parishads. Soon it was realised that they did not have the same status as those elected, though the nominated belonged to families of influential politicians. Two committees, one the Balwant Rai Mehta Committee and the other, headed by Ashok Mehta looked at the women's place in these bodies and the recommendation was that each gram panchayat should have at least two elected members.

The Government of Maharashtra earmarked 30 per cent of all seats for women in each local government body in 1990 after which, women politicians expected that reservation would encourage more women to enter formal, mainstream politics.

#### Box 7.9

##### Rule by Proxy

In Maharashtra, whether it is in gram panchayats, samitis, zilla parishads, there is a practice, though not universal, at least in visible number of cases of women contesting elections, to get elected to seats just to hold the seat for a male member of the family. Often, the male is a husband, father, father-in-law or brother-in-law and rarely, a son. Almost invariably, the effort is to retain the reigns within the family.

It is not uncommon for a woman to just sign away her authority to the *upa-sarpanch*, even if she is an elected *sarpanch* to fill a reserved slot because the powerful males dictate the terms. This practice is seen in a pronounced manner in municipal councils and samitis, where the practice of a male func-

Several women without party affiliations contested the elections as independent candidates, which were held at different places between late 1991 and early 1992. These included women from trade unions and women's groups as well as social workers and professional women. No doubt, a substantial number of women who contested these elections belonged to the families of politicians, at least a few of them holding them for their husbands, fathers, sons, or even in-laws.

The advantages of reservations for women in Panchayati Raj institutions were however negated by strong patriarchal structures still prevalent in the communities that do not tolerate women's presence in public spaces. Where elected women are aware of their rights and duties, have information about government schemes and village development programmes and receive support from the community, specifically men folk, their presence has influenced the socio-economic scenario of the village. Simple things like learning to sit in a chair, or sign their names create confidence. Exposure to public spaces and physical mobility are empowering and carry great potential for transformation.

The Constitutional (73rd Amendment) Act in 1993 reserved at least a third of the seats for women in the local bodies. As on 1 April, 2001, total number of women in different municipal corporations was

tioning as a proxy to the woman who has her legitimate rights curtailed.

Which means a woman gets her right by law but is encroached upon by a convention which only uses her as a proxy for the male in a male dominated society. They constitute a pair, the man wielding the authority and the women providing the formality. In some towns, it is not uncommon for a separate chair being assigned to the male in the office from where he 'functions'.

But, as more and more women emerge in their own right to fill these places, a trend that is beginning to strengthen, such rule by proxy would diminish and disappear. Until then . . .



484 (33.1 per cent). Greater Mumbai and Pune each had the highest number of women elected to it (34.1 per cent) and Sangli had the lowest proportion of women members at 30.1 per cent. Only three municipal corporations had women as mayors: Thane, Nashik and Nagpur. The number of standing committees varied from district to district with Thane at 29 topping the list. In Greater Mumbai's 10 standing committees, half had women chairpersons. Kolhapur had 40 per cent and Sangli, 37.5 per cent headed by women. They were least in Nagpur, which of course boasted a woman mayor. In all 22 per cent of chairpersons of these committees were women (Annexure Table 94).

In municipal corporations, including in Greater Mumbai's civic body the total reserved seats are now pegged at 539 for women and without exception, they have held these seats. The number of such municipal corporations is on the increase, with some new towns upgraded from a council to a corporation periodically when a town's population crosses 3,00,000.

The number of women in municipal councils which manage civic affairs in towns with populations of less than 3,00,000 was generally lower than in municipal corporations (30 per cent) but there are district variations. The lowest was in Nanded at 5.2 per cent and the highest being in Solapur with 36.8 per cent. Just 4.2 per cent of the civic council presidents were women; women chaired 26.2 per cent of all standing committees. In Parbhani Municipal Council, women headed 50 per cent of the standing committees.

### Box 7.10

#### 'Our Vote . . . '

On the 10th of March 2000, more than 1,200 rural women from different villages assembled on the occasion of the death anniversary of Krantijyoti Savitribai Phule at Sayagata village of Chandrapur district. They announced 'Mahila Rajsatta Andolan by chanting slogans—"Our Vote Our Governance".' These women were either members of their

The 223 municipal councils in Maharashtra have between them, 1,727 seats reserved for women and in two *nagar panchayats*, 12 are similarly set aside.

Women constitute 33 per cent of zilla parishad members. Only 9 women i.e., 1.5 per cent occupied a president's position at the zilla parishad level. Seen in percentages, women at the helm of standing committees at the district level was more or less the same as at the Municipal Corporation level, at 18.2 per cent (Annexure Table 94).

At the Panchayati Samiti or block level, women constituted 32.7 per cent of the total members but only 9.6 per cent were chairpersons. There were 27,596 gram panchayats in the State and women accounted for 29.2 per cent of the total membership which is four per cent lower than 33 per cent reserved by law. Women elected as sarpanches of these gram panchayats was 29.4 per cent (Annexure Table 94).

### All Women Panchayats

The first all-women panchayat in Maharashtra was formed in 1962 at Nimbut village in the sugar belt of Pune district. Another such all-women Panchayat was formed in 1984 in Mauje Rui village of the same district (Pune). During 1983, a panel of 13 women contested gram panchayat elections in villages like Indoli and Palshi in Satara district. They challenged the culture of male domination in politics by employing innovative methods such as holding street corner meetings to expose corrupt politicians. Though women could not win, they

gram panchayats, small savings groups or mahila mandals. As a result of the Mahila Rajsatta Andolan, 145 institutions and organisations are working together in 30 districts, 129 taluks and 841 villages in Maharashtra. Their objective is to encourage women's participation in gram sabha and panchayats.

Source: Nilambari Gokhale, Resource and Support Centre for Development, Belapur, Navi Mumbai.

showed that women are capable of working in the political sphere if they are organised.

In the 1989 elections, eight women's Panchayats came to power because of the Shetkari Sanghatana's initiatives, with its call to rural women to enter politics. These villages are: Salod and Erangaon in Amaravati district, Yenora in Wardha, Metikheda in Yavatmal, Vitner in Jalgaon, Nimbgaon Bhogi in Pune, Ralegaon Siddhi in Ahmadnagar and Bitargaon in Solapur district. In 1992, two more women's Panchayats—Bhende Khurd in Ahmadnagar and Brahmanghar in Pune district—came to power. These are good beginnings (Annexure Table 107).

### **In Co-operatives SHGs and DWCRA Programmes**

The co-operative movement in Maharashtra is well established with a total membership of 32,660,983 as on 1 April 2001, women constituting 11.60 per cent, but they are not in decision-making positions in these organisations. Very few women—actually 0.09 per cent were chairpersons of these institutions.

Mahila Arthik Vikas Mahamandal Limited (MAVIM) was established in 1975, its purpose being dispersal of credit and information to poor rural women through formation of Self-Help Groups (SHGs). At present, they are concentrated in 12 districts of Maharashtra. The total number of SHGs organised in the State by March 2001 was 4,488. Majority of these groups 3,828 (85.29) per cent were organised by MAVIM and local NGOs formed the rest. About one-fourth of these SHGs in Pune, Nanded and Chandrapur were organised by NGOs. Except MAVIM no other NGO had organised any microcredit groups in tribal belt of Dhule and Gadchiroli.

SHGs primarily inculcate thrift and savings among groups of 15–20 reinforced by the reward of collective credit without requiring pledging of any property, interest being easy for those in a precarious economic status. The collective responsibility enforces discipline and the pride of having made a contribution adds to their self-worth, the

fact that they leave their hearth to attend meetings. These have emerged as community based organisations helping members maximise the use of internal as well as external resources. They have, being small and self-directed proved that enhanced income and productive use of credit is possible.

The total membership of women in SHGs in Maharashtra is 69,168. These groups have distributed loans worth Rs 145,470,543 through the internal lending process to its members. Half of these groups are linked with banks and received bank loans worth Rs 65,491,117 till end of fiscal 2001.

During 1995–96, 2,175 DWCRA groups were formed with 27,333 women as members. Of these, 14,831 received financial help from the government. Within a span of three years from 1996, their number more than doubled to 4,490 with the membership rising to 49,474 women. In all, 37,774 i.e., 76.3 per cent of the members getting this financial assistance. To what extent micro credit really lifts women out of their low income trap is debatable in the absence of other supports like marketing, training etc.

A number of professional women's organisations such as Women Lawyers' Collective, Women Executives, Women Board of Directors, Women in Banking, Women Entrepreneurs, etc. are mutual support groups. They also work for redress of women's problems in their specific professions. Among them, Annapurna Mahila Mandal set up in 1975 is a unique organisation that began by organising home based '*Khanawalis*' (meal providers) catering to the industrial labourers in Mumbai. It has since extended its activities to other self-employed women in many other districts of Maharashtra and has a membership of over one lakh women and expanding. It provides training for self-employment and loans for entrepreneurship development linked with savings and old age security of women.

### **Status of Women**

The position of women appears to be contingent on the general development of a region as well as on the particular socio-cultural characteristics of

## Highlights: Gains and Gaps in Women's Development in Maharashtra—2001

<i>Gains</i>	<i>Gaps</i>
<p><b>1. Life Expectancy at Birth (LEB)</b> LEB high for women: 63 years.</p>	<p>The benefits of high LEB accrue only to those women who survive high mortality rates in the early years of life.</p>
<p><b>2. Sex Ratio</b> Overall Sex Ratio (OSR) higher than national average (933) in 25 districts (out of 35) Child Sex Ratio (CSR) higher than national average (927) in fifty per cent of the districts. Konkan and East Maharashtra have CSR higher than the national average.</p>	<p>OSR of the State lower than the national average. Sharpest decline in the last decade.</p> <p>CSR for the State lower than the national average. Greater Mumbai, all districts of Western Maharashtra and most districts of Marathwada have CSR lower than 927.</p>
<p><b>3. Infant Mortality Rate (IMR)</b> IMR in the State lower than the national average (67.6).</p>	<p>IMR still high at 43.7 compared to the target of 30 fixed by the Population Policy, 2001. Age specific death rate for female children aged 1–4 years is high.</p>
<p><b>4. Maternal Mortality Rate</b> MMR in the State lower than the national average.</p>	<p>MMR is still high at one maternal death for 297 live births.</p>
<p><b>5. (ASDR Age-Specific Death Rate)</b> Female ASDR higher than male between 25 and 69 years.</p>	<p>Female ASDR higher than male between 15 and 24 years. Reduction in female ASDR only after they cross the reproductive years.</p>
<p><b>6. Older Women</b> There are schemes like Sanjay Gandhi Niradhar Yojana for old women.</p>	<p>The proportion of older women in the State is increasing. Of 8.8 million widowed, separated and divorced women in the State, 52 per cent are above the age of 60. Morbidity and dependence of these women is high. The amount and coverage of old age pension is very low.</p>
<p><b>7. Violence</b> Gender sensitisation of police personnel is being undertaken. More women police are being recruited. Better reporting and improved registration of crimes against women.</p>	<p>All types of crime against women on the increase. Negative attitudes against women increasing. Torture is the most prevalent. Torture constituted 55.27 per cent of all crimes in the State. Convictions for crime against women are negligible.</p>
<p><b>8. General Health of Women and Children</b> Apart from Government infrastructure, many NGOs are working on health issues. There is a strong people's movement too.</p>	<p>42 per cent of women in the State have Body Mass Index of less than 18.5. Anaemia is widespread—49 per cent of women and 76 per cent of the children are affected.</p>
<p><b>9. Immunisation</b> Good progress in coverage, 80 per cent of children in the State have received all vaccines.</p>	<p>Regional disparities persist. Gender segregated data not available.</p>
<p><b>10. Age At Marriage (AAM)</b> Improvement in Mean AAM.</p>	<p>Percentage of women getting married below the legal age at marriage (18 years) is 39.9 per cent for the State. This percentage is very high in some districts of Marathwada.</p>

## Highlights: Gains and Gaps in Women's Development in Maharashtra—2001 *(continued)*

<i>Gains</i>	<i>Gaps</i>
<p><b>11. Total Fertility Rate (TFR)</b> TFR (2.52) of the State lower than the national average (2.85).</p>	34.6 per cent of births are of third order. Many districts have TFR greater than 3.
<p><b>12. Maternal Care</b> Percentage of women who received any type of antenatal care is high 87.8 per cent.</p>	But percentage of women who had full antenatal care is only 54.8.
<p><b>13. Work Participation Rate (WPR)</b> WPR for women higher than at national level.</p>	High WPR in rural Maharashtra may only indicate compulsion rather than choice. WPR for urban women low, only 15 per cent. A large percentage of women work as casual labour and at subsidiary/marginal activities in rural sector. Difference between male and female wage rates wide.
<p><b>14. Literacy and Education</b> Female Literacy Rate high (67 per cent). Maharashtra ranks 11th among Indian States. Enrolment of girls in primary school high (103 per cent) of the reference group and increasing. Government has made education free for girls up to standard twelve and for boys up to standard ten. Primary schools are also to be set up within 15 km of a habitation of 200 people and within half a kilometre of a tribal settlement.</p>	Girls drop out at the end of primary school in the largest proportions as well as at the end of every stage of school education.
<p><b>15. Higher Education</b> Many institutions in the State set apart exclusively for women.</p>	Inability to continue in education is also true of girls in higher education. Women gravitate towards certain areas of study, laying the foundations for segregation and reduced opportunities in the labour force.
<p><b>16. Empowerment</b> The State has introduced reservation of one-third of the seats in panchayati raj institutions; Proposed Bill of Rights; Improved property rights in co-parcenary property, matrimonial property and in public allotment of land and housing. Twelve, all women's panchayats exist in the State. Women constitute 11.60 per cent of total membership in cooperatives. The percentage of women membership in the legislative council is at an all time high, 20.5 per cent, in the legislative assembly.</p>	Women in elected bodies in decision-making positions are few. Women panchayati members face male resistance, which makes it difficult for them to take independent decisions. While some efforts have been made to educate women members of elected bodies at different levels to discharge their duties effectively, much remains to be done.

that region, promoting or inhibiting gender development and empowerment. At the policy level, the State is way ahead of many others in the country. Gender development is not commensurate with the potentially enabling socio-political conditions. The benefits of growth should be shared among regions and among people equally.

There is an urgent need to include the poor into

the development process through reforms, infrastructure development and enhancement of social attainments. Gender gaps across the districts of the State in demographic features, health, education, employment and political participation show a wide array of discriminations.

The message is: invest in women for their good and the society; it has a multiplier effect.

## Policy Options

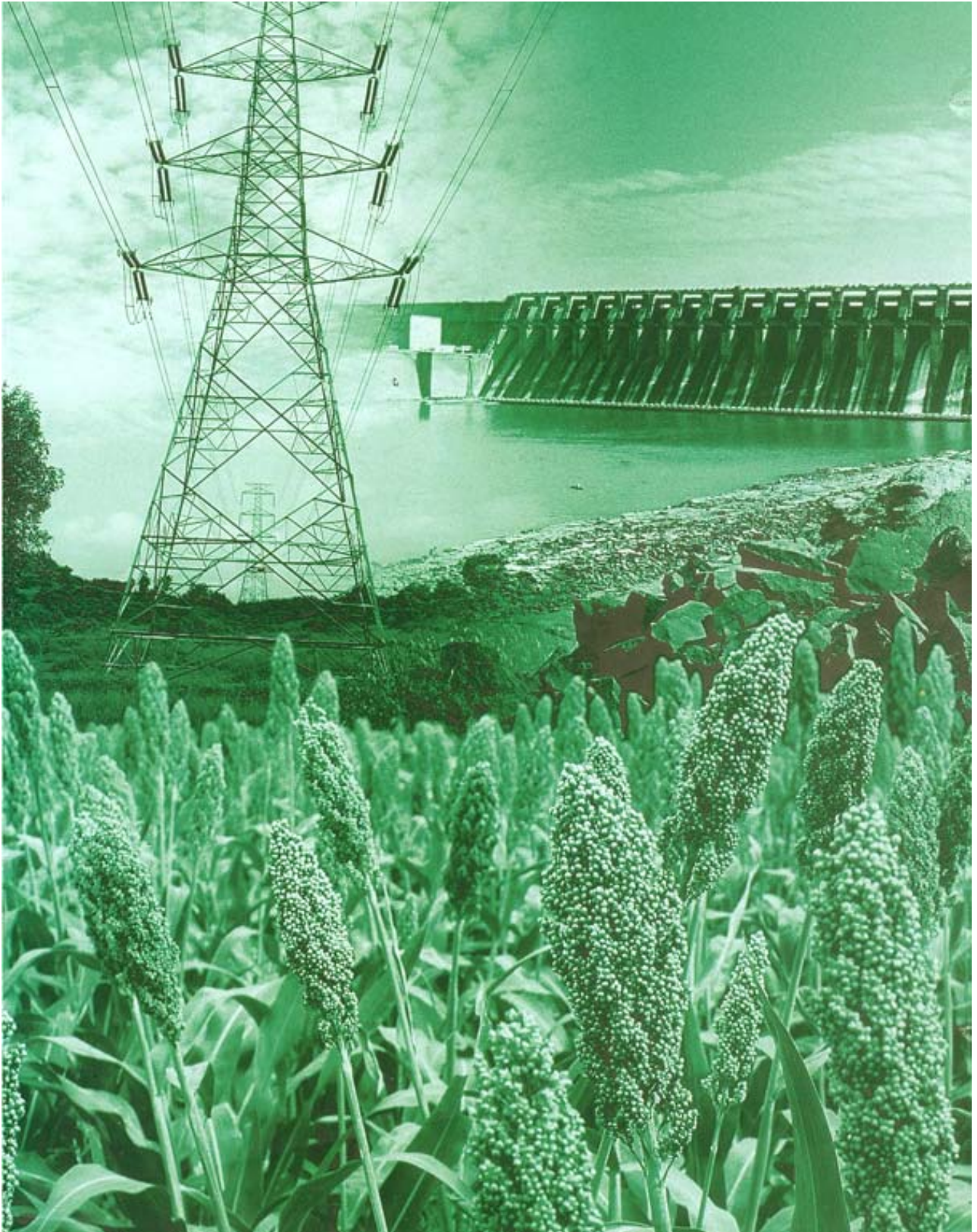
- Registration of clinics offering amniocentesis, their close monitoring, mandating data from abortion clinics for public inspection, education through PHCs and panchayats on scale similar to family planning programme are required. Curriculum changes in schools to remove gender bias would be useful.
- Improving the opportunities for education, health, employment and property rights.
- Enforce existing measures like Anti-Dowry Act.
- Combat the high levels of anaemia and malnutrition, especially in the tribal belt on a war footing.
- Ensure registration of marriages to arrest marriages below the legally permissible age and teenage pregnancies; it would also assist women in cases of divorce and bigamy, as Hindu marriages do not have documentary evidence.
- Emphasise spacing, non terminal methods and provide for follow-up to help improve reproductive health.
- Improved wage rates, especially for women, improvement in agricultural productivity, development of non-farm employment in rural areas, investment in rural infrastructure are the only hope for pulling rural women up.
- Focus special efforts on rural women since more women in rural areas are illiterate.
- Avoid relapse into illiteracy among the neo-literate by introducing advanced primers.
- Encourage Women's Groups to run literacy programmes especially in rural areas since literacy in slums has improved due to the involvement of NGOs.
- Identify local solutions to retain girls in education since free education and free transport to schools has attracted them in increasing numbers. The problems faced by girls are likely to vary over regions, communities and castes.
- Strengthen by training the role of women in Panchayat Raj since, despite familial and societal constraints, they are already beginning to decide on important developmental issues of their villages.
- Conduct field research to estimate if free education has improved the schooling of girls and if so, by what extent.
- Gender sensitise elected members of all democratic institutions and ensure egalitarian power sharing between women and men in positions of power such as chairpersons of the standing committees, sarpanches, presidents of panchayat samities and mayor, making local self-governance more effective.
- Generate desegregated data and publish them regularly to enable trend analysis on
  - Female foeticide according to land holding, occupation, education and social groups in both rural and urban areas.
  - District-wise infant, neo-natal and under five mortality.
  - Registration of births and deaths.
  - Morbidity data from hospital records.
  - Occupational and mental health data.
  - Female Life Insurance Policyholders and beneficiaries.
  - School enrolment of girls/boys by private schools versus municipal and other local body schools.
  - District-wise wage rates for different jobs.
  - Data on membership of Mahila Mandals.
  - District level data on female heads of households and women deserted by their husbands.
  - District-wise data on crimes against women and convictions.

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# GROWTH AND HUMAN DEVELOPMENT





## Growth and Human Development

**M**aharashtra is ranked amongst the various high-income States but in terms of Human Development Index (HDI), its rank is lower since the high per capita incomes have not resulted in corresponding levels of human development attainment. There are several anomalies and distortions, chief among them being high levels of poverty, wide inequalities in the distribution of assets and consumer expenditure, high levels of unemployment and regional disparities.

When examining the links between economic development and human development, three aspects are to be considered: literacy and mean years spent in schooling, infant mortality rate and anthropometric measurements like weight and height as indicators for education, health and nutrition. Using them, a Human Development Index (HDI) can be constructed for Maharashtra. With that the level and pattern of human development attainment across its districts can be visualised.

On these crucial counts, where do Maharashtra and its districts stand?

There have been notable achievements. Literacy rates have improved, from a mere 39.13 per cent in 1971 to 77.27 per cent in 2001, the pace of progress having been rapid in the last decade. If Mumbai region had 87 per cent of its population literate, most others had attained around 80 per cent literacy. Nandurbar district with 56 per cent had the lowest levels of literacy but that is substantially higher than the State average of 1961, all of which points out to the gains made as well as to what needs to be done. Disparate levels across Maharashtra are a historic legacy.

Mean years of schooling—that is the time spent

for basic education, is a realistic indicator of the stock of human capital. The attainment on this indicator varies from 6.36 years in Sindhudurg to 2.87 for Jalna. The State average, for 1999–2000 was 4.970. On the other hand, dropout rate was higher at 53 per cent at Standard X than for Standard VII, which was 31 per cent across Maharashtra. Non-enrolment and dropout decisions are compelled by several factors including lower incomes and the need to work at home in rural areas. More children belonging to lower incomes are not enrolled in urban areas compared to the rural.

In a population where more than half the population consumes less than 90 per cent of the normal minimum daily calorific value, the children are quite undernourished, reflecting its impact on their physique with its attendant implication to their general health. This has been highlighted in the earlier chapters.

The Human Development Index (HDI) is also a tool for measuring the non-income dimensions of the quality of life and is a composite index of three basic components of development—longevity, knowledge and income. Longevity is represented as life expectancy at birth and is indicative of the capability of leading a long healthy life. Educational attainment, a capability for acquiring knowledge for communicating and community participation, is the weighted average of two educational stock variables—adult literacy and the average number of years spent in schooling; adult literacy getting a  $\frac{2}{3}$ rd weightage and schooling  $\frac{1}{3}$ rd.

This HDI however does not enable the tracking of the improvement or change in the indicators of attainment. Therefore, attainment Indices in Education and Health using the indicators of literacy



Table 8.1

## Human Development Indicators—Education

No. Districts		Literacy Rate (Age 7+) 2001		Mean Years of Schooling (Std. 1–7) 1999–2000		Dropout Rate (per 100) 1998–99			
		%	Rank	Years	Rank	7 Std.	Rank	10 Std.	Rank
1	2	3	4	5	6	7	8	9	10
1	Mumbai	86.82	2	5.852	6	19	4	53	13
2	Mumbai (Subn.)	87.14	1	5.852	7	19	5	53	14
3	Thane	81.00	6	5.460	13	34	16	62	24
4	Raigad	77.32	13	5.313	17	43	27	66	31
5	Ratnagiri	75.35	19	4.921	20	19	6	57	19
6	Sindhudurg	80.52	8	6.356	1	15	2	34	1
7	Nashik	75.10	20	4.151	28	23	8	64	27
8	Dhule	72.08	26	3.836	30	45	28	56	16
9	Nandurbar	56.06	35	3.836	31	45	29	56	17
10	Jalgaon	76.06	17	5.131	19	29	10	50	11
11	Ahmednagar	75.82	18	4.550	22	41	26	60	22
12	Pune	80.78	7	5.740	9	30	13	50	12
13	Satara	78.52	12	5.425	14	18	3	42	4
14	Sangli	76.70	15	5.600	10	31	14	60	23
15	Solapur	71.50	27	4.228	26	38	24	65	30
16	Kolhapur	77.23	14	5.768	8	11	1	41	3
17	Aurangabad	73.63	23	4.207	27	37	22	57	20
18	Jalna	64.52	33	2.870	35	51	34	73	35
19	Parbhani	67.04	31	3.017	33	47	31	72	33
20	Hingoli	66.86	32	3.017	34	47	32	72	34
21	Beed	68.48	30	4.116	29	45	30	62	25
22	Nanded	68.52	29	3.507	32	53	35	69	32
23	Osmanabad	70.24	28	4.249	25	40	25	62	26
24	Latur	72.34	25	5.306	18	35	20	59	21
25	Buldhana	76.14	16	4.305	24	37	23	64	28
26	Akola	81.77	5	5.355	15	34	17	49	9
27	Washim	74.03	22	5.355	16	34	18	49	10
28	Amaravati	82.96	4	5.586	11	35	21	56	18
29	Yavatmal	74.06	21	4.263	23	47	33	64	29
30	Wardha	80.50	9	6.258	3	31	15	46	6
31	Nagpur	84.18	3	6.286	2	19	7	36	2
32	Bhandara	78.68	10	6.104	4	29	11	47	7
33	Gondiya	78.65	11	6.104	5	29	12	47	8
34	Chandrapur	73.07	24	5.551	12	27	9	45	5
35	Gadchiroli	60.29	34	4.872	21	34	19	54	15
	Maharashtra	77.27	–	4.970	–	31	–	53	–

Sources: Column 3: S.K. Biswas, (2001); Columns 7 and 9: Data provided by the Directorate of Education, Pune.

and infant mortality rate have been constructed. The methodology and data sources are outlined in the appendices, but it has to be noted that health has been represented by IMR, as data for life expectancy is not available at the district level.

The HDI using the UNDP methodology for the year 2000 highlights the backwardness of the districts of Marathwada and Vidarbha, the results presented in Table 8.2, which gives the HDI value of 0.58 for the State. Only districts of Mumbai—both city and suburban—and Thane, as well as Raigad, Sindhudurg, Pune, Satara, Sangli, Kolhapur and Nagpur being above the State average. Significantly, Nagpur alone is from Vidarbha's districts and none of the Marathwada districts, it may be noted, are in the list of above-the-State's average attainment.

If western parts, including Konkan, are more developed than those on its eastern side, there are certain districts within the western region, which has their own backwardness. The tribal district of Dhule as well as Nandurbar has low values and ranking. Nandurbar's HDI value is a mere 0.28. Marathwada's districts are the most backward among all districts of Maharashtra with values lower than the State average. For Jalna, it is 0.27 and Aurangabad, with 0.57 comes barely close to the State average. None of the other Marathwada district has a value higher than 0.47. With regard to Vidarbha, it must be said none of them is above or on par with the State average with the exception of Nagpur which has a HDI value of 0.71 and amongst all districts, is ranked fifth. Amravati and Wardha are relatively more developed of Vidarbha districts with HDI values of 0.50 and 0.49 and are ranked correspondingly at 15 and 16 respectively. Gadchiroli, despite being in the second quartile in terms of per capita district domestic product, has the lowest HDI value of 0.21, just a notch below Yavatmal's 0.22.

Districts in the Mumbai region occupy the top slot but the difference in value for them and the rest is stark. This phenomenon is explained partly by the high per capita income of Mumbai city. It also conveys the existence of a sharp divergence between the social sector attainments of metropolitan Mumbai

Table 8.2

**Human Development Index and Per Capita District Domestic Product**

No. Districts		HDI		PCDDP (Rs)	
		2000	Rank	1998–99	Rank
1	2	3	4	(At Current Prices)	5
					6
1	Mumbai	1.00	2	45471	1
2	Mumbai (Subn.)	1.00	1	45471	2
3	Thane	0.82	3	33200	3
4	Raigad	0.70	6	30364	4
5	Ratnagiri	0.44	22	14354	25
6	Sindhudurg	0.60	9	20016	10
7	Nashik	0.51	13	20636	8
8	Dhule	0.36	30	11789	34
9	Nandurbar	0.28	32	11789	35
10	Jalgaon	0.50	14	16449	17
11	Ahmednagar	0.57	11	15251	22
12	Pune	0.76	4	28000	6
13	Satara	0.59	10	15563	20
14	Sangli	0.68	7	20411	9
15	Solapur	0.48	17	18097	13
16	Kolhapur	0.64	8	20925	7
17	Aurangabad	0.57	12	19365	11
18	Jalna	0.27	33	12047	33
19	Parbhani	0.43	24	13827	26
20	Hingoli	0.43	25	13827	27
21	Beed	0.47	18	15303	21
22	Nanded	0.37	29	13068	31
23	Osmanabad	0.38	28	12905	32
24	Latur	0.47	19	13677	29
25	Buldhana	0.41	27	13823	28
26	Akola	0.44	23	16069	18
27	Washim	0.36	31	16069	19
28	Amravati	0.50	15	17168	14
29	Yavatmal	0.22	34	13382	30
30	Wardha	0.49	16	16952	16
31	Nagpur	0.71	5	28878	5
32	Bhandara	0.46	20	14467	23
33	Gondiya	0.46	21	14467	24
34	Chandrapur	0.41	26	19325	12
35	Gadchiroli	0.21	35	17140	15
	Maharashtra	0.58	–	22763	–

Source: PCDDP: Directorate of Economics and Statistics, 2001, District Domestic Product of Maharashtra 1993–94 to 1998–99, Government of Maharashtra, Mumbai.

and the rest of Maharashtra. The HDI values ascribed to various districts highlights the regional disparities, which persist despite being dealt with by the Government of Maharashtra through financial allocations for investment to remedy the imbalances. The high value for Mumbai has in fact pushed up the HDI for the State.

There is a strong link between the HDI rankings of the districts and the per capita district domestic product (PCDDP) for 1998–99 at current prices. Those districts, which have a higher value on HDI also rank higher on the PCDDP, except for Satara, which is an exception with a high value on HDI but lower in rank for PCDDP. Those with lower HDI are correspondingly lower on the PCDDP.

### Achievement Indices

HDI measures absolute deprivation and improvement in the performance level of the lowest performing segment will cause the index for all others to drop. Similar is the effect when a top performer improves its performance. To avoid *j*'s performance to affect *i*'s performance, it is necessary to set the maximum value *M*, at a level, which is higher than the maximum recorded value. *M* may be set at a level, which represents an unattainable target (see Annexure). Similarly, *m*, the minimum value may be set at the actual minimum value attained historically or some smaller number. This procedure also corrects other biases connected with linear measures of deprivation.

These indices are important in yet another sense. They measure non-income dimensions of development. There are conceptual problems in including income along with attainment in education and health. Income represents purchasing power over goods and services and therefore, needs to be considered as a *means* or an *input* towards human development attainment. Literacy, mean years of schooling, life expectancy and infant mortality are *final outcomes* of the processes of development.

Conceptual problems apart, there are empirical problems in estimating incomes at the district level.

Annexure I has listed these difficulties. Achievement Indices thus evaluate a district's performance vis-à-vis other districts without including the income dimension.

More important, the HDI measures attainment at a point in time. It is often necessary and interesting to study the pattern of improvement or decline in human development attainment over time. Hence, Achievement Indices have been constructed for the districts of Maharashtra using literacy for 2001 to represent education and infant mortality rate in 1991 to represent health (as data for 2001 is not available yet.) The Improvement Index, IIL, measures the increase in literacy rate in the period 1991 to 2001 and the Improvement Index, IIMR, estimates the decline in infant mortality rate in the period 1981 to 1991.

Achievement indices in literacy rates (AIL) at the district have been estimated, using source data from the Census documents and adjusted to make districts comparable across 1991 and 2001 (see Annexure III for methodology). For 1991, it varied between 0.8056 for Mumbai and 0.3654 for Gadchiroli. All Marathwada districts fall below the State average of 0.6097. For 2001, the AIL continued to be at top for Mumbai at 0.8536 and Nandurbar was lowest at 0.5118 but the positions of Marathwada remained the same with all them recording lower values than the State average of 0.7474.

The Improvement Index (IIL) for 1991–2001 indicated Akola to have the first rank, followed by Amaravati, Nagpur, Bhandara, Gondiya and Dhule. The districts with low value IIL were Nandurbar, Sindhudurg, Washim, the two Mumbai districts and Gadchiroli. Those with high ranks in AIL in 1991 continued with better performance in 2001 (Table 8.3). These included the districts of Mumbai districts, Nagpur, Pune, Amaravati, Wardha and Thane. At the lower end are Dhule, Nandurbar, Jalna, Parbhani, Hingoli, Beed, Nanded and Gadchiroli.

Over 1991–2001, no major changes appear in the rankings of the districts with respect to achievement in literacy except Sindhudurg and Akola. The

districts that have higher levels of literacy in an earlier period continue to maintain a lead over districts with lower levels of literacy 'Initial conditions' appear to have given certain districts a 'lead' over other districts that have had a lower starting point. The IIL has indicated that in terms of change over the period 1991–2001, Akola has the highest

rank on the index and Sindhudurg, which achieved rapid improvement in 1981–1991, has slowed down the pace of improvement in 1991–2001.

### Health: 1981–1991

In the case of health, Achievement Indices for Infant

Table 8.3

### Achievement and Improvement Indices for Literacy (1991–2001)

No. Districts		AIL 1991	Rank	AIL 2001	Rank	IIL 1991–2001	Rank
1	2	3	4	5	6	7	8
1	Mumbai	0.8056	1	0.8536	2	0.0630	32
2	Mumbai (Subn.)	0.8056	2	0.8571	1	0.0685	31
3	Thane	0.6616	8	0.7889	6	0.1049	14
4	Raigad	0.5994	16	0.7480	13	0.1030	17
5	Ratnagiri	0.5856	17	0.7261	19	0.0921	24
6	Sindhudurg	0.7312	3	0.7836	8	0.0481	34
7	Nashik	0.5814	19	0.7233	20	0.0920	25
8	Dhule	0.4580	28	0.6898	26	0.1240	3
9	Nandurbar	0.4580	29	0.5118	35	0.0232	35
10	Jalgaon	0.6033	15	0.7340	17	0.0888	28
11	Ahmednagar	0.5670	21	0.7313	18	0.1061	10
12	Pune	0.6783	5	0.7864	7	0.0910	27
13	Satara	0.6297	10	0.7613	12	0.0976	19
14	Sangli	0.5846	18	0.7411	15	0.1051	13
15	Solapur	0.5154	25	0.6833	27	0.0945	22
16	Kolhapur	0.6327	9	0.7470	14	0.0829	29
17	Aurangabad	0.5220	24	0.7070	23	0.1088	8
18	Jalna	0.4028	34	0.6058	33	0.0923	23
19	Parbhani	0.4176	32	0.6338	31	0.1031	16
20	Hingoli	0.4176	33	0.6318	32	0.1019	18
21	Beed	0.4424	30	0.6498	30	0.1033	15
22	Nanded	0.4241	31	0.6502	29	0.1108	7
23	Osmanabad	0.4919	27	0.6693	28	0.0955	21
24	Latur	0.5063	26	0.6927	25	0.1053	11
25	Buldhana	0.5743	20	0.7349	16	0.1052	12
26	Akola	0.6203	11	0.7974	5	0.1396	1
27	Washim	0.6203	12	0.7114	22	0.0610	33
28	Amaravati	0.6673	6	0.8107	4	0.1253	2
29	Yavatmal	0.5329	23	0.7118	21	0.1073	9
30	Wardha	0.6661	7	0.7833	9	0.0961	20
31	Nagpur	0.7071	4	0.8242	3	0.1135	4
32	Bhandara	0.6077	13	0.7631	10	0.1121	5
33	Gondiya	0.6077	14	0.7628	11	0.1118	6
34	Chandrapur	0.5490	22	0.7008	24	0.0912	26
35	Gadchiroli	0.3654	35	0.5588	34	0.0808	30
	Maharashtra	0.6097	–	0.7474	–	0.0968	–

Notes: (i) AIL:  $g(100 - 10) - g(100 - x)/g(100 - 10)$  where  $x$  = actual value.

(ii) IIL:  $\ln(100 - x_1) - \ln(100 - x_2)/\ln(100 - 10)$  where  $x_1$  and  $x_2$  are actual values in 1991 and 2001 respectively.

Source: Nanda (1991), Biswas (2001).

Mortality (AIIMR) have been constructed. (See Annexure IV for the methodology).

The results of AIIMR 1981 gave Mumbai the highest value at 0.6554 followed by Pune, Sangli, Kolhapur and Ahmednagar all in Western Maharashtra. All the districts of Vidarbha except Nagpur registered the lower values. The AIIMR 1991 has Mumbai in the top position again at 0.7908 followed by Sangli, Thane, and Ahmednagar in Western Maharashtra and Parbhani in Marathwada. At the lower end were the districts of Vidarbha except Nagpur. All of them registered values lower than the State average of 0.4756 including Nagpur. The Improvement Index in IMR (IIMR) for the period 1981–1991 shows Parbhani to have the highest rank followed by Bhandara, Thane, Raigad and Chandrapur. Of these, one district belonged to Marathwada, two to Vidarbha and two to Western Maharashtra.

Districts that performed well in 1981 were Mumbai, Pune, Sangli, Kolhapur, Ahmednagar, Ratnagiri, Sindhudurg, Satara, Solapur and Beed. Districts which are lower down in ranks were Gadchiroli, Chandrapur, Bhandara, Yavatmal, Wardha, Buldhana, Amaravati, Raigad, Akola and Parbhani.

Most districts that fared well in reducing infant mortality belonged to Konkan and Western Maharashtra. The poor performers belonged to the Vidarbha region in 1981. In 1991, the districts that improved their ranks substantially include Thane, Raigad, Aurangabad, Parbhani, Nanded and Bhandara. The ranks of the districts in Vidarbha do not show any marked improvement. However, the Improvement Indices, which show the improvement over 1981–1991, indicted several districts of Vidarbha to have reduced IMR substantially. These include Bhandara, Chandrapur, Buldhana and Wardha. Parbhani in Marathwada has achieved the highest rank in the Improvement Indices in IMR (IIMR), which is noteworthy.

To sum up, Mumbai appears to have the highest rank with respect to achievement in both literacy and infant mortality rates. Greater Mumbai, Thane,

Pune, Satara and Kolhapur appear to have the highest rank with respect to AIL 2001 and AIIMR 1991. All districts of Marathwada, except Aurangabad, record low ranks on the AIL 2001 and all the districts of Vidarbha, except Nagpur record low ranks on the AIIMR 1991.

The Achievement Indices thus reveal that the districts of Marathwada with the exception of Aurangabad lag behind in education as indicated by literacy rates. The Achievement Indices for health as represented by infant mortality rates indicate that the districts of Vidarbha with the exception of Nagpur lag behind in health.

Several districts of Marathwada such as Aurangabad, Parbhani, Hingoli and Beed have high ranks on the AIIMR while several district of Vidarbha such as Akola, Amaravati, Wardha, Nagpur, Bhandara and Gondiya have high ranks on the AIL.

Thus when the Achievement Indices, AIL and AIIMR, are compared with the HDI it may be inferred that the ranks of Aurangabad, Parbhani, Hingoli and Beed in Marathwada are lower on the HDI because of low status on literacy despite high ranks on the AIIMR. The opposite is the case with the districts of Vidarbha. Akola, Amaravati, Wardha, Bhandara and Gondiya record low or medium ranks on the HDI despite high ranks on the AIL 2001 due to lower ranks on the AIIMR 1991.

Comparison of Achievement Indices at two different time points indicates progress or improvement. These have been called the Improvement Indices. The Improvement Index for literacy, IIL, reveals Dhule, Nanded and Latur to have higher ranks in terms of change over time. This is despite their low status on the Achievement Index, AIL 2001. Similarly, the Improvement Index for IMR, IIMR, indicates Bhandara and Gondiya to have substantially reduced infant mortality rates over 1981 to 1991 despite high infant mortality rates in 1991.

Nutrition is yet another key element in determining the level of attainment of a population but for that, district-wise data is not available. The

extent of malnutrition and undernutrition needs to be studied since they render an individual susceptible to infections resulting in higher mortality. The problem of undernourishment in Maharashtra is acute; the State has several districts with a sizeable tribal population.

The measures of nutrition are in terms of height-for-age, weight-for-age and height-for-weight. The measures weight-for-age and height-for-age have been reported to indicate undernourishment and

stunting respectively for the districts of Maharashtra. There are two measures of deprivation viz. values exceeding-3SD indicating severe deprivation and those exceeding-2SD indicating mild malnutrition; Maharashtra has a high percentage of undernourished children. The weight-for-age indicator using the measure-3SD shows that the percentage of undernourished children below two years of age is high in Ratnagiri in Konkan, Ahmednagar and Pune in Western Maharashtra, Aurangabad and Beed in Marathwada, and districts of Vidarbha including Buldhana,

Table 8.4

**Achievement and Improvement Indices for IMR (1981–1991)**

No.	Districts	AIIMR 1981	Rank	AIIMR 1991	Rank	IIMR 1981–1991	Rank
1	2	3	4	5	6	7	8
1	Mumbai	0.6554	1	0.7908	1	0.1354	29
2	Thane	0.2885	14	0.6838	3	0.3953	3
3	Raigad	0.1633	23	0.5459	12	0.3825	4
4	Ratnagiri	0.3386	6	0.4697	19	0.1311	30
5	Sindhudurg	0.3386	7	0.5000	15	0.1614	26
6	Nashik	0.2929	13	0.4466	22	0.1537	28
7	Dhule	0.2841	16	0.4816	18	0.1975	22
8	Jalgaon	0.2094	18	0.4938	17	0.2844	15
9	Ahmednagar	0.3433	5	0.6740	4	0.3307	6
10	Pune	0.4245	2	0.6292	7	0.2047	20
11	Satara	0.3199	8	0.6377	6	0.3178	10
12	Sangli	0.4191	3	0.7378	2	0.3187	9
13	Solapur	0.3199	9	0.5127	13	0.1927	23
14	Kolhapur	0.3675	4	0.6047	9	0.2372	19
15	Aurangabad	0.2885	15	0.5969	10	0.3084	13
16	Jalna	0.1822	20	0.4638	21	0.2816	16
17	Parbhani	0.1822	21	0.6464	5	0.4642	1
18	Beed	0.3199	10	0.6292	8	0.3093	12
19	Nanded	0.1977	19	0.5127	14	0.3150	11
20	Osmanabad	0.3108	11	0.5000	16	0.1892	24
21	Latur	0.3108	12	0.5892	11	0.2784	17
22	Buldhana	0.1056	25	0.4299	24	0.3243	7
23	Akola	0.1784	22	0.3339	28	0.1554	27
24	Amaravati	0.1633	24	0.3675	26	0.2042	21
25	Yavatmal	0.0679	27	0.2335	30	0.1656	25
26	Wardha	0.0780	26	0.3979	25	0.3199	8
27	Nagpur	0.2254	17	0.4697	20	0.2443	18
28	Bhandara	0.0285	28	0.4354	23	0.4069	2
29	Chandrapur	0.0253	29	0.3577	27	0.3324	5
30	Gadchiroli	0.0253	30	0.3108	29	0.2855	14
	Maharashtra	0.2542	–	0.4756	–	0.2214	–

Notes: (i)  $AIMR = 1 - ((X - 30)/(190 - 30))^{0.5}$ .

(ii)  $IIMR = AIMR(t) - AIMR(t - 1)$ .

(iii) IMR = Number of deaths from birth to age one per thousand live births.

Source: Registrar General of India (1997).

Amaravati, Nagpur, Bhandara, Chandrapur and Gadchiroli.

In the case of the height-for-age indicator, the measure 3SD indicated incidence of severe stunting in most districts of Marathwada and Vidarbha region, Jalgaon, Ahmednagar and Pune of Western Maharashtra. Data for Dhule and Nandurbar has not been reported but a similar situation may be assumed to exist.

Concepts of prevention of communicable diseases and nutritional deficiencies and the use of modern medicine have been identified as important factors leading to higher incidence of under- and malnourishment and mortality. Health workers working amongst the tribals trace the non-utilisation of health services by the tribal population to traditional beliefs and superstitions. Cultural alienation of health care providers including doctors, nurses, MPWs, and the alien design and culture of health care institutions like hospitals and PHCs have been cited other impediments to increased utilisation of health care facilities.

### Social Factors

Societal considerations need to be taken into account while discussing human development attainment. Social environment is an important factor, which fosters attainment in education and health particularly for women. It is difficult to measure

social attitudes. Hence, female literacy has been taken to be an indicator of social attitude towards women. As the status of women improves, the age of marriage is likely to be postponed. Hence, this has also been considered as an indicator of progress of the society or modernisation.

### Conclusions

- There are sharp disparities across regions, districts and between the urban and rural areas, between Mumbai and rest of Maharashtra in the attainments in education, health and nutrition.
- Marathwada districts are the most backward among all districts of Maharashtra and score low on the HDI.
- Since the pattern of growth of income has implications for HDI, the growth of the secondary sector and rise in employment in non-agricultural enterprises are needed to further the structural changes. Also, economic growth has to be dispersed.
- Significance of physical infrastructure cannot be underplayed. Access to amenities as well as social infrastructure in the form of schools and health-care facilities are crucial to ensure their optimal use. Access to schools and health facilities emerged as important since average distance between villages is high in Maharashtra. So is the case with healthcare facilities.

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## The Way Forward

**M**aharashtra is indeed a deeply contrasting and widely divided world—one of unprecedented opulence and the other of remarkable deprivation, destitution and gender oppression. That too, in an age and era, when democracy, participatory government, concepts of human rights, globalisation and a border-less world are very much part of the prevailing intellectual rhetoric. Alongside, there exists a ‘real’ world wherein is widespread hunger, persistence of poverty, worsening of our environment, violation of elementary freedom as well as basic liberties. This potent combination results in increasing inequalities and widening of the gap between sections of the people in our society, placing the sustainability of our economic and social lives in peril.

Overcoming this malaise has to be the central part of the ‘effort’ of any society. Maharashtra, with its historic background of seeking to foster equity among all sections of society, is no exception. Understanding, assessing and evaluating these issues and suggesting measures to improve and enrich the lives of the people is the subject matter of this Human Development Report.

Human development is defined as expanding the range of people’s choices. The poor are poor because their set of capabilities is small—*not because of what they don’t have, but because of what they can’t do*. Well-being is possible by things people can do rather than things people have. If their set of capabilities grows larger, people can do more of the things they would like to do. Economic development expands the choice people have over their capabilities. It has a meaning only when the resources and access to the gains crafted from them are evenly spread across the population. It is the pattern of growth, not just growth in itself or by

itself that is important for human development; it has to enable improvement in the productive capability of the people and their participation in value added activities thereby increasing their purchasing power.

The Human Development Index (HDI) of a society/community/state/country considers three important factors—health, education and access to resources—to arrive at the well-being index. These three factors and their significant influence on the nature and type of capabilities that availability and accessibility of these factors induce in its people *to lead the kind of life they want to live*, have been subject to adequate intellectual inquiry to qualify for inclusion in the HDI.

The ‘instrumental’ freedoms to promote human development are economic facilities and opportunities, political freedoms, social opportunities, transparency guarantees and protective security. The societal arrangements to facilitate the process of human development and bring value to the lives of all people are the social system, the State, the market and exchange mechanism, the legal system, political system, the media and public interest groups and civil society organisations. The interplay between the requirement of freedoms and the societal arrangements are at best known for their complexity and unpredictability.

Fundamentally, human assets such as capacity for basic labour, skills and good health can be programmed through a directed effort. Similarly natural assets such as land can be distributed, physical and financial assets can be created. These are relatively achievable, as it is in the interest of the ‘privileged’ to foster the development of these assets for their own relative prosperity but for some others,



it is the possibility of the 'unintended consequences' of such interventions. However, social assets, such as network of contacts and reciprocal obligations that can be called on in time of need, and political influence over resources, is a separate category by itself. To tackle this aspect the instrumental freedoms and the societal arrangements have to have a causal effect to generate the 'even-chance' for all people.

Every human development report must stir consciences and should further our progress towards a *humane* society.

Maharashtra indeed has a lot to be proud of, and these aspects have found emphatic mention in the report. Do we rest on our laurels or do we spur ourselves to greater action and glory? To decide on this question, an exercise of this kind has to be constructively critical. This is also to enable us to pause and reflect on achieved progress. It is the moment to measure the 'unintended consequences' and limit their negative impact. It is time for stock-taking *followed* by midway course correction before designing a new blueprint.

What is worrisome is the flip side of Maharashtra, a 'progressive' State.

Maharashtra produces less food grains than its requirements. It is endowed with poor quality soil. Only 14.5 per cent of the net sown area of approximately 17.75 million hectares are irrigated. Agriculture is vulnerable to drought and directly affects the lives of the farm labour and small landowners and in many ways, impacts the entire population across the State. This translates to migration to urban areas in times of distress that eventuates to a permanent shift, with unintended consequences. There is further aggravation because of a dominance of a cash crop preference, which guzzle irrigation waters disproportionate to the area under cultivation depriving any scope for equity. The other dimension to this is that water users have been asked to band together, on the strength of successes of voluntary enterprise of the people, to ensure equitable distribution to all legitimate claimants of their share to

it. In most irrigation projects, originally set out cropping patterns in the command areas have not been either adhered to or ensured; that could have promoted some equity in distribution.

The logical and natural outcome to provide focus on water conservation schemes in areas where irrigation projects exist and where none are ever likely to be built since farming has to be made more reliable and productive. If this is achieved, the community of farm-dependent people become 'stable population' in that they have lesser incentive to migrate and can benefit from the fruits of location-based development that governments normally are relatively better at doing.

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Slums are a proliferating reality. If such large numbers of people choose living in slums in inhuman conditions, there must be a compelling reason for their choice or the lack of it. As usual, the unintended consequences of the proliferation of slums and their unhygienic environment are what condition the life and health of the entire population there.

Urbanisation, it is believed, leads to a demographic behaviour that aims at improvement of the

individual and the family in areas of health, education and employment. These in turn are supposed to lead to a fast decline in fertility and mortality. Nevertheless, as seen in the previous pages of this document, it has not always been the case.

The urban population of Maharashtra is continually growing as a percentage of the total population. It is currently 42.4 per cent of the total population. This trend in urbanisation coupled with the fact that a third of the population of urban Maharashtra is forced to live in slums negates the supposedly positive effects of urbanisation. An unhygienic and congested environment as evidenced in slums is not conducive for improvement in health standards of the population. The supposed improvement in education and employment opportunities of urban areas should be interpreted carefully. Why do people migrate to urban areas and live in slums? Is it out of choice? If employment and incomes were possible at their respective places would one migrate, at all, to urban areas and live in slums? The question begs an answer!

Apparently, efforts at urbanisation, which is actually the effect of people's movement towards a well ordered, prosperous and egalitarian living cannot be mutually exclusive of attempts to improve the quality of life and choices in the ruralscapes. If not in simultaneous action, it requires to be attended to in tandem.

As regards the supposed decline of fertility, the data is self-evident. The fertility rate for rural Maharashtra is 2.74, it is marginally lower at 2.69 in the case of urban slum areas and it is significantly lower at 1.39 for urban non-slum areas in Maharashtra.

Maharashtra is the second most populous State in India, next only to Uttar Pradesh. Its population growth rate is alarmingly poised to well above the country's exponential rate of 1.93 per cent. This large increase in population together with urban migration into slum settlements, is potentially disastrous combination. That overcrowded 'slums' do not contribute to improving the human development index but also pull down developmental efforts in other areas due

to the unintended consequences appear to be an inevitable outcome.

Maharashtra has the second highest per capita State Domestic Product, among 15 major States but its spatial distribution is uneven. The per capita net SDP was Rs 20,644, higher by about 40 per cent of the all-India average of Rs 14,712 in 1998–99. However, a major portion of Maharashtra is poor in terms of income as the distribution of income is skewed with Dhule district being the poorest and having a per capita SDP of Rs 11,789; in contrast Mumbai districts are the richest with Rs 45,471, almost four times the level of Dhule. There is also substantial incidence of poverty as measured by cereal consumption and calorie intake. Majority of the rural and urban population is undernourished and this is reflected in turn in their poor health.

The skewed development offers a rich and prismatic insight into why Maharashtra is where it is today. Its growth is urban-centric, has a non-agricultural focus and has had its visible consequences. It is obvious to anyone that this trend has to be reversed, or in the least, the highly undesirable side effects are contained.

In health, as in other sectors, there is improvement in the life expectancy at birth; however, there are still many areas of serious concern. The infant mortality rate (IMR) for the State, though declining is still high at 48 per thousand with many districts recording IMR above 100 per thousand. Female IMR in Yavatmal district is particularly high at 126 per thousand. Gender preference in favour of a male child, considering it an asset unlike a daughter who is a liability, prevails. Laws to check pre-natal gender-selection has had little impact while its effective enforcement could lead to not only gender-equity within the family to start with but reflect positively on the health of the mother whose need to bear children frequently would be reduced.

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Mumbai, the biggest urban centre in the country and the cradle of slums has a phenomenally high occurrence of diseases ascribable to unhygienic living conditions, poor sanitation, congestion and overcrowding. Prevalence of diseases preventable by immunisation was also the highest in Greater Mumbai. Malaria, Tuberculosis and now the spectre of Leptosporosis and other communicable and infectious diseases, is looming large, not in cities but across Maharashtra. About half the cases of AIDS were reported in Greater Mumbai. 3.5 per cent of the population in Maharashtra have either partial or complete blindness.

Though women enjoy a higher life expectancy, their nutritional status falls below the prescribed standard of 2,700 calories per day. Inadequate nutrition is a cause of serious anaemia. Overall, nearly three-fourth of the children between the age of 3–6 have some level of anaemia. Many girls are married before the legally marriageable age of 18 years. The median age for the first and the last birth in Maharashtra is 18.8 years and 28.1 years respectively. Child bearing begins early and ends early leaving the mother impoverished in body and mind. Weak mothers produce weak babies and they in turn become weak mothers. Poor nutritional standard and neglect of the female child result in poor health leading to susceptibility to diseases. Healthcare facilities, both reliable and accessible, especially through spending in the public domain, with improved facilities and skills in the rural areas is urgently called for.

Early motherhood has the unintended consequence of neglect of formal education and skills required to seek gainful employment. On an average though girls fare academically better, only 65 girls complete higher secondary examination in comparison to 100 boys. This pattern gradually decreases the domain of women in decision-making. In politics and social sphere there are some illustrious women there in their own right, on the strength of their own capabilities but they are more an excep-

tion rather than the general rule. At the cutting edge of grassroots democracy in the local bodies, the rule by proxy is often in vogue where a woman gets her right by law but is traduced upon by convention, which only uses her as a proxy for a male, usually a relation. Such males together with the elected woman do represent a socio-political phenomenon, which possibly is inevitable but which needs to be changed quickly with education and empowerment.

In understanding the different aspects of the evil of gender inequality, we have to look beyond the predicament of women and examine the problem created for men as well as the asymmetric treatment of women. These causal connections can be very significant. Gender empowerment of women tends to reduce child neglect and mortality, cut down fertility, overcrowding, and more generally, broaden social concern and care. The extensive penalties of neglecting women's interests rebound on men with a vengeance.

Gender inequality hurts the interests of not only the girls and grown up women, but also boys and men, through biological connections and through societal connections.

The various policy implications and options have been highlighted at the end of each of the various chapters. Apart from a wise ruler who laid the foundations of a *sensitive* attitude towards people and their concerns, Maharashtra also has had a large roster of social thinkers and doers like Jyotiba Phule, Shahu Maharaj, father-son duo of the Karves who pioneered social reforms and took steps towards transformation of our society. They gave women a position and role in the progress of our society by recognising their entitlements and enabling its acquisition. This message has, however, sadly forgotten and lost. This needs to be revived.

As stated in the beginning, the 'instrumental' freedoms to promote human development and the societal arrangements to facilitate the process must be enhanced and strengthened to bring about the desired outcome. The unintended consequences of the outcome is required to be monitored continuously and

corrected for which even data bases have to be improved and kept in the public domain for a liberal society to measure the march of the society.

Given the realities on the ground, and societal experience of the way resources, both human and material are deployed and used, several areas need focused attention. They are:

#### 1. Managing water resources better by

- Conservation of water for drinking and irrigation
- Optimising water shares to lands, increasing equity in distribution
- Increasing the proportion of irrigation of arable land

#### 2. Stabilising income potential from agricultural operation by

- Provision of farm inputs to improve productivity of the lands and predictability of incomes
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#### 3. Empowering women by

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  - Improve their health
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- Punishing female foeticide
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- Targeting improvement of women's health to

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#### 4. Targeting compulsory elementary education for all children by

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#### 5. Improving healthcare by

- Extending further the medicare facilities, especially in the rural areas
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- Making such facilities more accessible
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#### 6. Enhancing

- Nutritional status of that slice of population which consumes now less than 90 per cent of calorific value per day per head
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## The Way Forward

**M**aharashtra is indeed a deeply contrasting and widely divided world—one of unprecedented opulence and the other of remarkable deprivation, destitution and gender oppression. That too, in an age and era, when democracy, participatory government, concepts of human rights, globalisation and a border-less world are very much part of the prevailing intellectual rhetoric. Alongside, there exists a ‘real’ world wherein is widespread hunger, persistence of poverty, worsening of our environment, violation of elementary freedom as well as basic liberties. This potent combination results in increasing inequalities and widening of the gap between sections of the people in our society, placing the sustainability of our economic and social lives in peril.

Overcoming this malaise has to be the central part of the ‘effort’ of any society. Maharashtra, with its historic background of seeking to foster equity among all sections of society, is no exception. Understanding, assessing and evaluating these issues and suggesting measures to improve and enrich the lives of the people is the subject matter of this Human Development Report.

Human development is defined as expanding the range of people’s choices. The poor are poor because their set of capabilities is small—*not because of what they don’t have, but because of what they can’t do*. Well-being is possible by things people can do rather than things people have. If their set of capabilities grows larger, people can do more of the things they would like to do. Economic development expands the choice people have over their capabilities. It has a meaning only when the resources and access to the gains crafted from them are evenly spread across the population. It is the pattern of growth, not just growth in itself or by

itself that is important for human development; it has to enable improvement in the productive capability of the people and their participation in value added activities thereby increasing their purchasing power.

The Human Development Index (HDI) of a society/community/state/country considers three important factors—health, education and access to resources—to arrive at the well-being index. These three factors and their significant influence on the nature and type of capabilities that availability and accessibility of these factors induce in its people *to lead the kind of life they want to live*, have been subject to adequate intellectual inquiry to qualify for inclusion in the HDI.

The ‘instrumental’ freedoms to promote human development are economic facilities and opportunities, political freedoms, social opportunities, transparency guarantees and protective security. The societal arrangements to facilitate the process of human development and bring value to the lives of all people are the social system, the State, the market and exchange mechanism, the legal system, political system, the media and public interest groups and civil society organisations. The interplay between the requirement of freedoms and the societal arrangements are at best known for their complexity and unpredictability.

Fundamentally, human assets such as capacity for basic labour, skills and good health can be programmed through a directed effort. Similarly natural assets such as land can be distributed, physical and financial assets can be created. These are relatively achievable, as it is in the interest of the ‘privileged’ to foster the development of these assets for their own relative prosperity but for some others,

it is the possibility of the 'unintended consequences' of such interventions. However, social assets, such as network of contacts and reciprocal obligations that can be called on in time of need, and political influence over resources, is a separate category by itself. To tackle this aspect the instrumental freedoms and the societal arrangements have to have a causal effect to generate the 'even-chance' for all people.

Every human development report must stir consciences and should further our progress towards a *humane* society.

Maharashtra indeed has a lot to be proud of, and these aspects have found emphatic mention in the report. Do we rest on our laurels or do we spur ourselves to greater action and glory? To decide on this question, an exercise of this kind has to be constructively critical. This is also to enable us to pause and reflect on achieved progress. It is the moment to measure the 'unintended consequences' and limit their negative impact. It is time for stock-taking *followed* by midway course correction before designing a new blueprint.

What is worrisome is the flip side of Maharashtra, a 'progressive' State.

Maharashtra produces less food grains than its requirements. It is endowed with poor quality soil. Only 14.5 per cent of the net sown area of approximately 17.75 million hectares are irrigated. Agriculture is vulnerable to drought and directly affects the lives of the farm labour and small landowners and in many ways, impacts the entire population across the State. This translates to migration to urban areas in times of distress that eventuates to a permanent shift, with unintended consequences. There is further aggravation because of a dominance of a cash crop preference, which guzzle irrigation waters disproportionate to the area under cultivation depriving any scope for equity. The other dimension to this is that water users have been asked to band together, on the strength of successes of voluntary enterprise of the people, to ensure equitable distribution to all legitimate claimants of their share to

it. In most irrigation projects, originally set out cropping patterns in the command areas have not been either adhered to or ensured; that could have promoted some equity in distribution.

The logical and natural outcome to provide focus on water conservation schemes in areas where irrigation projects exist and where none are ever likely to be built since farming has to be made more reliable and productive. If this is achieved, the community of farm-dependent people become 'stable population' in that they have lesser incentive to migrate and can benefit from the fruits of location-based development that governments normally are relatively better at doing.

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# Glossary

## A. Definitions of Statistical Terms

1. **Crude Birth Rate (CBR)**  
$$= \frac{\text{Number of live births in a given year}}{\text{Mid year population}} \times 1000$$
2. **Crude Death Rate (CDR)**  
$$= \frac{\text{Number of deaths in a given year}}{\text{Mid year population}} \times 1000$$
3. **Natural Increase Rate** is the difference between Crude Birth Rate and Crude Death Rate.
4. **Net Migration Rate** is the difference between the In-migration rate and Out-migration rate. It is equal to population growth rate per annum minus the natural increase rate per annum.
5. **Infant Mortality Rate (IMR)** per 1000 live births—Probability of dying between birth and before completing one year.
6. **Neonatal Mortality** per 1000 live births—Probability of dying within one month after birth.
7. **Post Neonatal Mortality** per 1000 live births—Probability of dying after one month after birth but before completing one year.
8. **Age Specific Fertility Rate (ASFR)** is defined as the number of live births in a specific age-group of women per thousand female population of that age-group.
9. **Total Fertility Rate (TFR)** per woman in a given year is average number of children born to a woman during the reproductive span (age 15–49 years) provided she experiences the current age-specific fertility rates.
10. **General Fertility Rate (GFR)** is defined as the number of live births per 1000 women in the reproductive age-group (15–49 years) in a given year.
11. **Maternal Mortality Rate (MMR)** reported annual number of deaths of women from pregnancy related causes per lakh live births.
12. **Sex Ratio** is number of females per thousand males.
13. **Life Expectancy at Birth (LEB)** is the average number of years expected to be lived at the time of birth if current mortality trends were to continue.
14. **Literate** is a person who can read and write with understanding in any language is considered as literate and a person who can merely read but cannot write is taken to be as **illiterate**.
15. **Gross Enrolment Ratio** is the number of students enrolled in a level of education whether or not they belong to the relevant age-group for that level as a percentage of population in the relevant age-group for that level.
16. **Net Enrolment Ratio** is the number of students enrolled in a level of education who belongs in the relevant age-group as a percentage of the population in the age-group.
17. **Labour Force** is defined as the total persons working (or employed) and seeking or available for work (or unemployed).
18. **Work Force** is persons engaged in any gainful activity are considered 'workers' (or employed). They are the persons assigned any one or more of the nine activity categories under the first broad activity category i.e. 'working or employed'.
19. **Workforce Participation Rate** is defined as the proportion of workers in the population.
20. Employed and Unemployed according to usual status approach, (with a reference period of 365 days) adopted by National Sample Survey Organisation (NSSO) a person is considered as **working** or **employed** if he/she is engaged relatively for a longer time, during the reference period of last 365 days in any one or more of the work activities. He/she is considered as **seeking or available** for work or **unemployed** if he/she is not working but is either seeking or available for work for a relatively longer period of the specified reference period.
21. **Principal Status** is the status of activity on which a person spent relatively longer time of the preceding 365 days prior to the date of survey was considered the principal usual activity status of the person.
22. **Subsidiary Status** is a 'non-worker' (on the basis of principal usual activity status) who pursued some gainful activity in a subsidiary capacity was considered to be usually working in a subsidiary capacity.
23. **Human Expenditure Ratio (HDR)**—It is a percentage of State Income devoted to human priority concerns viz. elementary education, preventive health care, water supply, sanitation and nutrition.

## B. Acronyms

AIDS	Acquired Immuno-deficiency Syndrome	HPI	Human Poverty Index
AIL	Achievement Indices in Literacy	ICDS	Integrated Child Development Scheme
AAM	Age at Marriage	IIL	Improvement Indices in Literacy
ASDR	Age Specific Death Rate	IIMR	Improvement Indices in Infant Mortality Rate
ANC	Ante Natal Care	IIPS	International Institute for Population Sciences
ANM	Auxiliary Nurses, Midwife	IMR	Infant Mortality Rate
ARI	Acute Respiratory Infection	IRD	Integrated Rural Development Programme
BMC	Brihanmumbai Municipal Corporation	IUD	Intra Uterine Device
BMI	Body Mass Index	LEB	Life Expectancy at Birth
CAG	Comptroller and Auditor General	MCACS	Maharashtra State Aids Control Society
CBR	Crude Birth Rate	MCH	Maternal and Child Health
CDR	Crude Death Rate	MMR	Maternal Mortality Rate
CBHI	Central Bureau of Health Intelligence	MPW	Multi Purpose Worker
CEHAT	Centre for Enquiry into Health and Allied Themes	NACP	National Aids Control Programme
CHC	Community Health Centre	NCAER	National Council for Applied Economic Research
CPIAL	Consumer Price Index for Agricultural Labourers	NFHS	National Family Health Survey
CPIIW	Consumer Price Index for Industrial Workers	NGO	Non-Governmental Organisation
CPINM	Consumer Price Index for Non-manual Employees	NLEP	National Leprosy Eradication Programme
CPR	Couple Protection Rate	NMEP	National Malaria Eradication Programme
CSSM	Child Survival and Safe Motherhood	NSDP	Net State Domestic Product
CSO	Central Statistical Organisation	NSS	National Sample Survey
CSR	Child Sex Ratio	NSSO	National Sample Survey Organisation
CSW	Commercial Sex Worker	OPD	Out Patient Department
DDP	District Domestic Product	ORT	Oral Rehydration Therapy
DPAP	Drought Prone Area Programme	PCDDP	Per Capita District Domestic Product
DPEP	District Primary Education Programme	PDS	Public Distribution System
DWCRA	Development of Women and Children in Rural Areas	PEEP	Primary Education Enhancement Programme
ECG	Electro Cardio Graph	PHC	Primary Health Centre
EGS	Employment Guarantee Scheme	PHU	Primary Health Unit
EPI	Expanded Immunisation Programme	PNDT	Pre-Natal Diagnostic Techniques
ESIS	Employees State Insurance Scheme	PRC	Population Research Centre
FRU	First Stage Referral Units	RCH	Reproductive and Child Health
GDI	Gender Development Index	RGI	Registrar General, India
GDP	Gross Domestic Product	RNTCP	Revised National Tuberculosis Control Programme
GEM	Gender Empowerment Measure	RTI	Reproductive Tract Infection
GNP	Gross Net Product	SAP	Structural Adjustment Programme
GoI	Government of India	SDP	State Domestic Product
GoM	Government of Maharashtra	SRB	Sex Ratio at Birth
HDI	Human Development Index	SRS	Sample Registration Scheme
HDR	Human Development Report	STD	Sexually Transmitted Diseases
HER	Human Expenditure Ratio	STI	Sexually Transmitted Infections
HFA	Health For All	TB	Tuberculosis
HP	Health Post	TFR	Total Fertility Rate
		TRYSEM	Training for Rural Youth for Self Employment
		UNDP	United Nations Development Programme
		WPR	Work Participation Rate
		ZP	Zilla Parishad

## I District Domestic Product

### 1. Concept

For purposes of problem assessment and policy design, ideally the concept of income with reference to any given geographical unit/economic agent should be defined in terms of final accrual. However, for reasons like lack of information on income flows across regions or among economic agents, estimation of such a concept is not possible. For instance, we have only estimates of state domestic product originating within its geographical boundaries. For similar reasons, the concept that can be estimated at the district level may be defined by the 'income originating' approach. That is, it may be defined as the final bill of goods and services produced within the physical boundaries of the given district. In other words, the concept is restricted to a documentation of production activities.

Of course, there is the problem of locating activities for what are really supra-regional sectors like banking and insurance, central government administration, and transport and communication. It may not be possible to take into account the net income flows to local residents from migrant relatives outside and vice versa. Similarly, a district may be rich in terms of endowment of natural resources like mineral and forest resources and hence, may generate substantial royalty income to the state. By this measure, the district may be rich. However, the district could be really poor and backward in terms of actual income accruing to the residents. For reasons like these, estimates of DDP may not reflect the real economic endowment levels of the local residents and hence, welfare consequences of the growth process or different policy measure.

However, in the chapter on Human Development Indices, the Per Capita District Domestic Product is on the basis of details available for 30 districts of Maharashtra. Since the new districts are mere territorial divisions of existing districts, the following adjustments have been made. The Per Capita District Domestic Product (PCDDP) of Mumbai has been taken to be that of Mumbai Suburban, PCDDP of Dhule to be that of Nandurbar, PCDDP of Akola to be that of Washim, PCDDP of Parbhani to be that of Hingoli, and the PCDDP of Bhandara to be that of Gondiya.

The PCDDP has been made available by the Directorate of Economics and Statistics (2001) and has been estimated

using the 'income originating approach'. District income has been defined as the sum of economic value of all goods and services produced within the district, irrespective of the fact whether persons inside the district own the income or outside. In view of the open character of the economic activities and the absence of data relating to inter-district flows, the 'income-originating' approach has been adopted though the 'income-accruing' approach would have been preferred.

Availability of data presents problems, as data for primary and registered manufacturing sector are available. However data for other sectors is not only scanty; often, it is unreliable. Hence, wherever basic data was available the methodology used at the state level has been followed for the preparation of estimates at the district level. In other cases, depending upon the availability of the data, relevant indicators have been utilised to allocate the state level estimates to the districts.

Hence, the district domestic product may be looked upon as mere approximation to district income.

### 2. Methods of Estimation: A Survey

This section provides a brief profile of the methodology used in the estimation of district-wise domestic products in Maharashtra and their implications for a study like the one on regional aspects of human development.

District domestic products are estimated by methods similar to that used by the Central Statistical Organisation for the national accounts: that is, a combination of production and income approaches (and also expenditure approach (e.g. construction) in a few cases). The state government departments have sought to generate estimates, to the extent possible, with reference to direct estimates available from the districts. For this purpose, output originating within district boundaries is classified into two categories:

- (a) Product which can be estimated using direct information for the district; and
- (b) product that has to be estimated using indirect indicators.

In spite of their best efforts, the states do not seem to have really succeeded in sticking to this approach. Instead, they seem to have resorted to different combinations of these two approaches depending upon data availability.

For purposes of estimation, the entire district economy is classified into the following categories:

- (1) Primary sector covering agriculture, forestry, fisheries, mining and quarrying;
- (2) Secondary sector including manufacturing (both registered and unregistered) construction, electricity, gas and water supply; and
- (3) the Tertiary sector covering railways, transport and storage, communication, trade, hotels and restaurant, banking and insurance, real estate, ownership of dwelling and business services, public administration and other services.

Production approach is used largely for the primary and the registered manufacturing sectors.

#### *Agriculture:*

The value added in agriculture in a given district is estimated on the basis of estimates of prices and output available for the district concerned. For crops for which such details are not available, but only estimates of area cultivated are available, estimates of output are made on the basis of pilot/ad hoc surveys or state-level estimates are allocated across districts as per the area estimates. However, estimates of value added are derived after deducting estimates of input costs interpolated from state aggregates. Given the information constraint, this is the best option. However, the estimates interpolated from state-aggregates disregard the heterogeneity across districts. Hence, they would suffer from the shortcoming that they do not consider inter-regional variations in yield and price levels.

#### *Livestock:*

The state aggregates by type of livestock product are distributed across districts with reference to the livestock population concerned. Ideally one should consider allowing for differences in cattle type and yield, estimates of district-wise livestock population for different years with appropriate adjustments for inter-district migration of cattle over years.

#### *Forestry and Logging:*

The estimates are based largely on district-wise estimates of value of output available with the Forest Department and Forest Development Corporation. Value added is obtained by netting out.

#### *Fishing:*

Estimates for this sector are based on district-wise estimates of production and prices.

#### *Mining and Quarrying:*

Estimates of output and prices are from districts. Input and cost estimates are from the state level. However, interpolated cost estimates would distort the picture on income generated in a district.

#### *Manufacturing (registered):*

Value added estimates by districts are derived from the schedules of the Annual Survey of Industries.

#### *Manufacturing (unregistered):*

State-level estimates are allocated with reference to workforce numbers. This approach ignores inter-district differences in yield and price levels.

#### *Construction:*

State estimates obtained by the expenditure approach are allocated with reference to workforce. There is a difference between workforce size by residence and that by place of work. DDP estimates for construction by district made with reference to workforce size by residence are likely to be affected by variations in the difference caused by daily, seasonal and even permanent migration of workforce.

#### *Electricity, Gas and Water Supply:*

For electricity value added from private companies is allotted to respective districts and value added by public institutions is distributed to districts on the basis of workforce. In respect of water works, estimates are allotted on the basis of workforce only. However, in the case of gas units estimates are distributed to districts on the basis of biogas plants in the district.

#### *Railways:*

The income from railways is allotted with reference to the workforce.

#### *Transport by Other Means and Storage:*

The district-wise estimates of income from mechanised road transport in the public, private and unorganised sectors on the basis of district-wise workforce in the respective sub-sectors. A similar procedure is adopted for estimates of income from storage.

#### *Communication:*

The income is allocated across districts with reference to workforce estimates.

#### *Trade, Hotels and Restaurants:*

District-wise estimates are made with reference to workforce in Maharashtra State.

#### *Real Estate, Ownership of Dwellings and Business Services:*

The allocation is made with reference to workforce estimates.

#### *Public Administration:*

The workforce estimates are used as the relevant indicator.

#### *Other Services:*

State level estimates are allocated with reference to workforce in the districts.

The valuation of district-wise quantities at state-level prices would convey a misleading information about the real endowment levels across districts. Allocation of state aggregates with reference to workforce estimates or similar district specific indicator would not account for inter-regional heterogeneity and consequent income difference.

## II National Sample Survey Data on Consumer Expenditure

The National Sample Survey (NSS) is a socio-economic enquiry on a nationwide scale. It is carried out in the form of annual/biannual rounds. For this purpose, the National Sample Survey Organisation (NSSO) has its own field offices spread all over the country. Since 1954 the State Governments also carry out such surveys independently using the same sample design and schedules as those of the NSSO. The State samples are generally as large as those of the NSSO. These two field operations constitute what are called the state and central samples of the NSS. The idea is to increase the sample size by pooling the central and state sample results so as to permit disaggregated estimates at the regional level. Accordingly, the estimates of poverty at the state/national level presented in this study are based on the central sample results and those at the district level are based on pooled central and state sample results.

The NSS collects information on various socio-economic aspects of households; household consumption is one of the most important. The data are collected on the basis of household interviews. For this purpose, the households are selected based on simple random sampling. The sample design is stratified and two-stage in both rural and urban sectors. Rural sector is stratified with respect to homogeneity of population density, cropping pattern, etc. while the urban sector with respect to population sizes of towns and cities. Villages are the first stage units in the rural sector; urban blocks in the urban sector. The households constitute the second stage units in both the sectors.

The NSS concept of consumer expenditure includes all the non-productive expenditure incurred by the households. It includes consumption out of home-grown produce, gifts, loans etc. Data on perquisites like food in the employer's house are not included in the NSS estimates of consumption of the employee households. This must have resulted in underestimation of food grain consumption by the employee households who in the rural sector are generally poor landless households. In-kind wage payments, including prepared food at the employer's home, used to be quite common

during the fifties and sixties. There has been increasing landlessness and actualisation of labour since the mid-seventies, which must have resulted in increasing market dependence of the poor. Such progressive market dependence of the landless poor must have involved increasing monetisation of the labour market and hence, also that of their consumption. As a result, the extent of underestimation of food grains consumption by the poorer households and hence, overestimation of poverty must have declined.

The NSS distinguishes between consumption from home-grown stock and those from market purchases; it values the former at farm harvest prices and the latter at market retail prices. Poverty estimates based on such data using conventional statistical deflators may be valid in a stationary context. The estimates lose their meaning and relevance when the context itself undergoes a change, that is, during a period of monetisation and urbanisation as found in Maharashtra (Suryanarayana, 2000).

Another major shortcoming, which has adversely affected the comparability of the NSS estimates of consumer expenditure and hence, estimates of poverty for the year 1999–2000 with those for the earlier years, is the change in the reference period used for data collection. The NSSO generally collects consumer expenditure data for a reference period of thirty days. But during the 55th Round (1999–2000), the NSSO collected data (i) on food, pan, tobacco and intoxicants for two different reference periods of seven days and 30 days; (ii) on remaining items for a reference period of 365 days from the same households. This change in methodology could have affected the comparability of the NSS estimates for the following reason. Earlier experiments by the NSSO on reference periods have shown that estimates of per capita expenditure on food obtained from one week as a reference period are about 30 per cent higher than those obtained with one month as a reference period. Conversely, the estimates of non-food expenditure for a reference period of 365 days are found to be lower (GoI, 2001c; p. 194). Their combined effect must have led to an overestimation of consumption by about 18 per cent. This is one reason that has to be kept in mind while comparing the results for the year 1999–2000 with those for the earlier years and interpreting the changes in them.

## III Expert Group Methodology on Poverty Line

The Planning Commission constituted an Expert Group in 1989 to reconsider methodological and computational aspects of poverty estimation. The Expert Group was to look into the methodology used to estimate incidence of poverty

at the national as well as state levels. According to the Expert Group 'the poverty line defines on an average the level of per capita per day expenditure which meets a normative minimum standard of living, deemed reasonable. Calorie intake is but one of the ingredients, though an important one, of the minimum standard, but the poverty line makes an allowance for non-food consumption needs as well on the basis of observed consumer behaviour. The Group recognises the desirability of defining the normative standard for non-food consumption and its constituents, without reference to actual behaviour, but until this is done, the existing basis seems to be the most practical and reasonable. It is this consumption basket that constitutes the minimum standard for defining the boundary between the poor and the non-poor (GoI, 1993; p.30). The Expert Group has recommended that the all-India poverty lines and norms suggested by the Task Force (GoI, 1979) on minimum needs and effective consumption demand be the basis for further estimates of poverty.

To begin with, state-specific poverty lines for the base year 1973–74 are to be estimated applying the same national living standard norm uniformly to all states. This is to ensure comparability of poverty estimates across states and over time. For this purpose the 'standardised commodity basket corresponding to the poverty line at the national level' is to be valued at state specific prices in the base year. This is done using Fisher's cost of living index estimated to capture inter-state price differentials with respect to all-India by Chatterjee and Bhattacharya (1974) for the rural sector and those by Minhas, Kansal and Jain (1992) for the urban sector. The state-sector-specific poverty lines for subsequent years are to be updated by their respective consumer price indices obtained as weighted state-sector-specific commodity group price indices where the weighting diagram is given by the corresponding all-India consumption basket for the base year poverty line. The Expert Group has recommended the use of published commodity group price indices from the Consumer Price Index for Agricultural Labourers (CPIAL) for the rural and a simple average of 'suitably weighted' price indices from Consumer Price Index for Industrial Workers (CPIIW) and Consumer Price Index for Non-manual Employees (CPINM) for the urban sector for purposes of consumer price indices. Given the state-specific poverty lines, the corresponding poverty ratios are to be estimated relying 'exclusively' on the NSS size distribution of per capita consumption expenditure. And all-India poverty ratios are to be obtained as 'a ratio of the aggregate number of State-wise poor persons to the total all-India (rural and urban) population' (GoI, 1993; p. 34).

The poverty lines obtained for the rural and urban sectors of Maharashtra and all-India as per the Expert Group methodology are as follows:

*(per capita per month in Rs)*

Year	Maharashtra		All-India	
	Rural	Urban	Rural	Urban
1973–74	50.47	58.64	49.63	56.96
1977–78	58.07	74.64	56.84	72.50
1983	88.24	127.23	89.45	117.64
1987–88	115.61	184.45	115.43	165.58
1993–94	194.94	328.56	205.84	281.35
1999–00	318.63	539.71	327.56	454.11

Source: Gol (1993, 2000 and 2001b).

## IV Methodology for the Construction of the HDI

A country's deprivation with respect to each of the indicators is calculated using the following formula:

$$I_{(i,j)} = [(\max_j X_{(i,j)} - X_{(i,j)}) / \text{Range}_{(i)}]$$

Where:

$I_{(i,j)}$  is the deprivation indicator for the  $j$ th country with respect to the  $i$ th variable

$\max_j X_{(i,j)}$  is the maximum of  $X_{(i,j)}$  across countries

$X_{(i,j)}$  is the value of the  $i$ th variable for the  $j$ th country

$\text{Range}_{(i)}$  is the range of the  $i$ th variable across countries

In the next step, an average deprivation indicator  $I_{(j)}$  for each country is calculated by taking a simple average of the deprivation indicators:

$$I_{(j)} = \sum_{i=1}^3 I_{(i,j)} / 3$$

The HDI for the  $j$ th country is then derived as (1– average deprivation index)

$$\text{i.e. HDI}_{(j)} = 1 - I_{(j)}$$

Using this methodology a Human Development Index has been developed for the districts of Maharashtra. The indicators used have been literacy and mean years of schooling to represent attainment in education. The weights attached have been two-thirds and one-third respectively. Attainment in health has been represented by the indicator infant mortality rate, as data for life expectancy at the district level is not available. Income has been represented by the Per Capita District Domestic Product at constant prices (1993–94) for the year 1998–99.

### Data Sources

Data for literacy levels for 2001 has been taken from the

census documents and mean years of schooling have been calculated using the data on enrolment made available by the Directorate of Economics and Statistics. Data on infant mortality rates at the district level for 1991 is available in the Registrar General of India (1997), which is based on the Census Data. The Directorate of Economics and Statistics (2001) provided the Income Data for the districts.

## V Methodology for the Construction of Achievement Indices in Education

The achievement indices and improvement indices constructed by Kakwani (1993) enables the comparison of achievements (levels) and improvements (changes) in the standards of living as indicated by literacy rates or infant mortality rates across regions. These indicators have asymptotic limits reflecting physical and biological maxima. Also, the relationship between achievement and values of the indicators is not linear, as an incremental improvement at a higher limit of achievement would represent higher levels of achievement than similar incremental improvements from a lower base. Hence, the observed differences in the levels of the social indicators do not reflect their true achievement. An axiomatic approach is used to derive an achievement index, which is normalised to lie between 0 and 1. The achievement function derived accommodates the view that an improvement in the standard of living of a country when it is already at a higher level signifies an achievement greater than that of another with an equal increase from a lower base. The improvement index is then derived as the difference between the values of the achievement index in two time-periods. Since the achievement function is defined as a univariate function of the indicators of well being, the improvement index so obtained is additive.

This methodology is used to measure the levels and improvements in literacy rates across the districts of Maharashtra over the period 1991–2001. Let  $x$  be the literacy rate of a country which has  $m$  and  $M$  as lower and upper bounds, respectively.  $M$  is an asymptotic limit in the sense that  $x$  never reaches this value, although it may come arbitrarily close to  $M$ . Let  $m$  be the lower bound for  $x$ . Kakwani (1993) attempts to define an appropriate index  $Q(x_1, x_2, m, M)$  to measure a country's improvement when the value of the indicator  $x$  moves  $x_1$  to  $x_2$ . Suppose  $f(x, m, M)$  is the achievement function which is equal to 0 if  $x = m$  and 1 if  $x$  approaches  $M$ ; thus it lies between 0 and 1. An achievement index that lies between 0 and 1 is specified as:

$$f(x, m, M) = g(M - m) - g(M - x)/g(M - m)$$

$f(x, m, M)$  will lie between 0 and 1 for all  $g(x)$

provided  $g'(x) > 0$ ,  $g(x) > 0$  for  $x > 0$  and  $\lim_{x \rightarrow M} g(x) = 0$ , as  $x$  approaches 0.

As the literacy rate increases, a further increase must be regarded as a greater achievement than an equal increase at lower levels of literacy rate. In other words,  $g(x)$  must be a concave function. Kakwani (1993) uses a concave function which has been used by Atkinson and is given by  $g(x) = \text{Ln}(x)$  for  $e = 1$  which provides a class of achievement functions.

$$f(x, m, M)$$

$$= \text{Ln}(M - m) - \text{Ln}(M - x)/\text{Ln}(M - m) \text{ for } e = 1$$

where  $\text{Ln}$  stands for natural logarithm. The achievement function is zero when  $x = m$  and it approaches unity when  $x$  approaches  $M$ . Kakwani states that it is customary to define  $\text{Ln}(x)$  approaching to zero as  $x$  approaches zero. However, in the data set of this paper, this functional form does not give results. Hence the functional form of achievement index in literacy (AIL) used in this paper is

$$\text{AIL}(x) = g(M - m) - g(M - x)/g(M - m)$$

or

$$1 - [g(M - x)/g(M - m)]$$

where  $g(\cdot)$  is a positive, increasing function with  $\lim_{x \rightarrow 0} g(x) = 0$  as  $x$  approaches 0.

The improvement index for literacy (IIL) is defined as:

$$\text{IIL} = \text{Ln}(M - x_1) - \text{Ln}(M - x_2)/\text{Ln}(M - m)$$

The Achievement Indices using  $M$  to be 100 and  $m$  to be 10 for 1991 and 2001 and the Improvement Index for 1991–2001 have been presented in Table 8.3.

## VI Methodology for the Construction of Achievement Indices in Health

With reference to infant mortality rates, the functional form as given by Kakwani (1993) does not give adequate results. Hence, the functional form as given by Datta et al (1997) has been used. The achievement index for infant mortality (AIIMR) is defined as

$$\text{AIIMR}(x) = 1 - ((x - m)/(M - m))^{0.5}$$

Where  $x$  = the actual infant mortality rate,  $m$  and  $M$  as the lower and upper bounds. The maximum and minimum values have been taken to be larger and smaller, respectively than the actual extreme points observed during the reference period. The improvement index is the difference between the achievement indices in the two time-periods

$$\text{IIMR} = \text{AIMR}_{(t)} - \text{AIMR}_{(t-1)}$$

This implies that higher the Index value, better is the performance in reducing the IMR.

The Achievement Indices for 1981 and 1991, using the lower and the upper limit as 30 and 180, and the Improvement Index for 1981–1991 are presented in Table 8.4.



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## Key Indicators

Table 1

### Interstate Comparison of Key Indicators

Sr. No.	State	Crude Birth Rate 1999			Crude Death Rate 1999			Total Fertility Rate (TFR) 1997-98			Couple Protected 31-3-2001*
		Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	
1	2	3	4	5	6	7	8	9	10	11	12
1	Andhra Pradesh	21.7	22.0	20.6	8.2	9.0	5.7	2.4	2.6	2.1	5.8
2	Assam	27.0	28.0	18.9	9.7	10.1	6.2	3.2	3.4	2.0	15.2
3	Bihar	31.5	32.4	25.2	8.9	9.2	7.1	4.3	4.5	3.1	21.2
4	Gujarat	25.4	27.0	22.0	7.9	8.8	5.9	3.0	3.3	2.5	52.8
5	Haryana	26.8	27.7	23.3	7.7	8.0	6.4	3.3	3.5	2.7	49.4
6	Karnataka	22.3	23.7	19.2	7.7	8.7	5.5	2.4	2.6	2.0	56.3
7	Kerala	18.0	18.1	17.7	6.4	6.5	6.3	1.8	1.8	1.9	39.6
8	Madhya Pradesh	31.1	33.1	23.6	10.4	11.1	7.6	3.9	4.1	2.6	45.9
9	Maharashtra	21.1	21.6	20.3	7.5	8.7	5.6	2.7	2.9	2.3	49.3
10	Orissa	24.1	24.6	20.3	10.7	11.1	7.1	2.9	3.0	2.3	37.6
11	Punjab	21.5	22.5	18.6	7.4	7.9	6.1	2.6	2.7	2.1	65.5
12	Rajasthan	31.1	32.5	24.9	8.4	8.9	6.4	4.1	4.4	3.0	36.1
13	Tamil Nadu	19.3	19.8	18.2	8.0	8.7	6.6	2.0	2.1	1.8	50.4
14	Uttar Pradesh	32.8	33.9	27.5	10.5	11.1	8.1	4.6	4.8	3.6	38.0
15	West Bengal	20.7	22.9	14.3	7.1	7.2	6.8	2.4	2.7	1.7	32.2
	India	26.1	27.6	20.8	8.7	9.4	6.3	3.2	3.5	2.4	46.2

\* Provisional figures.

Source: (1) Cols 3 to 8: SRS Bulletin, April 2001.

(2) Cols 9 to 11: Statistical Report, 1998 of SRS.

(3) Col. 12: Department of Family Welfare, Government of India, New Delhi.

## Key Indicators

Table 1 (continued)

### Interstate Comparison of Key Indicators

Sr. No.	State	Infant Mortality Rate– 1999			Neo-Natal Mortality Rate–1999	Child Mortality Rate–1999	Percentage of Births Order (4th and Higher)	Medical Attention at Birth	
		Total	Urban	Rural				Institut- ional	Trained Professionals
1	2	13	14	15	16	17	18	19	20
1	Andhra Pradesh	66	75	37	46	18.1	7.8	42.8	27.7
2	Assam	76	79	36	51	27.5	25.9	21.1	16.1
3	Bihar	63	64	55	44	22.9	33.0	15.4	19.4
4	Gujarat	63	70	45	44	19.6	16.8	36.3	38.3
5	Haryana	68	70	58	41	22.4	19.5	24.7	68.1
6	Karnataka	58	69	24	42	16.7	12.9	49.2	26.0
7	Kerala	14	14	16	11	3.6	5.1	97.1	1.8
8	Madhya Pradesh	90	96	55	61	32.6	25.8	14.7	22.1
9	Maharashtra	48	58	31	29	12.7	15.5	47.8	20.6
10	Orissa	97	100	65	60	29.0	21.4	13.9	24.0
11	Punjab	53	57	39	33	16.8	13.4	12.7	86.1
12	Rajasthan	81	85	59	50	27.7	26.4	8.0	26.3
13	Tamil Nadu	52	58	39	35	13.0	6.9	64.8	21.5
14	Uttar Pradesh	84	88	66	52	29.6	36.4	7.8	42.0
15	West Bengal	52	55	40	30	15.0	16.1	36.2	13.9
	India	70	75	44	45	22.5	23.9	25.4	28.8

Source: Cols 13 to 15: SRS Bulletin, April 2001.

Cols 16 to 20: Statistical Report, 1998, SRS.

## Key Indicators

Table 1 (continued)

### Interstate Comparison of Key Indicators

Sr. No.	State	Life Expectancy at Birth—1997		Mean Age at Marriage—1998–99		Literacy Rate—2001			Adult Literacy Rate 1991
		Male	Female	Male	Female	Total	Male	Female	
1	2	21	22	23	24	25	26	27	28
1	Andhra Pradesh	61.2	63.5	23.9	18.3	61.11	70.85	51.17	38.5
2	Assam	56.6	57.1	27.8	21.7	64.28	71.93	56.03	49.6
3	Bihar	60.4	58.4	23.8	18.8	47.53	60.32	33.57	24.8
4	Gujarat	60.9	62.9	24.4	20.2	69.97	80.50	58.60	55.9
5	Haryana	63.7	64.6	24.6	19.8	68.59	79.25	56.31	48.9
6	Karnataka	61.6	64.9	26.7	20.1	67.04	76.29	57.45	50.9
7	Kerala	70.4	75.9	27.9	21.5	90.92	94.20	87.86	88.0
8	Madhya Pradesh	55.6	55.2	23.5	18.9	64.11	76.80	50.28	40.0
9	Maharashtra	64.1	66.6	25.3	19.8	77.27	86.27	67.51	60.4
10	Orissa	57.1	57.0	26.6	21.2	63.61	75.95	50.97	46.1
11	Punjab	66.7	68.8	25.7	22.1	69.95	75.63	63.55	52.9
12	Rajasthan	59.1	60.1	22.3	18.3	61.03	76.46	44.34	35.5
13	Tamil Nadu	63.2	65.1	26.6	20.9	73.47	82.33	64.55	57.0
14	Uttar Pradesh	58.1	56.9	23.3	19.0	57.36	70.23	42.98	38.6
15	West Bengal	62.2	63.6	26.2	19.6	69.22	77.58	60.22	56.2
	India	60.4	61.8	24.9	19.7	65.38	75.85	54.16	48.5

Source: (1) Cols 21 & 22: Statistical Report, 1998 of SRS.

(2) Cols 23 & 24: NFHS-2, 1998–99.

(3) Cols 25 to 28: Population Census, 2001.

## Key Indicators

Table 1 (concluded)

### Interstate Comparison of Key Indicators

Sr. No.	State	Per Capita NSDP 1998–99	Percentage of Households with Amenities–1991					
			Electricity	Safe Drinking Water	Toilets	Pucca	Semi-Pucca Katcha	
1	2	29	30	31	32	33	34	35
1	Andhra Pradesh	13853	46.30	55.08	18.40	38.41	22.58	39.01
2	Assam	8,700	18.74	45.86	37.43	14.62	15.16	70.22
3	Bihar	5,923	12.57	58.76	11.75	30.18	36.00	33.82
4	Gujarat	18,792	65.93	69.78	30.69	56.93	39.01	4.06
5	Haryana	19,773	70.35	74.32	22.45	50.14	35.73	14.13
6	Karnataka	15,889	52.47	71.68	24.13	42.55	40.90	16.55
7	Kerala	17,756	48.43	18.89	51.28	55.97	19.13	24.90
8	Madhya Pradesh	10,147	43.30	53.51	15.07	30.97	64.87	4.66
9	Maharashtra	20,644	69.4	68.49	29.56	57.93	32.24	9.83
10	Orissa	8,719	23.54	39.07	9.81	18.71	22.06	59.23
11	Punjab	20,834	82.31	92.74	33.18	76.97	11.07	11.96
12	Rajasthan	11,045	35.03	58.96	19.57	56.13	22.94	20.93
13	Tamil Nadu	17,525	54.74	67.42	23.13	45.54	18.03	36.44
14	Uttar Pradesh	9,261	21.91	62.24	18.02	41.03	30.34	28.63
15	West Bengal	12,961	32.90	81.98	31.51	32.61	29.38	38.01
	India	14,712	42.37	62.30	23.70	41.61	30.95	27.44

Source: (1) Col. 29: Directorate of Economics and Statistics of respective States and C.S.O., New Delhi.

(2) Cols 30 to 35: Population Census–1991.

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## Population

Table 2

District-wise Population of Persons Males and Females and  
Decadal Growth Rate for the Years 1961, 1971, 1981, 1991 and 2001

Sr. No.	District	Total Population								
		1961			1971			1981		
		Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai #	4152056	2496176	1655880	5970575	3478378	2492197	8243405	4652646	3590759
2	Thane	1652678	861117	791561	2281664	1204855	1076809	3351562	1779645	1571917
3	Raigad	1058855	514534	544321	1263003	614278	648725	1486452	726512	759940
4	Ratnagiri	1827203	816804	1010399	1990583	886995	1103588	2111311	943395	1167916
5	Sindhudurg	-	-	-	-	-	-	-	-	-
6	Nashik	1855246	953531	901715	2369221	1221419	1147802	2991739	1544532	1447207
7	Dhule	1351236	686942	664294	1662181	849601	812580	2050294	1043140	1007154
8	Nandurbar	-	-	-	-	-	-	-	-	-
9	Jalgaon	1765047	902001	863046	2123121	1089840	1033281	2618274	1342963	1275311
10	Ahmednagar	1775969	905313	870656	2269117	1160205	1108912	2708309	1382632	1325677
11	Pune	2466880	1268710	1198170	3178029	1643864	1534165	4164470	2150088	2014382
12	Satara	1430105	698555	731550	1727376	848092	879284	2038677	989122	1049555
13	Sangli	1230716	628754	601962	1539820	790165	749655	1831212	931187	900025
14	Solapur	1860119	960655	899464	2253840	1165927	1087913	2610144	1344147	1265997
15	Kolhapur	1596493	811693	784800	2048049	1045474	1002575	2506330	1273881	1232449
16	Aurangabad	1532341	781635	750706	1971006	1014481	956525	2433420	1249632	1183788
17	Jalna	-	-	-	-	-	-	-	-	-
18	Parbhani	1206236	611787	594449	1506771	768662	738109	1829378	929638	899740
19	Hingoli	-	-	-	-	-	-	-	-	-
20	Beed	1001466	508827	492639	1286121	658204	627917	1486030	755971	730059
21	Nanded	1079674	547974	531700	1397762	714820	682942	1749334	892417	856917
22	Osmanabad	1477656	758235	719421	1896687	975484	921203	2230620	1139197	1091423
23	Latur	-	-	-	-	-	-	-	-	-
24	Buldhana	1059698	541026	518672	1262978	646303	616675	1508777	770833	737944
25	Akola	1189354	613832	575522	1501478	773569	727909	1826952	937824	889128
26	Washim	-	-	-	-	-	-	-	-	-
27	Amaravati	1232780	637861	594919	1541209	798073	743136	1861410	961564	899846
28	Yavatmal	1098470	557010	541460	1423677	726072	697605	1737423	887236	850187
29	Wardha	634277	322894	311383	779562	400040	379522	926618	475696	450922
30	Nagpur	1512807	784161	728646	1942688	1010911	931777	2588811	1345377	1243434
31	Bhandara	1268286	635174	633112	1585580	798072	787508	1837577	920159	917418
32	Gondia	-	-	-	-	-	-	-	-	-
33	Chandrapur	1238070	623681	614389	1640137	832567	807570	2055642	1045692	1009950
34	Gadchiroli	-	-	-	-	-	-	-	-	-
Maharashtra		39553718	20428882	19124836	50412235	26116351	24295884	62784171	32415126	30369045

# Includes Mumbai City and Mumbai Suburban District.

Source: Population Census.

## Population

Table 2 (continued)

District-wise Population of Persons Males and Females and  
Decadal Growth Rate for the Years 1961, 1971, 1981, 1991 and 2001

Sr. No.	District	1991			2001*			Decadal Growth Rate			
		Persons	Males	Females	Persons	Males	Females	1961-71	1971-81	1981-91	1991-2001
1	2	12	13	14	15	16	17	18	19	20	21
1	Mumbai #	9925891	5460145	4465746	11914398	6577902	5336496	(+)43.80	(+)38.07	(+)20.41	(+)20.03
2	Thane	5249126	2792874	2456252	8128833	4377806	3751027	(+)38.06	(+)46.89	(+)56.62	(+)54.86
3	Raigad	1824816	907907	916909	2205972	1116821	1089151	(+)19.28	(+)17.69	(+)22.76	(+)20.89
4	Ratnagiri	1544057	700190	843867	1696482	794431	902051	(+)8.94	(+)6.06	(+)11.92	(+)9.85
5	Sindhudurg	832152	389384	442768	861672	414900	446772	-	-	(+)6.56	(+)3.55
6	Nashik	3851352	1984973	1866379	4987923	2591980	2395943	(+)27.70	(+)26.28	(+)28.73	(+)29.51
7	Dhule	1473170	757268	715902	1708993	878538	830455	(+)23.01	(+)23.35	(+)23.68	(+)16.01
8	Nandurbar	1062545	538020	524525	1309135	662764	646371	-	-	-	(+)23.21
9	Jalgaon	3187634	1642873	1544761	3679936	1904437	1775499	(+)20.29	(+)23.32	(+)21.75	(+)15.44
10	Ahmednagar	3372935	1730609	1642326	4088077	2106501	1981576	(+)27.77	(+)19.36	(+)24.54	(+)21.20
11	Pune	5532532	2861460	2671072	7224224	3768001	3456223	(+)28.83	(+)31.04	(+)32.85	(+)30.58
12	Satara	2451372	1208375	1242997	2796906	1402301	1394605	(+)20.79	(+)18.02	(+)20.24	(+)14.10
13	Sangli	2209488	1128521	1080967	2581835	1319267	1262568	(+)25.12	(+)18.92	(+)20.66	(+)16.85
14	Solapur	3231057	1670516	1560541	3855383	1990661	1864722	(+)21.17	(+)15.81	(+)23.79	(+)19.32
15	Kolhapur	2989507	1524732	1464775	3515413	1803746	1711667	(+)28.28	(+)22.38	(+)19.28	(+)17.59
16	Aurangabad	2213779	1151693	1062086	2920548	1521632	1398916	(+)28.63	(+)23.46	(+)39.60	(+)31.93
17	Jalna	1364425	696798	667627	1612357	825977	786380	-	-	(+)32.45	(+)18.17
18	Parbhani	1293104	661700	631404	1491109	761937	729172	(+)24.92	(+)21.41	(+)15.72	(+)15.31
19	Hingoli	823931	422094	401837	986717	505188	481529	-	-	-	(+)19.76
20	Beed	1822072	937410	884662	2159841	1120664	1039177	(+)28.42	(+)15.54	(+)22.61	(+)18.54
21	Nanded	2330374	1197876	1132498	2868158	1476301	1391857	(+)29.46	(+)25.15	(+)33.21	(+)23.08
22	Osmanabad	1276327	658896	617431	1472256	762947	709309	(+)28.36	(+)17.61	(+)23.95	(+)15.35
23	Latur	1676641	863203	813438	207237	1074321	1003916	-	-	(+)29.38	(+)23.95
24	Buldhana	1886299	966017	920282	2226328	1144314	1082014	(+)19.18	(+)19.46	(+)25.02	(+)18.03
25	Akola	1351959	699012	652947	1629305	840883	788422	(+)26.24	(+)21.68	(+)21.20	(+)21.51
26	Washim	862312	443136	419176	1019725	525806	493919	-	-	-	(+)18.25
27	Amaravati	2200057	1136314	1063743	2606063	1343572	1262491	(+)25.02	(+)20.78	(+)18.19	(+)18.45
28	Yavatmal	2077144	1064422	1012722	2460482	1267117	1193365	(+)29.61	(+)22.04	(+)19.55	(+)18.46
29	Wardha	1067357	550370	516987	1230640	635751	594889	(+)22.91	(+)18.86	(+)15.19	(+)15.30
30	Nagpur	3287139	1710404	1576735	4051444	2095489	1955955	(+)28.79	(+)33.26	(+)26.97	(+)23.25
31	Bhandara	1021408	515772	505636	1135835	573184	562651	(+)24.59	(+)15.89	(+)14.70	(+)11.20
32	Gondia	1086221	544503	541718	1200151	598447	601704	-	-	(+)10.49	
33	Chandrapur	1771994	909787	862207	2077909	1059875	1018034	(+)32.48	(+)25.33	(+)25.06	(+)17.26
34	Gadchiroli	787010	398364	388646	969960	490809	479151	-	-	(+)23.48	(+)23.25
	Maharashtra	78937187	40825618	38111569	96752247	50334270	46417977	(+)27.45	(+)24.54	(+)25.73	(+)22.57

\* Figures are provisional.

# Includes Mumbai City and Mumbai Suburban District.

Source: Population Census.

## Population

Table 3

District-wise Density and Sex-Ratio for the Years 1961, 1971, 1981, 1991 and 2001

Sr. No. District	Density					Sex Ratio (per thousand males)				
	1961	1971	1981	1991	2001*	1961	1971	1981	1991	2001*
1 2	3	4	5	6	7	8	9	10	11	12
1 Mumbai #	9486	9901	13644	16461	19759	663	716	772	818	811
2 Thane	180	239	349	549	850	919	894	883	879	857
3 Raigad	151	175	208	255	308	1058	1057	1047	1010	975
4 Ratnagiri	142	153	167	188	207	1237	1244	1258	1205	1135
5 Sindhudurg	–	–	148	160	165	–	–	1204	1137	1077
6 Nashik	119	152	192	248	321	946	940	938	940	924
7 Dhule	108	126	156	193	212	967	956	966	958	945
8 Nandurbar	–	–	–	–	260	–	–	–	–	975
9 Jalgaon	155	180	223	271	313	957	948	950	940	932
10 Ahmednagar	106	133	159	198	240	962	956	959	949	941
11 Pune	158	203	266	354	462	944	933	938	933	917
12 Satara	137	165	195	234	267	1047	1037	1061	1029	995
13 Sangli	143	180	213	258	301	957	949	967	958	957
14 Solapur	124	150	174	217	259	936	933	942	934	937
15 Kolhapur	193	254	323	389	457	967	959	963	961	949
16 Aurangabad	92	122	173	219	289	960	943	936	922	919
17 Jalna	–	–	119	177	209	–	–	970	958	952
18 Parbhani	96	121	149	192	229	972	960	967	953	957
19 Hingoli	–	–	–	–	218	–	–	–	–	953
20 Beed	92	115	133	170	202	968	954	965	944	927
21 Nanded	104	133	166	221	272	970	955	960	945	943
22 Osmanabad	104	134	137	169	195	949	945	958	937	930
23 Latur	–	–	175	234	290	–	–	959	942	934
24 Buldhana	109	130	156	195	230	959	955	957	953	946
25 Akola	112	142	173	209	300	938	940	949	939	938
26 Washim	–	–	–	–	198	–	–	–	–	939
27 Amaravati	101	126	152	180	213	933	931	937	936	940
28 Yavatmal	81	102	128	153	181	972	961	959	951	942
29 Wardha	101	124	147	169	195	964	949	948	939	936
30 Nagpur	152	196	260	332	413	929	922	925	922	933
31 Bhandara	135	172	199	226	292	997	987	997	988	982
32 Gondia	–	–	–	–	221	–	–	–	–	1005
33 Chandrapur	47	64	135	155	182	985	969	959	948	961
34 Gadchiroli	–	–	41	55	67	–	–	981	976	976
Maharashtra	129	164	204	257	314	936	930	937	934	922

\* Figures are provisional.

# Includes Mumbai City and Mumbai Suburban District.

Source: Population Census.

## Population

Table 4

District-wise Scheduled Castes Population and Percentage to the Total Population  
for the Years 1961, 1971, 1981 and 1991

Sr.		Scheduled Castes				Percentage			
No. District		1961	1971	1981	1991	1961	1971	1981	1991
1	2	3	4	5	6	7	8	9	10
1	Mumbai #	123527	210497	399076	646914	2.98	3.53	4.84	6.52
2	Thane	22722	36170	83825	271797	1.37	1.59	2.50	5.18
3	Raigad	13887	15401	25182	50999	1.31	1.22	1.69	2.79
4	Ratnagiri	37939	42986	45132	27385	2.08	2.16	2.14	1.77
5	Sindhudurg	—	—	—	42435	—	—	—	5.10
6	Nashik	67845	96097	185859	326755	3.66	4.06	6.21	8.48
7	Dhule	48054	61506	85735	134359	3.56	3.70	4.18	5.30
8	Nandurbar	—	—	—	—	—	—	—	—
9	Jalgaon	61319	87708	154227	295047	3.47	4.13	5.89	9.25
10	Ahmednagar	157500	211443	287707	418479	8.97	9.32	10.62	12.41
11	Pune	121237	175402	313797	631063	4.91	5.52	7.54	11.41
12	Satara	74875	93103	126630	233014	5.24	5.39	6.21	9.50
13	Sangli	102080	150687	204352	277458	8.29	9.79	11.16	12.56
14	Solapur	238863	320319	373083	497913	12.84	14.21	14.29	15.41
15	Kolhapur	181779	232537	302649	381029	11.39	11.35	12.08	12.75
16	Aurangabad	92715	108389	150436	305246	6.05	5.50	6.18	13.79
17	Jalna	—	—	—	176452	—	—	—	12.93
18	Parbhani	83976	84938	106466	233323	6.96	5.64	5.82	11.02
19	Hingoli	—	—	—	—	—	—	—	—
20	Beed	135272	161174	170482	244281	13.51	12.53	11.47	13.41
21	Nanded	118879	127170	197709	422942	11.01	9.10	11.30	18.15
22	Osmanabad	197892	285320	342461	208609	13.39	15.04	15.35	16.34
23	Latur	—	—	—	319568	—	—	—	19.06
24	Buldhana	56214	68326	93227	216687	5.30	5.41	6.18	11.40
25	Akola	55866	71571	100616	264554	4.70	4.77	5.51	11.95
26	Washim	—	—	—	—	—	—	—	—
27	Amaravati	48702	65447	112754	384499	3.95	4.25	6.06	17.48
28	Yavatmal	42523	55894	85985	226820	3.87	3.93	4.95	10.92
29	Wardha	15143	23570	36412	149975	2.39	3.02	3.93	14.05
30	Nagpur	54388	80287	182395	619226	3.60	4.13	7.05	18.84
31	Bhandara	31074	82965	179244	355484	2.45	5.23	9.75	16.87
32	Gondia	—	—	—	—	—	—	—	—
33	Chandrapur	42643	76854	134322	299533	3.44	4.69	6.53	16.90
34	Gadchiroli	—	—	—	95996	—	—	—	12.20
	Maharashtra	2226914	3025761	4479763	8757842	5.63	6.00	7.14	11.09

# Includes Mumbai City and Mumbai Suburban District.

Source: Population Census.

## Population

Table 5

District-wise Scheduled Tribes Population and Percentage to the Total Population  
for the Years 1961, 1971, 1981 and 1991

Sr. No. District		Scheduled Tribes				Percentage			
		1961	1971	1981	1991	1961	1971	1981	1991
1	2	3	4	5	6	7	8	9	10
1	Mumbai #	22455	30016	84073	103775	0.54	0.50	1.02	1.05
2	Thane	500558	579538	729424	951205	30.29	25.40	21.76	18.12
3	Raigad	95354	113502	190210	233953	9.01	8.99	12.80	12.82
4	Ratnagiri	3101	10066	31746	14847	0.17	0.51	1.50	0.96
5	Sindhudurg	—	—	—	3893	—	—	—	0.47
6	Nashik	453707	561202	701647	931069	24.45	23.69	23.45	24.18
7	Dhule	513344	615801	831064	1036491	37.99	37.05	40.53	40.87
8	Nandurbar	—	—	—	—	—	—	—	—
9	Jalgaon	98710	125026	216009	313551	5.59	5.89	8.25	9.84
10	Ahmednagar	109827	145783	187656	240141	6.18	6.42	6.93	7.12
11	Pune	89913	108405	158705	216336	3.64	3.41	3.81	3.91
12	Satara	2417	3610	13060	18342	0.17	0.21	0.64	0.75
13	Sangli	595	2425	15535	10784	0.05	0.16	0.85	0.49
14	Solapur	9089	8608	51577	48352	0.49	0.38	1.98	1.50
15	Kolhapur	1518	3809	27311	14789	0.10	0.19	1.09	0.49
16	Aurangabad	24455	32300	75663	83502	1.60	1.64	3.11	3.77
17	Jalna	—	—	—	28300	—	—	—	2.07
18	Parbhani	34838	42101	78577	111470	2.89	2.79	4.30	5.26
19	Hingoli	—	—	—	—	—	—	—	—
20	Beed	2367	4394	13405	20515	0.24	0.34	0.90	1.13
21	Nanded	40597	56309	178238	275972	3.76	4.03	10.19	11.84
22	Osmanabad	393	2604	52013	22463	0.03	0.14	2.33	1.76
23	Latur	—	—	—	37527	—	—	—	2.24
24	Buldhana	—	—	66457	95389	—	—	4.40	5.06
25	Akola	—	—	114759	155695	—	—	6.28	7.03
26	Washim	—	—	—	—	—	—	—	—
27	Amaravati	54881	79371	241704	316448	4.45	5.15	12.98	14.38
28	Yavatmal	155609	197977	370116	445840	14.17	13.91	21.30	21.46
29	Wardha	—	—	142244	166391	—	—	15.35	15.59
30	Nagpur	—	—	353303	457715	—	—	13.65	13.92
31	Bhandara	—	—	298039	309822	—	—	16.22	14.70
32	Gondia	—	—	—	—	—	—	—	—
33	Chandrapur	183431	231402	549503	349169	14.82	14.11	26.73	19.70
34	Gadchiroli	—	—	—	304535	—	—	—	38.70
Maharashtra		2397159	2954249	5772038	7318281	6.06	5.86	9.19	9.27

# Includes Mumbai City and Mumbai Suburban District.

Source: Population Census.

## Population

Table 6

District-wise Number of Main Workers and Work Participation Rate as per 1961 Census

Sr. No.	District	Total Main Workers						Work Participation Rate	
		Total		Rural		Urban		All	
		Persons	Females	Persons	Females	Persons	Females	Persons	Females
1	2	3	4	5	6	7	8	9	10
1	Mumbai #	1686668	145807	–	–	1686668	145807	40.62	8.81
2	Thane	777756	289547	605034	265505	172722	24042	47.06	36.58
3	Raigad	495825	222834	460275	214900	35550	7934	46.83	40.94
4	Ratnagiri	820776	426145	773831	414628	46945	11517	44.92	42.18
5	Sindhudurg	–	–	–	–	–	–	–	–
6	Nashik	914057	378574	747983	340332	166074	38242	49.27	41.98
7	Dhule	638848	259399	565899	240579	72949	18820	47.28	39.05
8	Nandurbar	–	–	–	–	–	–	–	–
9	Jalgaon	813373	329695	681546	298262	131827	31433	46.08	38.20
10	Ahmednagar	892801	372248	832872	360406	59929	11842	50.27	42.75
11	Pune	1053143	382540	763085	338165	290058	44375	42.69	31.93
12	Satara	692495	332335	641420	319250	51075	13085	48.42	45.43
13	Sangli	531478	194771	466198	178010	65280	1676	43.18	32.36
14	Solapur	815253	282629	641603	241035	173650	41594	43.83	31.42
15	Kolhapur	728531	287660	631577	270483	96954	17177	45.63	36.65
16	Aurangabad	810824	343711	739272	328399	71552	15312	52.91	45.79
17	Jalna	–	–	–	–	–	–	–	–
18	Parbhani	624274	245983	563526	231284	60748	14699	51.75	41.38
19	Hingoli	–	–	–	–	–	–	–	–
20	Beed	542045	232988	507544	223860	34501	9128	54.13	47.29
21	Nanded	563170	228422	508052	214952	55118	13470	52.16	42.96
22	Osmanabad	769319	313347	712993	298230	56326	15117	52.06	43.56
23	Latur	–	–	–	–	–	–	–	–
24	Buldhana	543586	231725	479194	214842	64392	16883	51.30	44.88
25	Akola	585261	229395	494677	211575	90584	17820	49.21	39.86
26	Washim	–	–	–	–	–	–	–	–
27	Amaravati	578073	214922	463447	187962	114626	26960	46.89	36.13
28	Yavatmal	595060	259395	545961	247756	49099	11639	54.17	47.91
29	Wardha	316638	130384	267708	119772	48930	10612	49.92	41.87
30	Nagpur	702970	262806	423492	196932	279478	65874	46.47	36.07
31	Bhandara	740997	357649	683910	338402	57087	19247	58.43	56.49
32	Gondia	–	–	–	–	–	–	–	–
33	Chandrapur	715260	331306	680855	322993	34405	8313	57.77	53.92
34	Gadchiroli	–	–	–	–	–	–	–	–
Maharashtra		18948481	7286217	14881954	6618514	4066527	667703	47.91	38.10

# Includes Mumbai City and Mumbai Suburban District.

Source: Population Census.

## Population

Table 7

District-wise Number of Main Workers and Work Participation Rate as per 1971 Census

Sr. No.	District	Total Main Workers						Work Participation Rate	
		Total		Rural		Urban		All	
		Persons	Females	Persons	Females	Persons	Females	Persons	Females
1	2	3	4	5	6	7	8	9	10
1	Mumbai #	2198098	192370	–	–	2198098	192370	36.82	7.72
2	Thane	853672	200354	583409	173823	270263	26531	37.41	18.61
3	Raigad	453175	152263	406690	145649	46485	6614	35.88	23.47
4	Ratnagiri	697174	310980	652372	302369	44802	8611	35.02	28.18
5	Sindhudurg	–	–	–	–	–	–	–	–
6	Nashik	897917	272155	707239	241195	190678	30960	37.90	23.71
7	Dhule	594691	160594	516542	148094	78149	12500	35.78	19.76
8	Nandurbar	–	–	–	–	–	–	–	–
9	Jalgaon	766412	230198	628690	209391	137722	20807	36.10	22.28
10	Ahmednagar	803846	213626	729739	202983	74107	10643	35.43	19.26
11	Pune	1036422	224576	645867	178652	390555	45924	32.61	14.64
12	Satara	541330	145944	480179	137620	61151	8324	31.34	16.60
13	Sangli	478698	80332	399082	71165	79616	9167	31.09	10.72
14	Solapur	759263	159154	586264	130944	172999	28210	33.69	14.63
15	Kolhapur	696319	158127	573466	146754	122853	11373	34.00	15.77
16	Aurangabad	730677	202545	642480	192330	88197	10215	37.07	21.18
17	Jalna	–	–	–	–	–	–	–	–
18	Parbhani	563714	148090	496683	139623	67031	8467	37.41	20.06
19	Hingoli	–	–	–	–	–	–	–	–
20	Beed	453139	110521	413336	105049	39803	5472	35.23	17.60
21	Nanded	497553	118419	434235	110257	63318	8162	35.60	17.34
22	Osmanabad	640848	139991	577648	131735	63200	8256	33.79	15.20
23	Latur	–	–	–	–	–	–	–	–
24	Buldhana	530196	190778	465214	178595	64982	12183	41.98	30.94
25	Akola	600142	196629	497958	180583	102184	16046	39.97	27.01
26	Washim	–	–	–	–	–	–	–	–
27	Amaravati	592907	179084	466851	156828	126056	22256	38.47	24.10
28	Yavatmal	603034	210015	546416	200214	56618	9801	42.36	30.11
29	Wardha	304835	97717	252657	89306	52178	8411	39.10	25.75
30	Nagpur	689276	183767	392260	138782	297016	44985	35.48	19.72
31	Bhandara	742445	303451	683196	287870	59249	15581	46.82	38.53
32	Gondia	–	–	–	–	–	–	–	–
33	Chandrapur	664496	205567	615301	199226	49195	6341	40.51	25.46
34	Gadchiroli	–	–	–	–	–	–	–	–
	Maharashtra	18390279	4787247	13393774	4199037	4996505	588210	36.48	18.33

# Includes Mumbai City and Mumbai Suburban District.

Source: Population Census.

## Population

Table 8

District-wise Number of Main Workers and Work Participation Rate as per 1981 Census

Sr. No.	District	Total Main Workers						Work Participation Rate	
		Total		Rural		Urban		All	
		Persons	Females	Persons	Females	Persons	Females	Persons	Females
1	2	3	4	5	6	7	8	9	10
1	Mumbai #	2860054	307506	–	–	2860054	307506	34.70	8.56
2	Thane	1267771	300391	777895	248372	489876	52019	37.83	19.11
3	Raigad	555728	200366	488497	189560	67231	10806	37.39	26.37
4	Ratnagiri	719150	313405	673435	305653	45715	7752	34.06	26.83
5	Sindhudurg	–	–	–	–	–	–	–	–
6	Nashik	1219868	420198	942072	377868	277796	42330	40.77	29.04
7	Dhule	779326	236577	672310	220274	107016	16303	38.01	23.49
8	Nandurbar	–	–	–	–	–	–	–	–
9	Jalgaon	1035988	349160	855151	322431	180837	26729	39.57	27.38
10	Ahmednagar	1125377	403704	1016276	385417	109101	18287	41.55	30.45
11	Pune	1455460	384944	861875	298121	593585	86823	34.95	19.11
12	Satara	684172	218388	609513	206143	74659	12245	33.56	20.81
13	Sangli	625479	143014	510141	125990	115338	17024	34.16	15.83
14	Solapur	983022	277218	751863	228340	231159	48878	37.66	21.90
15	Kolhapur	921304	252454	737731	232417	183573	20037	36.76	20.48
16	Aurangabad	1003159	339029	855527	317287	147632	21742	41.22	28.64
17	Jalna	–	–	–	–	–	–	–	–
18	Parbhani	810830	278617	707158	259695	103672	18922	44.32	30.97
19	Hingoli	–	–	–	–	–	–	–	–
20	Beed	599764	191216	536626	181684	63138	9532	40.36	26.19
21	Nanded	710174	222335	620567	207979	89607	14356	40.60	25.95
22	Osmanabad	866981	255476	772320	240347	94661	15129	38.87	23.41
23	Latur	–	–	–	–	–	–	–	–
24	Buldhana	708653	284102	623871	267302	84782	16800	46.97	38.50
25	Akola	778502	278609	650617	258989	127885	19620	42.61	31.34
26	Washim	–	–	–	–	–	–	–	–
27	Amaravati	753281	244552	596545	218347	156736	26205	40.47	27.18
28	Yavatmal	799914	312051	726828	299580	73086	12471	46.04	36.70
29	Wardha	397282	143003	335386	133235	61896	9768	42.87	31.71
30	Nagpur	921316	260484	518752	198788	402564	61696	35.59	20.95
31	Bhandara	839489	356502	766843	337631	72646	18871	45.68	38.86
32	Gondia	–	–	–	–	–	–	–	–
33	Chandrapur	879749	308894	808738	299977	71011	8917	42.80	30.59
34	Gadchiroli	–	–	–	–	–	–	–	–
Maharashtra		24301793	7282195	17416537	6361427	6885256	920768	38.71	23.98

# Includes Mumbai City and Mumbai Suburban District.

Source: Population Census.



## Population

Table 9

District-wise Number of Main Workers and Work Participation Rate as per 1991 Census

Sr. No.	District	Total Main Workers						Work Participation Rate	
		Total		Rural		Urban		All	
		Persons	Females	Persons	Females	Persons	Females	Persons	Females
1	2	3	4	5	6	7	8	9	10
1	Mumbai #	3434732	468650	–	–	3434732	468650	34.60	10.49
2	Thane	1961704	449016	814447	301380	1147257	147636	37.37	18.28
3	Raigad	720103	263488	614618	246989	105485	16499	39.46	28.74
4	Ratnagiri	575756	256157	535806	248790	39950	7367	37.29	30.36
5	Sindhudurg	318491	132201	300190	128495	18301	3706	38.27	29.86
6	Nashik	1584002	586380	1183798	521414	400204	64966	41.13	31.42
7	Dhule	1004884	351117	866441	330835	138443	20282	39.63	28.31
8	Nandurbar	–	–	–	–	–	–	–	–
9	Jalgaon	1279877	461632	1032732	422683	247145	38949	40.15	29.88
10	Ahmednagar	1432411	556890	1262944	521968	169467	34922	42.47	33.91
11	Pune	2051679	608891	1179727	457276	871952	151615	37.08	22.80
12	Satara	896395	308146	805126	292010	91269	16136	36.57	24.79
13	Sangli	814726	223190	659190	196087	155536	27103	36.87	20.65
14	Solapur	1248343	400660	969310	338772	279033	61888	38.64	25.67
15	Kolhapur	1169735	360963	926761	328522	242974	32441	39.13	24.64
16	Aurangabad	886480	324263	681971	291228	204509	33035	40.04	30.53
17	Jalna	599819	241142	534220	230808	65599	10334	43.96	36.12
18	Parbhani	890306	337742	759857	316272	130449	21470	42.05	32.69
19	Hingoli	–	–	–	–	–	–	–	–
20	Beed	758589	296607	669914	282008	88675	14599	41.63	33.53
21	Nanded	926583	338938	790177	314568	136406	24370	39.76	29.93
22	Osmanabad	529425	194507	474794	183907	54631	10600	41.48	31.50
23	Latur	656243	235868	569251	225139	86992	10729	39.14	29.00
24	Buldhana	844348	348560	728131	325606	116217	22954	44.76	37.88
25	Akola	923191	343627	741781	313935	181410	29692	41.69	32.05
26	Washim	–	–	–	–	–	–	–	–
27	Amaravati	887892	297036	677510	261120	210382	35916	40.36	27.92
28	Yavatmal	923250	368576	821263	350852	101987	17724	44.45	36.39
29	Wardha	450539	165801	371501	153003	79038	12798	42.21	32.07
30	Nagpur	1167907	331157	588047	238003	579860	93154	35.53	21.00
31	Bhandara	965020	419468	881566	398605	83454	20863	45.79	40.05
32	Gondia	–	–	–	–	–	–	–	–
33	Chandrapur	745116	275624	604058	254009	41058	21615	42.05	31.97
34	Gadchiroli	358563	141271	335519	135191	23044	6080	45.56	36.35
	Maharashtra	31006109	10087568	21380650	8609475	9625459	1478093	39.28	26.47

# Includes Mumbai City and Mumbai Suburban District.

Source: Population Census.

## Population

Table 10

District-wise Number of Main Workers and Work Participation Rate as per 2001\* Census

Sr. No.	District	Total Main Workers						Work Participation Rate	
		Total		Rural		Urban		All	
		Persons	Females	Persons	Females	Persons	Females	Persons	Females
1	2	3	4	5	6	7	8	9	10
1	Mumbai #	4272899	668517	–	–	4272899	668517	35.86	12.53
2	Thane	2825024	560500	853687	307245	1971337	253255	34.75	14.94
3	Raigad	685113	200161	522749	177889	162364	22272	31.06	18.38
4	Ratnagiri	578013	239462	519181	229283	58832	10179	34.07	26.55
5	Sindhudurg	241598	81304	218291	77304	23307	4000	28.04	18.20
6	Nashik	1949487	683739	1368681	594297	580806	89442	39.08	28.54
7	Dhule	589191	187988	473875	173708	115316	14280	34.48	22.64
8	Nandurbar	461999	165914	407066	158543	54933	7371	35.29	25.67
9	Jalgaon	1337571	456529	1058907	420720	278664	35809	36.35	25.71
10	Ahmednagar	1676906	650726	1430568	604809	246338	45917	41.02	32.84
11	Pune	2735269	820515	1385396	570197	1349873	250318	37.86	23.74
12	Satara	1074097	395088	957609	373550	116488	21538	38.40	28.33
13	Sangli	978742	312459	786941	277824	191801	34635	37.91	24.75
14	Solapur	1507619	540407	1125733	444337	381886	96070	39.10	28.98
15	Kolhapur	1430971	489663	1106283	441833	324688	47830	40.71	28.61
16	Aurangabad	1068688	369258	773960	324752	294728	44506	36.59	26.41
17	Jalna	629217	244860	550477	234172	78740	10688	39.02	31.14
18	Parbhani	564757	209441	450957	191319	113800	18122	37.87	28.72
19	Hingoli	422687	179373	382656	172661	40031	6712	42.84	37.25
20	Beed	853562	348241	757970	334755	95592	13486	39.52	33.51
21	Nanded	992251	350991	822973	326647	169278	24344	34.60	25.22
22	Osmanabad	563684	209496	505441	200026	58243	9470	38.29	29.54
23	Latur	733623	240307	612703	225246	120920	15061	35.30	23.94
24	Buldhana	931746	375155	802761	354961	128985	20194	41.85	34.67
25	Akola	594236	185312	421375	160804	172861	24508	36.47	23.50
26	Washim	405611	158107	357175	150778	48436	7329	39.78	32.01
27	Amaravati	932655	284450	681177	247235	251478	37215	35.79	22.53
28	Yavatmal	963635	365045	849773	346099	113862	18946	39.16	30.59
29	Wardha	444685	143119	359298	131767	85387	11352	36.13	24.06
30	Nagpur	1299554	333442	578990	222890	720564	110552	32.08	17.05
31	Bhandara	377586	140069	331565	130595	46021	9474	33.24	24.89
32	Gondia	402876	150806	362433	142362	40443	8444	33.57	25.06
33	Chandrapur	708152	237212	534442	212756	173710	24456	34.08	23.30
34	Gadchiroli	352676	138104	334736	134729	17940	3375	36.36	28.82
Maharashtra		35586380	11115760	22685829	9096093	12900551	2019667	36.78	23.95

\* Figures are provisional.

# Includes Mumbai City and Mumbai Suburban District.

Source: Population Census.

## Population

Table 11

Participation Rate of Male and Female Among Main Workers and Marginal Workers  
as per Population Census 2001\*

Sr.		<i>Total Main and Marginal Workers</i>			<i>Participation Rate</i>	
No.	District	Male	Female	Persons	Male	Female
1	2	3	4	5	6	7
1	Mumbai #	3781747	746176	4527923	83.52	16.48
2	Thane	2451526	772613	3224139	76.04	23.96
3	Raigad	589339	345111	934450	63.07	36.93
4	Ratnagiri	407318	376265	783583	51.98	48.02
5	Sindhudurg	227183	185548	412731	55.04	44.96
6	Nashik	1366011	857777	2223788	61.43	38.57
7	Dhule	455874	301599	757473	60.18	39.82
8	Nandurbar	344871	269295	614166	56.15	43.85
9	Jalgaon	977952	622837	1600789	61.09	38.91
10	Ahmednagar	1110428	814724	1925152	57.68	42.32
11	Pune	2049147	1000099	3049246	67.20	32.80
12	Satara	756899	575654	1332553	56.80	43.20
13	Sangli	742061	503493	1245554	59.58	40.42
14	Solapur	1054043	712917	1766960	59.65	40.35
15	Kolhapur	1020895	667772	1688667	60.46	39.54
16	Aurangabad	756495	463216	1219711	62.02	37.98
17	Jalna	415215	318493	733708	56.59	43.41
18	Parbhani	378070	271516	649586	58.20	41.80
19	Hingoli	259842	209938	469780	55.31	44.69
20	Beed	548480	431202	979682	55.99	44.01
21	Nanded	719447	508539	1227986	58.59	41.41
22	Osmanabad	389195	275884	665079	58.52	41.48
23	Latur	525502	334736	860238	61.09	38.91
24	Buldhana	595682	442243	1037925	57.39	42.61
25	Akola	436231	223506	659737	66.12	33.88
26	Washim	267244	198807	466051	57.34	42.66
27	Amaravati	724124	396344	1120468	64.63	35.37
28	Yavatmal	675136	475229	1150365	58.69	41.31
29	Wardha	348280	215122	563402	61.82	38.18
30	Nagpur	1087405	465858	1553263	70.01	29.99
31	Bhandara	303357	245887	549244	55.23	44.77
32	Gondia	319247	271658	590905	54.03	45.97
33	Chandrapur	568039	388452	956491	59.39	40.61
34	Gadchiroli	272477	240055	512532	53.16	46.84
	Maharashtra	26924762	15128565	42053327	64.03	35.97

\* Figures are provisional.

# Includes Mumbai City and Mumbai Suburban District.

Source: Population Census.

## Population

Table 12

Under-5 Mortality Rate for Boys and Girls (1970–1998)

<i>Sr. No.</i>	<i>Year</i>	<i>Child Mortality Rate (Age Group 0–4)</i>	
		<i>Girls</i>	<i>Boys</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
1	1970	40.7	36.9
2	1981	26.6	25.9
3	1990	17.5	15.6
4	1992	15.9	16.0
5	1994	13.4	15.3
6	1996	13.9	12.4
7	1998	11.2	14.3

Source: Registrar General of India, New Delhi.

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## Economic Growth and Poverty

Table 13

Persondays Created under EGS for the Years 1990–91, 1995–96 and 1999–2000

*Persondays in lakhs*

Sr. No.	District	Persondays 1990–91		Persondays 1995–96		Persondays 1999–2000	
		Total	Women	Total	Women	Total	Women
1	2	3	4	5	6	7	8
1	Mumbai #	–	–	–	–	–	–
2	Thane	24.70	15.27	31.15	17.87	54.01	32.41
3	Raigad	4.16	0.21	12.28	–	19.72	11.83
4	Ratnagiri	22.19	4.60	22.34	9.48	48.27	22.96
5	Sindhudurg	9.70	1.49	13.59	5.27	15.61	9.37
6	Nashik	41.45	11.73	20.65	6.09	55.11	33.07
7	Dhule	35.75	13.86	14.19	1.77	8.46	5.08
8	Nandurbar	–	–	–	–	18.67	11.20
9	Jalgaon	14.73	2.81	4.56	0.33	37.17	22.30
10	Ahmednagar	56.32	16.84	110.88	32.16	29.09	17.45
11	Pune	34.66	14.27	69.75	37.21	13.32	7.99
12	Satara	16.07	3.79	18.82	8.87	12.95	7.77
13	Sangli	11.57	1.96	8.02	3.05	8.40	5.04
14	Solapur	45.27	9.44	165.48	43.09	25.76	15.46
15	Kolhapur	16.66	3.35	10.05	5.21	12.37	7.42
16	Aurangabad	30.33	12.84	52.89	27.97	38.39	23.03
17	Jalna	36.11	8.05	36.42	21.76	54.98	32.99
18	Parbhani	35.82	8.71	23.65	12.69	11.51	6.91
19	Hingoli	–	–	–	–	4.49	2.69
20	Beed	32.26	14.21	54.20	30.67	67.35	20.41
21	Nanded	48.07	13.93	44.75	18.18	46.91	28.15
22	Osmanabad	42.28	7.98	59.10	28.83	50.08	30.05
23	Latur	33.81	11.72	40.35	14.87	45.53	27.32
24	Buldhana	27.38	7.23	17.04	4.82	30.44	18.26
25	Akola	16.17	4.08	10.22	1.86	11.59	6.95
26	Washim	–	–	–	–	9.67	5.81
27	Amaravati	28.51	9.09	24.52	6.94	34.71	20.83
28	Yavatmal	32.65	5.06	21.46	1.41	23.25	13.95
29	Wardha	11.14	5.11	4.17	0.56	8.83	5.30
30	Nagpur	34.07	13.17	13.13	3.57	20.24	12.14
31	Bhandara	96.60	33.65	36.74	14.80	45.95	27.57
32	Gondia	–	–	–	–	22.67	13.60
33	Chandrapur	40.20	14.82	20.43	5.96	45.19	27.11
34	Gadchiroli	20.31	8.17	9.33	2.91	18.70	11.22
Maharashtra		898.94	277.44	970.16	368.20	949.39	543.64

# Includes Mumbai City and Mumbai Suburban District.

Note: Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

Source: Planning Department, Mantralaya, Mumbai.

## Economic Growth and Poverty

Table 14

District Income at Current Prices for the Years 1993–94, 1997–98, and 1998–99

Sr. No. District	Income (NDDP) (Rs in lakhs)			Per Capita Income (Rs)			
	1993–94	1997–98	1998–99	1993–94	1997–98	1998–99	
1 2	3	4	5	6	7	8	
1	Mumbai #	2532707	4448969	5115400	24352	40044	45471
2	Thane	975214	1754466	2001295	17521	29471	33200
3	Raigad	386989	567528	628601	20245	27758	30364
4	Ratnagiri	143137	225671	250346	8888	13102	14354
5	Sindhudurg	116998	162869	188148	13480	17544	20016
6	Nashik	446856	812825	903770	115050	18792	20636
7	Dhule	180581	307830	339249	6796	10831	11789
8	Nandurbar	–	–	–	–	–	–
9	Jalgaon	287218	502122	594605	8605	14065	16449
10	Ahmednagar	278208	479972	583980	7868	12692	15251
11	Pune	876155	1511127	1764358	15058	24282	28000
12	Satara	221430	368018	432366	8632	13413	15563
13	Sangli	240075	415367	511178	10381	16793	20411
14	Solapur	292151	511313	663616	8628	14118	18097
15	Kolhapur	361702	603312	708633	11567	18038	20925
16	Aurangabad	252465	400771	490746	10789	16013	19365
17	Jalna	102066	143436	188174	7077	9298	12047
18	Parbhani	179317	261818	331160	8110	11071	13827
19	Hingoli	–	–	–	–	–	–
20	Beed	143647	248195	316304	7526	12158	15303
21	Nanded	179016	298747	346951	7304	11394	13068
22	Osmanabad	94788	141859	187561	7063	9883	12905
23	Latur	130035	200892	261136	7376	10654	13677
24	Buldhana	148032	224924	296084	7485	10633	13823
25	Akola	208449	323625	403398	8992	13053	16069
26	Washim	–	–	–	–	–	–
27	Amaravati	221059	429089	427676	9610	17441	17168
28	Yavatmal	172901	258777	314921	7957	11134	13382
29	Wardha	96321	183354	204615	8642	15381	16952
30	Nagpur	465780	938906	1071256	13504	25450	28678
31	Bhandara	172897	304841	344742	7858	12953	14467
32	Gondia	–	–	–	–	–	–
33	Chandrapur	202695	372803	388625	10912	18765	19325
34	Gadchiroli	97220	131272	153139	11784	14876	17140
	Maharashtra	10206108	17534696	20412031	12326	19799	22763

Note: (1) Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available hence, combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

(2) Due to the paucity of data, use of indicators for allocation and various limitations of estimation procedure, the district domestic products are to be accepted with a margin of error and can be used to have a broad judgement on the level of income in the districts.

# Includes Mumbai City and Mumbai Suburban District.

Source: Directorate of Economics and Statistics, Mumbai.

## Economic Growth and Poverty

Table 15

District Income at Constant Prices for the Years 1993–94, 1997–98 and 1998–99

Sr. No. District	District Income (NDDP) (Rs in lakhs)			Per Capita Income (Rs)			
	1993–94	1997–98	1998–99	1993–94	1997–98	1998–99	
1 2	3	4	5	6	7	8	
1	Mumbai #	2532707	3347103	3591126	24382	30126	31922
2	Thane	975214	1306632	1420028	17521	21948	23558
3	Raigad	386989	424855	458174	20245	20780	22132
4	Ratnagiri	143137	183048	190549	8888	10627	10926
5	Sindhudurg	116998	149813	150567	13480	16138	16018
6	Nashik	446856	565789	635268	11050	13081	14505
7	Dhule	180581	221393	235836	6796	7790	8195
8	Nandurbar	–	–	–	–	–	–
9	Jalgaon	287218	361852	401662	8605	10136	11112
10	Ahmednagar	278208	349093	402522	7868	9231	10512
11	Pune	876155	1119960	1236893	15058	17996	
12	Satara	221430	276879	303659	8632	10091	10930
13	Sangli	240075	311874	362552	10381	12609	14476
14	Solapur	292151	369143	423852	8628	10193	11558
15	Kolhapur	361702	453495	509728	11567	13559	15051
16	Aurangabad	252465	295379	334082	10789	11802	13183
17	Jalna	102066	102718	125716	7077	6659	8049
18	Parbhani	179317	186793	222074	8110	7898	9272
19	Hingoli	–	–	–	–	–	–
20	Beed	143647	163159	197815	7526	7993	9550
21	Nanded	179016	206262	233330	7304	7867	8788
22	Osmanabad	94788	103238	130270	7063	7192	8963
23	Latur	130035	145186	174298	7376	7700	9129
24	Buldhana	148032	157964	189532	7485	7467	8849
25	Akola	208449	226911	261137	8992	9152	10402
26	Washim	–	–	–	–	–	–
27	Amaravati	221059	249404	284122	9610	10137	11405
28	Yavatmal	172901	181186	211554	7957	7796	8990
29	Wardha	96321	127529	140751	8642	10698	11661
30	Nagpur	465780	666851	741829	13504	18076	19859
31	Bhandara	172897	223598	238027	7858	9501	9989
32	Gondia	–	–	–	–	–	–
33	Chandrapur	202695	244386	261482	10912	12301	13003
34	Gadchiroli	97220	93883	103958	11784	10639	11635
	Maharashtra	10206108	12815376	14172393	12326	14470	15804

Note: (1) Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available hence, combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

(2) Due to the paucity of data, use of indicators for allocation and various limitations of estimation procedure, the district domestic products are to be accepted with a margin of error and can be used to have a broad judgement on the level of income in the districts.

# Includes Mumbai City and Mumbai Suburban District.

Source: Directorate of Economics and Statistics, Mumbai.

## Economic Growth and Poverty

Table 16

Percentage Share of District Income (NDDP) to State Income at Current and Constant Prices

Sr. No. District	At Current Prices				At Constant (1993-94) Prices			
	1993-94	1995-96	1997-98	1998-99	1993-94	1995-96	1997-98	1998-99
1 2	3	4	5	6	7	8	9	10
1 Mumbai #	24.82	24.76	25.37	25.06	24.82	24.72	26.12	25.34
2 Thane	9.56	9.87	10.01	9.80	9.56	9.84	10.20	10.02
3 Raigad	3.79	3.75	3.24	3.08	3.79	3.82	3.32	3.23
4 Ratnagiri	1.40	1.40	1.29	1.23	1.40	1.42	1.43	1.34
5 Sindhudurg	1.15	1.13	0.93	0.92	1.15	1.15	1.17	1.06
6 Nashik	4.38	4.34	4.64	4.43	4.38	4.43	4.41	4.48
7 Dhule	1.77	1.63	1.76	1.66	1.77	1.61	1.73	1.66
8 Nandurbar	-	-	-	-	-	-	-	-
9 Jalgaon	2.81	2.76	2.86	2.91	2.81	2.70	2.82	2.83
10 Ahmednagar	2.73	2.80	2.74	2.86	2.73	2.83	2.72	2.84
11 Pune	8.58	8.99	8.62	8.64	8.58	9.15	8.74	8.73
12 Satara	2.17	2.10	2.10	2.12	2.17	2.22	2.16	2.14
13 Sangli	2.35	2.39	2.37	2.50	2.35	2.47	2.43	2.50
14 Solapur	2.86	2.82	2.92	3.25	2.86	2.78	2.88	2.99
15 Kolhapur	3.54	3.50	3.44	3.47	3.54	3.63	3.54	3.60
16 Aurangabad	2.47	2.55	2.29	2.40	2.47	2.57	2.30	2.36
17 Jalna	1.00	0.87	0.92	0.82	0.92	0.85	0.80	0.89
18 Parbhani	1.76	1.70	1.49	1.62	1.76	1.63	1.46	1.57
19 Hingoli	-	-	-	-	-	-	-	-
20 Beed	1.41	1.55	1.42	1.55	1.41	1.42	1.27	1.40
21 Nanded	1.75	1.67	1.70	1.70	1.75	1.64	1.61	1.65
22 Osmanabad	0.93	0.87	0.81	0.92	0.93	0.85	0.81	0.92
23 Latur	1.27	1.27	1.15	1.28	1.27	1.25	1.13	1.23
24 Buldhana	1.45	1.35	1.28	1.45	1.45	1.29	1.23	1.34
25 Akola	2.04	1.95	1.85	1.98	2.04	1.88	1.77	1.84
26 Washim	-	-	-	-	-	-	-	-
27 Amaravati	2.17	1.99	2.45	2.10	2.17	1.89	1.95	2.00
28 Yavatmal	1.69	1.55	1.48	1.54	1.69	1.50	1.41	1.49
29 Wardha	0.94	1.06	1.05	1.00	0.94	1.04	1.00	0.99
30 Nagpur	4.56	4.75	5.35	5.25	4.56	4.76	5.20	5.23
31 Bhandara	1.69	1.79	1.74	1.69	1.69	1.79	1.74	1.68
32 Gondia	-	-	-	-	-	-	-	-
33 Chandrapur	1.99	1.95	2.13	1.90	1.99	1.96	1.91	1.85
34 Gadchiroli	0.95	0.89	0.75	0.75	0.95	0.91	0.73	0.73
Maharashtra	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Note: (1) Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available hence, combined figures given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

(2) Due to the paucity of data, use of indicators for allocation and various limitations of estimation procedure, the district domestic products are to be accepted with a margin of error and can be used to have a broad judgement on the level of income in the districts.

# Includes Mumbai City and Mumbai Suburban District.

Source: Directorate of Economics and Statistics, Mumbai.



## Economic Growth and Poverty

Table 17

Sector-wise Percentage Share in Total District Income at Current Prices

Sr. No. District	Primary Sector			Secondary Sector			Tertiary Sector			
	1993-94	1997-98	1998-99	1993-94	1997-98	1998-99	1993-94	1997-98	1998-99	
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai #	1.27	1.78	1.90	37.63	35.48	34.17	61.10	62.73	63.92
2	Thane	6.02	5.33	4.92	45.36	46.28	44.32	48.62	48.39	50.76
3	Raigad	11.09	10.40	9.47	68.98	62.61	61.88	19.93	26.99	28.65
4	Ratnagiri	40.95	30.54	29.18	22.79	25.24	25.12	36.25	44.22	45.70
5	Sindhudurg	61.46	46.47	47.31	10.36	15.39	14.73	28.18	38.14	37.96
6	Nashik	29.92	30.34	27.78	33.99	33.59	33.23	36.09	36.07	38.99
7	Dhule	33.98	29.14	26.39	16.18	16.86	16.94	49.21	54.00	56.67
8	Nandurbar	-	-	-	-	-	-	-	-	-
9	Jalgaon	36.31	34.19	34.50	20.96	22.11	20.62	42.74	43.69	44.88
10	Ahmednagar	29.62	24.85	29.21	25.60	26.98	24.62	44.78	48.17	46.18
11	Pune	13.45	10.10	1.77	42.02	42.52	40.00	44.53	47.39	48.23
12	Satara	35.46	31.97	33.29	22.29	21.55	20.28	42.25	46.48	46.43
13	Sangli	35.71	30.77	35.53	18.47	21.18	19.00	45.82	48.05	45.46
14	Solapur	27.84	23.90	32.06	23.13	25.33	21.55	49.04	50.77	46.39
15	Kolhapur	30.75	25.00	27.79	24.75	25.74	24.19	44.50	49.27	48.02
16	Aurangabad	21.81	15.02	21.30	40.45	41.09	36.84	37.74	43.89	41.86
17	Jalna	46.85	28.70	37.89	12.86	17.65	14.87	40.28	53.65	47.23
18	Parbhani	46.13	33.60	39.20	12.90	15.64	13.72	40.97	50.76	47.08
19	Hingoli	-	-	-	-	-	-	-	-	-
20	Beed	43.27	38.20	44.17	13.73	16.07	14.03	43.00	45.74	41.81
21	Nanded	33.90	27.99	29.05	17.56	18.91	18.03	48.55	53.10	52.92
22	Osmanabad	49.01	35.24	44.45	13.22	17.25	14.45	37.77	47.52	41.10
23	Latur	36.95	26.07	34.55	15.11	16.74	14.28	47.94	57.19	51.17
24	Buldhana	37.29	24.59	34.10	12.02	14.86	12.52	50.69	60.55	53.39
25	Akola	33.09	24.38	29.18	13.64	14.34	12.79	53.27	61.28	58.03
26	Washim	-	-	-	-	-	-	-	-	-
27	Amaravati	44.19	47.02	38.31	12.64	11.94	13.32	43.17	41.03	48.37
28	Yavatmal	44.67	31.09	35.30	14.33	17.90	16.28	41.00	51.01	48.43
29	Wardha	36.44	37.11	34.01	17.74	19.77	19.57	45.81	43.12	46.42
30	Nagpur	17.61	17.10	15.67	26.33	33.16	32.04	56.06	49.74	52.29
31	Bhandara	40.81	33.82	32.97	24.46	30.08	29.34	34.72	36.10	37.68
32	Gondia	-	-	-	-	-	-	-	-	-
33	Chandrapur	45.05	47.30	41.96	22.05	19.82	21.08	32.91	32.88	36.95
34	Gadchiroli	73.28	64.09	64.48	6.82	9.62	9.16	19.90	26.29	26.36
	Maharashtra	21.29	17.98	19.12	31.29	31.80	30.11	47.42	50.21	50.77

Note: (1) Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available hence, combined figures given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

(2) Due to the paucity of data, use of indicators for allocation and various limitations of estimation procedure, the district domestic products are to be accepted with a margin of error and can be used to have a broad judgement on the level of income in the districts.

# Includes Mumbai City and Mumbai Suburban District.

Source: Directorate of Economics and Statistics, Mumbai.

## Economic Growth and Poverty

Table 18

Sector-wise Percentage Share in Total District Income at Constant (1993–94) Prices

Sr. No. District	Primary Sector			Secondary Sector			Tertiary Sector			
	1993–94	1997–98	1998–99	1993–94	1997–98	1998–99	1993–94	1997–98	1998–99	
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai #	1.27	1.50	1.63	37.63	36.25	36.37	61.10	62.26	62.00
2	Thane	6.02	5.29	5.25	45.36	47.31	46.41	48.62	47.40	48.34
3	Raigad	11.09	10.28	9.97	68.98	63.71	62.81	19.98	26.01	27.22
4	Ratnagiri	40.95	38.32	35.56	22.79	23.25	24.11	36.25	38.43	40.33
5	Sindhudurg	61.46	57.94	54.73	10.36	12.45	13.44	28.18	29.61	31.83
6	Nashik	29.92	25.34	27.47	33.99	37.20	35.49	36.09	37.46	37.04
7	Dhule	33.98	28.84	27.75	16.81	17.44	17.77	49.21	53.72	54.48
8	Nandurbar	–	–	–	–	–	–	–	–	–
9	Jalgaon	36.31	32.25	32.74	20.96	23.16	22.40	42.74	44.60	44.87
10	Ahmednagar	29.62	24.58	29.00	25.60	27.96	26.39	44.78	47.46	44.61
11	Pune	13.45	10.62	11.86	42.02	43.79	42.56	44.53	45.59	45.58
12	Satara	35.46	34.27	34.61	22.29	21.61	21.29	42.25	44.12	44.10
13	Sangli	35.71	32.81	37.80	18.47	21.04	19.52	45.82	46.15	42.67
14	Solapur	27.84	22.94	27.09	23.13	25.89	24.44	49.04	51.17	48.48
15	Kolhapur	30.75	27.54	30.91	24.75	25.55	24.59	44.50	46.91	44.50
16	Aurangabad	21.81	14.85	19.02	40.45	42.74	40.37	37.74	42.71	40.61
17	Jalna	46.85	27.80	37.02	12.86	18.32	16.21	40.28	53.87	46.77
18	Parbhani	46.13	32.54	38.94	12.90	15.97	14.68	40.97	51.49	46.38
19	Hingoli	–	–	–	–	–	–	–	–	–
20	Beed	43.27	31.60	39.57	13.73	18.15	16.25	43.00	50.25	44.18
21	Nanded	33.90	24.35	28.53	17.56	20.07	19.32	48.55	55.57	52.15
22	Osmanabad	49.01	35.97	45.78	13.22	17.46	15.06	37.77	46.58	39.17
23	Latur	36.95	25.98	33.96	15.11	17.08	15.49	47.94	56.94	50.54
24	Buldhana	37.29	21.58	30.81	12.02	15.63	14.13	50.69	62.79	55.06
25	Akola	33.09	21.08	26.84	13.64	15.07	14.21	53.27	63.85	58.95
26	Washim	–	–	–	–	–	–	–	–	–
27	Amaravati	44.19	34.31	37.43	12.64	15.07	14.40	43.17	50.62	48.17
28	Yavatmal	44.67	28.92	34.79	14.33	18.86	17.55	41.00	52.22	47.66
29	Wardha	36.44	33.92	34.56	17.74	21.06	20.58	45.81	45.02	44.86
30	Nagpur	17.61	14.21	16.07	26.33	35.02	33.88	56.06	50.78	50.06
31	Bhandara	40.81	33.18	31.73	24.46	31.47	31.98	34.72	35.35	36.29
32	Gondia	–	–	–	–	–	–	–	–	–
33	Chandrapur	45.05	41.19	40.63	22.05	22.68	22.91	32.91	36.13	36.46
34	Gadchiroli	73.28	63.62	64.82	6.82	10.08	9.91	19.90	26.30	25.27
	Maharashtra	21.29	16.84	18.80	31.29	33.05	32.13	47.42	50.11	49.07

Note: (1) Figures for newly formed districts i.e. Nandurbar, Hingoli; Washim and Gondia are not available hence, combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

(2) Due to the paucity of data, use of indicators for allocation and various limitations of estimation procedure, the district domestic products are to be accepted with a margin of error and can be used to have a broad judgement on the level of income in the districts.

# Includes Mumbai City and Mumbai Suburban District.

Source: Directorate of Economics and Statistics, Mumbai.

## Economic Growth and Poverty

Table 19

Employment in Central Government, State Government and Local Bodies for 2000

Sr. No.	District	Central Government 2000		State Government 2000		Local Bodies 2000	
		Total	Female	Total	Female	Total	Female
1	2	3	4	5	6	7	8
1	Mumbai #	179946	21589	78456	13335	172748	37542
2	Thane	8930	1230	30379	3916	42064	13875
3	Raigad	2730	209	9114	838	10562	3237
4	Ratnagiri	1150	235	9346	1129	12431	4548
5	Sindhudurg	1560	151	5879	535	6604	2646
6	Nashik	23070	1442	25370	2238	25942	7483
7	Dhule	1938	118	16486	1507	13679	3516
8	Nandurbar	–	–	–	–	–	–
9	Jalgaon	35059	1693	12436	900	20228	4622
10	Ahmednagar	5328	692	18386	1151	20083	5337
11	Pune	54307	8264	46574	6784	51565	17063
12	Satara	2947	280	13425	960	16133	4998
13	Sangli	2155	269	11847	1248	14110	4521
14	Solapur	16288	835	16632	1608	22254	5176
15	Kolhapur	3038	319	12682	1087	22514	5580
16	Aurangabad	3867	301	18262	2117	14966	3749
17	Jalna	232	12	6332	246	9456	2162
18	Parbhani	152	29	11504	592	12827	1656
19	Hingoli	–	–	–	–	–	–
20	Beed	1228	31	14729	2714	15402	2519
21	Nanded	1737	68	17260	1179	16592	2932
22	Osmanabad	1471	31	7443	519	13783	4628
23	Latur	370	34	7328	433	11124	2628
24	Buldhana	1112	36	9535	643	13699	3170
25	Akola	1877	108	10293	902	16426	3979
26	Washim	–	–	–	–	–	–
27	Amaravati	1466	120	20288	1851	17905	4999
28	Yavatmal	0	0	13636	672	14996	2443
29	Wardha	2557	141	7903	661	8792	2476
30	Nagpur	57525	3648	35450	4893	23196	7987
31	Bhandara	4465	266	8823	694	14537	2980
32	Gondia	–	–	–	–	–	–
33	Chandrapur	7202	335	11954	1068	11926	3302
34	Gadchiroli	112	–	10512	1434	7065	1375
	Maharashtra	423822	42490	518269	57860	673616	173137

Note: (1) Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

(2) Due to the paucity of data, use of indicators for allocation and various limitations of estimation procedure, the district domestic products are to be accepted with a margin of error and can be used to have a broad judgement on the level of income in the districts.

# Includes Mumbai City and Mumbai Suburban District.

Source: Commissioner, Employment and Self Employment, Navi Mumbai.

## Economic Growth and Poverty

Table 20

Employment in Central Government Quasi and State Government Quasi for 2000

<i>Sr.</i>		<i>Central Government Quasi 2000</i>		<i>State Government Quasi 2000</i>	
<i>No. District</i>		<i>Total</i>	<i>Female</i>	<i>Total</i>	<i>Female</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
1	Mumbai #	248483	44891	16528	2830
2	Thane	10084	3022	15687	834
3	Raigad	11601	934	5844	143
4	Ratnagiri	1904	217	6994	204
5	Sindhudurg	1223	152	4677	315
6	Nashik	13138	1389	16225	616
7	Dhule	3180	160	7212	124
8	Nandurbar	—	—	—	—
9	Jalgaon	3558	235	12530	233
10	Ahmednagar	2603	321	8667	159
11	Pune	25052	6341	20220	2470
12	Satara	2500	339	8868	292
13	Sangli	2163	245	9169	193
14	Solapur	3856	337	12375	631
15	Kolhapur	3456	492	11946	338
16	Aurangabad	4268	607	11541	434
17	Jalna	528	45	2896	29
18	Parbhani	848	44	6194	122
19	Hingoli	—	—	—	—
20	Beed	1032	52	7300	95
21	Nanded	2639	135	7412	159
22	Osmanabad	576	27	3812	66
23	Latur	1023	43	5552	164
24	Buldhana	978	43	5255	77
25	Akola	3786	397	7133	232
26	Washim	—	—	—	—
27	Amaravati	3595	270	8588	237
28	Yavatmal	3535	130	6410	144
29	Wardha	2513	145	5320	193
30	Nagpur	38323	3212	23796	1128
31	Bhandara	3343	463	3813	156
32	Gondia	—	—	—	—
33	Chandrapur	21426	784	8663	223
34	Gadchiroli	285	17	1226	46
Maharashtra		421499	65489	271853	12887

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Commissioner, Employment and Self Employment, Navi Mumbai.

## Economic Growth and Poverty

Table 21

Number of Families Below Poverty Line for 1997–98

Sr. No.	District	Total Families	BPL Families	Percentage
1	2	3	4	5
1	Mumbai #	–	–	–
2	Thane	402169	209524	52.10
3	Raigad	340366	97584	28.67
4	Ratnagiri	326096	119669	36.70
5	Sindhudurg	170772	63628	37.26
6	Nashik	538214	211157	39.23
7	Dhule	259731	131013	50.44
8	Nandurbar	221137	166799	75.43
9	Jalgaon	597900	229150	38.33
10	Ahmednagar	602305	150825	25.04
11	Pune	545983	106604	19.53
12	Satara	467166	75817	16.23
13	Sangli	362854	51386	14.16
13	Solapur	499206	134329	26.91
15	Kolhapur	476983	81858	17.16
16	Aurangabad	293555	76342	26.01
17	Jalna	256848	69797	27.17
17	Parbhani	364859	112489	30.83
19	Hingoli	–	–	–
20	Beed	368707	95282	25.84
21	Nanded	378020	110741	29.30
21	Osmanabad	269077	58031	21.57
23	Latur	303322	85406	28.16
24	Buldhana	361639	150589	41.64
25	Akola	222727	99136	44.51
25	Washim	192038	92842	48.35
27	Amaravati	360658	184932	51.28
28	Yavatmal	423641	184801	43.62
29	Wardha	182000	80840	44.42
30	Nagpur	324165	111253	34.32
31	Bhandara	443998	229102	51.60
31	Gondia	–	–	–
33	Chandrapur	316892	148697	46.92
34	Gadchiroli	180117	99389	55.18
	<b>Maharashtra</b>	<b>11053145</b>	<b>3819012</b>	<b>34.55</b>

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Below Poverty Line Survey for 1997-98 by Rural Development Department, Mantralaya, Mumbai.

## Economic Growth and Poverty

Table 22

### Agricultural Wage Rate per Day for Males and Females

*In Rupees*

Sr. No. Month		Wage Rates (Ploughing)							
		1997		1998		1999		2000	
		Male	Female	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9	10
1	January	39.39	–	41.33	–	49.31	–	56.29	–
2	February	39.58	–	42.56	–	50.36	–	55.12	–
3	March	39.24	–	42.00	–	50.25	–	55.10	–
4	April	38.23	–	41.96	–	48.73	–	54.01	–
5	May	40.17	–	41.98	–	47.08	–	53.58	–
6	June	39.28	–	44.08	–	50.86	–	57.01	–
7	July	40.94	–	46.06	–	51.45	–	58.90	–
8	August	39.94	–	46.12	–	52.00	–	59.19	–
9	September	41.10	–	49.04	–	52.37	–	60.95	–
10	October	42.09	–	49.04	–	53.45	–	62.78	–
11	November	42.22	–	48.61	–	53.86	–	62.78	–
12	December	41.69	–	49.81	–	54.39	–	62.78	–

*In Rupees*

Sr. No. Month		Wage Rates (Sowing)							
		1997		1998		1999		2000	
		Male	Female	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9	10
1	January	36.60	25.65	41.07	28.72	46.11	35.05	46.84	31.75
2	February	37.33	26.69	41.32	30.40	48.89	38.00	46.79	29.25
3	March	37.17	26.69	45.77	32.00	49.71	40.36	50.83	36.56
4	April	38.24	27.33	45.00	38.83	51.67	34.62	53.95	37.50
5	May	38.66	27.50	45.00	32.50	49.64	33.75	54.12	38.18
6	June	37.37	26.20	42.07	29.06	46.95	33.71	51.51	39.36
7	July	40.13	27.56	42.25	29.64	48.33	32.50	51.58	30.88
8	August	39.01	26.51	42.72	30.91	46.25	30.50	53.16	32.37
9	September	40.65	27.25	45.62	34.63	54.23	30.71	54.35	31.88
10	October	41.63	28.03	45.78	34.63	47.92	31.67	53.70	30.00
11	November	41.37	28.11	44.67	33.41	48.03	30.51	52.87	30.70
12	December	41.52	28.58	44.39	33.76	46.96	31.13	52.42	30.67

## Economic Growth and Poverty

Table 22 (continued)

Agricultural Wage Rate per day for Males and Females

*In Rupees*

Sr. No. Month		Wage Rates (Harvesting)							
		1997		1998		1999		2000	
		Male	Female	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9	10
1	January	34.50	23.82	39.75	27.21	43.73	32.43	48.03	30.93
2	February	35.28	24.61	40.87	27.22	41.37	28.20	46.84	32.10
3	March	35.88	24.24	39.75	26.71	41.72	27.42	47.57	32.14
4	April	37.42	24.69	39.75	27.92	41.43	28.28	46.99	31.57
5	May	38.11	25.57	39.08	26.44	41.18	28.82	47.85	32.81
6	June	37.89	24.90	40.00	29.79	40.91	29.00	50.75	33.68
7	July	37.80	24.45	–	–	–	–	37.50	–
8	August	37.63	22.88	–	–	–	–	57.92	35.71
9	September	38.83	24.42	38.55	26.78	48.21	33.33	54.48	34.12
10	October	39.85	27.25	42.25	31.29	45.13	31.78	50.26	34.83
11	November	39.39	26.96	42.65	32.05	47.47	33.42	47.95	33.64
12	December	40.70	27.88	44.69	33.49	47.97	34.31	48.11	34.05

*In Rupees*

Sr. No. Month		Wage Rates (Threshing)							
		1997		1998		1999		2000	
		Male	Female	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9	10
1	January	34.93	24.07	40.44	26.05	41.18	31.82	43.64	30.50
2	February	34.27	23.18	40.19	25.50	43.93	35.46	44.00	–
3	March	36.69	23.26	39.82	25.75	43.00	34.23	43.82	29.62
4	April	37.73	24.32	40.48	26.56	40.94	30.93	43.75	31.25
5	May	37.12	23.85	40.29	28.57	–	–	44.50	–
6	June	38.30	23.83	–	–	–	–	–	–
7	July	–	24.10	–	–	–	–	–	–
8	August	–	–	–	–	–	–	–	–
9	September	–	–	–	–	–	–	–	–
10	October	43.13	26.54	41.67	–	–	–	51.00	–
11	November	40.46	26.37	41.84	–	40.33	–	51.54	–
12	December	41.36	26.84	41.56	–	41.50	–	52.50	–

Source: National Sample Survey Organisation Data Processing Division Headquarters, Kolkata.

## Economic Growth and Poverty

Table 23

Employment in Central Government, State Government and Local Bodies (1996–2000)

Sr. No. Year		Employment in									
		Central Government		State Government		Local Bodies		Central Government Quasi		State Government Quasi	
		Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
1	2	3	4	5	6	7	8	9	10	11	12
1	1996	453553	41654	530737	54712	665481	167470	421499	65489	271853	12887
2	1997	447708	41496	527946	54464	679279	171412	424166	66779	267170	12295
3	1998	432834	42279	531249	55885	682962	171825	416439	66128	268078	12624
4	1999	427350	42300	522334	57304	679120	171571	412703	67180	263854	12292
5	2000	423819	42486	518264	57854	673609	173129	412148	67564	262087	11959

Source: Commissioner, Employment and Self-Employment, Navi Mumbai.



## Economic Growth and Poverty

Table 24

### Selected Indicators of Human Development

State	Literacy (%) (Reference Year—1991)			Life Expectancy at Birth (Years) 1991–95	Per Capita SDP (Rs at Current Prices) 1998–99
	Male	Female	Total		
1	2	3	4	5	6
Andhra Pradesh	55.13	32.72	44.09	61.80	13,853
Assam	61.87	43.03	52.89	55.70	8,700
Bihar	52.49	22.89	38.48	59.30	5,923
Gujarat	73.13	48.64	61.29	61.00	18,792
Haryana	69.10	40.47	55.85	63.40	19,773
Karnataka	67.26	44.34	56.04	62.50	15,889
Kerala	93.62	86.17	89.81	72.90	17,756
Madhya Pradesh	58.42	28.85	44.20	54.70	10,147
Maharashtra	76.56	52.32	64.87	64.80	20,644
Orissa	63.09	34.68	49.09	56.50	8,719
Punjab	65.66	50.41	58.51	67.20	20,834
Rajasthan	54.99	20.44	38.55	59.10	11,045
Tamil Nadu	73.75	51.33	62.66	63.30	17,525
Uttar Pradesh	55.73	25.31	41.60	56.80	9,261
West Bengal	67.81	46.56	57.70	62.10	12,961
All-India	64.13	39.29	52.21	60.30	14,712

Source: Government of Maharashtra (2001a).

## Economic Growth and Poverty

Table 25

Estimates of Per Capita Intake of Calories, Protein and Fat per Diem by Decile Groups:  
Urban Maharashtra

Decile Group	Calorie (cal.)			Protein (gm.)			Fat (gm.)		
	1972-73	1983	1993-94	1972-73	1983	1993-94	1972-73	1983	1993-94
1	2	3	4	5	6	7	8	9	10
0-10	1197.00	1400.22	1471.97	32.43	41.34	42.78	14.24	18.03	21.70
10-20	1513.24	1592.57	1644.80	59.15	47.35	47.03	22.82	24.06	30.04
20-30	1676.00	1719.90	1765.37	51.10	50.01	49.83	28.60	29.02	34.87
30-40	1726.91	1788.68	1850.75	51.42	52.03	52.01	30.91	32.12	38.90
40-50	1778.39	1886.00	1879.85	51.61	54.00	52.63	33.17	39.00	43.00
50-60	1919.00	1999.84	1949.32	52.00	57.48	53.95	39.30	44.21	47.49
60-70	1993.75	2049.21	2089.00	53.95	58.53	58.70	43.41	47.12	53.60
70-80	2181.97	2217.71	2227.16	58.81	61.47	60.99	53.27	58.04	60.38
80-90	2609.00	2695.69	2379.50	69.20	70.22	65.15	66.90	75.03	67.40
90-100	3114.74	2930.16	2632.28	73.34	67.55	71.93	86.39	83.35	81.63
All	1971.00	2028.00	1989.00	55.30	56.00	55.50	41.90	45.00	47.90

Source: Based on NSSO (1983, 1986 & 1997).

Estimates of Per Capita Intake of Calories, Protein and Fat per Diem by Decile Groups:  
Rural Maharashtra

Decile Group	Calorie (cal.)			Protein (gm.)			Fat (gm.)		
	1972-73	1983	1993-94	1972-73	1983	1993-94	1972-73	1983	1993-94
1	2	3	4	5	6	7	8	9	10
0-10	1063.41	1540.20	1333.80	32.12	45.31	40.87	10.28	15.13	16.79
10-20	1420.23	1737.40	1532.24	43.14	50.34	43.95	14.26	18.89	21.82
20-30	1588.21	1851.10	1662.20	47.35	53.58	47.64	15.44	21.19	24.70
30-40	1695.00	1920.00	1765.40	49.70	56.00	50.26	17.70	23.00	27.24
40-50	1818.82	2064.20	1854.20	52.42	59.78	52.34	22.48	25.27	30.85
50-60	1959.00	2155.90	1921.22	55.50	61.75	53.97	27.90	27.89	33.17
60-70	2056.27	2230.00	2028.14	58.47	63.00	56.78	28.56	31.00	35.88
70-80	2152.00	2337.80	2110.50	61.40	66.46	58.85	29.20	34.46	38.23
80-90	2370.71	2544.20	2299.87	67.87	72.82	31.92	41.50	44.14	-
90-100	2826.35	3059.10	2882.43	79.03	90.96	79.02	46.27	61.68	62.19
All	1895.00	2144.00	1939.00	54.70	62.00	54.80	24.40	30.00	33.50

Source: Based on NSSO (1983, 1986, 1989 and 1997a).

## Economic Growth and Poverty

Table 25A

Monthly Per Capita Cereal Consumption (Kg) by Select Decile Groups: Maharashtra

Year	Rural Sector Population Decile Group (per cent)						Urban Population Decile Group (per cent)					
	0-10	10-20	20-30	30-40	40-50	All	0-10	10-20	20-30	30-40	40-50	All
1	2	3	4	5	6	7	8	9	10	11	12	13
1961-62	13.36	11.61	12.59	14.55	13.96	16.07	9.57	10.08	11.22	11.41	11.27	10.81
1972-73	7.72	10.19	11.55	12.09	12.53	12.64	7.71	9.42	9.77	9.54	9.45	8.99
1973-74	9.50	11.20	12.08	12.84	13.53	13.48	8.74	9.86	9.63	9.31	9.35	9.26
1977-78	9.61	11.15	12.09	12.82	13.07	13.57	9.32	10.44	10.32	10.26	10.43	10.01
1983	11.06	12.24	12.80	13.08	13.85	13.83	9.27	9.79	10.15	10.23	10.11	10.00
1986-87	7.92	10.27	10.80	11.97	12.37	11.88	8.27	8.68	9.12	10.20	10.34	9.29
1987-88	10.36	11.57	12.37	12.94	13.35	13.06	9.99	10.56	10.48	10.63	9.98	10.23
1993-94	9.03	9.96	10.61	11.10	11.27	11.41	9.43	9.54	9.75	9.83	9.44	9.41
1999-00	9.69	10.35	10.98	11.38	11.80	11.47	7.92	9.48	9.51	10.38	9.70	9.45

Source: Author's estimates based on various issues of *Sarvekshana*.

## Economic Growth and Poverty

Table 26

Growth in State Domestic Product at Factor Cost by Sector, Maharashtra, 1960–2000

<i>Sector</i>	<i>Share in SDP '60– '61 (%)</i>	<i>Growth '61–'70 (% per annum)</i>	<i>Share in SDP '70– '71 (%)</i>	<i>Growth '71–'80 (% per annum)</i>	<i>Share in SDP '80– '81 (%)</i>	<i>Growth '81–'90 (% per annum)</i>	<i>Share in SDP '90– '91 (%)</i>	<i>Growth '90–'00 (% per annum)</i>	<i>Share in SDP '99– '00 (%)</i>	<i>Growth '61–'00 (% per annum)</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>
Agriculture	36.20	−0.85	24.40	6.64*	23.65	3.28	19.59	4.38	15.52	2.93
Forestry & logging	4.89	−0.73	4.36	0.05	2.57	1.52	1.90	−3.06	0.86	0.17
Fishing	0.67	3.55	0.60	6.36*	0.75	1.93	0.49	5.22	0.40	3.63*
Mining & quarrying	0.37	7.45*	0.49	5.46*	0.73	4.43	0.91	3.29	0.66	6.10*
<b>Sub Total: Primary</b>	<b>42.14</b>	<b>−0.67</b>	<b>29.86</b>	<b>5.77*</b>	<b>27.69</b>	<b>3.12</b>	<b>22.88</b>	<b>3.83</b>	<b>17.44</b>	<b>2.74*</b>
Registered Manufacturing	9.91	5.90*	14.12	7.15*	16.66	6.98*	18.91	5.28*	16.56	5.94*
Unregistered Manufacturing	7.01	2.40*	6.90	4.77*	7.21	4.73*	6.14	9.45*	8.06	4.91*
Construction	8.68	3.55*	9.53	1.26*	7.28	3.60*	5.89	4.75*	5.35	2.82*
Electricity, gas & water supply	0.53	10.92*	1.15	5.46*	1.40	9.68*	1.96	8.05*	2.15	8.35*
<b>Sub Total: Secondary</b>	<b>26.13</b>	<b>4.42*</b>	<b>31.70</b>	<b>5.77*</b>	<b>32.56</b>	<b>5.91*</b>	<b>32.90</b>	<b>6.30*</b>	<b>32.11</b>	<b>5.05*</b>
Railways	0.97	3.95*	1.05	5.26*	0.96	4.66*	0.90	5.58*	0.83	3.90*
Transport by other means & storage	1.86	8.50*	3.23	3.76*	3.18	7.59*	3.98	8.61*	4.53	6.59*
Communications	0.93	11.04*	1.66	7.28*	2.28	6.06*	2.19	16.02*	4.53	7.50*
Trade, hotels & restaurants	12.34	2.30*	11.59	6.49*	12.77	5.65*	13.36	7.86*	13.93	5.07*
Banking & insurance	2.72	1.53	4.24	5.92*	4.47	10.71*	7.87	6.76	9.96	9.15*
Real estate, ownership of dwellings & building services	6.87		4.95*	8.52	3.28*	7.94	3.23*	6.21	4.36*	5.27
Public administration	1.05	9.06*	2.16	8.59*	3.24	7.55*	3.52	−2.22	4.33	7.93*
Other services	4.99	4.72*	5.99	2.10*	4.91	6.90	6.19	7.18*	7.08	5.03*
<b>Sub Total: Tertiary</b>	<b>31.73</b>	<b>4.31*</b>	<b>38.44</b>	<b>5.03*</b>	<b>39.75</b>	<b>6.42*</b>	<b>44.21</b>	<b>7.56*</b>	<b>50.45</b>	<b>5.82*</b>
Net State Domestic Product	100.00	2.52*	100.00	5.23*	100.00	5.42*	100.00	6.40*	100.00	4.73*
Per Capita SDP (Rs)		0.06		2.94*		3.05*		4.64*		2.43*

\* Significant at 1 % level for a two-tail test.

Note: Growth rates worked out from Ordinary Least Squares semi-log trend functions.

Source: Based on data at 1993–94 prices provided by the Directorate of Economics & Statistics, Government of Maharashtra.

## Economic Growth and Poverty

Table 27

EGS: A Statistical Profile

<i>Year</i>	<i>Total Expenditure (Rs million at current prices)</i>	<i>Total Expenditure (Rs million at 1993–94 prices)</i>	<i>Proportion of total Expenditure on Wages (%)</i>	<i>Persondays Generated (Million)</i>	<i>Cost per Personday (Rs at current prices)</i>	<i>Cost per Personday (Rs at 1993–94 prices)</i>	<i>Average Labour Attendance per day (Million)</i>	<i>Average Wage per Personday (Rs at current prices)</i>	<i>Average Wage per Personday (Rs at 1960–61 prices)</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>
1972–73	18.8	107.26	–	4.50	4.18	23.84	–	–	–
1973–74	18.9	93.38	–	5.10	3.71	18.31	–	–	–
1974–75	137.2	582.71	–	48.10	2.85	12.11	–	–	–
1975–76	346.1	1461.76	90.95	109.50	3.16	13.35	0.33	–	–
1976–77	511.0	2029.56	75.04	136.50	3.74	14.87	0.46	2.81	0.91
1977–78	515.4	1958.65	73.98	117.30	4.39	16.70	0.39	3.25	1.01
1978–79	741.7	2700.41	79.58	163.50	4.54	16.52	0.55	3.61	1.16
1979–80	1092.3	3514.17	81.89	205.40	5.32	17.11	0.69	4.36	1.24
1980–81	1221.2	3419.90	75.90	171.50	7.12	19.94	0.57	5.40	1.41
1981–82	1261.7	3275.18	77.74	156.00	8.09	20.99	0.52	6.28	1.36
1982–83	1309.3	3292.33	76.20	128.00	10.23	25.72	0.47	7.80	1.74
1983–84	1849.8	4309.05	75.34	164.50	11.24	26.19	0.55	8.41	1.68
1984–85	2320.4	5097.24	63.68	178.00	13.04	28.64	0.60	8.30	1.61
1985–86	2722.4	5568.63	66.85	189.50	14.37	29.39	0.63	9.60	1.79
1986–87	2434.3	4699.60	63.47	187.60	12.98	25.05	0.63	8.23	1.44
1987–88	2883.1	5045.16	53.19	133.30	21.63	37.85	0.46	9.11	1.46
1988–89	2542.3	4080.72	50.00	81.30	31.27	50.19	0.27	15.02	2.21
1989–90	2392.8	3581.11	53.30	78.00	30.68	45.91	0.28	15.53	2.07
1990–91	2389.2	3228.30	57.37	89.80	26.61	35.95	0.18	15.02	1.97
1991–92	3199.2	3816.37	63.14	119.40	26.79	31.96	0.26	16.91	1.71
1992–93	4527.2	4987.51	60.30	148.00	30.59	33.70	0.38	18.45	1.60
1993–94	3473.4	3473.40	52.69	98.40	35.30	35.30	0.22	18.60	1.80
1994–95	3840.9	3420.11	69.92	94.20	40.77	36.31	0.19	28.51	2.29
1995–96	4437.5	3632.09	63.00	97.00	45.75	37.44	0.19	28.82	1.93
1996–97	3667.5	2836.11	70.00	90.10	40.70	31.48	0.10	28.49	1.90
1997–98	3530.0	2584.87	73.00	90.00	39.22	28.72	0.10	28.63	1.88
1998–99	4566.6	3166.02	71.00	91.90	49.69	34.45	0.12	35.28	2.09
1999–2000	4939.7	3253.38	75.00	94.90	52.05	34.28	0.12	39.04	2.23
Total	62889.9	89214.98	3271.30	–	–	–	–	–	–
Average	–	–	66.95	20.71	27.94	15.23	1.69	–	–

*Note:* Estimates of total expenditure on the EGS at constant 1993–94 prices are obtained using implicit state domestic product deflator and those of wages at constant 1960–61 prices are obtained using the Consumer Price Index for Agricultural Labourers.

*Source:* Planning Department, Mantralaya, Mumbai.

## Economic Growth and Poverty

Table 27A

Sectoral Growth Performance during different Five Year Plan Periods—  
Maharashtra and All India (Average Growth Rate: Per Cent Per Annum)

Plan	Maharashtra				All-India			
	Primary Sector	Secondary Sector	Tertiary Sector	Total Sector	Primary Sector	Secondary Sector	Tertiary Sector	Total Sector
1	2	3	4	5	6	7	8	9
III Plan (1961–66)	-2.84	4.54	4.34	1.77	-0.46	6.50	5.22	2.47
Annual Plan (1966–69)	5.36	4.58	4.38	4.76	4.08	3.21	3.92	3.72
IV Plan (1969–74)	-0.18	2.56	3.59	2.19	2.51	3.07	4.05	3.20
V Plan (1974–79)	3.52	7.67	6.78	6.02	3.33	6.41	5.65	4.80
Annual Plan (1979–80)	-0.22	1.56	1.59	1.05	-13.09	-4.86	1.63	-6.23
VI Plan (1980–85)	1.00	3.04	6.16	3.77	5.69	5.61	5.47	5.47
VII Plan (1985–90)	1.00	7.10	7.00	8.25	3.24	7.52	8.07	6.03
Annual Plan (1990–92)	-18.73	0.31	2.19	-0.67	1.46	2.25	5.06	3.12
VIII Plan (1992–97)	5.23	6.87	5.37	6.73	4.64	7.04	7.55	6.44

*Note:* Sectoral growth rates worked out on the basis of net domestic product estimates at 1993–94 prices.

*Source:* Based on data at 1993–94 prices provided by the Directorate of Economics and Statistics, Mumbai.

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## Health and Nutrition

Table 28

Number of Medical Institutions\* for 1961, 1971, 1981, 1991 and 2000,  
and Annual Growth Ratio for 1961 to 2000 and 1991 to 2000

Sr.		Number of Government Medical Institution					Annual Growth Rate	
No. District		1961	1971	1981	1991	2000	1961–2000	1991–2000
1	2	3	4	5	6	7	8	9
1	Mumbai #	129	191	245	267	747	14.48	0.19
2	Thane	5	9	27	42	48	24.00	11.43
3	Raigad	7	7	13	21	22	7.86	10.48
4	Ratnagiri	4	7	9	14	14	8.75	10.00
5	Sindhudurg	–	–	–	9	12	0.00	13.33
6	Nashik	4	12	25	41	56	35.00	13.66
7	Dhule	5	6	15	23	29	14.50	12.61
8	Nandurbar	–	–	–	–	–	–	–
9	Jalgaon	3	7	15	34	38	31.67	11.18
10	Ahmednagar	6	6	20	30	32	13.33	10.67
11	Pune	15	21	47	90	96	16.00	10.67
12	Satara	5	7	15	20	23	11.50	11.50
13	Sangli	2	5	12	21	22	27.50	10.48
14	Solapur	9	16	22	42	44	12.22	10.48
15	Kolhapur	3	9	16	18	24	20.00	13.33
16	Aurangabad	1	11	17	17	19	47.50	11.18
17	Jalna	–	–	–	8	9	–	11.25
18	Parbhani	1	3	5	13	18	45.00	13.85
19	Hingoli	–	–	–	–	–	–	–
20	Beed	2	4	5	12	13	16.25	10.83
21	Nanded	4	5	8	21	24	15.00	11.43
22	Osmanabad	1	6	5	12	13	32.50	10.83
23	Latur	–	–	–	11	13	–	11.82
24	Buldhana	14	14	15	18	20	3.57	11.11
25	Akola	5	12	19	22	27	13.50	12.27
26	Washim	–	–	–	–	–	–	–
27	Amaravati	14	15	28	45	50	8.93	11.11
28	Yavatmal	14	14	18	20	22	3.93	11.00
29	Wardha	8	10	14	18	19	5.94	10.56
30	Nagpur	21	25	39	43	44	5.24	10.23
31	Bhandara	9	10	10	17	20	5.56	11.76
33	Chandrapur	7	8	13	20	22	7.86	11.00
34	Gadchiroli	–	–	–	8	13	–	16.25
Maharashtra		298	440	677	977	1553	13.03	15.90

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available hence, combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

\* Excluding private institutions.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Health Services, Mumbai.

## Health and Nutrition

Table 29

Population per Government Medical Institution\* and Number of Medical Institutions per lakh population for 1961, 1971, 1981, 1991 and 2000

Sr. No. District		Population per Government Medical Institution					Number of Medical Institutions per lakh population				
		1961	1971	1981	1991	2000	1961	1971	1981	1991	2000
1	2	3	4	5	6	7	8	9	10	11	12
1	Mumbai #	32186	31260	33647	37176	15950	3.1	3.2	3.0	2.7	6.3
2	Thane	330536	253518	124132	124979	149588	0.3	0.4	0.8	0.8	0.7
3	Raigad	151265	180429	114342	86896	99002	0.7	0.6	0.9	1.2	1.0
4	Ratnagiri	456801	284369	234690	110290	71280	0.2	0.4	0.4	0.9	0.8
5	Sindhudurg	-	-	-	92461	138692	-	-	-	1.1	1.4
6	Nashik	463812	197435	119870	93935	84659	0.2	0.5	0.8	1.1	1.2
7	Dhule	270247	277030	136686	110248	104884	0.4	0.4	0.7	0.9	1.0
8	Nandurbar	-	-	-	-	-	-	-	-	-	-
9	Jalgaon	588349	303303	174652	93754	99557	0.2	0.3	0.6	1.1	1.0
10	Ahmednagar	295995	378186	135115	112431	127020	0.3	0.3	0.7	0.9	0.8
11	Pune	164459	151335	88606	61473	72315	0.6	0.7	1.1	1.6	1.4
12	Satara	119175	75103	63709	27544	30686	0.3	0.4	0.7	0.8	0.8
13	Sangli	615358	307964	162601	105214	118458	0.2	0.3	0.7	1.0	0.8
14	Solapur	206680	140865	118643	76930	88138	0.5	0.7	0.8	1.3	1.1
15	Kolhapur	532164	227561	156646	166084	145739	0.2	0.4	0.6	0.6	0.7
16	Aurangabad	1532341	179182	143142	130222	106235	0.1	0.6	0.7	0.8	0.9
17	Jalna	-	-	-	170553	303206	-	-	-	0.6	0.5
18	Parbhani	1206226	502257	265376	162849	134610	0.1	0.2	0.3	0.6	0.7
19	Hingoli	-	-	-	-	-	-	-	-	-	-
20	Beed	500733	321530	297206	151839	167152	0.2	0.3	0.3	0.7	0.6
21	Nanded	269918	279552	210687	119970	122038	0.4	0.4	0.5	0.9	0.8
22	Osmanabad	1477556	316116	446124	106361	96488	0.1	0.3	0.2	0.9	0.9
23	Latur	-	-	-	152422	257945	-	-	-	0.7	0.6
24	Buldhana	75693	90213	75439	125753	126606	1.3	1.1	1.3	0.8	0.8
25	Akola	237871	125123	96155	100649	97032	0.4	0.8	1.0	1.0	1.0
26	Washim	-	-	-	-	-	-	-	-	-	-
27	Amaravati	88056	102747	60479	48890	51146	1.1	1.0	1.5	2.0	2.0
28	Yavatmal	78462	101691	96524	102857	110647	1.3	1.0	1.0	1.0	0.9
29	Wardha	79285	77956	66487	59298	64072	1.3	1.3	1.5	1.7	1.6
30	Nagpur	72038	77738	66380	76445	91167	1.4	1.3	1.5	1.3	1.1
31	Bhandara	140921	158558	183758	123978	119603	0.7	0.6	0.5	0.8	0.8
32	Gondia	-	-	-	-	-	-	-	-	-	-
33	Chandrapur	176867	205017	158126	88600	68586	0.6	0.5	0.6	1.1	1.0
34	Gadchiroli	-	-	-	98376	121078	-	-	-	1.0	1.4
	Maharashtra	202295	178481	120134	97611	10451148	0.5	0.6	0.8	1.0	1.0

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available hence, combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

\* Excluding private institutions.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Health Services, Mumbai.



## Health and Nutrition

Table 30

Number of PHCs, Population per PHC, and Number of PHCs per lakh population for 1961, 1971, 1981, 1991 and 2000

Sr. No. District		District-wise Growth of Primary Health Centres								
		1961			1971			1981		
		PHCs	Population per PHC	No. of PHCs per lakh population	PHCs	Population per PHC	No. of PHCs per lakh population	PHCs	Population per PHC	No. of PHCs per lakh population
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai #	—	—	—	—	—	—	—	—	—
2	Thane	6	192225	0.5	17	85583	1.2	24	77723	1.3
3	Raigad	5	190435	0.5	15	74028	1.4	18	70921	1.4
4	Ratnagiri	12	139945	0.7	24	75975	1.3	18	107800	0.9
5	Sindhudurg	—	—	—	—	—	—	—	—	—
6	Nashik	6	230044	0.4	17	99456	1.0	22	93800	1.1
7	Dhule	7	162197	0.6	14	98175	1.0	21	78577	1.3
8	Nandurbar	—	—	—	—	—	—	—	—	—
9	Jalgaon	7	195404	0.5	18	90054	1.1	22	89092	1.1
10	Ahmednagar	6	264776	0.4	16	126101	0.8	18	130941	0.8
11	Pune	7	218139	0.5	19	97277	1.0	24	88475	1.1
12	Satara	7	181668	0.6	16	93757	1.1	17	104287	1.0
13	Sangli	7	148327	0.7	11	113902	0.9	12	119760	0.8
14	Solapur	6	223374	0.4	15	109153	0.9	16	115161	0.9
15	Kolhapur	3	429573	0.2	15	107187	0.9	16	117769	0.8
16	Aurangabad	3	438543	0.2	14	172353	0.9	14	117268	0.6
17	Jalna	—	—	—	—	—	—	—	—	—
18	Parbhani	6	173256	0.6	13	97295	1.0	13	114350	0.9
19	Hingoli	—	—	—	—	—	—	—	—	—
20	Beed	6	189470	0.8	7	128974	0.5	13	96635	1.0
21	Nanded	7	131972	0.8	11	106326	0.9	13	109345	0.9
22	Osmanabad	4	330348	0.3	14	118550	0.8	7	269626	0.4
23	Latur	—	—	—	—	—	—	—	—	—
24	Buldhana	6	147377	0.7	12	86764	1.2	13	94599	1.1
25	Akola	9	102947	1.0	12	95677	1.0	13	105561	0.9
26	Washim	—	—	—	—	—	—	—	—	—
27	Amaravati	10	91059	1.1	13	85887	1.2	14	94065	1.1
28	Yavatmal	8	119993	0.8	13	94594	1.1	17	86782	1.2
29	Wardha	5	96852	1.0	7	84066	1.2	8	86889	1.2
30	Nagpur	6	120851	0.8	12	73944	1.4	13	86118	1.8
31	Bhandara	7	161718	0.6	13	108082	0.9	16	99801	1.0
32	Gondia	—	—	—	—	—	—	—	—	—
33	Chandrapur	3	380793	0.3	17	86649	1.2	13	137993	0.7
34	Gadchiroli	—	—	—	—	—	—	—	—	—
	Maharashtra	159	167995	0.6	355	981325	1.0	395	94479	1.1

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available hence, combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Health Services, Mumbai.

## Health and Nutrition

Table 30 (continued)

Number of PHCs, Population per PHC and Number of PHCs per lakh population for 1961, 1971, 1981, 1991 and 2000

Sr. No. District		District-wise Growth of Primary Health Centres					
		1991			2000		
1	2	PHCs	Population per PHC	No. of PHCs per lakh population	PHCs	Population per PHC	No. of PHCs per lakh population
12	13	14	15	16	17		
1	Mumbai #	—	—	—	—	—	—
2	Thane	73	25424	3.9	77	24223	4.1
3	Raigad	53	28230	3.5	54	32010	3.1
4	Ratnagiri	67	20985	4.4	67	13299	4.0
5	Sindhudurg	38	20237	4.6	38	40474	4.3
6	Nashik	91	27278	3.7	100	29216	3.4
7	Dhule	81	24887	4.0	90	26646	3.8
8	Nandurbar	—	—	—	—	—	—
9	Jalgaon	76	30434	3.3	80	33569	3.0
10	Ahmednagar	88	32267	3.1	89	37590	2.7
11	Pune	82	33238	3.0	86	38940	2.6
12	Satara	69	30950	3.2	71	35435	2.8
13	Sangli	57	29943	3.3	59	33751	3.0
14	Solapur	66	34872	2.9	68	40866	2.4
15	Kolhapur	67	32873	3.0	72	35271	2.8
16	Aurangabad	43	38066	2.6	47	46228	2.2
17	Jalna	33	41289	2.4	38	45555	2.2
18	Parbhani	51	32165	3.1	51	35474	2.8
19	Hingoli	—	—	—	—	—	—
20	Beed	45	33225	3.0	47	37160	2.7
21	Nanded	58	31452	3.2	64	35019	2.9
22	Osmanabad	41	31021	3.2	42	36216	2.8
23	Latur	44	38024	2.6	46	45266	2.2
24	Buldhana	47	31872	3.1	52	34201	2.9
25	Akola	52	30383	3.3	55	32751	3.1
26	Washim	—	—	—	—	—	—
27	Amaravati	54	27462	3.6	56	29681	3.4
28	Yavatmal	59	29156	3.4	62	31934	3.1
29	Wardha	27	29031	3.4	27	32575	3.1
30	Nagpur	45	27916	3.6	48	29252	3.4
31	Bhandara	64	28621	3.5	72	28925	3.5
32	Gondia	—	—	—	—	—	—
33	Chandrapur	59	29982	3.3	58	36780	2.7
34	Gadchiroli	42	18705	5.3	45	20842	4.8
	Maharashtra	1672	28495	3.5	1761	32071	3.1

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Health Services, Mumbai.

## Health and Nutrition

Table 31

Number of Sub-Centres, Population per Sub-Centre and Sub-Centre per lakh population  
for 1991 and 2000

Sr. No.	District	1991			2000		
		Number of Sub-Centres	Population per Sub-Centre*	Sub-Centre per lakh population*	Number of Sub-Centres	Population per Sub-Centre*	Sub-Centre per lakh population*
1	2	3	4	5	6	7	8
1	Mumbai #	—	—	—	—	—	—
2	Thane	456	4070	25	470	3968	25
3	Raigad	277	5401	19	277	6240	16
4	Ratnagiri	374	3759	27	374	2382	42
5	Sindhudurg	246	3126	32	246	6252	16
6	Nashik	517	4801	21	530	5512	18
7	Dhule	315	6400	16	431	5564	18
8	Nandurbar	—	—	—	—	—	—
9	Jalgaon	376	6152	16	397	6765	15
10	Ahmednagar	485	5855	17	485	6898	14
11	Pune	501	5440	18	501	6684	15
12	Satara	309	6911	14	309	8142	12
13	Sangli	270	6322	16	270	7375	14
14	Solapur	329	6996	14	329	8446	12
15	Kolhapur	371	5937	17	371	6845	15
16	Aurangabad	248	6003	17	248	4437	23
17	Jalna	171	6630	15	171	7487	8
18	Parbhani	345	4755	21	351	5154	19
19	Hingoli	—	—	—	—	—	—
20	Beed	253	5910	17	253	6903	14
21	Nanded	333	5478	18	374	5993	17
22	Osmanabad	204	5306	19	204	4530	69
23	Latur	234	5704	18	234	6408	9
24	Buldhana	265	5653	18	265	6711	15
25	Akola	326	4846	21	326	5525	18
26	Washim	—	—	—	—	—	—
27	Amaravati	287	5167	19	320	5194	19
28	Yavatmal	356	4832	21	374	5294	19
29	Wardha	164	4780	21	180	4886	20
30	Nagpur	300	4187	24	300	4680	21
31	Bhandara	427	4290	23	427	4877	21
32	Gondia	—	—	—	—	—	—
33	Chandrapur	276	4620	22	336	2305	43
34	Gadchiroli	349	2059	49	372	3863	26
Maharashtra		9364	5168	19	9725	5807	17

Note: (1) \* Rural Population.

(2) Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

Source: Directorate of Health Services, Mumbai.

## Health and Nutrition

Table 32

Number of Beds in Medical Institutions\* for 1961, 1971, 1981, 1991 and 2000,  
and Annual Growth Rate for 1961 to 2000 and 1981 to 2000

Sr. No. District	Number of Beds in Medical Institutions					Annual Growth Rate	
	1961	1971	1981	1991	2000	1961-2000	1981-2000
1 2	3	4	5	6	7	8	9
1 Mumbai #	—	—	—	—	—	—	—
2 Thane	445	2474	5063	4256	5057	0.29	0.05
3 Raigad	365	553	1077	803	833	0.05	0.05
4 Ratnagiri	276	691	958	981	981	0.10	0.06
5 Sindhudurg	—	—	—	490	580	0.84	0.08
6 Nashik	601	711	2071	2135	2764	0.13	0.08
7 Dhule	116	285	1022	1358	1518	0.33	0.09
8 Nandurbar	—	—	—	—	—	—	—
9 Jalgaon	173	507	1245	1371	1677	0.25	0.08
10 Ahmednagar	92	252	1883	2009	2046	0.50	0.06
11 Pune	4244	6504	2367	11326	11790	0.07	0.07
12 Satara	240	629	1316	980	1046	0.05	0.05
13 Sangli	606	958	1836	1648	1698	0.05	0.05
14 Solapur	687	1074	2794	2414	2518	0.10	0.05
15 Kolhapur	498	724	1350	1350	1397	0.09	0.06
16 Aurangabad	65	807	1568	1441	1460	0.53	0.05
17 Jalna	—	—	—	480	510	0.28	0.12
18 Parbhani	184	447	591	639	894	0.14	0.09
19 Hingoli	—	—	—	—	—	—	—
20 Beed	410	479	912	966	1016	0.07	0.07
21 Nanded	173	596	826	1439	1592	0.08	0.11
22 Osmanabad	169	288	400	580	610	0.11	0.10
23 Latur	—	—	—	480	670	3.94	0.13
24 Buldhana	462	479	773	883	970	0.06	0.08
25 Akola	510	765	1465	1678	2765	0.14	0.10
26 Washim	—	—	—	—	—	—	—
27 Amaravati	526	1547	2866	3103	3274	0.15	0.06
28 Yavatmal	526	526	1103	1278	1356	0.08	0.07
29 Wardha	593	593	1888	2444	2520	0.11	0.08
30 Nagpur	1667	3363	5378	5554	5614	0.09	0.05
31 Bhandara	444	444	1033	1017	1107	0.08	0.07
32 Gondia	—	—	—	—	—	—	—
33 Chandrapur	118	316	1117	1492	15552	0.35	0.08
34 Gadchiroli	—	—	—	310	460	0.16	0.19
Maharashtra	14190	26012	42902	54905	74275	0.11	0.07

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

\* Excluding private institutions. # Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Health Services, Mumbai.

## Health and Nutrition

Table 33

Population per Bed, and Beds per lakh population\* for the Years 1961, 1971, 1981, 1991 and 2000

Sr. No.	District	1961		1971		1981		1991		2000	
		Popul. per bed	Beds per lakh popul.	Popul. per bed	Beds per lakh popul.	Popul. per bed	Beds per lakh popul.	Popul. per bed	Beds per lakh popul.	Popul. per bed	Beds per lakh popul.
1	2	3	4	5	6	7	8	9	10	11	12
1	Mumbai #	—	—	—	—	—	—	—	—	—	—
2	Thane	3714	27	922	108	663	151	1233	81	1420	70
3	Raigad	3460	52	1915	29	1880	72	2272	44	2615	38
4	Ratnagiri	6620	15	2881	35	2204	45	1574	64	1017	98
5	Sindhudurg	—	—	—	—	—	—	1608	59	2569	35
6	Nashik	3087	32	3332	30	1445	69	1804	55	1715	58
7	Dhule	11649	9	5832	17	2006	50	1867	54	2004	50
8	Nandurbar	—	—	—	—	—	—	—	—	—	—
9	Jalgaon	10203	10	3556	28	2103	48	2325	43	2256	44
10	Ahmednagar	19304	5	9004	11	1438	70	1679	60	1987	50
11	Pune	581	172	480	205	449	223	488	205	539	170
12	Satara	7197	44	2274	14	1640	65	2501	40	2758	36
13	Sangli	2941	78	1285	39	997	100	1341	75	1536	65
14	Solapur	2708	37	2999	48	934	107	1338	75	1540	65
15	Kolhapur	3206	31	2520	36	1857	55	2214	45	2504	40
16	Aurangabad	23674	4	2197	46	1652	64	1636	65	1374	73
17	Jalna	—	—	—	—	—	—	2243	35	2351	19
18	Parbhani	10250	15	6556	10	3095	32	3313	30	2710	37
19	Hingoli	—	—	—	—	—	—	—	—	—	—
20	Beed	2443	41	2685	37	1820	61	1848	54	2130	47
21	Nanded	8080	55	1812	12	2118	47	1619	62	1840	54
22	Osmanabad	8744	11	7969	13	5677	18	2201	45	1564	77
23	Latur	—	—	—	—	—	—	3493	29	3005	20
24	Buldhana	2294	44	2637	38	1952	51	2136	47	2349	43
25	Akola	2332	43	1963	51	1247	80	3120	76	948	106
26	Washim	—	—	—	—	—	—	—	—	—	—
27	Amaravati	2344	48	996	100	649	154	709	141	761	128
28	Yavatmal	2088	48	2707	37	1575	63	1625	62	1795	56
29	Wardha	1070	93	1315	76	519	182	437	229	483	207
30	Nagpur	965	104	578	173	481	208	592	169	715	140
31	Bhandara	2557	35	3571	28	1770	56	2072	48	2164	46
32	Gondia	—	—	—	—	—	—	—	—	—	—
33	Chandrapur	10492	10	5198	19	1810	54	1188	84	972	103
34	Gadchiroli	—	—	—	—	—	—	2539	39	3422	29
	Maharashtra	2270	44	1815	55	1075	93	1256	80	1304	72

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

\* Excluding private institutions. # Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Health Services, Mumbai.

## Health and Nutrition

Table 34

Total ANC Registered and Total Deliveries Conducted by Various Attentions for 2000–01

Sr. No.	District	Deliveries Conducted by Various Attentions for 2000–01					Total Deliveries	% of Deliveries against col. 3
		Total A.N.C. Registered	Untrained Dai	Trained Dai	A.N.M./Doctors	Institutions		
1	2	3	4	5	6	7	8	9
1	Mumbai #	–	–	–	–	–	–	–
2	Thane	110207	9082	28505	3875	47311	88773	80.55
3	Raigad	53404	3878	10887	2922	24173	41860	78.38
4	Ratnagiri	43048	1539	8528	5931	16533	32531	75.57
5	Sindhudurg	18871	376	1293	1663	15009	18341	97.19
6	Nashik	103068	5191	27445	12376	40300	85312	82.77
7	Dhule	45626	3249	13164	5266	10939	33068	72.48
8	Nandurbar	36365	2930	17961	5099	3308	29298	80.57
9	Jalgaon	95963	6612	23683	12381	25012	67688	70.54
10	Ahmednagar	99470	11274	13854	13656	35183	73967	74.36
11	Pune	116020	2812	16967	7748	56954	84481	72.82
12	Satara	69983	3841	5278	5187	38811	53117	75.90
13	Sangli	51658	2163	6169	5774	27434	41540	80.41
14	Solapur	77004	12781	12456	10956	11987	48180	62.57
15	Kolhapur	71771	1221	8216	5784	34444	49665	69.20
16	Aurangabad	52060	5163	11985	7883	9780	34811	66.87
17	Jalna	48133	2723	13893	5982	11146	33744	70.11
18	Parbhani	70865	3888	18132	13237	10925	46182	65.17
19	Hingoli	–	–	–	–	–	–	–
20	Beed	56457	3774	12775	7281	16686	40516	71.76
21	Nanded	76582	5972	22461	8779	54289	91501	119.48
22	Osmanabad	37675	2691	9544	7489	9826	29550	78.43
23	Latur	56262	4319	16812	6274	8322	35727	63.50
24	Buldhana	55573	3066	18170	4415	14838	40489	72.86
25	Akola	48753	1280	7855	2574	24935	36644	75.16
26	Washim	26407	1213	9612	1067	7026	18918	71.64
27	Amaravati	48945	2407	11000	4163	24470	42040	85.89
28	Yavatmal	61488	1312	18940	8638	14730	43620	70.94
29	Wardha	26862	114	5669	1783	12870	20436	76.08
30	Nagpur	50166	355	12532	4266	17114	34267	68.31
31	Bhandara	61772	2162	21184	5738	13911	42995	69.60
32	Gondia	–	–	–	–	–	–	–
33	Chandrapur	59247	2051	15633	4108	16350	38142	64.38
34	Gadchiroli	22362	1799	10551	6840	3522	22712	101.57
Maharashtra		1852067	111238	431154	199135	658138	1400115	75.60

*Note:* Figures for newly formed districts i.e. Hingoli and Gondia are not available, hence combined figures are given for undivided districts viz. Parbhani and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Health Services, Mumbai.

## Health and Nutrition

Table 35

Infant and Children's Immunisation Programme for the Year 2000-01

Sr.	<i>Infant Care for 2000-01</i>					
No. District	<i>DPT-3</i>	<i>Polio-3</i>	<i>BCG</i>	<i>Measles</i>	<i>Vit. A-1</i>	
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
1	Mumbai #	231762	232459	225397	201679	114030
2	Thane	163400	163379	169653	156247	138909
3	Raigad	53710	53753	59878	52139	48831
4	Ratnagiri	41412	41412	41802	42663	43251
5	Sindhudurg	17357	17357	18021	17329	17326
6	Nashik	118753	120272	125751	116827	108210
7	Dhule	43829	43429	45792	45101	44307
8	Nandurbar	36257	36257	33889	36170	36230
9	Jalgaon	88103	88566	91590	86263	80745
10	Ahmednagar	96822	96687	100008	96449	91187
11	Pune	168782	171203	179642	155121	140075
12	Satara	68420	68420	68736	65930	62251
13	Sangli	59688	59673	61689	58785	55882
14	Solapur	96156	96478	99681	94939	94496
15	Kolhapur	82135	82135	81552	79811	73918
16	Aurangabad	78809	79116	77683	74690	68768
17	Jalna	43282	43611	45918	40048	40794
18	Parbhani	65022	67178	66591	64795	64503
19	Hingoli	-	-	-	-	-
20	Beed	59212	59157	60686	52915	52058
21	Nanded	76078	81264	78019	76983	71309
22	Osmanabad	33974	33964	33563	33712	31953
23	Latur	51109	51109	51598	49920	45837
24	Buldhana	55755	54755	54821	53191	49373
25	Akola	39092	38577	46433	38663	37395
26	Washim	26482	26132	26088	25467	24622
27	Amaravati	56371	57148	55350	56533	56467
28	Yavatmal	60253	61091	58711	56988	54028
29	Wardha	27503	28254	30303	27568	25651
30	Nagpur	84070	83911	95499	88997	82265
31	Bhandara	55622	55886	57982	60453	59406
32	Gondia	-	-	-	-	-
33	Chandrapur	55124	55583	53987	52756	54275
34	Gadchiroli	22917	23617	23827	22734	22734
	Maharashtra	2257261	2271833	2320140	2181866	1991086

*Note:* Figures for newly formed districts i.e. Hingoli and Gondia are not available, hence combined figures are given for undivided districts viz. Parbhani and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Health Services, Mumbai.

## Health and Nutrition

Table 35 (continued)

Infant and Children's Immunisation Programme for the Year 2000–01

Sr. No. District	Children Fully Immunised for 2000–01				
	Below 5 years DPT-B	Polio-B	TT 5 years	TT 10 years	TT 16 years
1 2	3	4	5	6	7
1 Mumbai #	187971	190093	152566	176463	151083
2 Thane	148965	148965	145731	155377	141351
3 Raigad	53110	53106	49959	53815	45898
4 Ratnagiri	35570	35524	42155	40998	35475
5 Sindhudurg	16987	17005	19723	21102	18687
6 Nashik	108002	108945	107737	106338	94093
7 Dhule	41428	40531	56004	46675	40712
8 Nandurbar	27956	31241	31701	32870	29351
9 Jalgaon	83557	83189	86055	85545	78222
10 Ahmednagar	88644	88574	88011	91880	77816
11 Pune	146116	154182	147933	154730	146084
12 Satara	63359	63359	63314	63935	58461
13 Sangli	55461	56261	59095	58714	53253
14 Solapur	89452	90416	87872	91634	87265
15 Kolhapur	75765	75853	76427	75165	71338
16 Aurangabad	65469	65547	66482	70400	59423
17 Jalna	36735	36952	40922	40944	35639
18 Parbhani	62448	62572	60139	86774	53986
19 Hingoli	–	–	–	–	–
20 Beed	49344	50162	46980	56015	49726
21 Nanded	67763	69458	61808	61198	53836
22 Osmanabad	33913	33913	34505	34739	31420
23 Latur	47481	47481	46435	46370	42361
24 Buldhana	51318	51318	52101	50910	47187
25 Akola	40292	35693	35445	38618	34868
26 Washim	23471	22932	24133	24497	20723
27 Amaravati	54285	54512	58651	60196	54332
28 Yavatmal	52039	51651	67799	62295	54174
29 Wardha	24033	25340	27265	28126	25292
30 Nagpur	78307	78801	76265	78351	68422
31 Bhandara	48366	45969	55384	51232	49021
32 Gondia	–	–	–	–	–
33 Chandrapur	52660	52497	52511	51997	35501
34 Gadchiroli	21471	21471	22381	23241	30217
Maharashtra	2031738	2043513	2043489	2121144	1875217

*Note:* Figures for newly formed districts i.e. Hingoli and Gondia are not available, hence combined figures are given for undivided districts viz. Parbhani and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Health Services, Mumbai.



## Health and Nutrition

Table 36

AIDS Cases Surveillance for the period—August 1986 to February 2001

Sr. No. District		AIDS Cases Surveillance—August 1986 to February 2001					
		AIDS Cases			AIDS Deaths		
1	2	3	4	5	6	7	8
		Male	Female	Total	Male	Female	Total
1	Mumbai #	2432	520	2952	164	36	200
2	Thane	79	16	95	5	2	7
3	Raigad	57	10	67	4	1	5
4	Ratnagiri	14	5	19	0	0	0
5	Sindhudurg	5	2	7	3	1	4
6	Nashik	4	1	5	1	1	2
7	Dhule	1	1	2	0	1	1
8	Nandurbar	—	—	—	—	—	—
9	Jalgaon	12	9	21	1	1	2
10	Ahmednagar	9	12	21	1	1	2
11	Pune	216	159	375	14	39	53
12	Satara	280	100	380	24	2	26
13	Sangli	1461	616	2077	198	69	267
14	Solapur	8	5	13	1	1	2
15	Kolhapur	231	83	314	81	32	113
16	Aurangabad	30	10	40	0	0	0
17	Jalna	7	1	8	0	0	0
18	Parbhani	6	0	6	0	0	0
19	Hingoli	—	—	—	—	—	—
20	Beed	9	0	9	0	0	0
21	Nanded	1	0	1	0	0	0
22	Osmanabad	0	0	0	0	0	0
23	Latur	4	2	6	1	1	2
24	Buldhana	3	0	3	1	0	1
25	Akola	78	14	92	0	0	0
26	Washim	—	—	—	—	—	—
27	Amaravati	2	0	2	0	0	0
28	Yavatmal	1	1	2	0	1	1
29	Wardha	0	0	0	0	0	0
30	Nagpur	7	3	10	5	3	8
31	Bhandara	0	0	0	0	0	0
33	Chandrapur	95	21	116	0	0	0
34	Gadchiroli	1	0	1	0	0	0
	Maharashtra	5053	1591	6644	504	192	696

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Health Services, Mumbai.

## Health and Nutrition

Table 37

### Reproductive and Child Health Indicators—1997

(In per cent)

Sr. No. District		Reproductive and Child Health Indicators							
		Girls married below 18 years	Births of Order 3 and above	Receiving complete A.N.C.	Institutional Deliveries	Total unmet need for Contraception	Current users of Contraception	Using Spacing Methods	Children receiving Complete Immunisation
1	2	3	4	5	6	7	8	9	10
1	Mumbai #	8.00	29.90	81.30	93.10	13.80	63.20	16.00	90.50
2	Thane	19.70	34.90	57.40	71.10	23.40	56.30	10.30	84.80
3	Raigad	15.90	28.70	63.20	55.90	22.50	56.90	6.00	87.30
4	Ratnagiri	13.00	32.30	71.00	51.70	12.40	58.30	1.80	94.10
5	Sindhudurg	3.80	28.00	78.90	76.60	27.90	48.40	4.40	92.50
6	Nashik	32.10	35.90	30.00	54.50	9.90	56.50	9.50	68.60
7	Dhule	40.00	37.20	33.70	31.00	11.90	58.30	4.30	69.40
8	Nandurbar	—	—	—	—	—	—	—	—
9	Jalgaon	46.00	35.70	40.90	44.10	21.10	62.40	7.60	78.50
10	Ahmednagar	40.80	33.90	52.00	60.00	10.90	64.60	6.80	89.70
11	Pune	30.40	27.10	56.00	75.00	9.20	65.70	7.80	74.30
12	Satara	21.90	28.10	60.00	60.90	5.90	69.10	3.30	92.50
13	Sangli	25.60	20.70	65.30	68.70	17.00	63.40	4.00	87.30
14	Solapur	41.80	38.30	48.60	57.00	8.60	63.10	3.10	84.10
15	Kolhapur	18.40	18.80	59.80	73.70	18.50	65.30	4.00	76.20
16	Aurangabad	50.90	42.20	39.70	49.60	30.50	50.00	10.40	59.20
17	Jalna	55.60	44.00	40.20	27.90	13.20	51.70	6.00	78.30
18	Parbhani	46.60	47.00	38.00	32.30	26.30	55.70	6.40	67.20
19	Hingoli	—	—	—	—	—	—	—	—
20	Beed	59.40	41.60	40.30	42.70	26.40	55.80	6.10	63.00
21	Nanded	36.70	43.50	46.80	29.90	30.50	52.00	9.20	71.30
22	Osmanabad	46.50	35.60	47.50	36.40	10.00	58.20	4.10	79.30
23	Latur	58.10	39.50	43.90	40.70	10.30	60.00	4.90	89.30
24	Buldhana	33.50	43.90	47.20	43.90	13.80	55.30	9.10	78.70
25	Akola	38.20	41.40	59.10	49.30	24.80	57.50	7.50	81.50
26	Washim	—	—	—	—	—	—	—	—
27	Amaravati	10.20	36.60	46.60	52.90	9.12	63.80	9.30	71.50
28	Yavatmal	27.10	37.90	53.10	37.10	19.90	59.30	5.50	74.30
29	Wardha	12.30	24.10	64.10	62.80	6.50	69.70	5.20	90.30
30	Nagpur	11.30	29.80	52.00	67.20	14.20	63.80	4.60	76.00
31	Bhandara	9.30	38.00	43.70	24.60	8.50	59.60	1.90	78.90
32	Gondia	—	—	—	—	—	—	—	—
33	Chandrapur	25.70	31.10	62.10	41.00	16.90	65.80	4.60	92.70
31	Gadchiroli	26.80	35.90	67.70	16.40	23.50	58.20	2.80	85.70
	Maharashtra	28.80	33.90	54.50	58.50	16.00	60.40	7.70	80.30

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Health Services, Mumbai.

## Health and Nutrition

Table 38

### Fertility and Child Mortality Indicators–1991

<i>Sr.</i>		<i>Fertility and Child Mortality Indicators–1991</i>		
<i>No. District</i>		<i>TFR</i>	<i>IMR (per 1000)</i>	<i>CMR (per 1000)</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
1	Mumbai #	3.00	37	50
2	Thane	3.39	46	54
3	Raigad	3.75	63	87
4	Ratnagiri	3.66	75	90
5	Sindhudurg	3.28	70	87
6	Nashik	4.14	79	88
7	Dhule	4.22	73	95
8	Nandurbar	–	–	–
9	Jalgaon	3.89	71	84
10	Ahmednagar	3.81	47	60
11	Pune	3.21	52	70
12	Satara	3.30	51	61
13	Sangli	2.95	41	53
14	Solapur	3.48	68	83
15	Kolhapur	2.94	55	74
16	Aurangabad	4.62	56	81
17	Jalna	4.47	76	94
18	Parbhani	4.54	50	95
19	Hingoli	–	–	–
20	Beed	4.37	52	80
21	Nanded	4.58	68	87
22	Osmanabad	3.87	70	96
23	Latur	4.32	57	71
24	Buldhana	4.47	82	97
25	Akola	4.59	101	115
26	Washim	–	–	–
27	Amaravati	3.95	94	114
28	Yavatmal	3.86	124	143
29	Wardha	3.49	88	104
30	Nagpur	3.51	75	101
31	Bhandara	3.77	81	115
32	Gondia	–	–	–
33	Chandrapur	3.81	96	137
34	Gadchiroli	3.96	106	144
	Maharashtra	3.72	74	91

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Cols 3 and 4 Reproductive and Child Health Project Rapid Household Survey Phase-I and Phase-II and cols 5 to 7 RG1, 1997.

## Health and Nutrition

Table 39

Average Population covered by PHCs, CHCs and Sub-Centres

Sr. No.	State	Average Population covered by (as on 31-3-1991)			Average Population covered by (as on 30-6-1999)		
		Sub-Centre	PHC	CHC	Sub-Centre	PHC	CHC
1	2	3	4	5	6	7	8
1	Andhra Pradesh	6175	37995	10.5	4949	31972	2.2
2	Gujarat	3793	30888	1.8	4116	30964	1.4
3	Haryana	5400	31427	3.0	6303	36136	2.3
4	Karnataka	3988	27430	2.1	4201	20409	1.4
5	Kerala	4204	23509	4.0	4384	23212	2.8
6	Maharashtra	5167	29379	1.7	5401	30913	1.7
7	Punjab	5012	7022	2.1	2693	32978	1.5
8	Tamil Nadu	4234	25721	5.0	4494	27168	5.4
9	West Bengal	6269	31966	5.7	6818	44287	5.6
	India	4753	28011	3.2	5164	30854	2.4

Source: Computation based on data from Rural Health Statistics (1992 and 2000) and Expert Committee on Population Projection (1996).

## Health and Nutrition

Table 40

Prevalence Rate of Leprosy and Malaria Eradication Programmes

Sr. No. District	Prevalence Rate of Leprosy				Malaria Eradication during 2000-01				
	1985-86	1990-91	1995-96	2000-01	Total B.S. Collected	Total Examination	Positive R.T.	Total R.T.	
1	2	3	4	5	6	7	8	9	10
1	Mumbai #	56.5	27.2	3.7	2.1	430645	430645	10346	10209
2	Thane	6.2	19.4	6.0	5.5	827795	818883	5587	5584
3	Raigad	60.0	43.4	8.9	5.3	317675	317675	3498	3497
4	Ratnagiri	21.2	13.5	2.5	1.9	297325	296621	675	675
5	Sindhudurg	19.5	12.4	1.7	2.1	191215	191188	256	256
6	Nashik	20.0	13.3	3.9	3.1	706381	722260	477	477
7	Dhule	30.3	18.2	2.6	3.2	303152	305617	1311	1311
8	Nandurbar	-	-	-	-	221150	220117	949	938
9	Jalgaon	54.6	29.6	3.4	3.3	760226	627592	1126	1120
10	Ahmednagar	30.2	19.0	2.3	1.6	663144	683503	981	977
11	Pune	22.1	14.9	2.2	2.0	825436	834989	1405	1405
12	Satara	59.8	20.9	4.5	3.0	470550	440823	982	978
13	Sangli	38.9	25.0	2.3	1.3	429571	425551	479	475
14	Solapur	76.2	12.6	3.0	2.2	534571	473606	1892	1892
15	Kolhapur	36.5	22.7	1.9	1.2	409186	407162	260	260
16	Aurangabad	21.0	18.6	2.0	1.7	388272	388272	1802	1802
17	Jalna	41.2	19.0	2.7	1.9	294291	294291	314	314
18	Parbhani	69.6	42.1	5.3	3.2	396957	394057	834	833
19	Hingoli	-	-	-	-	-	-	-	-
20	Beed	60.2	33.4	4.2	2.2	444045	454045	1668	1668
21	Nanded	108.9	14.5	3.0	3.5	525077	525077	1169	1169
22	Osmanabad	98.6	13.3	3.3	3.4	216733	216733	469	468
23	Latur	111.8	19.5	3.9	2.9	319277	319277	783	783
24	Buldhana	65.3	30.2	2.6	2.1	412054	412054	737	737
25	Akola	70.5	23.0	4.5	3.0	292383	292383	894	894
26	Washim	-	-	-	-	190391	190391	609	609
27	Amaravati	40.9	9.5	2.7	2.9	551930	551930	1700	1700
28	Yavatmal	98.8	13.5	6.2	5.1	609291	609291	3751	3735
29	Wardha	48.4	15.9	3.8	4.1	265397	265397	1156	1156
30	Nagpur	74.7	12.0	2.7	3.3	661390	661391	2378	2378
31	Bhandara	74.0	20.6	4.6	6.4	1165081	1135909	5065	5065
32	Gondia	-	-	-	-	-	-	-	-
33	Chandrapur	147.6	19.9	8.0	7.1	656179	656179	3498	3498
34	Gadchiroli	129.5	29.4	7.4	6.3	731435	731435	17697	17697
	Maharashtra	58.3	19.6	3.7	3.1	15508205	15294344	74748	74650

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Health Services, Mumbai.

## Health and Nutrition

Table 41

District-wise Beneficiaries Covered Under ICDS Programme for the Year 2000–01

Sr. No.	District	Pregnant Women			Nursing Women			
		No. of AUs.	Eligible	Enrolled	Benefited	Eligible	Enrolled	Benefited
1	2	3	4	5	6	7	8	9
1	Mumbai #	731	–	–	–	–	–	–
2	Thane	2256	20876	17192	13997	22998	18153	14466
3	Raigad	1652	10036	7374	6759	11347	8137	7452
4	Ratnagiri	728	3817	2046	1318	5014	2611	1671
5	Sindhudurg	565	2608	1506	611	3272	1769	721
6	Nashik	2569	33751	21740	17819	32890	21946	17897
7	Dhule	809	9469	8032	6552	10363	8703	7048
8	Nandurbar	1004	13281	11786	11020	14872	13175	11741
9	Jalgaon	2381	24426	18763	13830	27652	20539	15047
10	Ahmednagar	2232	21776	14932	11267	22914	16509	11538
11	Pune	1960	12404	4751	2955	13308	5077	3105
12	Satara	1017	8780	2270	1160	9808	2484	1210
13	Sangli	1390	10229	2814	1119	11170	2957	1088
14	Solapur	1392	19376	9257	2614	16441	8557	3734
15	Kolhapur	1030	7231	3174	1688	8712	3750	1636
16	Aurangabad	1559	20573	14700	12564	22815	15290	13095
17	Jalna	674	10379	7258	3608	9646	7192	3414
18	Parbhani	999	11578	8995	7802	12967	10058	8758
19	Hingoli	–	–	–	–	–	–	–
20	Beed	1652	20107	12896	10743	20987	13198	10803
21	Nanded	2021	22190	18158	16244	23428	18858	16761
22	Osmanabad	1219	13562	11685	10394	14561	11931	10339
23	Latur	1293	16969	12078	11172	17087	11952	11082
24	Buldhana	744	7128	5733	5150	8207	6628	5808
25	Akola	973	9251	7484	6511	9230	7240	6225
26	Washim	755	8915	6851	6204	9048	7006	6205
27	Amaravati	1866	14188	12646	9454	15810	14192	10808
28	Yavatmal	2069	19390	14735	13564	20702	15309	14188
29	Wardha	525	3980	3335	2527	3865	3174	2358
30	Nagpur	1605	10869	8662	7928	11880	9439	8576
31	Bhandara	1973	16996	14208	8875	19655	16611	10438
32	Gondia	–	–	–	–	–	–	–
33	Chandrapur	2068	12313	9213	6203	11315	8740	6113
34	Gadchiroli	1274	7996	7434	6506	9114	8626	7498
Maharashtra		44985	424444	301708	238158	451078	319811	250823

*Note:* Figures for newly formed districts i.e. Hingoli and Gondia are not available, hence combined figures are given for undivided districts viz. Parbhani and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

## Health and Nutrition

Table 41 (continued)

District-wise Beneficiaries Covered Under ICDS Programme for the Year 2000-01

Sr. No.	District	Children (6 months–1 year)			Children (1–3 years)			Children (3–6 years)		
		Eligible	Enrolled	Benefited	Eligible	Enrolled	Benefited	Eligible	Enrolled	Benefited
1	2	10	11	12	13	14	15	16	17	18
1	Mumbai #	–	–	–	–	–	–	–	–	–
2	Thane	31638	26740	23351	94210	77141	63453	126631	111217	91965
3	Raigad	14374	10874	10463	48794	36049	33324	70669	57929	53557
4	Ratnagiri	14299	5994	5852	20716	10308	7003	31624	28038	19158
5	Sindhudurg	4595	3007	2215	13836	7496	4949	22256	15965	6749
6	Nashik	43291	33124	30224	126973	91780	77636	176135	131936	116073
7	Dhule	14335	11722	10215	43280	35548	29650	56877	47257	39699
8	Nandurbar	18611	16844	15512	56092	51210	47652	72843	63374	58798
9	Jalgaon	30723	25067	22254	106557	82355	66202	154415	138114	11082
10	Ahmednagar	26090	21778	18920	83954	65206	50950	115322	88699	73325
11	Pune	18660	15699	14507	56268	18905	10717	87530	64867	46536
12	Satara	12844	370	149	39442	2586	1670	62490	39312	31777
13	Sangli	13974	2307	1867	44967	2947	2714	69044	56849	41683
14	Solapur	21665	17515	16901	56033	17225	15527	83792	59036	25335
15	Kolhapur	12051	10241	6350	34678	3345	2544	54603	48595	42314
16	Aurangabad	24717	19653	17597	75802	57811	50492	108790	86853	76676
17	Jalna	11971	10646	9695	37991	32147	17433	52162	46215	22716
18	Parbhani	17869	14259	11650	50331	38897	33599	67211	63004	50078
19	Hingoli	–	–	–	–	–	–	–	–	–
20	Beed	25695	13250	11122	78938	26210	22544	117729	75121	66065
21	Nanded	30364	27083	25815	99454	80765	72976	139747	128167	111417
22	Osmanabad	15603	13319	12202	54479	47660	42750	72299	63409	57664
23	Latur	21799	11387	10813	61224	29082	27500	89646	70842	65759
24	Buldhana	11118	9357	8771	32677	26617	24644	43003	40264	36842
25	Akola	11043	9728	9101	39132	32745	30547	53193	45108	40071
26	Washim	21074	9812	9038	38203	28646	26022	50328	38082	33601
27	Amaravati	17617	16110	12882	68492	63240	49775	83189	81177	63628
28	Yavatmal	27622	20340	17637	84207	64594	60934	114419	89272	82518
29	Wardha	4527	4024	3479	17659	14828	12473	24777	23635	20248
30	Nagpur	13563	11433	10989	49886	41252	39396	71158	59997	57487
31	Bhandara	24903	20776	14271	80850	68643	46300	108896	93684	64225
32	Gondia	–	–	–	–	–	–	–	–	–
33	Chandrapur	14795	10428	7601	54220	39244	28185	80063	73627	54842
34	Gadchiroli	12131	11256	9978	40113	37644	33795	58434	55662	48867
Maharashtra		583561	434143	381421	1789458	1232126	1033356	2519275	2085307	1710555

Note: Figures for newly formed districts i.e. Hingoli and Gondia are not available, hence combined figures are given for undivided districts viz. Parbhani and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

## Health and Nutrition

Table 41 (concluded)

District-wise Beneficiaries Covered under ICDS Programme for the Year 2000-01

Sr.	<i>Pregnant Women</i>			<i>Nursing Women</i>			
No.	District	<i>Eligible</i>	<i>Enrolled</i>	<i>Benefited</i>	<i>Eligible</i>	<i>Enrolled</i>	<i>Benefited</i>
1	2	19	20	21	22	23	24
1	Mumbai #	–	–	–	–	–	–
2	Thane	20876	17192	13997	22998	18153	14466
3	Raigad	10036	7374	6759	11347	8137	7452
4	Ratnagiri	3817	2046	1318	5014	2611	1671
5	Sindhudurg	2608	1508	611	3272	1769	721
6	Nashik	33751	21740	17819	32890	21946	17897
7	Dhule	9469	8032	6552	10363	8703	7048
8	Nandurbar	13281	11786	11020	14872	13175	11741
9	Jalgaon	24426	81763	13830	27652	20539	15047
10	Ahmednagar	21776	14932	11267	22914	16509	11538
11	Pune	12404	4751	2955	13308	5077	3105
12	Satara	8780	2270	1160	9808	2484	1210
13	Sangli	10229	2814	1119	11170	2957	1088
14	Solapur	19376	9257	2614	16441	8557	3734
15	Kolhapur	7231	3174	1688	8712	3750	1636
16	Aurangabad	20537	14700	12564	22815	15290	13095
17	Jalna	10379	7258	3608	9646	7192	3414
18	Parbhani	11578	8995	7802	12967	10058	8758
19	Hingoli	–	–	–	–	–	–
20	Beed	20101	12896	10743	20987	13198	10803
21	Nanded	22190	18158	16244	23428	18858	16761
22	Osmanabad	13562	11685	10394	14561	11931	10339
23	Latur	16969	12078	11172	17087	11952	11082
24	Buldhana	7128	5733	5150	8207	6628	5808
25	Akola	9251	7484	6511	9230	7240	6225
26	Washim	8915	6851	6204	9048	7006	6205
27	Amaravati	14188	12646	9454	15810	14192	10808
28	Yavatmal	19390	14735	13564	20702	15309	14188
29	Wardha	3980	3335	2527	3865	3174	2358
30	Nagpur	10869	8662	7928	11880	9439	8576
31	Bhandara	16996	14208	8875	19655	16611	10438
32	Gondia	–	–	–	–	–	–
33	Chandrapur	12313	9213	6203	11315	8740	6113
34	Gadchiroli	7996	7434	6505	9114	8626	7498
	Maharashtra	424402	364710	238157	451078	319811	250823

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Commissioner of ICDS, Navi Mumbai.



## Health and Nutrition

Table 42

District-wise Unnatural Deaths and Number of Unnatural Deaths  
per lakh population for the Year 1999

<i>Sr.</i>		<i>Total Unnatural Deaths</i>			<i>Number of Unnatural Deaths per lakh population</i>	
<i>No.</i>	<i>District</i>	<i>Males</i>	<i>Females</i>	<i>Total</i>	<i>Males</i>	<i>Females</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
1	Mumbai #	5028	2651	7679	82	53
2	Thane	982	464	1446	25	13
3	Raigad	361	154	515	35	15
4	Ratnagiri	291	143	434	39	16
5	Sindhudurg	132	58	190	32	12
6	Nashik	974	643	1617	41	29
7	Dhule	331	166	497	22	12
8	Nandurbar	127	61	188	0	0
9	Jalgaon	732	318	1050	39	18
10	Ahmednagar	792	467	1259	39	24
11	Pune	2103	1222	3325	60	37
12	Satara	751	446	1197	55	32
13	Sangli	541	233	774	42	19
14	Solapur	516	191	707	27	11
15	Kolhapur	529	268	797	31	16
16	Aurangabad	479	281	760	31	20
17	Jalna	187	130	317	20	15
18	Parbhani	278	200	478	24	18
19	Hingoli	—	—	—	—	—
20	Beed	256	126	382	24	12
21	Nanded	438	309	747	30	22
22	Osmanabad	341	199	540	42	26
23	Latur	446	326	772	42	33
24	Buldhana	412	249	661	37	23
25	Akola	342	288	630	26	24
26	Washim	194	95	289	0	0
27	Amaravati	671	551	1222	53	47
28	Yavatmal	491	268	759	41	24
29	Wardha	466	329	795	78	59
30	Nagpur	914	476	1390	45	26
31	Bhandara	505	165	670	44	15
32	Gondia	—	—	—	—	—
33	Chandrapur	511	260	771	48	26
34	Gadchiroli	171	101	272	37	22
	Maharashtra	21292	11838	33130	44	26

*Note:* Figures for newly formed districts i.e. Hingoli and Gondia are not available, hence combined figures are given for undivided districts viz. Parbhani and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Health Services, Mumbai.

## Health and Nutrition

Table 43

Rural-Urban Differentials in Availability of Medical Manpower, Maharashtra, 1981 and 1991

Category of Medical Manpower	1981				1991			
	No. of Personnel	Number per lakh population			No. of Personnel	Number per lakh population		
		Total	Rural	Urban		Total	Rural	Urban
1	2	3	4	5	6	7	8	9
<b>1. Physicians and Surgeons</b>	61932	99	47	195	91795	116	53	216
Allopathic	28967	46	15	103	36315	46	14	97
Ayurvedic	5776	9	7	14	7973	10	6	17
Homeopathic	2300	4	3	5	7358	9	6	15
Unani	496	1	0	2	1787	2	1	4
Dental Surgeons	1280	2	0	5	2072	3	0	6
Veterinarians	3177	5	–	–	5090	6	6	7
Pharmacists	15034	24	11	48	16864	21	9	42
Dieticians and Nutritionists	0	0	0	0	159	0	0	0
Public Health Physicians	2997	5	4	7	5109	6	4	10
Physicians & Surgeons n.e.c.	1808	3	2	5	9068	11	7	18
<b>2. Nursing and Medical Health Professionals</b>	75327	120	62	227	129376	164	84	291
Vaccinators, Innoculators, Medical Assistants	5696	9	8	11	7058	9	7	11
Dental Assistants	185	0	0	1	474	1	0	1
Veterinary Assistants	1971	3	3	3	2290	3	3	2
Pharmaceutical Assistants	1270	2	1	4	4714	6	3	1
Nurses	26892	43	14	97	46599	59	25	112
Midwives and HV's	4953	8	6	11	3522	4	3	8
X-Ray Technicians	1367	2	1	5	2072	3	1	6
Optometrists and Opticians	258	0	0	1	999	1	1	2
Physio/Occupational Therapists	228	0	0	1	334	0	0	1
Nursing, Sanitary, other medical and health technicians	32509	52	29	94	61314	78	41	136

n.e.c.= not elsewhere classified.

Source: Census of India 1981 (B series, table B-18) and Census of India 1991 (B Series table B-19).

## Health and Nutrition

Table 44

Percentage of Couples Effectively Protected by Various Family Planning Methods 2000–01

Sr. No.	District	Per Cent of Sterilisation		Number of E.C.E.P. by Various Methods				Total
		Vasectomy	Tubectomy	Sterilisation	IUD	C.C.	O.P. Users	
1	2	3	4	5	6	7	8	9
1	Mumbai #	0.57	99.43	25.2	26.8	15.1	8.7	76.0
2	Thane	0.48	99.52	34.8	4.3	3.4	2.2	44.7
3	Raigad	0.12	99.88	39.5	4.3	4.5	3.8	52.1
4	Ratnagiri	0.36	99.64	35.8	5.9	5.2	3.4	50.3
5	Sindhudurg	0.48	99.52	33.3	8.8	5.6	4.0	51.7
6	Nashik	2.71	97.29	42.4	4.6	4.3	3.0	54.3
7	Dhule	3.82	96.18	46.9	4.6	4.4	2.9	58.8
8	Nandurbar	4.03	95.97	—	—	—	—	—
9	Jalgaon	0.47	99.53	46.4	6.5	3.8	3.3	60.0
10	Ahmednagar	0.08	99.92	45.4	7.3	4.0	3.8	60.5
11	Pune	1.18	98.82	47.7	7.2	5.1	3.8	63.8
12	Satara	0.16	99.84	45.1	7.9	4.7	3.9	61.6
13	Sangli	0.12	99.88	47.6	7.9	4.3	3.8	63.6
14	Solapur	0.02	99.98	47.6	7.9	5.2	5.0	65.7
15	Kolhapur	0.08	99.92	49.3	8.0	5.3	3.9	66.5
16	Aurangabad	0.13	99.87	36.5	5.6	5.1	3.6	50.8
17	Jalna	0.15	99.85	34.5	6.8	4.6	4.0	49.9
18	Parbhani	0.03	99.97	33.4	7.0	4.0	5.7	50.1
19	Hingoli	0.00	0.00	—	—	—	—	—
20	Beed	0.18	99.82	38.7	7.3	4.7	3.4	54.1
21	Nanded	0.01	99.99	31.8	5.2	4.0	3.6	44.6
22	Osmanabad	0.10	99.90	37.4	8.2	5.0	4.8	55.4
23	Latur	0.06	99.94	36.2	6.4	3.8	2.9	49.3
24	Buldhana	1.59	98.41	39.3	7.7	4.9	4.3	56.2
25	Akola	4.16	95.84	46.2	8.5	5.2	3.9	63.8
26	Washim	0.75	99.25	—	—	—	—	—
27	Amaravati	3.98	96.02	51.5	8.5	5.9	3.9	69.8
28	Yavatmal	0.15	99.85	46.5	8.8	4.1	4.0	63.4
29	Wardha	5.20	94.80	47.9	8.5	4.7	4.1	65.2
30	Nagpur	0.61	99.39	48.0	8.6	4.9	4.0	65.5
31	Bhandara	17.57	82.43	39.1	6.7	4.1	3.9	53.8
32	Gondia	9.06	90.94	—	—	—	—	—
33	Chandrapur	1.23	98.77	43.8	5.6	4.6	3.9	57.9
34	Gadchiroli	23.63	76.37	53.3	8.5	5.2	4.3	71.3
	Maharashtra	1.63	98.37	42.4	6.7	4.2	3.3	56.6

# Includes Mumbai City and Mumbai Suburban District.

Source: Directorate of Health Services, Mumbai.

## Health and Nutrition

Table 45

Number of Beneficiaries under Supplementary Nutrition Programme (ICDS Programme)  
in the Month of March 1996–2000

Year	Total Number			Percentage	Percentage
	Eligible	Enrolled	Benefited	Enrolled	Benefited
1	2	3	4	5	6
<i>Pregnant Women</i>					
1996	292332	234425	182625	80.19	62.47
1997	357950	283364	223832	79.16	62.53
1998	409269	312573	239448	76.37	58.51
1999	433343	321995	258022	74.30	59.54
2000	465368	338655	282532	72.77	60.71
2001	424444	301708	238158	71.08	56.11
<i>Nursing Women</i>					
1996	325707	261204	201024	80.20	61.72
1997	385951	302371	236183	78.34	61.20
1998	454510	347406	264084	76.44	58.10
1999	436798	323208	254115	73.99	58.18
2000	492184	355195	295168	72.17	59.97
2001	451078	319811	250823	70.90	55.61
<i>Children (6 months – 1 Year)</i>					
1996	435731	281167	211209	64.53	48.47
1997	531196	351567	276980	66.18	52.14
1998	568997	376650	308440	66.20	54.21
1999	603032	401398	322055	66.56	53.41
2000	569641	397739	335829	69.82	58.95
2001	583561	434143	381421	74.40	65.36
<i>Children (1 – 3 Years)</i>					
1996	1238555	836250	659417	67.52	53.24
1997	1503453	1037233	833694	68.99	55.45
1998	1642818	1133602	922946	69.00	56.18
1999	1755536	1182010	979304	67.33	55.78
2000	1824368	1226887	1067161	67.25	58.49
2001	1789458	1232126	1033356	68.85	57.75
<i>Children (3 – 6 Years)</i>					
1996	1736405	1499180	1205198	86.34	69.41
1997	2136310	1837695	1512311	86.02	70.79
1998	2351404	1993105	1572807	84.76	66.89
1999	2509380	2114106	1733811	84.25	69.09
2000	2562906	2140523	1795951	83.52	70.07
2001	2519275	2085307	1710555	82.77	67.90
<i>Total Children</i>					
1996	3410691	2616597	2075824	76.72	60.86
1997	4170959	3226495	2622985	77.36	62.89
1998	4563219	3503357	2804193	76.77	61.45
1999	4867948	3697514	3035170	75.96	62.35
2000	4956915	3765149	3198941	75.96	64.53
2001	4892294	3751576	3125332	76.68	63.88

Source: Commissioner of ICDS, Navi Mumbai.

## Health and Nutrition

Table 46

Selected District-wise Child Health Indicators, Maharashtra, 1998–99

<i>Sr.</i>		<i>Percentage of Children</i>			
<i>No. District</i>		<i>Anaemic</i>	<i>Given Colostrum</i>	<i>Having Diarrhoea</i>	<i>Breathing Problems</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
1	Mumbai #	16.9	68.4	29.2	5.0
2	Thane	***	63.6	36.6	48.1
3	Raigad	***	50.6	23.8	44.7
4	Ratnagiri	9.6	34.5	34.4	19.0
5	Sindhudurg	***	44.0	18.7	49.0
6	Nashik	10.6	31.0	31.9	32.5
7	Dhule	7.2	32.4	27.1	24.4
8	Jalgaon	***	29.2	26.0	52.9
9	Ahmednagar	16.2	28.2	44.6	24.9
10	Pune	18.7	37.1	37.9	22.2
11	Satara	9.8	29.3	26.6	18.0
12	Sangli	***	36.2	21.0	43.8
13	Solapur	8.5	29.1	32.0	33.4
14	Kolhapur	***	47.0	30.1	60.8
15	Aurangabad	***	31.3	19.6	48.5
16	Jalna	2.8	17.5	34.3	34.0
17	Parbhani	***	43.8	17.9	36.9
18	Beed	***	42.7	22.5	44.7
19	Nanded	***	40.5	29.9	46.1
20	Osmanabad	6.2	22.8	37.5	38.5
21	Latur	2.5	29.0	24.0	36.8
22	Buldhana	8.2	23.6	25.5	44.6
23	Akola	***	43.0	25.1	54.2
24	Amaravati	9.6	37.5	15.9	56.5
25	Yavatmal	***	33.8	32.5	58.7
26	Wardha	5.3	37.9	22.8	55.1
27	Nagpur	***	61.9	26.6	61.3
28	Bhandara	4.8	32.7	20.4	50.9
29	Chandrapur	***	47.3	28.3	58.9
30	Gadchiroli	***	46.3	25.6	48.2

*Note:* '\*\*\*' Information on anaemia not collected in districts which were covered in Phase-I.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Reproductive and Child Health—Rapid Household Survey 1998–99.

## Health and Nutrition

Table 47

Percentage of Males and Females having at least one of RTI/STI Symptoms, Maharashtra

<i>Sr. No.</i>	<i>District</i>	<i>Female</i>	<i>Male</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
1	Mumbai #	22.0	4.2
2	Thane	25.1	9.6
3	Raigad	17.7	9.0
4	Ratnagiri	23.0	3.6
5	Sindhudurg	19.7	5.8
6	Nashik	25.5	7.6
7	Dhule	24.5	9.2
8	Jalgaon	27.6	8.4
9	Ahmednagar	21.1	6.4
10	Pune	21.8	8.9
11	Satara	18.9	4.9
12	Sangli	19.0	4.9
13	Solapur	20.3	5.9
14	Kolhapur	16.7	10.6
15	Aurangabad	29.5	8.5
16	Jalna	36.5	9.2
17	Parbhani	24.8	11.9
18	Beed	23.6	7.3
19	Nanded	37.6	13.2
20	Osmanabad	26.0	7.4
21	Latur	23.9	7.0
22	Buldhana	28.1	11.7
23	Akola	43.4	11.7
24	Amravati	32.1	14.7
25	Yavatmal	28.4	14.6
26	Wardha	31.8	14.8
27	Nagpur	27.9	8.8
28	Bhandara	28.1	16.8
29	Chandrapur	34.8	13.7
30	Gadchiroli	34.1	13.9
	Maharashtra	27.1	10.2

Refers to three months prior to the survey.

# Includes Mumbai City and Mumbai Suburban District.

Source: Reproductive and Child Health Project Rapid Household Survey—1998–99. Phase-I and Phase-II.

## Health and Nutrition

Table 48

### Health Care Indicators across Selected States in India

Sr. No.	Type of Health Facility/Indicator	Ref. Year	Andhra Pradesh	Gujarat	Haryana	Karnataka	Kerala	Maharashtra	Punjab	Tamil Nadu	West Bengal	All India
1	2	3	4	5	6	7	8	9	10	11	12	13
1	<b>Health Facilities</b>											
	Population per hospital	1995	23675	17722	234848	168410	14806	25921	101668	133903	186910	61881
	Population per bed	1995	11	1526	706	2584	1283	391	1023	1509	1120	1351
	Registered doctors per lakh population	1997	36.4	61.2	4.9	94.5	81.5	75.3	127.9	95.0	61.2	51.8
	Registered nurses per lakh population	1997	58.1	146.6	22.8	100.2	79.2	112.9	138.6	132.5	45.6	63.6
2	<b>Fertility and Mortality Indicators</b>											
	Crude Birth Rate:	1998-99	21.4	24.3	23.1	20.4	18.8	23.0	19.1	21.4	20.8	24.8
	Total Fertility Rate	1998-99	2.25	2.72	2.88	2.13	1.96	2.52	2.21	2.19	2.29	2.85
	Crude Death Rate	1998-99	10.7	8.0	8.1	7.9	6.0	9.0	8.4	10.8	8.3	9.7
	Neonatal Mortality Rate	1998-99	43.8	39.6	34.9	37.1	13.8	32.0	34.3	34.8	31.9	43.4
	Post Neonatal Mortality Rate	1998-99	22.1		23.0	21.9	14.4	2.5	11.7	22.8	13.3	16.8
	Infant Mortality Rate	1998-99	65.8	62.6	56.8	51.5	16.3	43.7	57.1	48.2	48.7	67.6
	Under five mortality	1998-99	85.5	85.1	76.8	69.8	18.8	58.1	72.1	63.3	67.6	94.9
	Life expectancy at birth:	1992-96										
	Males		60.8	60.5	63.4	61.1	70.2	63.8	66.4	62.8	61.8	60.1
	Females		63.0	62.5	64.3	64.5	75.8	66.2	68.6	64.8	63.1	61.4
3	<b>Reproductive and Child Health Indicators</b>											
	Percentage of women aged 20-24 years married before 18 years: 1998-99	1998-99	64.3	40.7	41.5	46.3	17.0	47.7	11.6	24.9	45.9	50.0
	Percentage who received at least 3 ANC check ups	1998-99	80.1	60.2	37.4	71.4	98.3	65.4	57.0	91.4	57.0	43.8
	Percentage of Institutional deliveries	1998-99	49.8	36.3	22.4	51.1	93.0	52.6	37.5	79.3	40.1	33.6
	Percentage currently using FP Methods	1998-99	59.6	59.0	62.4	58.3	63.7	60.9	66.7	52.1	66.6	48.2
	Any Modern Method	1998-99	58.9	53.3	53.2	56.5	56.1	59.9	53.8	50.3	47.3	42.8
	Spacing methods (pill, IUD and Condom)	1998-99	1.8	8.1	12.5	4.4	5.1	7.6	23.0	4.3	13.5	6.8
	Full immunization of children (12-23 months)	1998-99	58.7	53.0	62.7	60.0	79.7	78.4	72.1	88.8	43.8	42.0

## Health and Nutrition

Table 48 (continued)

### Health Care Indicators across Selected States in India

Sr. No.	Type of Health Facility/Indicator	Ref. Year	Andhra Pradesh	Gujarat	Haryana	Kar- nataka	Kerala	Maha- rashtra	Punjab	Tamil Nadu	West Bengal	All India
1	2	3	4	5	6	7	8	9	10	11	12	13
4	<b>Morbidity Rate (per 1 lakh population)</b>											
	Leprosy (point prevalence)	1994	63	30	–	n.a.	–	65	–	83	22	57
	Diarrhoea (in 30 days) (per 1000 popn)	1994	36	9	29	n.a.	6	14	16	19	45	31
	Asthma (point prevalence)	1998-99	4292	1979	1922	1733	4806	2524	1308	1546	2593	2468
	Tuberculosis (point prevalence)	1998-99	592	438	358	269	526	282	207	479	492	544
	Jaundice (point prevalence)	1998-99	1571	1109	993	373	528	1534	976	1142	2381	1361
	Malaria (in last 3 months)	1998-99	4851	4449	2093	600	56	4098	1082	380	1482	3697
	Prevalence of ailments in last 15 days (per thousand population)	1995-96										
	Rural		64	46	61	45	118	52	76	52	65	55
	Urban		61	36	63	40	88	48	85	58	65	54
	Prevalence of hospitalisation in last 1 year (per thousand population)	1995-96										
	Rural		14	14	25	14	70	19	14	18	11	13
	Urban		17	21	25	18	65	26	17	23	22	20
	<b>Nutritional Status</b>											
	Percentage of children of age with anaemia 6–36 months	1998–99	72.3	74.5	83.9	70.6	43.9	76.0	80.0	69.0	78.3	74.3
	Percentage of ever-married women of 15–49 years with anaemia	1998–99	49.8	46.3	47.0	42.4	22.7	48.5	41.4	56.5	62.7	51.8
	Percentage of households with per capita calorie intake level of below 2700 Kcal.	1993–94										
	Rural		40.9	46.4	25.9	42.7	45.7	49.7	24.4	51.3	32.2	36.9
	Urban		48.1	41.0	41.6	44.7	47.6	45.9	40.4	52.9	35.7	41.6
	Average exp on outpatient care (in Rs)	1995–96										
	Rural		165	157	189	122	136	165	175	102	131	176
	Urban		172	218	414	172	120	185	162	129	137	194
	Average exp on inpatient care (in Rs)	1995–96										
	Rural		6428	2663	3224	2997	2293	3089	4988	2840	1957	3202
	Urban		4886	3327	6537	3593	1927	3997	5712	3934	3217	3921



## Health and Nutrition

Table 49

Availability of Health Care Infrastructure Facilities in Maharashtra by Districts

Sr. No.	District	Population served per					% in Public Sector		% in Urban Areas*		
		Hospital**	Dispensary**	ISM†	All Medical Inst.	Beds	Hospitals**	Dispensaries**	Hospitals**	Dispensaries**	Beds
1	2	3	4	5	6	7	8	9	10	11	12
1	Mumbai #	13764	5251	65617	3593	355	8.0	100.0	100.0	100.0	100.0
2	Thane	21468	3720	73562	3040	662	42.9	47.2	97.1	50.8	90.9
3	Raigad	20192	12296	200000	7378	1062	18.1	5.9	96.5	96.4	99.2
4	Ratnagiri	34529	324577	300000	28472	1234	15.7	10.7	88.4	95.5	66.0
5	Sindhudurg	20337	7110	9016	3325	694	22.0	47.5	79.3	100.0	81.8
6	Nashik	21192	8144	44975	5203	837	18.3	13.2	87.8	100.0	69.3
7	Dhule	14809	12227	63466	6058	1385	15.9	2.9	95.0	100.0	69.0
8	Jalgaon	6742	17453	63224	4516	665	7.9	6.3	71.7	95.3	76.8
9	Ahmednagar	25691	12892	31940	6766	838	7.8	7.8	87.7	99.6	60.7
10	Pune	11163	17257	300000	6631	373	19.7	100.0	90.4	100.0	67.9
11	Satara	13703	184016	100000	11710	615	33.7	11.6	95.1	99.5	83.4
12	Sangli	11438	12093	22542	4662	618	10.0	17.6	74.5	100.0	68.5
13	Solapur	19631	26124	200000	10514	575	8.6	100.0	14.0	3.3	35.8
14	Kolhapur	36544	14755	42470	8426	1155	24.4	3.8	84.9	3.8	39.7
15	Aurangabad	21350	2502	200000	2212	757	27.7	100.0	72.5	26.5	73.1
16	Jalna	25152	477897	89606	18864	1086	19.7	13.8	82.5	66.7	75.3
17	Parbhani	23672	21192	42792	8865	1284	25.7	10.7	80.0	100.0	55.3
18	Beed	26973	36134	23355	9297	1469	18.6	11.4	88.7	100.0	56.7
19	Nanded	27212	17876	44528	8685	1058	16.0	5.7	98.1	61.9	93.4
20	Osmanabad	38320	47900	41912	14118	1316	17.8	12.4	92.1	99.4	76.8
21	Latur	28896	440670	62953	18954	1157	12.8	2.5	93.4	100.0	73.5
22	Buldhana	27533	12957	17089	5813	1124	16.1	7.8	93.1	94.8	76.3
23	Akola	22815	8619	47492	5528	833	11.7	2.4	92.2	92.2	76.8
24	Amaravati	11064	7557	7812	2851	418	16.8	10.3	94.7	87.9	71.9
25	Yavatmal	26303	19492	41191	8803	1011	64.7	43.2	85.4	52.5	53.4
26	Wardha	27354	19009	86270	9925	438	19.4	7.3	96.9	99.5	91.8
27	Nagpur	9624	41130	29279	6159	471	22.8	100.0	44.7	84.3	69.9
28	Bhandara	52755	79132	29154	15176	1458	22.5	5.5	61.9	47.2	51.4
29	Chandrapur	20027	9701	16630	4692	856	7.6	4.2	81.7	67.2	64.7
30	Gadchiroli	48659	22357	22357	9090	1020	11.3	23.1	47.1	56.8	14.8
	Maharashtra	161191	9972	40811	5435	642	13.4	8.9	86.7	90.2	61.7

\*\* Includes only allopathic medical institutions.

† Includes Ayurvedic, Unani and Homeopathic institutions.

\* Includes infrastructure facilities in public and private sectors.

# Includes Mumbai City and Mumbai Suburban District.

Source: Computed on the basis of information in Statistical Abstract of Maharashtra State 1993-94 & 1994-95, Directorate of Economics and Statistics, Government of Maharashtra, Mumbai.

## Health and Nutrition

Table 50

Number of Hospitals, Dispensaries, Beds, Doctors and Nurses per 1,00,000 population  
in Selected States 1981–1995/1997

<i>Year</i>	<i>Andhra Pradesh</i>	<i>Gujarat</i>	<i>Haryana</i>	<i>Karnataka</i>	<i>Kerala</i>	<i>Maharashtra</i>	<i>Punjab</i>	<i>Tamil Nadu</i>	<i>West Bengal</i>	<i>All India</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>
<i>Hospitals</i>										
1981	1.14	2.43	0.66	0.63	2.98	1.60	1.51	0.78	0.75	0.99
1986	1.03	3.78	0.52	0.61	1.20	2.18	1.44	0.78	0.67	1.02
1991	1.75	4.34	0.48	0.64	7.02	2.67	1.14	0.73	0.61	1.32
1995	4.10	5.60	0.40	0.60	6.60	3.60	1.00	0.70	0.50	1.60
(N)*	(2950)	(2528)	(79)	(293)	(2040)	(3115)	(220)	(408)	(399)	(15097)
<i>Dispensaries</i>										
1981	1.32	1.38	1.93	3.85	2.95	5.58	8.85	1.38	0.77	2.45
1986	1.32	9.47	1.60	3.68	5.48	10.30	9.69	1.29	0.90	3.38
1991	0.27	15.20	1.32	1.88	6.04	11.70	7.12	0.92	0.81	3.25
1995	0.40	16.10	1.20	1.70	6.40	9.50	6.60	0.90	0.70	310
(N)*	(303)	(7255)	(217)	(830)	(1951)	(8143)	(1462)	(512)	(551)	(28225)
<i>Beds</i>										
1981	63.70	97.70	62.30	86.30	176.00	116.00	119.00	85.20	88.90	73.60
1986	61.20	111.00	51.30	86.60	220.00	133.00	120.00	86.40	87.20	77.80
1991	64.60	146.00	45.40	78.30	263.00	145.00	102.00	88.20	80.10	78.70
1995	78.50	175.70	60.20	112.80	283.30	148.50	113.20	103.50	92.30	94.40
(N)*	(56)	(72)	(11)	(55)	(87)	(127)	(37)	(61)	(68)	(870)
<i>Doctors</i>										
1981	43.10	43.00	–	51.10	46.00	65.40	128.00	65.70	60.20	31.90
1991	49.70	53.00	–	98.60	56.70	62.70	135.00	81.90	61.40	47.20
1997	36.90	61.20	4.90	94.50	81.50	75.30	127.90	95.00	61.20	51.80
(N)*	(27541)	(28415)	(925)	(50576)	(25644)	(66477)	(29170)	(5905)	(47358)	(507313)
<i>Nurses</i>										
1981	20.30	14.50	14.00	13.90	37.50	54.00	94.60	51.80	16.20	22.00
1991	23.30	59.00	20.70	52.20	78.40	48.60	116.00	60.50	25.30	36.90
1997	58.10	146.60	22.80	100.20	79.20	112.90	138.00	132.50	45.60	63.56
(N)*	(42659)	(68045)	(4344)	(50371)	(24914)	(99676)	(31487)	(79881)	(34701)	(607396)

\* Total number of hospitals, dispensaries, beds, doctors and nurses presented are related to latest year.

Source: Duggal et al. 1995; CSO 2000.

## Health and Nutrition

Table 51

Total Health Expenditure and Per Capita Expenditure on Health  
and Health Expenditure as a Percentage of NSDP for Some Major States

State	Item	Years				
		1980-81	1985-86	1990-91	1995-96	1998-99
1	2	3	4	5	6	7
Punjab	Health Expenditure (in millions)	533.00	906.37	1696.78	2604.29	5183.12
	Per capita health expenditure (in Rs.)		29.60	55.37	83.66	117.96
	Health expenditure as % of NSDP		1.20	1.10	1.00	0.70
Haryana	Health Expenditure (in millions)	395.00	641.90	871.07	1666.96	3079.72
	Per capita expenditure (in Rs.)	28.45	60.05	52.91	91.29	156.80
	Health expenditure as % of NSDP	1.30	1.10	0.70	0.70	
Gujarat	Health Expenditure (in millions)	875.00	1517.51	2524.03	4708.85	n.a.
	Per capita expenditure (in Rs.)	22.74	44.45	61.10	104.75	
	Health expenditure as % of NSDP	1.30	1.30	1.00	0.90	
Kerala	Health Expenditure (in millions)	818.00	1279.15	2219.90	4172.08	575113
	Per capita expenditure (in Rs.)	29.76	45.36	76.29	135.86	179 30
	Health expenditure as % of NSDP	2.10	2.00	1.80	1.60	
Tamil Nadu	Health Expenditure (in millions)	1106.00	1964.44	3895.14	7182.95	11667.14
	Per capita expenditure (in Rs.)	20.99	47.57	69.93	121.83	189.94
	Health expenditure as % of NSDP	1.50	1.40	1.40	1.20	
Karnataka	Health Expenditure (in millions)	714.00	1507.80	2495.82	5133.77	n.a.
	Per capita expenditure (in Rs.)	17.00	34.24	55.49	105.33	
	Health expenditure as % of NSDP	1.30	1.50	1.20	1.10	
West Bengal	Health Expenditure (in millions)	1409.00	2098.13	4600.04	6298.94	11495.35
	Per capita expenditure (in Rs.)	24.25	37.54	67.57	85.47	146.78
	Health expenditure as % of NSDP	1.50	1.20	1.50	1.00	
Andhra Pradesh	Health Expenditure (in millions)	1228.00	193.67	3297.95	6061.22	10401.75
	Per capita expenditure (in Rs.)	20.59	39.08	49.59	84.92	138.67
	Health expenditure as % of NSDP	1.70	1.40	1.10	0.90	
Maharashtra	Health Expenditure (in millions)	1306.98	4781.83	4976.25	9061.10	11854.90
	Per capita expenditure (in Rs.)	2099.00	69.12	63.67	105.46	132.20
	Health expenditure as % of NSDP	0.80	1.70	0.80	0.60	0.60

Source: Finance and Revenue Accounts, respective states, various years.

## Health and Nutrition

Table 52

Summary of Information on Studies Covering Morbidity and Utilisation of Health Care Services from the Private Sector and on Medical Expenditure in Maharashtra

Reference	Morbidity Rates (per 1000 population)			Utilisation of Services from Public/Private Health Care Sector*					
	Recall			Rural			Urban		
	Period	Rural	Urban	Public	Private	Total	Public	Private	Total
1	2	3	4	5	6	7	8	9	10
FRCH 1984 (Jesani <i>et al</i> 1996)	–	–	–	33.10	58.40	91.50	–	–	–
NSSO 1986-87 (1992)									
Inpatient care	–	–	26.32	73.68	100.00	25.02	74.27	99.29	
Outpatient care	–	–	–	–	–	–	–	–	–
Duggal and Amin (1989)	1 month	154.00	145.00	10.43	79.82	90.35	15.99	73.95	89.94
NCAER (1992)	2 weeks	70.46	54.82	38.67	61.33	100.00	45.49	54.51	100.00
NCAER (1993)									
Non-hospitalised ailments—	30 days	66.80	78.60	–	–	–	–	–	–
Males	–	65.40	77.80	46.10	51.30	97.40	30.00	68.00	98.00
Females	–	68.40	79.50	41.60	55.00	96.60	35.10	62.40	97.50
Hospitalisation	1 year	5.50	14.10	30.50	69.50	100.00	58.80	51.20	100.00
NSSO—1995–96 (1998)									
Hospitalisation	1 year	19.00	26.00	31.20	68.80	100.00	31.80	68.20	100.00
Ailments	15 days	52.00	48.00	16.00	73.00	89.00	17.00	77.00	94.00
Nandraj <i>et al</i> (1998)	30 days	–	363.00	–	–	–	10.00	84.00	–
Madhiwala <i>et al</i> (2000)—	30 days	–	–	22.60	63.50	86.10	10.30	71.70	82.00
Male	–	868.00	247.00	–	–	–	–	–	–
Female	–	1355.00	457.00	–	–	–	–	–	–
Inpatient care	–	–	–	–	–	–	–	–	–
Outpatient care	–	–	–	–	–	–	–	–	–

\* Percentage may not add up to hundred in some cases since some have not sought treatment or might have gone for self-treatment.

## Health and Nutrition

Table 52 (continued)

Summary of Information on Studies Covering Morbidity and Utilisation of Health Care Services  
from the Private Sector and on Medical Expenditure in Maharashtra.

Reference	Average Medical Expenditure (Rupees) per Ailment/Episode					
	Rural			Urban		
	Public	Private	Total	Public	Private	Total
<i>1</i>	<i>11</i>	<i>12</i>	<i>13</i>	<i>14</i>	<i>15</i>	<i>16</i>
FRCH 1984 (Jesani <i>et al</i> 1996)	28.00	87.08	56.99	–	–	–
NSSO 1986-87 (1992)						
Inpatient care	438.80	901.36	841.80	400.10	1929.00	1499.00
Outpatient care	52.10	99.40	86.50	83.80	153.10	131.90
Duggal and Amin (1989)	–	–	103.60	–	–	100.40
NCAER (1992)	97.50	227.26	172.60	129.50	201.86	175.10
NCAER (1993)						
Non-hospitalised ailments—	30.19	240.64	171.50	74.10	169.85	136.60
Males	–	–	–	–	–	–
Females	–	–	–	–	–	–
Hospitalisation	664.90	112.72	981.50	462.00	1976.30	1086.00
NSSO—1995–96 (1998)						
Hospitalisation	1529.00	3836.00	3089.00	1439.00	5345.00	3997.00
Ailments	129.00	158.00	147.00	125.00	195.00	185.00
Nandraj <i>et al</i> (1998)	–	–	–	179.90	134.46	134.00
Madhiwala <i>et al</i> (2000)—						
Male	–	–	–	–	–	–
Female	–	–	–	–	–	–
Inpatient care	16.00	118.00	97.00	12.00	128.00	98.00
Outpatient care	332.00	2188.00	–	1938.00	2188.00	–

## Health and Nutrition

Table 53

Per cent Utilising Health Care Services from Private Sector for Selected RCH Services  
by Districts, Maharashtra, 1998–99

Sr. No.	District	Antenatal Care	For Delivery #	Pregnancy		Side Effects		Diarrhoea	Pneumonia	
				Compli- cations	Post Delivery Complications	of Steril- isation	Treatment of RTI/STI			
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai †	53.6	51.7	62.5	60.7	50.0	83.9	33.2	79.6	90.9
2	Thane	47.8	61.0	63.3	60.5	69.3	67.4	30.5	68.1	48.8
3	Raigad	37.8	56.4	60.9	64.0	58.3	60.8	22.7	67.0	72.5
4	Ratnagiri	41.4	55.8	64.7	65.1	57.1	77.1	8.1	61.4	54.7
5	Sindhudurg	26.3	32.2	37.1	43.7	41.6	69.6	4.1	55.5	65.4
6	Nashik	33.2	54.5	69.3	71.4	65.7	78.8	14.8	66.6	73.6
7	Dhule	22.6	44.8	60.4	69.0	–	67.7	13.3	47.7	55.5
8	Jalgaon	32.6	59.3	73.4	74.5	72.0	75.6	12.4	74.1	67.9
9	Ahmednagar	44.4	69.7	82.2	67.2	81.7	83.7	11.1	68.8	80.8
10	Pune	50.0	57.6	61.5	64.3	65.1	76.3	25.1	68.6	79.3
11	Satara	53.4	62.1	68.5	64.4	72.2	81.2	8.5	62.9	66.6
12	Sangli	46.9	60.3	73.3	63.9	68.5	73.2	3.4	76.3	75.0
13	Solapur	44.3	65.3	76.2	73.9	63.6	83.3	26.0	63.8	76.5
14	Kolhapur	58.2	63.6	74.7	75.7	50.0	75.2	9.5	69.8	78.9
15	Aurangabad	30.1	49.7	68.5	73.4	98.8	74.5	13.9	59.3	65.0
16	Jalna	24.8	59.6	61.6	75.1	58.1	74.1	25.9	62.3	61.0
17	Parbhani	27.2	46.0	62.7	62.2	55.4	72.9	12.4	68.0	62.9
18	Beed	23.5	45.5	51.5	59.6	42.4	38.9	12.2	58.8	58.6
19	Nanded	26.3	53.8	58.6	61.2	66.0	61.1	15.8	60.7	70.1
20	Osmanabad	30.9	39.2	69.2	67.5	65.4	73.6	17.0	52.1	64.1
21	Latur	35.0	57.1	77.7	68.5	65.8	85.7	29.8	52.0	58.2
22	Buldhana	30.9	45.2	66.1	69.4	57.8	84.9	–	51.9	67.1
23	Akola	32.7	47.3	61.4	61.6	63.0	70.8	14.7	71.0	71.0
24	Amaravati	28.2	43.4	50.0	64.6	53.0	66.3	23.3	71.0	61.1
25	Yavatmal	23.8	34.0	62.1	63.8	67.1	82.6	10.5	64.1	76.6
26	Wardha	38.5	31.7	62.1	51.9	68.1	78.1	20.9	37.2	54.4
27	Nagpur	32.1	31.8	50.2	39.3	56.3	68.9	17.6	69.6	69.7
28	Bhandara	21.7	21.1	66.1	69.4	63.7	68.6	24.2	40.0	50.3
29	Chandrapur	31.8	43.9	60.3	58.0	100.0	59.0	11.6	51.4	63.7
30	Gadchiroli	8.9	19.5	30.7	32.2	32.0	36.5	23.4	31.7	35.3
	Maharashtra	38.3	51.3	63.8	63.8	59.6	67.4	17.4	65.3	68.5

\* Figures based on phase one survey.

# Only institutional deliveries were considered.

† Includes Mumbai City and Mumbai Suburban District.

Source: Based on CORT (1998 and 1999), RCH-RHS Survey reports, various district reports.

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## Education

Table 54

Management-wise Number of Primary Schools for the Years 1990, 1995 and 2000

Sr. No. District		Management-wise number of Primary Schools								
		Central Government			State Government			Zilla Parishad		
		1990	1995	2000	1990	1995	2000	1990	1995	2000
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai #	2	9	0	0	0	0	0	0	0
2	Thane	2	4	4	64	72	72	2465	2753	2943
3	Raigad	3	1	1	11	11	18	2282	2398	2544
4	Ratnagiri	0	0	0	4	4	4	2493	2589	2627
5	Sindhudurg	0	0	0	3	3	5	1436	1461	1460
6	Nashik	4	4	4	60	65	65	2442	2591	2753
7	Dhule	0	0	0	62	74	14	1778	1944	948
8	Nandurbar	—	—	0	—	—	56	—	—	1164
9	Jalgaon	5	5	6	14	16	19	1639	1677	1691
10	Ahmednagar	0	0	0	11	16	15	2461	2695	2836
11	Pune	2	1	1	15	14	16	3044	3054	3359
12	Satara	1	1	1	2	3	5	2226	2240	2382
13	Sangli	1	1	1	3	4	4	1354	1453	1561
14	Solapur	1	2	1	2	1	1	1991	2190	2373
15	Kolhapur	0	0	0	1	1	11	1717	1722	1730
16	Aurangabad	1	0	1	10	8	9	1284	1430	1430
17	Jalna	1	1	1	0	0	0	1053	1124	1174
18	Parbhani	1	1	1	2	2	0	1537	1668	945
19	Hingoli	—	—	0	—	—	2	—	—	760
20	Beed	1	1	1	2	2	4	1618	1689	1842
21	Nanded	1	0	0	12	17	20	1743	1885	1903
22	Osmanabad	0	0	0	0	0	0	797	887	907
23	Latur	0	0	0	—	—	—	1020	1090	1096
24	Buldhana	0	0	0	7	4	4	1307	1307	1309
25	Akola	0	0	0	3	4	3	1562	1608	887
26	Washim	—	—	0	—	—	1	—	—	737
27	Amaravati	0	0	0	18	25	20	1437	1524	1585
28	Yavatmal	0	0	0	22	31	23	1770	1816	1823
29	Wardha	2	2	2	4	3	4	874	900	903
30	Nagpur	5	5	5	3	5	5	1400	1478	1517
31	Bhandara	3	2	2	11	10	2	1533	1643	710
32	Gondia	—	—	0	—	—	8	—	—	941
33	Chandrapur	2	1	0	8	6	9	1371	1426	1486
34	Gadchiroli	0	0	0	24	19	27	957	1177	1280
Maharashtra		38	41	32	378	420	446	48591	51419	53606

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Education, Pune,

## Education

Table 54 (continued)

Management-wise Number of Primary Schools for the Years 1990, 1995 and 2000

Sr. No.	District	Management-wise Number of Schools											
		Municipal Councils			Private (Aided)			Private (Non-aided)			Total		
		1990	1995	2000	1990	1995	2000	1990	1995	2000	1990	1995	2000
1	2	12	13	14	15	16	17	18	19	20	21	22	23
1	Mumbai #	1310	1266	1188	320	355	342	547	616	580	2179	2246	2110
2	Thane	249	388	391	252	309	382	227	435	496	3259	3961	4288
3	Raigad	55	75	75	14	25	29	21	30	71	2386	2540	2738
4	Ratnagiri	20	20	20	7	9	16	15	24	31	2539	2646	2698
5	Sindhudurg	0	0	0	28	26	25	3	6	15	1470	1496	1505
6	Nashik	313	292	278	84	121	165	54	73	74	2957	3146	3339
7	Dhule	108	95	60	91	139	135	41	49	27	2080	2301	1184
8	Nandurbar	–	–	32	–	–	71	–	–	25	–	–	1348
9	Jalgaon	140	138	133	62	91	129	46	57	79	1906	1984	2057
10	Ahmednagar	74	71	62	60	82	92	28	40	66	2634	2904	3071
11	Pune	371	393	418	121	183	203	124	215	241	3677	3860	4238
12	Satara	68	62	58	42	47	70	32	41	63	2371	2394	2579
13	Sangli	97	96	95	47	64	89	24	47	74	1526	1665	1824
14	Solapur	173	173	148	157	201	246	55	61	69	2379	2628	2838
15	Kolhapur	150	153	152	159	104	125	73	56	70	2100	2036	2088
16	Aurangabad	82	103	100	64	114	148	72	106	125	1513	1761	1813
17	Jalna	19	19	21	25	36	63	8	19	27	1106	1199	1286
18	Parbhani	1	17	17	56	99	80	30	43	29	1627	1830	1072
19	Hingoli	–	–	2	–	–	38	0	0	26	–	–	828
20	Beed	0	0	0	36	51	87	38	64	69	1695	1807	2003
21	Nanded	8	11	11	103	203	252	164	106	112	2031	2222	2298
22	Osmanabad	20	28	29	33	45	89	12	12	30	862	972	1055
23	Latur	16	34	23	55	137	196	55	77	52	1146	1338	1367
24	Buldhana	76	81	83	18	34	46	17	23	41	1425	1449	1483
25	Akola	120	121	114	29	43	37	32	62	70	1746	1838	1111
26	Washim	–	–	22	0	0	29	–	–	27	–	–	816
27	Amaravati	127	119	113	49	73	96	41	41	57	1672	1782	1871
28	Yavatmal	85	94	91	45	74	95	29	32	56	1951	2047	2088
29	Wardha	67	71	63	28	30	46	25	28	35	1000	1034	1053
30	Nagpur	336	354	346	176	301	334	212	271	263	2132	2414	2470
31	Bhandara	62	64	31	39	79	83	156	161	38	1804	1959	866
32	Gondia	–	–	32	–	–	66	–	–	40	–	1087	
33	Chandrapur	93	96	96	32	42	38	47	63	105	1553	1634	1734
34	Gadchiroli	6	0	0	23	29	50	8	24	23	1018	1249	1380
	Maharashtra	4246	4434	4304	2255	3146	3992	2236	2882	3206	57744	62342	65586

Note: Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

Source: Directorate of Education, Pune.



## Education

Table 55

Number of Preprimary Schools, their Enrolment and Number of Teachers for the Years 1990 and 2000

Sr. No.	District	Number of Schools		Total Enrolment				Number of Teachers			
		1990	2000	1990		2000		1990		2000	
				Total	Girls	Total	Girls	Total	Female	Total	Female
1	2	3	4	5	6	7	8	9	10	11	12
1	Mumbai #	76	300	18097	8076	15485	7048	521	520	300	300
2	Thane	43	2348	7888	3618	218775	106711	164	161	4694	4694
3	Raigad	100	2322	2579	1271	122640	61153	101	101	2338	2338
4	Ratnagiri	7	952	512	225	24381	11884	19	19	1018	1018
5	Sindhudurg	53	1106	1115	545	26556	13003	53	53	1107	1094
6	Nashik	11	385	1797	872	4368	1869	44	44	385	385
7	Dhule	35	1106	3524	1654	58755	28557	53	53	1102	1102
8	Nandurbar	-	1204	-	-	106367	52453	-	-	1287	1287
9	Jalgaon	39	2364	3124	1334	129768	63367	78	72	2365	2365
10	Ahmednagar	2	2755	455	206	137014	58527	8	8	2900	2888
11	Pune	32	2685	4950	2333	66425	31884	131	130	2657	2657
12	Satara	17	2334	2412	1100	90523	43724	62	62	2320	2320
13	Sangli	23	1360	2921	1185	61928	28189	70	69	1360	1360
14	Solapur	20	2017	3651	1848	84234	41012	77	77	2017	2017
15	Kolhapur	67	1929	5381	2417	86754	41253	143	138	1897	1897
16	Aurangabad	32	2139	3773	1821	140508	60432	75	75	2245	2245
17	Jalna	6	501	716	286	22374	10435	13	13	527	527
18	Parbhani	16	453	2150	883	18149	489	33	33	453	453
19	Hingoli	-	1657	-	-	64330	30577	-	-	1657	1657
20	Beed	9	638	1005	466	21190	10091	20	20	638	638
21	Nanded	29	503	3052	1292	13027	6047	57	55	503	503
22	Osmanabad	2	1411	333	150	116389	56485	8	8	1411	1411
23	Latur	2	235	438	165	7473	3156	9	9	235	235
24	Buldhana	8	553	538	228	17997	8890	15	14	564	564
25	Akola	15	1656	1224	588	85787	43424	33	33	1667	1667
26	Washim	-	887	-	-	26610	8937	-	-	887	887
27	Amaravati	70	970	4828	2247	23912	10867	111	111	970	970
28	Yavatmal	29	2207	2400	1180	199152	96054	52	51	2225	2225
29	Wardha	8	932	1504	686	24639	11031	42	42	932	932
30	Nagpur	88	813	6035	3032	34521	15370	162	162	702	702
31	Bhandara	5	999	547	250	52579	26060	12	12	992	992
32	Gondia	-	1010	-	-	41316	20792	-	-	1010	1004
33	Chandrapur	13	1981	1149	539	23597	11543	23	23	1987	1987
34	Gadchiroli	-	1361	-	-	120402	60308	-	-	1362	1362
	Maharashtra	857	46073	88098	40497	2287925	1081622	2189	2168	48714	48683

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Education, Pune.

## Education

Table 56

Number of Lower Primary Schools and their Enrolment for the Years 1990, 1995 and 2000

Sr. No.	District	1990			1995			2000		
		No. of Schools	Enrolment		No. of Schools	Enrolment		No. of Schools	Enrolment	
			Total	Girls		Total	Girls		Total	Girls
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai #	1349	565173	269542	1382	585197	270510	1234	544106	246580
2	Thane	2199	253878	115486	2609	314979	148977	2635	282972	134099
3	Raigad	1574	103703	50975	1739	118427	57637	1946	138073	67286
4	Ratnagiri	1484	68723	33538	1521	64184	31492	1590	65692	32464
5	Sindhudurg	840	31379	15419	898	30534	15135	943	29951	14645
6	Nashik	2116	260876	120485	2238	269688	126015	2365	285094	136125
7	Dhule	1747	197986	90206	1991	226885	108201	976	139362	66008
8	Nandurbar	—	—	—	—	—	—	1137	101339	48656
9	Jalgaon	1247	197736	88072	1309	219575	99591	1390	227954	105983
10	Ahmednagar	2006	242814	111998	2283	288136	143436	2416	283115	136680
11	Pune	2387	280585	135665	2489	311426	150791	2788	298768	142693
12	Satara	1522	129103	62208	1509	130165	62948	1699	130069	62498
13	Sangli	912	112230	56135	1009	117769	58501	1159	115958	56969
14	Solapur	1528	176508	79189	1735	219294	104930	1954	217559	105888
15	Kolhapur	1158	159751	74837	1082	139660	68533	1088	125310	59144
16	Aurangabad	998	130093	56348	1043	165089	72415	975	151851	73941
17	Jalna	799	86816	34503	755	92457	41371	574	73058	34593
18	Parbhani	1165	107576	46636	961	114024	46490	547	79807	36453
19	Hingoli	—	—	—	—	—	—	372	46287	23560
20	Beed	1229	110104	48182	1262	122820	58882	1243	126479	62398
21	Nanded	1399	144799	64927	1183	121542	58939	1160	118426	58983
22	Osmanabad	482	55453	24830	464	69132	32691	457	62259	29002
23	Latur	658	88111	40945	658	100596	49239	648	97656	50493
24	Buldhana	1005	135137	62547	928	136160	64178	919	131344	63134
25	Akola	1200	150977	69801	1221	162120	76999	733	108138	49117
26	Washim	—	—	—	—	—	—	515	64843	30920
27	Amaravati	1202	168584	79300	1214	193845	90713	1195	146997	72623
28	Yavatmal	1290	116752	51848	1266	126268	59979	1286	128805	61470
29	Wardha	779	85556	42260	782	83185	40271	768	70354	34625
30	Nagpur	1596	243757	119438	1712	219698	107360	1739	218252	106956
31	Bhandara	1250	128634	63213	1291	122285	61530	600	57574	27697
32	Gondia	—	—	—	—	—	—	675	51525	26300
33	Chandrapur	1152	130432	61655	1120	120575	58421	968	102036	49561
34	Gadchiroli	813	50181	22963	945	54652	28256	973	48147	23265
	Maharashtra	39086	4713407	2193151	40599	5040367	2394431	41667	4869160	2330809

Note: Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

Source: Directorate of Education, Pune.

## Education

Table 57

Number of Upper Primary Schools and their Enrolment for the Years 1990, 1995 and 2000

Sr. No.	District	1990			1995			2000		
		No. of Schools	Enrolment		No. of Schools	Enrolment		No. of Schools	Enrolment	
			Total	Girls		Total	Girls		Total	Girls
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai #	830	564986	271575	864	598280	299528	815	529791	265121
2	Thane	1060	434625	198123	1352	551096	257193	1653	636446	299666
3	Raigad	812	166332	78984	801	168593	81722	792	161256	78366
4	Ratnagiri	1055	159109	75868	1125	168450	81478	1108	158061	76899
5	Sindhudurg	630	85178	41791	598	74773	36888	562	65068	32068
6	Nashik	841	262345	122008	908	280108	133575	974	319618	153742
7	Dhule	333	91709	40198	310	88441	38463	208	56347	25907
8	Nandurbar	—	—	—	—	—	—	211	58478	25506
9	Jalgaon	659	224747	100047	675	219235	100117	667	227284	108303
10	Ahmednagar	628	192832	86041	621	206801	94139	655	208012	100405
11	Pune	1290	426877	201325	1371	489714	237473	1450	475234	227469
12	Satara	849	201491	95752	885	208777	100815	880	194394	94735
13	Sangli	614	200927	91409	656	214189	99635	665	202112	93137
14	Solapur	851	285579	122912	893	289587	134881	884	292666	138167
15	Kolhapur	942	270213	127355	954	282082	136539	1000	280954	135201
16	Aurangabad	515	170871	73307	718	260353	118688	838	317238	150440
17	Jalna	307	84776	32487	444	128527	56581	712	201434	97566
18	Parbhani	462	147104	61161	869	255527	124399	525	186301	90313
19	Hingoli	—	—	—	—	—	—	456	123998	59592
20	Beed	466	141961	59363	545	169087	77107	760	240902	114674
21	Nanded	632	209604	91289	1039	301419	144226	1138	328117	160758
22	Osmanabad	380	107907	50018	508	137794	68420	598	153088	76991
23	Latur	488	147820	71426	680	215294	107495	719	234255	111965
24	Buldhana	420	121529	50377	521	156649	69788	564	173863	83260
25	Akola	546	148966	66311	617	174066	81919	378	111621	53577
26	Washim	—	—	—	—	—	—	301	83739	40170
27	Amaravati	470	139626	63744	568	159201	73112	676	180650	85088
28	Yavatmal	661	173374	78667	781	208656	95483	802	231387	110725
29	Wardha	221	55630	25951	252	59546	28026	285	61357	28788
30	Nagpur	536	173437	81195	702	219543	103779	731	231756	111386
31	Bhandara	554	166657	78927	668	183939	88405	266	78760	38656
32	Gondia	—	—	—	—	—	—	412	112435	54589
33	Chandrapur	401	103284	47641	514	136040	66275	766	162299	80163
34	Gadchiroli	205	48699	20957	304	71331	31829	407	94064	45239
	Maharashtra	18658	5708195	2606209	21743	6677098	3167978	23919	7172985	3448632

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Education, Pune.

## Education

Table 58

Number of Total Primary Schools and their Enrolment for the Years 1990, 1995 and 2000

Sr. No.	District	1990			1995			2000		
		No. of Schools	Enrolment		No. of Schools	Enrolment		No. of Schools	Enrolment	
			Total	Girls		Total	Girls		Total	Girls
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai #	2179	1130159	541117	2246	1183477	570038	2110	1073897	511701
2	Thane	3259	688503	313609	3961	866075	406170	4288	919418	433765
3	Raigad	2386	270035	129959	2540	287020	139359	2738	299329	145652
4	Ratnagiri	2539	227832	109406	2646	232634	112970	2698	223753	109363
5	Sindhudurg	1470	116557	57210	1496	105307	52023	1505	95019	46713
6	Nashik	2957	523221	242493	3146	549796	259590	3339	604712	289867
7	Dhule	2080	289695	130404	2301	315326	146664	1184	195709	91915
8	Nandurbar	—	—	—	—	—	—	1348	159817	74162
9	Jalgaon	1906	422483	188119	1984	438810	199708	2057	455238	214286
10	Ahmednagar	2634	435646	198039	2904	494937	237575	3071	491127	237085
11	Pune	3677	707462	336990	3860	801140	388264	4238	774002	370162
12	Satara	2371	330594	157960	2394	338942	163763	2579	324463	157233
13	Sangli	1526	313157	147544	1665	331958	158136	1824	318070	150106
14	Solapur	2379	462087	202101	2628	508881	239811	2838	510225	244055
15	Kolhapur	2100	429964	202192	2036	421742	205072	2088	406264	194345
16	Aurangabad	1513	300964	129655	1761	425442	191103	1813	469089	224381
17	Jalna	1106	171592	66990	1199	220984	97952	1286	274492	132159
18	Parbhani	1627	254680	107797	1830	369551	170889	1072	266108	126766
19	Hingoli	—	—	—	—	—	—	828	170285	83152
20	Beed	1695	252065	107545	1807	291907	135989	2003	367381	177072
21	Nanded	2031	354403	156216	2222	422961	203165	2298	446543	219741
22	Osmanabad	862	163360	74848	972	206926	101111	1055	215347	105993
23	Latur	1146	235931	112371	1338	315890	156734	1367	331911	162458
24	Buldhana	1425	256666	112924	1449	292809	133966	1483	305207	146394
25	Akola	1746	299943	136112	1838	336186	158918	1111	219759	102694
26	Washim	—	—	—	—	—	—	816	148582	71090
27	Amaravati	1672	308210	143044	1782	353046	163825	1871	327647	157711
28	Yavatmal	1951	290126	130515	2047	334924	155462	2088	360192	172195
29	Wardha	1000	141186	68211	1034	142731	68297	1053	131711	63413
30	Nagpur	2132	417194	200633	2414	439241	211139	2470	450008	218342
31	Bhandara	1804	295291	142140	1959	306224	149935	866	136334	66353
32	Gondia	—	—	—	—	—	—	1087	163960	80889
33	Chandrapur	1553	233716	109296	1634	256615	124696	1734	264335	129724
34	Gadchiroli	1018	98880	43920	1249	125983	60085	1380	142211	68504
	Maharashtra	57744	10421602	4799360	62342	11717465	5562409	65586	12042145	5779441

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Education, Pune.

## Education

Table 59

Number of Teachers in Lower and Upper Primary Schools and Teacher-Pupil Ratio for the Year 1990

Sr. No. District	Lower Primary		Upper Primary		Total Primary		Teacher-Pupil Ratio			
	Total	Female	Total	Female	Total	Female	Lower	Upper	Total	
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai #	16749	11757	12575	8288	29324	20045	34	45	39
2	Thane	6181	3367	9534	6056	15715	9423	41	46	44
3	Raigad	3170	1299	4721	1955	7891	3254	33	35	34
4	Ratnagiri	2489	858	5871	2582	8360	3440	28	27	27
5	Sindhudurg	1322	576	3333	1423	4655	1999	24	26	25
6	Nashik	6681	2555	6272	2392	12953	4947	39	42	40
7	Dhule	5340	1546	2575	684	7915	2230	37	36	37
8	Nandurbar	—	—	—	—	—	—	—	—	—
9	Jalgaon	4854	1336	6105	2085	10959	3421	41	37	39
10	Ahmednagar	5955	1976	5234	1642	11189	3618	41	37	39
11	Pune	6931	3414	10899	5810	17830	9224	40	39	40
12	Satara	3667	1412	6628	2264	10295	3676	35	30	32
13	Sangli	2976	1063	5824	2225	8800	3288	38	34	36
14	Solapur	4381	1436	7064	2152	11445	3588	40	40	40
15	Kolhapur	3692	1436	8685	2583	12377	4019	43	31	35
16	Aurangabad	2762	926	3732	1383	6494	2309	47	46	46
17	Jalna	1650	308	1767	321	3417	629	53	48	50
18	Parbhani	2503	391	3328	672	5831	1063	43	44	44
19	Hingoli	—	—	—	—	—	—	—	—	—
20	Beed	2505	328	3343	760	5848	1088	44	42	43
21	Nanded	3244	498	4566	1115	7810	1613	45	46	45
22	Osmanabad	1378	232	2809	407	4187	639	40	38	39
23	Latur	1986	426	3732	526	5718	952	44	40	41
24	Buldhana	2949	526	3166	417	6115	943	46	38	42
25	Akola	3304	1002	3858	976	7162	1978	46	39	42
26	Washim	—	—	—	—	—	—	—	—	—
27	Amaravati	3996	1482	3739	1092	7735	2574	42	37	40
28	Yavatmal	2789	581	4388	1203	7177	1784	42	40	40
29	Wardha	2202	796	1637	468	3839	1264	39	34	37
30	Nagpur	6125	3591	4316	2239	10441	5830	40	40	40
31	Bhandara	3614	955	4593	1055	8207	2010	36	36	36
32	Gondia	—	—	—	—	—	—	—	—	—
33	Chandrapur	3189	963	2780	559	5969	1522	41	37	39
34	Gadchiroli	1443	242	1221	223	2664	465	35	40	37
	Maharashtra	120027	47278	148295	55557	268322	102835	39	38	39

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Education, Pune.

## Education

Table 60

Number of Teachers in Lower and Upper Primary Schools and Teacher-Pupil Ratio for the Year 1995

Sr. No. District	Lower Primary		Upper Primary		Total Primary		Teacher-Pupil Ratio			
	Total	Female	Total	Female	Total	Female	Lower	Upper	Total	
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai #	14272	10920	15028	10129	29300	21049	41	39	40
2	Thane	7706	4471	12375	8313	20081	12784	41	44	43
3	Raigad	3690	1647	4801	2173	8491	3820	32	40	34
4	Ratnagiri	2874	1132	5881	2481	8755	3613	22	29	27
5	Sindhudurg	1582	799	3150	1543	4732	2342	19	24	22
6	Nashik	7252	3485	6564	2163	13816	5648	37	43	40
7	Dhule	6049	1887	2658	864	8707	2751	37	33	36
8	Nandurbar	—	—	—	—	—	—	—	—	—
9	Jalgaon	5376	1592	6535	2143	11911	3735	41	33	37
10	Ahmednagar	7041	2566	4994	1874	12035	4440	41	41	41
11	Pune	7135	3770	13488	7588	20623	11358	44	36	39
12	Satara	4100	1725	6354	2383	10454	4108	32	33	32
13	Sangli	3272	1243	6082	2579	9354	3822	36	35	36
14	Solapur	4615	1543	6887	2412	11502	3955	48	42	44
15	Kolhapur	3859	1483	7553	2348	11412	3831	36	37	37
16	Aurangabad	3143	1002	4536	1772	7679	2774	52	57	55
17	Jalna	1863	440	2507	427	4370	867	50	51	51
18	Parbhani	3084	780	5635	1137	8719	1917	37	45	42
19	Hingoli	—	—	—	—	—	—	—	—	—
20	Beed	3072	597	4244	986	7316	1583	40	40	40
21	Nanded	3773	736	5884	1337	9657	2073	32	51	44
22	Osmanabad	1765	401	3326	549	5091	950	39	41	41
23	Latur	2518	864	5624	1222	8142	2086	40	38	39
24	Buldhana	3405	621	3913	612	7318	1233	40	40	40
25	Akola	4044	1384	4288	1327	8332	2711	40	41	40
26	Washim	—	—	—	—	—	—	—	—	—
27	Amaravati	4084	1608	4499	1674	8583	3282	47	35	41
28	Yavatmal	3497	957	5018	1491	8515	2448	36	42	39
29	Wardha	2394	976	1672	540	4066	1516	35	36	35
30	Nagpur	6456	3830	7066	4555	13522	8385	34	31	32
31	Bhandara	3515	1038	5079	1315	8594	2353	35	36	36
32	Gondia	—	—	—	—	—	—	—	—	—
33	Chandrapur	3030	936	3932	1231	6962	2167	40	35	37
34	Gadchiroli	1921	364	2259	386	4180	750	28	32	30
	Maharashtra	130387	54797	171832	69554	302219	124351	39	39	39

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Education, Pune.

## Education

Table 61

Number of Teachers in Lower and Upper Primary Schools and Teacher-Pupil Ratio for the Year 2000

Sr. No. District	Lower Primary		Upper Primary		Total Primary		Teacher-Pupil Ratio			
	Total	Female	Total	Female	Total	Female	Lower	Upper	Total	
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai #	12892	10964	12379	8005	25271	18969	42	43	42
2	Thane	7053	3943	14793	10402	21846	14345	40	43	42
3	Raigad	4286	1981	4695	2312	8981	4293	32	34	33
4	Ratnagiri	2900	1220	5729	2532	8629	3752	23	28	26
5	Sindhudurg	1655	872	2857	1347	4512	2219	18	23	21
6	Nashik	7608	2921	7729	3334	15337	6255	37	41	39
7	Dhule	3771	1518	1493	569	5264	2087	37	38	37
8	Nandurbar	2963	740	1431	324	4394	1064	34	41	36
9	Jalgaon	5854	1898	6022	2034	11876	3932	39	38	38
10	Ahmednagar	7911	2979	5040	1855	12951	4834	36	41	38
11	Pune	9471	5493	11724	6745	21195	12238	32	41	37
12	Satara	4483	2135	6058	2354	10541	4489	29	32	31
13	Sangli	3543	1427	5752	2569	9295	3996	33	35	34
14	Solapur	5977	2158	7434	2775	13411	4933	36	39	38
15	Kolhapur	3820	1596	7458	2473	11278	4069	33	38	36
16	Aurangabad	4288	1965	5258	1796	9546	3761	35	60	49
17	Jalna	1576	429	3754	616	5330	1045	46	54	51
18	Parbhani	2087	395	3549	1012	5636	1407	38	52	47
19	Hingoli	1038	208	2638	411	3676	619	45	47	46
20	Beed	3360	649	5244	1466	8604	2115	38	46	43
21	Nanded	3199	784	7204	1507	10403	2291	37	46	43
22	Osmanabad	2106	503	3666	757	5772	1260	30	42	37
23	Latur	2713	360	5246	1390	7959	1750	36	45	42
24	Buldhana	3276	715	4250	757	7526	1472	40	41	41
25	Akola	2642	1237	2622	1061	5264	2298	41	43	42
26	Washim	1547	375	1933	355	3480	730	42	43	43
27	Amaravati	4150	1824	4716	1793	8866	3617	35	38	37
28	Yavatmal	3151	895	5384	1765	8535	2660	41	43	42
29	Wardha	2240	1009	1942	739	4182	1748	31	32	31
30	Nagpur	6102	3683	6919	4400	13021	8083	36	33	35
31	Bhandara	1692	747	2389	936	4081	1683	34	33	33
32	Gondia	1657	461	3153	773	4810	1234	31	36	34
33	Chandrapur	3582	1194	4319	1218	7901	2412	28	38	33
34	Gadchiroli	1813	323	2470	497	4283	820	27	38	33
	Maharashtra	136406	59601	177250	72879	313656	132480	36	40	38

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Education, Pune.

## Education

Table 62

Number of Secondary and Higher Secondary Schools and their Enrolment for 1990

Sr. No.	District	Secondary			Higher Secondary			Total Sec. and Higher Sec.		
		Total Schools	Enrolment		Total Schools	Enrolment		Total Schools	Enrolment	
			Total	Girls		Total	Girls		Total	Girls
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai #	885	610207	271909	141	197346	74121	1026	807553	346030
2	Thane	382	226377	97007	79	109330	46931	461	335707	143938
3	Raigad	177	70029	27517	48	57457	22729	225	127486	50246
4	Ratnagiri	212	59574	21541	28	25413	9412	240	84987	30953
5	Sindhudurg	126	36329	14919	35	27550	11179	161	63879	26098
6	Nashik	351	181204	75118	66	105305	38168	417	286509	113286
7	Dhule	243	95278	39427	79	97316	33685	322	192594	73112
8	Nandurbar	—	—	—	—	—	—	—	—	—
9	Jalgaon	270	138683	50056	76	94976	34496	346	233659	84552
10	Ahmednagar	340	159930	56839	76	100711	35274	416	260641	92113
11	Pune	416	221089	91041	143	217870	82257	559	438959	173298
12	Satara	313	131057	51521	64	73318	26597	377	204375	78118
13	Sangli	283	107283	44478	53	52415	17007	336	159698	61485
14	Solapur	335	134255	48191	55	64645	17776	390	198900	65967
15	Kolhapur	366	149417	55469	42	50430	15714	408	199847	71183
16	Aurangabad	238	111627	39279	19	12521	3851	257	124148	43130
17	Jalna	104	42986	10588	12	12343	3951	116	55329	14539
18	Parbhani	168	83763	21306	21	25331	9675	189	109094	30981
19	Hingoli	—	—	—	—	—	—	—	—	—
20	Beed	262	88956	29188	32	23759	6787	294	112715	35975
21	Nanded	237	89217	28698	51	50408	13122	288	139625	41820
22	Osmanabad	172	67888	26027	23	24240	7211	195	92128	33238
23	Latur	237	110061	40186	37	30927	10522	274	140988	50708
24	Buldhana	159	61900	21974	52	59141	18769	211	121041	40743
25	Akola	264	96594	40938	78	73446	27217	342	170040	68155
26	Washim	—	—	—	—	—	—	—	—	—
27	Amaravati	326	117121	58318	78	81669	31070	404	198790	89388
28	Yavatmal	229	72723	28570	57	57713	21097	286	130436	49667
29	Wardha	137	51430	26925	55	60289	25777	192	111719	52702
30	Nagpur	434	205650	102756	115	133507	54050	549	339157	156806
31	Bhandara	276	101962	47499	94	78664	31228	370	180626	78727
32	Gondia	—	—	—	—	—	—	—	—	—
33	Chandrapur	177	81300	36594	43	53492	21908	220	134792	58502
34	Gadchiroli	81	19451	7402	20	19247	6262	101	38698	13664
	Maharashtra	8200	3723341	1511281	1772	2070779	757843	9972	5794120	2269124

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Education, Pune.



## Education

Table 63

Number of Secondary and Higher Secondary Schools and their Enrolment for 1995

Sr. No.	District	Secondary			Higher Secondary			Total Sec. and Higher Sec.		
		Total Schools	Enrolment		Total Schools	Enrolment		Total Schools	Enrolment	
			Total	Girls		Total	Girls		Total	Girls
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai #	948	693554	313696	191	241657	96606	1139	935211	410302
2	Thane	566	318307	144336	103	141145	59609	669	459452	203945
3	Raigad	222	78774	34278	65	81476	34470	287	160250	68748
4	Ratnagiri	233	55677	22371	49	40373	16250	282	96050	38621
5	Sindhudurg	138	36452	16317	41	29767	13074	179	66219	29391
6	Nashik	513	211768	95458	118	148514	57861	631	360282	153319
7	Dhule	315	105810	46976	113	130671	50483	428	236481	97459
8	Nandurbar	—	—	—	—	—	—	—	—	—
9	Jalgaon	386	153051	61368	97	125410	44509	483	278461	105877
10	Ahmednagar	438	196306	85100	116	151370	56213	554	347676	141313
11	Pune	641	284417	125179	192	274217	106783	833	558634	231962
12	Satara	388	139155	60114	87	97848	39698	475	237003	99812
13	Sangli	326	113976	52276	89	84380	33419	415	198356	85695
14	Solapur	459	171540	62785	110	92755	29959	569	264295	92744
15	Kolhapur	472	160079	66635	82	94516	37274	554	254595	103909
16	Aurangabad	309	116357	47474	46	51118	19259	355	167475	66733
17	Jalna	150	53710	16377	28	32265	10348	178	85975	26725
18	Parbhani	242	79863	24746	31	42125	17460	273	121988	42206
19	Hingoli	—	—	—	—	—	—	—	—	—
20	Beed	323	104359	38392	53	43785	16873	376	148144	55265
21	Nanded	278	113759	43407	74	80577	25454	352	194336	68861
22	Osmanabad	231	67407	28672	41	37929	13816	272	105336	42488
23	Latur	368	85897	36426	97	45833	16619	465	131730	53045
24	Buldhana	196	70880	28875	68	81812	29909	264	152692	58784
25	Akola	316	105523	46921	114	109629	43380	430	215152	90301
26	Washim	—	—	—	—	—	—	—	—	—
27	Amaravati	374	129784	65331	91	91844	36037	465	221628	101368
28	Yavatmal	294	80294	33942	76	70889	30131	370	151183	64073
29	Wardha	157	54131	28182	61	65456	29273	218	119587	57455
30	Nagpur	505	228126	115690	145	158412	65972	650	386538	181662
31	Bhandara	277	106181	53431	170	146154	66432	447	252335	119863
32	Gondia	—	—	—	—	—	—	—	—	—
33	Chandrapur	244	91192	43860	68	75844	32932	312	167036	76792
34	Gadchiroli	123	30933	12543	45	34779	14233	168	655712	26776
	Maharashtra	10432	4237262	1851158	2661	2902550	1144336	13093	7139812	2995494

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Education, Pune.

## Education

Table 64

Number of Secondary and Higher Secondary Schools and their Enrolment for 2000

Sr. No.	District	Secondary			Higher Secondary			Total Sec. and Higher Sec.		
		Total Schools	Enrolment		Total Schools	Enrolment		Total Schools	Enrolment	
			Total	Girls		Total	Girls		Total	Girls
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai #	1036	776523	360242	188	262687	108413	1224	1039210	468655
2	Thane	665	341122	158038	134	191884	88901	799	533006	246939
3	Raigad	253	99116	44570	68	94928	41835	321	194044	86405
4	Ratnagiri	253	66745	28003	49	50911	21201	302	117656	49204
5	Sindhudurg	151	40087	18404	36	31191	14489	187	71278	32893
6	Nashik	525	231736	107660	123	161063	63962	648	392799	171622
7	Dhule	235	80466	34829	89	97672	41406	324	178138	76235
8	Nandurbar	164	42201	16951	40	44826	19995	204	87027	36946
9	Jalgaon	399	236301	108791	118	160987	61670	517	397288	170461
10	Ahmednagar	510	227198	104454	129	171366	69547	639	398564	174001
11	Pune	705	306627	141151	216	287163	127856	921	593790	269007
12	Satara	426	159667	72318	97	112548	47985	523	272215	120303
13	Sangli	381	128227	61028	95	109121	47897	476	237348	108925
14	Solapur	543	211782	90347	94	115672	47026	637	327454	137373
15	Kolhapur	547	188523	85724	100	120355	49966	647	308878	135690
16	Aurangabad	347	153722	64025	59	64327	29044	406	218049	93069
17	Jalna	155	67463	24195	33	40106	15001	188	107569	39196
18	Parbhani	155	63391	23095	33	39340	18561	188	102731	41656
19	Hingoli	105	40466	14313	16	17589	6433	121	58055	20746
20	Beed	374	138337	56474	61	68236	28436	435	206573	84910
21	Nanded	312	140779	61816	88	95158	36413	400	235937	98229
22	Osmanabad	263	80558	35602	40	43945	17919	303	124503	53521
23	Latur	356	123326	57118	121	101279	42028	477	224605	99146
24	Buldhana	215	89185	39557	85	106707	42323	300	195892	81880
25	Akola	208	75528	36261	83	81738	36644	291	157266	72905
26	Washim	143	38936	16901	58	56272	21163	201	95208	38064
27	Amaravati	350	111853	55111	151	130001	60300	501	241854	115411
28	Yavatmal	323	99672	42547	79	78066	35925	402	177738	78472
29	Wardha	163	60723	31811	68	69974	32791	231	130697	64602
30	Nagpur	520	225406	114485	175	163128	69362	695	388534	183847
31	Bhandara	106	32906	17111	131	91186	42705	237	124092	59816
32	Gondia	154	50029	24367	72	63211	29749	226	113240	54116
33	Chandrapur	267	108701	54185	77	89401	39573	344	198102	93758
34	Gadchiroli	138	39261	17665	54	44166	18885	192	83427	36550
	Maharashtra	11447	4876563	2219149	3060	3456204	1475404	14507	8332767	3694553

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Education, Pune.

## Education

Table 65

Management-wise Number of Secondary and Higher Secondary Schools (1990)

Sr. No. District	Central Government	State Government	Zilla Parishad	Municipal Councils	Private		Total	
1	2	3	4	5	6	7 (Aided)	8 (Unaided)	9
1	Mumbai #	9	2	0	51	623	341	1026
2	Thane	4	17	2	6	285	147	461
3	Raigad	1	3	0	1	163	57	225
4	Ratnagiri	0	0	1	0	171	68	240
5	Sindhudurg	0	0	0	0	142	19	161
6	Nashik	4	24	2	4	313	70	417
7	Dhule	1	20	0	4	243	54	322
8	Nandurbar	—	—	—	—	—	—	—
9	Jalgaon	2	5	1	9	285	44	346
10	Ahmednagar	1	7	0	1	281	126	416
11	Pune	12	10	0	29	378	130	559
12	Satara	1	1	1	1	283	90	377
13	Sangli	0	0	0	1	265	70	336
14	Solapur	1	1	1	8	282	97	390
15	Kolhapur	0	1	5	3	308	91	408
16	Aurangabad	1	8	55	0	136	57	257
17	Jalna	1	0	33	0	56	26	116
18	Parbhani	2	3	77	0	55	52	189
19	Hingoli	—	—	—	—	—	—	—
20	Beed	1	0	60	0	112	121	294
21	Nanded	1	4	71	0	126	86	288
22	Osmanabad	1	0	51	0	87	56	195
23	Latur	0	0	50	0	152	72	274
24	Buldhana	1	0	35	8	142	25	211
25	Akola	0	2	16	6	223	95	342
26	Washim	—	—	—	—	—	—	—
27	Amaravati	1	7	23	10	233	130	404
28	Yavatmal	0	13	34	3	221	15	286
29	Wardha	2	2	2	7	135	44	192
30	Nagpur	5	3	15	18	375	133	549
31	Bhandara	3	2	54	12	189	110	370
32	Gondia	—	—	—	—	—	—	—
33	Chandrapur	3	3	20	2	125	67	220
34	Gadchiroli	0	14	10	0	36	41	101
Maharashtra		58	152	619	184	6425	2534	9972

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Education, Pune.

## Education

Table 66

Management-wise Number of Secondary and Higher Secondary Schools (1995)

Sr. No.	District	Central	State	Zilla	Municipal	Private		Total
		Government	Government	Parishad	Councils	(Aided)	(Unaided)	
1	2	3	4	5	6	7	8	9
1	Mumbai #	9	2	0	51	706	371	1139
2	Thane	4	23	2	8	341	291	669
3	Raigad	2	3	0	2	177	103	287
4	Ratnagiri	0	0	1	0	219	62	282
5	Sindhudurg	0	0	0	0	154	25	179
6	Nashik	4	29	2	4	444	148	631
7	Dhule	1	28	0	4	302	93	428
8	Nandurbar	0	0	0	0	0	0	0
9	Jalgaon	2	14	1	9	367	90	483
10	Ahmednagar	1	10	0	1	374	168	554
11	Pune	7	10	0	35	519	262	833
12	Satara	2	1	1	1	344	126	475
13	Sangli	0	0	0	1	319	95	415
14	Solapur	1	1	1	8	401	157	569
15	Kolhapur	1	1	5	3	401	143	554
16	Aurangabad	1	8	55	0	180	111	355
17	Jalna	1	0	32	0	71	74	178
18	Parbhani	2	3	73	0	111	84	273
19	Hingoli	0	0	0	0	0	0	0
20	Beed	1	3	57	0	240	75	376
21	Nanded	1	8	71	0	200	72	352
22	Osmanabad	1	0	50	0	128	93	272
23	Latur	0	0	50	0	314	101	465
24	Buldhana	1	0	35	8	163	57	264
25	Akola	1	2	16	6	295	110	430
26	Washim	0	0	0	0	0	0	
27	Amaravati	1	8	24	11	252	169	46
28	Yavatmal	1	16	35	8	215	95	370
29	Wardha	2	2	2	7	152	53	218
30	Nagpur	5	4	17	30	442	152	650
31	Bhandara	3	7	54	12	250	121	447
32	Gondia	0	0	0	0	0	0	0
33	Chandrapur	3	6	22	4	193	84	312
34	Gadchiroli	1	23	10	0	74	60	168
	Maharashtra	59	212	616	213	8348	3645	13093

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Education, Pune.

## Education

Table 67

Management-wise Number of Secondary and Higher Secondary Schools (2000)

Sr. No.	District	Central	State	Zilla	Municipal	Private		Total
		Government	Government	Parishad	Councils	(Aided)	(Unaided)	
1	2	3	4	5	6	7	8	9
1	Mumbai #	9	2	0	51	759	403	1224
2	Thane	3	38	2	10	427	319	799
3	Raigad	1	7	0	4	239	70	321
4	Ratnagiri	0	0	1	0	257	44	302
5	Sindhudurg	0	0	0	0	168	19	187
6	Nashik	4	29	2	3	447	163	648
7	Dhule	0	23	0	2	275	24	324
8	Nandurbar	1	49	0	2	119	33	204
9	Jalgaon	2	14	1	9	414	77	517
10	Ahmednagar	4	14	0	1	449	171	639
11	Pune	11	12	0	34	629	235	921
12	Satara	2	1	1	1	424	94	523
13	Sangli	0	0	0	1	386	89	476
14	Solapur	1	1	1	8	474	152	637
15	Kolhapur	1	1	4	3	484	154	647
16	Aurangabad	2	9	55	0	245	95	406
17	Jalna	1	0	32	0	115	40	188
18	Parbhani	2	0	42	0	121	23	188
19	Hingoli	0	3	30	0	50	38	121
20	Beed	1	6	57	0	273	98	435
21	Nanded	1	9	71	0	266	53	400
22	Osmanabad	1	0	50	0	190	62	303
23	Latur	0	0	50	0	371	56	477
24	Buldhana	1	0	35	8	208	48	300
25	Akola	0	1	11	3	220	56	291
26	Washim	1	1	5	3	156	35	201
27	Amaravati	1	11	24	12	397	56	501
28	Yavatmal	1	18	35	7	270	71	402
29	Wardha	2	4	2	7	183	33	231
30	Nagpur	5	3	16	24	513	134	695
31	Bhandara	1	2	32	5	170	27	237
32	Gondia	1	11	22	6	150	36	226
33	Chandrapur	3	12	21	4	247	57	344
34	Gadchiroli	1	32	10	0	122	27	192
	Maharashtra	64	313	612	268	10218	3092	14507

# Includes Mumbai City and Mumbai Suburban District.

Source: Directorate of Education, Pune.

## Education

Table 68

Number of Teachers in Secondary and Higher Secondary Schools and Teacher-Pupil Ratio (1990)

Sr. No.	District	Secondary		Higher Secondary		Total		Teacher-Pupil Ratio		
		Total	Female	Total	Female	Total	Female	Sec.	High. Sec.	Total
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai #	19379	12828	6085	3540	25464	16368	31	32	32
2	Thane	6885	3640	3107	1505	9992	5145	33	35	34
3	Raigad	2559	733	1999	623	4558	1356	27	29	23
4	Ratnagiri	2311	478	839	183	3150	661	26	30	27
5	Sindhudurg	1479	344	912	184	2391	528	25	30	27
6	Nashik	5727	1674	2969	666	8696	2340	32	35	33
7	Dhule	3289	573	2944	406	6233	979	29	33	31
8	Nandurbar	—	—	—	—	—	—	—	—	—
9	Jalgaon	4357	671	2739	461	7096	1132	32	35	33
10	Ahmednagar	5032	1017	2934	558	7966	1575	32	34	33
11	Pune	6874	3101	6363	2527	13237	5628	32	34	33
12	Satara	4629	1072	2404	443	7033	1515	28	30	29
13	Sangli	3633	747	1627	271	5260	1018	30	32	30
14	Solapur	4451	905	2019	359	6470	1264	30	32	31
15	Kolhapur	4953	930	1460	259	6413	1189	30	35	31
16	Aurangabad	3346	1058	315	59	3661	1117	33	40	34
17	Jalna	1348	211	326	66	1674	277	32	38	33
18	Parbhani	2556	379	708	162	3264	541	33	36	33
19	Hingoli	—	—	—	—	—	—	—	—	—
20	Beed	3013	451	683	73	3696	524	30	35	30
21	Nanded	2790	443	1380	188	4170	631	32	37	33
22	Osmanabad	2266	341	755	95	3021	436	30	32	30
23	Latur	3671	467	970	132	4641	599	30	32	30,
24	Buldhana	1948	221	1685	207	3633	428	32	35	33
25	Akola	3223	751	2114	305	5337	1056	30	35	32
26	Washim	—	—	—	—	—	—	—	—	—
27	Amaravati	3586	1004	2362	532	5948	1536	33	35	33
28	Yavatmal	2323	395	1620	268	3943	663	31	36	33
29	Wardha	1615	439	1676	310	3291	749	32	36	34
30	Nagpur	6773	2783	3995	1431	10768	4214	30	33	31
31	Bhandara	3346	587	2346	419	5692	1006	30	34	32
32	Gondia	—	—	—	—	—	—	—	—	—
33	Chandrapur	2453	518	1433	331	3886	849	33	37	35
34	Gadchiroli	702	111	556	83	1258	194	28	35	31
	Maharashtra	120517	38872	61325	16646	181842	55518	28	35	32

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Education, Pune.

## Education

Table 69

Number of Teachers in Secondary and Higher Secondary Schools and Teacher-Pupil Ratio (1995)

Sr. No.	District	Secondary		Higher Secondary		Total		Teacher-Pupil Ratio		
		Total	Female	Total	Female	Total	Female	Sec.	High. Sec.	Total
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai #	21257	14474	7379	4306	28636	18780	33	33	33
2	Thane	10411	5596	3531	1559	13942	7155	31	40	33
3	Raigad	2837	911	2523	820	5360	1731	28	32	30
4	Ratnagiri	2057	434	1255	266	3312	700	27	32	29
5	Sindhudurg	1383	326	1039	195	2422	521	26	29	27
6	Nashik	6252	1913	3896	767	10148	2680	34	38	36
7	Dhule	3709	653	3751	545	7460	1198	29	35	32
8	Nandurbar	—	—	—	—	—	—	—	—	—
9	Jalgaon	4604	788	3563	581	8167	1369	33	35	34
10	Ahmednagar	5847	1319	3914	726	9761	2045	34	39	36
11	Pune	7339	3261	7218	2883	14557	6144	39	38	38
12	Satara	4723	1089	2942	597	7665	1686	29	33	31
13	Sangli	3715	820	2533	586	6248	1406	31	33	32
14	Solapur	6859	1922	2683	554	9542	2476	25	35	28
15	Kolhapur	5109	1022	2615	462	7724	1484	31	36	33
16	Aurangabad	3072	909	1210	380	4282	1289	38	42	39
17	Jalna	1550	239	676	120	2226	359	35	48	39
18	Parbhani	2803	339	951	211	3754	550	28	44	32
19	Hingoli	—	—	—	—	—	—	—	—	—
20	Beed	3862	520	1365	232	5227	752	27	32	28
21	Nanded	3256	557	1932	257	5188	814	35	42	37
22	Osmanabad	2470	282	1221	155	3691	437	27	31	29
23	Latur	3037	337	1448	135	4485	472	28	32	29
24	Buldhana	2189	253	2082	305	4271	558	32	39	36
25	Akola	3230	724	2958	502	6188	1226	33	37	35
26	Washim	—	—	—	—	—	—	—	—	—
27	Amaravati	3871	1115	3513	762	7384	1877	34	26	30
28	Yavatmal	2587	479	2025	417	4612	896	31	35	33
29	Wardha	1802	469	1883	435	3685	904	30	35	32
30	Nagpur	7603	3184	4685	1764	12288	4948	30	34	31
31	Bhandara	3436	713	3685	692	7121	1405	31	40	35
32	Gondia	—	—	—	—	—	—	—	—	—
33	Chandrapur	2734	607	2218	582	4952	1189	33	34	34
34	Gadchiroli	1134	168	1058	169	2192	337	27	33	30
	Maharashtra	134738	45423	81752	21965	216490	67388	31	36	34

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Education, Pune.

## Education

Table 70

Number of Teachers in Secondary and Higher Secondary Schools and Teacher-Pupil Ratio (2000)

Sr. No. District	Secondary		Higher Secondary		Total		Teacher-Pupil Ratio			
	Total	Female	Total	Female	Total	Female	Sec.	High. Sec.	Total	
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai #	22321	14778	7663	4501	29984	19279	35	34	35
2	Thane	9210	4885	4510	2217	13720	7102	37	43	39
3	Raigad	3100	946	2583	783	5683	1729	32	37	34
4	Ratnagiri	2314	530	1431	312	3745	842	29	36	31
5	Sindhudurg	1495	369	958	209	2453	578	27	33	29
6	Nashik	6390	1940	3965	894	10355	2834	36	41	38
7	Dhule	2835	467	2806	472	5641	939	28	35	32
8	Nandurbar	1503	166	1252	225	2755	391	28	36	32
9	Jalgaon	6906	1037	3926	606	10832	1643	34	41	37
10	Ahmednagar	6297	1303	4556	913	10853	2216	36	38	37
11	Pune	9384	3552	7529	3014	16913	6566	33	38	35
12	Satara	5217	1239	3260	740	8477	1979	31	35	32
13	Sangli	4006	960	2804	699	6810	1659	32	39	35
14	Solapur	6097	1165	2881	550	8978	1715	35	40	36
15	Kolhapur	5846	1293	3113	592	8959	1885	32	39	34
16	Aurangabad	4199	1252	1457	501	5656	1753	37	44	39
17	Jalna	1810	253	935	177	2745	430	37	43	39
18	Parbhani	1820	248	1008	240	2828	488	35	39	36
19	Hingoli	1204	105	452	63	1656	168	34	39	35
20	Beed	4097	574	1626	212	5723	786	34	42	36
21	Nanded	3813	640	2313	327	6126	967	37	41	39
22	Osmanabad	2513	305	1180	157	3693	462	32	37	34
23	Latur	3702	631	2717	343	6419	974	33	37	35
24	Buldhana	2325	267	2593	359	4918	626	38	41	40
25	Akola	2204	644	2129	457	4333	1101	34	38	36
26	Washim	1119	164	1304	174	2423	338	35	43	39
27	Amaravati	3422	1036	3604	1072	7026	2108	33	36	34
28	Yavatmal	2897	558	2015	499	4912	1057	34	39	36
29	Wardha	1935	544	1949	516	3884	1060	31	36	34
30	Nagpur	7250	3238	4911	1749	12161	4987	31	33	32
31	Bhandara	1084	172	2424	548	3508	720	30	38	35
32	Gondia	1726	334	1595	274	3321	608	29	40	34
33	Chandrapur	3112	807	2366	581	5478	1388	35	38	36
34	Gadchiroli	1283	190	1239	169	2522	359	31	36	33
	Maharashtra	144436	46592	91054	25145	235490	71737	34	38	35

# Includes Mumbai City and Mumbai Suburban District.

Source: Directorate of Education, Pune.



## Education

Table 71

Enrolment Ratio to Age-Groups 6–11, 11–14 and 6–14 (1990)

(Population in lakhs)

Sr. No.	District	Age-Group 6–11				Age-Group 11–14				Age-Group 6–14			
		Projected Pop.		Enrolment Ratio		Projected Pop.		Enrolment Ratio		Projected Pop.		Enrolment Ratio	
		Total	Girl	Total	Girl	Total	Girl	Total	Girl	Total	Girl	Total	Girl
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Mumbai #	10.81	4.72	104.80	113.50	6.23	2.75	82.80	84.10	17.04	7.47	96.80	102.70
2	Thane	4.40	2.07	148.20	143.70	2.53	1.20	93.60	85.40	6.93	3.27	128.30	122.30
3	Raigad	1.95	1.00	129.60	121.70	1.12	0.58	82.30	68.60	3.07	1.58	112.30	101.90
4	Ratnagiri	1.81	1.00	108.90	95.50	1.04	0.58	76.00	56.70	2.85	1.58	96.90	81.20
5	Sindhudurg	1.01	0.56	99.50	88.10	0.59	0.33	83.80	66.30	1.60	0.89	93.40	80.00
6	Nashik	3.92	1.90	134.30	127.90	2.26	1.11	81.20	61.20	6.18	3.01	114.90	105.90
7	Dhule	2.68	1.32	112.30	101.90	1.55	0.77	68.10	54.70	4.23	2.09	96.10	84.50
8	Nandurbar	—	—	—	—	—	—	—	—	—	—	—	—
9	Jalgaon	3.44	1.69	121.50	109.40	1.98	0.98	75.90	59.50	5.42	2.67	104.90	91.10
10	Ahmednagar	3.55	1.74	127.00	116.80	2.04	1.01	76.40	58.60	5.59	2.75	108.50	95.50
11	Pune	5.46	2.65	127.40	124.10	3.14	1.54	88.70	75.50	8.60	4.19	113.20	106.30
12	Satara	2.67	1.38	116.20	9.40	1.54	0.80	88.40	71.10	4.21	2.18	107.70	95.30
13	Sangli	2.40	1.18	125.80	120.30	1.39	0.69	76.90	64.70	3.79	1.87	107.90	99.80
14	Solapur	3.41	1.66	130.70	118.40	1.96	0.96	71.80	53.00	5.37	2.62	109.20	94.40
15	Kolhapur	3.23	1.59	122.20	116.60	1.87	0.93	81.70	61.00	5.10	2.52	107.30	98.30
16	Aurangabad	2.09	1.02	138.40	122.20	1.20	0.59	73.10	52.70	3.29	1.61	114.60	96.70
17	Jalna	1.37	0.67	120.80	97.70	0.78	0.38	52.20	29.80	2.51	1.05	95.90	73.20
18	Parbhani	2.15	1.06	122.40	103.90	1.24	0.62	54.90	32.50	3.39	1.68	97.70	77.70
19	Hingoli	—	—	—	—	—	—	—	—	—	—	—	—
20	Beed	1.85	0.92	133.10	115.10	1.06	0.53	72.30	49.10	2.91	1.45	111.00	91.00
21	Nanded	2.30	1.13	152.50	136.10	1.33	0.66	64.40	44.90	3.63	1.79	120.90	102.40
22	Osmanabad	1.35	0.66	125.00	117.10	0.78	0.39	71.60	54.60	2.13	1.05	105.50	93.90
23	Latur	1.69	0.83	143.10	137.20	0.97	0.48	87.60	68.90	2.66	1.31	122.90	112.30
24	Buldhana	1.98	0.97	128.70	116.60	1.14	0.56	68.40	49.30	3.12	1.53	106.60	92.00
25	Akola	2.39	1.17	123.00	114.60	1.38	0.68	77.80	67.50	3.77	1.85	106.40	97.30
26	Washim	—	—	—	—	—	—	—	—	—	—	—	—
27	Amaravati	2.44	1.18	126.00	113.90	1.41	0.69	89.10	82.00	3.85	1.87	112.50	106.90
28	Yavatmal	2.28	1.12	118.80	108.80	1.31	0.65	72.00	58.70	3.59	1.77	101.70	90.40
29	Wardha	1.22	0.60	115.80	113.90	0.71	0.35	88.90	85.90	1.93	0.95	105.90	103.60
30	Nagpur	3.39	1.63	127.50	127.70	1.96	0.95	99.10	96.50	5.35	2.58	117.10	116.20
31	Bhandara	2.41	1.21	115.10	110.70	1.39	0.70	85.60	77.40	3.80	1.91	104.30	98.50
32	Gondia	—	—	—	—	—	—	—	—	—	—	—	—
33	Chandrapur	1.86	0.92	123.60	117.40	1.07	0.53	80.30	72.70	2.93	1.45	107.80	101.10
34	Gadchiroli	0.84	0.42	114.20	101.90	0.48	0.24	54.40	40.90	1.32	0.66	92.40	79.70
	Maharashtra	82.35	39.97	124.10	117.40	47.45	23.23	79.70	67.10	130.16	63.20	107.80	98.90

Note: Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

Source: Directorate of Education, Pune.

## Education

Table 72

Enrolment Ratio to Age-Groups 6–11, 11–14 and 6–14 (1995)

(Population in lakhs)

Sr. No.	District	Age-Group 6–11				Age-Group 11–14				Age-Group 6–14			
		Projected Pop.		Enrolment Ratio		Projected Pop.		Enrolment Ratio		Projected Pop.		Enrolment Ratio	
		Total	Girl	Total	Girl	Total	Girl	Total	Girl	Total	Girl	Total	Girl
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Mumbai #	91.58	5.58	102.2	900.2	7.28	3.43	133.7	81.3	18.86	9.01	95.1	93.0
2	Thane	8.25	4.07	101.2	95.3	5.10	2.43	65.1	63.0	13.35	6.50	87.4	83.2
3	Raigad	2.72	1.38	102.2	87.1	1.75	0.86	62.3	57.0	4.47	2.24	86.6	81.7
4	Ratnagiri	2.01	1.01	98.0	95.0	1.54	0.76	59.1	52.6	3.55	1.77	81.1	76.8
5	Sindhudurg	1.12	0.56	82.1	80.4	0.83	0.41	57.8	56.1	1.95	0.97	71.8	70.1
6	Nashik	5.74	2.77	95.5	92.8	3.76	1.78	62.8	58.4	9.50	4.55	82.5	79.3
7	Dhule	3.95	1.93	85.2	80.8	2.49	1.18	48.6	44.1	6.44	3.11	71.0	66.9
8	Nandurbar	–	–	–	–	–	–	–	–	–	–	–	–
9	Jalgaon	4.56	2.19	96.7	90.9	3.13	1.49	53.4	46.3	7.69	3.68	79.1	72.8
10	Ahmednagar	4.97	2.46	105.4	101.6	3.44	1.68	57.8	50.6	8.41	4.14	86.0	80.9
11	Pune	7.92	3.84	99.5	98.4	5.34	2.59	67.0	61.4	13.26	6.43	86.4	83.5
12	Satara	3.43	1.68	93.3	91.7	2.41	1.19	66.0	59.7	5.84	2.87	82.0	78.4
13	Sangli	3.06	1.51	103.6	100.0	2.22	1.10	60.8	55.5	5.28	2.61	85.6	81.2
14	Solapur	4.68	2.31	106.2	100.0	3.24	1.57	52.8	41.4	7.92	3.88	84.3	76.3
15	Kolhapur	6.24	3.06	61.4	60.1	2.94	1.44	63.9	58.3	9.18	4.50	62.2	59.6
16	Aurangabad	3.39	1.65	118.3	110.9	2.24	1.07	46.7	65.0	5.63	2.72	93.6	85.7
17	Jalna	2.16	1.06	98.6	89.6	1.42	0.69	43.3	30.4	3.58	1.75	76.5	66.3
18	Parbhani	4.18	2.09	83.7	78.0	3.02	1.46	31.8	24.0	7.20	3.55	61.9	55.8
19	Hingoli	–	–	–	–	–	–	–	–	–	–	–	–
20	Beed	2.82	1.41	102.5	95.7	1.97	0.95	48.2	40.0	4.79	2.36	80.2	73.3
21	Nanded	4.01	1.98	103.7	100.5	2.66	1.30	46.2	37.7	6.67	3.28	80.8	75.6
22	Osmanabad	1.89	0.95	104.2	101.1	1.34	0.65	54.5	47.7	3.23	1.60	83.6	79.4
23	Latur	2.55	1.28	118.4	115.6	1.80	0.89	51.1	46.1	4.35	2.17	90.6	87.1
24	Buldhana	2.67	1.31	108.6	101.5	1.87	0.92	52.4	42.4	4.54	2.23	85.5	77.1
25	Akola	3.15	1.57	104.1	98.7	2.31	1.14	58.0	51.8	5.46	2.71	84.6	79.0
26	Washim	–	–	–	–	–	–	–	–	–	–	–	–
27	Amaravati	2.94	1.44	120.1	113.9	2.22	1.10	62.2	58.2	5.16	2.54	95.2	89.8
28	Yavatmal	3.17	1.58	98.1	91.8	2.19	1.09	50.2	44.0	5.36	2.67	78.5	72.3
29	Wardha	1.36	0.67	106.6	103.3	1.02	0.51	65.7	64.7	2.38	1.18	89.1	86.4
30	Nagpur	4.62	2.27	98.7	96.5	3.25	1.59	67.7	65.4	7.87	3.86	85.9	83.7
31	Bhandara	2.98	1.48	98.3	97.3	1.89	0.93	79.9	78.5	4.87	2.41	91.2	90.0
32	Gondia	–	–	–	–	–	–	–	–	–	–	–	–
33	Chandrapur	2.75	1.39	90.5	86.3	1.75	0.87	62.9	59.8	4.50	2.26	79.8	76.1
34	Gadchiroli	1.21	0.61	101.7	96.7	0.79	0.39	54.4	46.2	2.00	1.00	83.0	77.0
	Maharashtra	116.08	57.09	98.7	94.7	77.21	37.46	60.4	54.7	193.29	94.55	83.4	78.9

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Education, Pune.

## Education

Table 73

Enrolment Ratio to Age-Groups 6–11, 11–14 and 6–14 (2000)

(Population in lakhs)

Sr. No.	District	Age-Group 6–11				Age-Group 11–14				Age-Group 6–14			
		Projected Pop.		Enrolment Ratio		Projected Pop.		Enrolment Ratio		Projected Pop.		Enrolment Ratio	
		Total	Girl	Total	Girl	Total	Girl	Total	Girl	Total	Girl	Total	Girl
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Mumbai #	11.77	5.70	94.00	92.30	6.41	3.05	97.50	94.10	18.18	3.75	95.30	92.90
2	Thane	8.77	4.25	97.00	93.90	4.22	1.99	88.20	86.40	12.99	6.24	94.10	91.50
3	Raigad	2.55	1.60	113.30	111.10	1.35	0.62	89.60	90.30	3.90	1.88	105.10	104.20
4	Ratnagiri	1.93	0.97	99.50	96.90	1.19	0.57	83.20	78.90	3.12	1.54	93.30	89.60
5	Sindhudurg	0.98	0.48	86.70	85.40	0.51	0.25	92.10	92.00	0.14	0.73	89.30	87.70
6	Nashik	6.42	3.11	98.10	95.80	3.09	1.46	87.00	82.90	9.51	4.57	94.40	91.70
7	Dhule	4.15	2.02	91.80	89.10	1.96	0.94	70.90	65.90	6.11	2.96	85.10	81.80
8	Nandurbar	–	–	–	–	–	–	–	–	–	–	–	–
9	Jalgaon	5.01	2.39	95.20	91.60	2.45	1.16	89.40	84.50	7.46	3.55	93.30	89.00
10	Ahmednagar	5.12	2.51	102.90	100.80	2.51	1.20	86.80	80.80	7.63	3.71	97.80	94.30
11	Pune	8.08	3.96	94.00	92.20	4.10	2.00	92.90	88.50	12.18	5.96	93.70	91.10
12	Satara	3.27	1.62	98.20	95.10	1.93	0.91	84.40	82.40	5.20	2.53	93.00	90.50
13	Sangli	3.01	1.46	97.90	92.90	1.45	0.71	102.00	98.20	4.46	2.17	102.00	98.20
14	Solapur	5.00	2.42	101.20	99.60	2.28	1.09	91.20	82.60	7.28	3.51	98.00	94.30
15	Kolhapur	3.19	1.92	97.50	94.30	2.16	1.04	92.60	89.40	6.06	2.96	95.90	92.90
16	Aurangabad	4.06	1.95	107.90	107.70	1.72	0.80	96.50	93.80	5.78	2.75	104.30	103.60
17	Jalna	2.78	1.39	94.60	91.30	1.10	0.51	69.00	60.80	3.88	1.90	87.40	83.20
18	Parbhani	3.39	1.68	122.40	117.20	1.40	0.65	90.00	81.50	4.79	2.33	112.90	107.70
19	Hingoli	–	–	–	–	–	–	–	–	–	–	–	–
20	Beed	2.97	1.47	116.80	114.30	1.24	0.58	100.00	91.40	4.21	2.05	111.90	107.80
21	Nanded	4.36	2.15	103.90	100.50	1.77	0.82	83.60	82.90	6.13	2.97	98.40	95.60
22	Osmanabad	1.99	0.98	102.50	101.00	0.94	0.45	88.30	84.40	0.29	0.14	97.90	95.80
23	Latur	2.86	1.44	113.30	113.90	1.38	0.65	92.00	92.30	4.24	2.09	106.40	107.20
24	Buldhana	2.96	1.46	103.00	100.00	1.48	0.69	82.40	76.80	4.44	2.15	96.00	93.00
25	Akola	3.28	1.60	111.30	107.50	1.68	0.80	91.10	87.50	4.96	2.40	104.40	100.80
26	Washim	–	–	–	–	–	–	–	–	–	–	–	–
27	Amaravati	2.90	1.42	138.30	137.30	1.61	0.78	95.00	91.00	4.51	2.20	122.80	120.90
28	Yavatmal	3.19	1.54	103.40	101.30	1.54	0.75	80.50	74.70	4.73	2.29	96.00	93.00
29	Wardha	1.38	0.67	98.50	98.50	0.68	0.35	101.40	97.10	2.06	1.02	99.50	98.30
30	Nagpur	4.45	2.17	102.20	101.40	2.50	1.23	92.00	91.10	6.95	3.14	98.60	97.60
31	Bhandara	2.73	1.34	101.80	101.50	1.51	0.75	92.00	90.70	4.24	2.09	9.30	97.60
32	Gondia	–	–	–	–	–	–	–	–	–	–	–	–
33	Chandrapur	2.50	1.19	100.40	102.50	1.31	0.65	98.30	87.70	3.81	1.84	96.60	97.30
34	Gadchiroli	1.19	0.60	107.60	101.70	0.63	0.31	80.90	77.40	1.82	0.91	98.90	93.40
	Maharashtra	117.00	57.12	101.90	99.70	58.10	27.76	90.60	85.80	175.10	84.88	97.80	95.20

Note: Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

Source: Directorate of Education, Pune.

## Education

Table 74

Senior Colleges, their Enrolment and Number of Teachers

Sr. No. District	No. of Colleges	Enrolment		Teachers		
		Total	Girls	Total	Females	
1	2	3	4	5	6	7
1	Mumbai #	80	218372	109097	5853	3231
2	Thane	27	51864	24592	1376	567
3	Raigad	12	8876	3102	335	37
4	Ratnagiri	5	7164	3066	215	38
5	Sindhudurg	6	6393	2527	237	19
6	Nashik	25	49779	14530	1383	140
7	Dhule	18	44469	12236	970	107
8	Nandurbar	—	—	—	—	—
9	Jalgaon	24	32415	7194	1272	160
10	Ahmednagar	22	41352	9697	1327	240
11	Pune	48	83637	32463	2345	702
12	Satara	23	32657	8518	1218	151
13	Sangli	26	26755	8645	1117	190
14	Solapur	25	35380	9805	1131	149
15	Kolhapur	35	41256	10741	1524	235
16	Aurangabad	23	34069	7867	1054	275
17	Jalna	5	5972	1312	198	21
18	Parbhani	12	14742	2595	522	46
19	Hingoli	—	—	—	—	—
20	Beed	18	21444	3862	661	69
21	Nanded	19	27258	4684	743	95
22	Osmanabad	13	11930	2165	442	32
23	Latur	14	21961	3931	701	60
24	Buldhana	12	11023	2626	313	34
25	Akola	19	26271	8192	681	156
26	Washim	—	—	—	—	—
27	Amaravati	25	31874	11981	1018	264
28	Yavatmal	18	17469	5283	537	78
29	Wardha	12	14332	5434	352	56
30	Nagpur	43	60693	26091	1845	657
31	Bhandara	14	15023	5062	396	88
32	Gondia	—	—	—	—	—
33	Chandrapur	17	21822	5845	531	70
34	Gadchiroli	10	3776	627	105	3
	Maharashtra	650	1020028	353770	30402	7970

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Education, Pune.

## Education

Table 75

Senior Colleges, their Enrolment and Number of Teachers (1995)

Sr. No. District	No. of Colleges	Enrolment				Teachers		
		Total	Girls	S.C.	S.T.	Total	Female	
1	2	3	4	5	6	7	8	9
1	Mumbai #	83	136069	69703	7507	663	3682	1938
2	Thane	30	40535	21001	2517	1055	1124	450
3	Raigad	17	10514	4300	514	95	376	56
4	Ratnagiri	8	4683	2243	315	1	178	23
5	Sindhudurg	7	5125	2325	263	5	190	17
6	Nashik	33	40850	15622	3338	1897	1166	250
7	Dhule	28	18742	6603	1513	2639	944	110
8	Nandurbar	—	—	—	—	—	—	—
9	Jalgaon	32	23405	8627	1805	506	1256	205
10	Ahmednagar	27	31166	9482	2844	680	1040	82
11	Pune	61	69250	29805	6409	907	2168	635
12	Satara	29	27108	9688	2382	30	992	136
13	Sangli	30	19383	7626	1817	54	930	170
14	Solapur	30	28662	8403	3336	130	959	156
15	Kolhapur	44	33155	10996	2923	104	1340	190
16	Aurangabad	24	23173	6282	4577	450	611	146
17	Jalna	8	5594	1249	568	37	199	31
18	Parbhani	14	12536	2784	1946	264	399	23
19	Hingoli	—	—	—	—	—	—	—
20	Beed	22	18901	4107	2765	55	534	60
21	Nanded	22	31808	6062	7729	1815	738	76
22	Osmanabad	15	11432	2488	1777	79	393	27
23	Latur	19	16436	3452	2837	152	584	43
24	Buldhana	14	6841	1971	1000	95	233	31
25	Akola	22	16281	6309	2765	459	482	89
26	Washim	—	—	—	—	—	—	—
27	Amaravati	36	24406	10640	4217	650	728	187
28	Yavatmal	22	13489	4582	2107	667	420	71
29	Wardha	16	13975	5932	2822	651	326	55
30	Nagpur	54	40818	20471	9488	2994	1335	480
31	Bhandara	22	13187	4329	3351	877	436	103
32	Gondia	—	—	—	—	—	—	—
33	Chandrapur	21	14677	5147	3851	1063	440	69
34	Gadchiroli	13	3881	1045	934	574	130	11
	Maharashtra	803	756082	293274	90217	19648	24333	5920

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Education, Pune.

## Education

Table 76

Junior and Senior Colleges, their Enrolment and Number of Teachers (2000)

Sr. No. District	No. of Colleges	Enrolment				Total	Female	
		Total	Girls	S.C.	S.T.			
1	2	3	4	5	6	7	8	9
1	Mumbai #	88	269582	150070	15843	1892	6083	3569
2	Thane	39	73421	38898	4749	1642	1739	770
3	Raigad	20	15500	6976	1128	299	575	124
4	Ratnagiri	14	11574	5182	937	10	392	76
5	Sindhudurg	9	7498	3489	493	10	285	27
6	Nashik	34	65867	25272	5548	2937	1650	333
7	Dhule	23	21157	7466	1782	1503	875	116
8	Nandurbar	12	10483	3182	980	3108	430	39
9	Jalgaon	33	56995	21058	4365	1177	1763	269
10	Ahmednagar	28	53870	18384	5030	1193	1765	201
11	Pune	64	112676	50965	10224	1832	3691	1130
12	Satara	31	47103	17872	4161	174	1445	265
13	Sangli	32	36702	15212	3557	65	1446	283
14	Solapur	31	45004	14383	5948	232	1286	175
15	Kolhapur	48	60055	21164	5597	56	1930	364
16	Aurangabad	26	52247	17075	10546	821	1227	411
17	Jalna	10	11341	2324	1468	102	293	41
18	Parbhani	14	13999	4186	1994	178	539	42
19	Hingoli	3	4566	1004	745	128	138	23
20	Beed	23	39766	10033	6083	263	1019	124
21	Nanded	22	25616	6918	6060	1795	869	107
22	Osmanabad	16	22415	6268	3431	336	716	61
23	Latur	21	23462	6817	3881	286	941	96
24	Buldhana	18	13215	4409	2282	242	339	48
25	Akola	15	22869	9646	3992	845	541	133
26	Washim	9	7760	2109	2847	728	622	119
27	Amaravati	39	33267	16487	6240	1332	1025	297
28	Yavatmal	22	23138	8806	2497	959	196	17
29	Wardha	18	13928	6900	2943	1221	317	67
30	Nagpur	59	73739	37289	17713	4596	1889	733
31	Bhandara	12	13125	5180	3284	943	268	46
32	Gondia	10	10495	4360	2141	538	230	63
33	Chandrapur	23	29549	11445	8714	2105	769	135
34	Gadchiroli	14	6015	2187	1384	1159	195	22
	Maharashtra	880	1327999	563016	158587	34707	37488	10326

# Includes Mumbai City and Mumbai Suburban District.

Source: Directorate of Education, Pune.

## Education

Table 77

District-wise Literacy Percentage for the Years 1961, 1971, 1981, 1991 and 2001

Sr. No. District	1961			1971			1991			
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai #	56.60	65.10	48.81	63.84	69.65	55.72	68.18	73.19	60.75
2	Thane	30.54	41.09	19.06	40.65	50.34	29.80	50.50	59.64	40.15
3	Raigad	24.56	36.37	13.40	35.32	47.25	24.03	45.59	57.42	34.27
4	Ratnagiri	28.49	42.16	17.44	39.83	52.52	29.64	47.75	59.62	38.15
5	Sindhudurg	—	—	—	—	—	—	—	—	—
6	Nashik	26.89	39.36	13.71	36.30	48.45	23.37	44.36	56.09	31.85
7	Dhule	25.15	37.43	12.45	31.89	42.96	20.30	37.51	48.61	26.01
8	Nandurbar	—	—	—	—	—	—	—	—	—
9	Jalgaon	34.01	49.32	18.02	45.24	58.44	31.32	48.14	61.19	34.39
10	Ahmednagar	26.45	39.36	13.03	36.23	48.97	22.91	43.16	56.51	29.24
11	Pune	34.31	46.18	21.74	44.62	56.30	32.10	54.03	65.16	42.14
12	Satara	33.98	47.41	21.16	38.32	52.38	24.77	48.15	61.39	35.67
13	Sangli	28.07	21.88	13.64	37.48	50.98	23.24	46.87	59.70	33.60
14	Solapur	25.15	36.89	12.60	33.90	46.40	20.49	40.68	53.61	26.96
15	Kolhapur	26.30	40.09	12.04	35.37	49.78	20.34	45.36	59.45	30.79
16	Aurangabad	17.88	28.65	6.67	28.49	42.14	14.02	35.80	50.80	19.96
17	Jalna	—	—	—	—	—	—	—	—	—
18	Parbhani	15.37	25.27	5.19	24.31	36.85	11.25	30.33	44.67	15.53
19	Hingoli	—	—	—	—	—	—	—	—	—
20	Beed	15.09	24.60	5.27	24.01	36.25	11.17	31.79	45.82	17.27
21	Nanded	15.14	24.83	5.16	22.78	34.64	10.36	29.78	43.32	15.67
22	Osmanabad	17.05	27.52	6.02	27.88	40.34	14.70	35.36	48.73	21.40
23	Latur	—	—	—	—	—	—	—	—	—
24	Buldhana	26.99	41.15	12.22	37.34	51.33	22.68	44.64	58.68	29.97
25	Akola	31.20	44.81	16.69	39.55	51.84	26.48	47.82	59.54	35.45
26	Washim	—	—	—	—	—	—	—	—	—
27	Amaravati	33.68	45.91	25.07	42.36	52.28	31.69	51.82	60.50	42.55
28	Yavatmal	23.48	35.34	11.27	31.60	42.87	19.88	39.29	51.21	26.86
29	Wardha	30.45	43.44	16.98	41.71	52.55	30.29	51.05	61.01	40.53
30	Nagpur	35.15	48.06	21.26	45.26	56.09	33.51	54.56	63.74	44.62
31	Bhandara	24.07	39.90	8.19	35.40	50.01	20.59	53.92	58.31	29.49
32	Gondia	—	—	—	—	—	—	—	—	—
33	Chandrapur	17.27	28.58	5.79	26.77	38.63	14.54	34.69	46.73	22.22
34	Gadchiroli	—	—	—	—	—	—	—	—	—
Maharashtra		29.82	42.04	16.76	39.13	51.04	26.43	47.18	58.74	34.79

*Note:* Figures for newly formed districts i.e. Sindhudurg, Jalna, Latur, Gadchiroli, Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Ratnagiri, Aurangabad, Osmanabad, Chandrapur, Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Population Census.

## Education

Table 77 (continued)

District-wise Literacy Percentage for the Years 1961, 1971, 1981, 1991 and 2001

Sr. No. District	1991			2001		
	Persons	Males	Females	Persons	Males	Females
1 2	12	13	14	15	16	17
1 Mumbai #	82.50	87.87	75.80	86.82	89.95	82.71
2 Thane	69.54	77.56	60.28	81.00	86.06	75.00
3 Raigad	63.95	75.94	52.20	77.32	86.40	68.06
4 Ratnagiri	62.70	76.64	15.61	75.35	86.28	65.98
5 Sindhudurg	75.81	86.23	55.87	80.52	90.21	71.67
6 Nashik	62.33	73.98	49.89	75.10	85.19	64.16
7 Dhule	51.22	63.13	38.78	72.08	81.90	61.76
8 Nandurbar	—	—	—	56.06	66.32	45.55
9 Jalgaon	64.30	77.46	50.34	76.06	86.53	64.95
10 Ahmednagar	61.03	75.30	45.99	75.82	86.21	64.88
11 Pune	71.05	81.56	59.77	80.78	88.55	72.32
12 Satara	66.67	80.61	53.35	78.52	88.45	68.71
13 Sangli	62.61	74.83	49.94	76.70	86.25	66.88
14 Solapur	56.39	70.08	41.73	71.50	82.28	60.67
15 Kolhapur	66.94	80.33	53.08	77.23	87.67	66.38
16 Aurangabad	58.98	72.93	39.64	73.63	85.07	61.28
17 Jalna	46.25	64.43	27.30	64.52	79.17.	49.25
18 Parbhani	47.58	64.90	29.41	67.04	80.58	52.98
19 Hingoli	—	—	—	66.86	81.11	51.96
20 Beed	49.82	66.34	32.34	68.48	80.69	55.38
21 Nanded	48.17	64.38	30.96	68.52	81.14	55.12
22 Osmanabad	54.27	68.39	39.16	70.24	82.03	57.55
23 Latur	55.57	70.47	39.74	72.34	83.63	60.28
24 Buldhana	61.69	76.53	46.13	76.14	87.17	64.55
25 Akola	65.83	77.63	53.28	81.77	89.22	73.82
26 Washim	—	—	—	74.03	86.01	61.32
27 Amaravati	70.06	78.40	61.13	82.96	89.28	76.21
28 Yavatmal	57.96	70.45	44.81	74.06	84.47	63.01
29 Wardha	69.95	78.33	61.02	80.50	87.70	72.80
30 Nagpur	73.64	81.79	52.74	84.18	90.25	77.65
31 Bhandara	64.69	78.82	50.44	78.68	89.11	68.11
32 Gondia	—	—	—	78.65	89.54	67.89
33 Chandrapur	59.41	71.30	46.81	73.07	83.19	62.56
34 Gadchiroli	42.89	56.56	28.87	60.29	69.72	50.64
Maharashtra	64.87	76.56	52.32	77.27	86.27	67.51

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Population Census.



## Education

Table 78

S.S.C. and H.S.C. Examination Results, March 2000

Sr. No. District		S.S.C. Examination					
		Appeared			Passed (per cent)		
1	2	Boys 3	Girls 4	Total 5	Boys 6	Girls 7	Total 8
1	Mumbai #	89833	70711	160544	55.45	59.82	57.37
2	Thane	54103	41699	95802	52.54	56.90	54.43
3	Raigad	17172	11265	28437	42.69	44.05	43.23
4	Ratnagiri	12507	7735	20242	45.97	46.27	46.09
5	Sindhudurg	7599	5937	13536	42.95	41.87	42.48
6	Nashik	40860	25793	66653	52.06	60.59	55.36
7	Dhule	16317	9317	25634	55.78	65.91	59.46
8	Nandurbar	8164	4724	12888	65.38	72.08	67.84
9	Jalgaon	35610	18969	54579	50.31	61.47	54.19
10	Ahmednagar	35851	20034	55885	50.37	57.08	52.78
11	Pune	60042	41787	101829	49.04	54.97	51.47
12	Satara	28510	17408	45918	50.42	55.87	52.49
13	Sangli	24132	14338	38470	50.48	57.60	53.13
14	Solapur	31184	15289	46473	48.63	55.79	50.99
15	Kolhapur	35592	20453	56045	52.23	60.49	55.25
16	Aurangabad	29507	15388	44895	43.30	56.84	47.94
17	Jalna	12883	4861	17744	45.63	58.44	49.14
18	Parbhani	20175	8508	28683	38.22	47.18	40.87
19	Hingoli	—	—	—	—	—	—
20	Beed	21162	10706	31868	61.18	72.21	64.89
21	Nanded	24886	12825	37711	53.17	60.03	55.51
22	Osmanabad	13885	7361	21246	40.50	45.10	42.09
23	Latur	20435	11651	32086	33.91	94.44	55.89
24	Buldhana	19381	9867	29248	45.48	49.68	46.90
25	Akola	17599	12153	29752	41.45	48.88	44.48
26	Washim	10305	5036	15341	59.13	64.81	60.99
27	Amaravati	25501	21495	46996	40.37	46.27	43.07
28	Yavatmal	20483	13851	34334	40.41	45.30	42.38
29	Wardha	15996	13313	29309	29.83	33.62	31.55
30	Nagpur	42886	40273	83159	37.15	36.35	36.77
31	Bhandara	29219	24459	53678	37.45	37.48	37.46
32	Gondia	—	—	—	—	—	—
33	Chandrapur	22812	18239	41051	32.76	31.65	32.27
34	Gadchiroli	9515	6151	15666	44.60	42.85	43.92
	Maharashtra	854106	561596	1415702	47.45	53.34	49.78

*Note:* Figures for newly formed districts i.e. Hingoli and Gondia are not available, hence combined figures are given for undivided districts viz. Parbhani and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Population Census.

## Education

Table 78 (continued)

S.S.C. and H.S.C. Examination Results, March 2000

Sr. No.	District	H.S.C. Examination					
		Appeared			Passed (per cent)		
1	2	Boys 9	Girls 10	Total 11	Boys 12	Girls 13	Total 14
1	Mumbai #	57176	48353	105529	71.33	80.57	75.57
2	Thane	23454	20187	43641	68.92	80.35	74.21
3	Raigad	7315	4871	12186	56.04	69.18	61.29
4	Ratnagiri	4162	2762	6924	66.10	76.03	70.06
5	Sindhudurg	3180	2444	5624	73.24	82.04	77.06
6	Nashik	23332	13538	36870	56.09	69.18	60.90
7	Dhule	11295	6171	17466	61.61	69.65	64.45
8	Nandurbar	6535	3091	9626	56.33	67.13	59.80
9	Jalgaon	18471	9374	27845	55.66	65.82	59.08
10	Ahmednagar	17507	9477	26984	61.73	75.26	66.48
11	Pune	32584	24098	56682	66.10	81.34	72.58
12	Satara	14794	8384	23178	57.96	72.76	63.31
13	Sangli	12447	7084	19531	59.04	75.61	65.05
14	Solapur	16113	7437	23550	59.32	74.30	64.05
15	Kolhapur	19427	9856	29283	60.33	77.35	66.06
16	Aurangabad	19109	8195	27304	43.15	56.34	47.11
17	Jalna	6447	2243	8690	43.43	57.24	47.00
18	Parbhani	8945	3750	12695	44.63	55.12	47.73
19	Hingoli	—	—	—	—	—	—
20	Beed	15142	6221	21363	63.60	73.38	66.45
21	Nanded	17586	7176	24762	52.22	58.67	54.09
22	Osmanabad	8288	3541	11829	43.86	52.27	46.38
23	Latur	14446	6395	20841	57.44	65.77	60.00
24	Buldhana	10259	4222	14481	45.16	58.69	49.11
25	Akola	10046	6373	16419	48.08	63.02	53.88
26	Washim	6854	2470	9324	63.83	74.29	66.60
27	Amaravati	15164	11566	26730	44.09	55.07	48.84
28	Yavatmal	10256	6310	16566	36.44	47.07	40.49
29	Wardha	9703	7297	17000	34.54	39.98	36.87
30	Nagpur	26225	21695	47920	48.21	58.40	52.80
31	Bhandara	17599	11484	29083	39.39	43.23	40.91
32	Gondia	—	—	—	—	—	—
33	Chandrapur	13528	7865	21393	38.73	47.86	42.09
34	Gadchiroli	5966	2878	8844	40.55	42.18	41.08
	Maharashtra	483355	296808	780163	55.92	68.02	60.53

Note: Figures for newly formed districts i.e. Hingoli and Gondia are not available, hence combined figures are given for undivided districts viz. Parbhani and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

Source: Population Census.

## Education

Table 79

School Attendance Rate of Boys and Girls for the Age Group 6–14 years (2000)

Sr. No.	District	Population			School Attendance			Attendance Rate		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	2	3	4	5	6	7	8	9	10	11
1	Mumbai #	921337	855550	1776887	589042	541117	3130159	63.93	63.25	63.60
2	Thane	571909	528781	1100690	374894	313609	688503	65.55	59.31	62.55
3	Raigad	221195	206738	427933	140076	129959	270035	63.33	62.86	63.10
4	Ratnagiri	178245	175480	353725	118426	109406	227832	66.44	62.35	64.41
5	Sindhudurg	86114	82403	168517	59347	57210	116557	68.92	69.43	69.17
6	Nashik	497940	462588	960528	280728	242493	523221	56.38	52.42	54.47
7	Dhule	331568	309664	641232	159291	130404	289695	48.04	42.11	45.18
8	Nandurbar	—	—	—	—	—	—	—	—	—
9	Jalgaon	416541	376276	792817	234364	188119	422483	56.26	49.99	53.29
10	Ahmednagar	417596	392337	809933	237607	198039	435646	56.90	50.48	53.79
11	Pune	604801	575678	1180479	370472	336990	707462	61.26	58.54	59.93
12	Satara	289660	271354	561014	172634	157960	330594	59.60	58.21	58.93
13	Sangli	247466	234936	482402	165613	147544	313157	66.92	62.80	64.92
14	Solapur	398343	364437	762780	259986	202101	462087	65.27	55.46	60.58
15	Kolhapur	336818	316642	653460	227772	202192	429964	67.62	63.86	65.80
16	Aurangabad	288593	262579	551172	171309	129655	300964	59.36	49.38	54.60
17	Jalna	177836	165771	343607	104602	66990	171592	58.82	40.41	49.94
18	Parbhani	274525	252468	526993	146883	107797	254680	53.50	42.70	48.33
19	Hingoli	—	—	—	—	—	—	—	—	—
20	Beed	232536	213973	446509	144520	107545	252065	62.15	50.26	56.45
21	Nanded	316961	293384	610345	198187	156216	354403	62.53	53.25	58.07
22	Osmanabad	160687	149977	310664	88512	74848	163360	55.08	49.91	52.58
23	Latur	216047	204955	421002	123560	112371	235931	57.19	54.83	56.04
24	Buldhana	239999	225546	465545	143742	112924	256666	59.89	50.07	55.13
25	Akola	271712	255417	527129	163831	136112	299943	60.30	53.29	56.90
26	Washim	—	—	—	—	—	—	—	—	—
27	Amaravati	254540	242454	496994	165166	143044	308210	64.89	59.00	62.01
28	Yavatmal	264058	249642	513700	159611	130515	290126	60.45	52.28	56.48
29	Wardha	119323	116471	235794	72975	68211	141186	61.16	58.56	59.88
30	Nagpur	353241	340129	693370	217749	201609	419358	61.64	59.27	60.48
31	Bhandara	240921	234178	475099	153151	142140	295291	63.57	60.70	62.15
32	Gondia	—	—	—	—	—	—	—	—	—
33	Chandrapur	207279	198118	405397	124420	109296	233716	60.03	55.17	57.65
34	Gadchiroli	96283	93901	190184	54960	43920	98880	57.08	46.77	51.99
	Maharashtra	9234074	8651827	17885901	5623430	4800336	10423766	60.90	55.48	58.28

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Population Census.

## Education

Table 80

Percentage of Population Completed at least Middle Level (Upto VII Std.)—1991

Sr. No.	District	Boys	Girls	Total
1	2	3	4	5
1	Mumbai #	17.90	16.87	19.16
2	Thane	12.38	12.13	12.66
3	Raigad	3.59		3.88
4	Ratnagiri	1.67	1.85	1.51
5	Sindhudurg	1.32	1.43	1.23
6	Nashik	7.96	8.00	7.91
7	Dhule	4.74	4.81	4.66
8	Nandurbar	—	—	—
9	Jalgaon	6.09	6.13	6.04
10	Ahmednagar	3.29	3.30	3.27
11	Pune	9.77	9.71	9.84
12	Satara	2.65	2.91	2.41
13	Sangli	4.44	4.52	4.36
14	Solapur	6.10	6.11	6.08
15	Kolhapur	5.23	5.30	5.17
16	Aurangabad	7.21	7.28	7.14
17	Jalna	3.88	3.96	3.80
18	Parbhani	5.25	5.37	5.13
19	Hingoli	—	—	—
20	Beed	4.01	4.07	3.95
21	Nanded	5.19	5.28	5.10
22	Osmanabad	3.46	3.47	3.44
23	Latur	4.68	4.71	4.64
24	Buldhana	4.51	4.54	4.48
25	Akola	6.22	6.23	6.20
26	Washim	—	—	—
27	Amaravati	6.85	6.90	6.81
28	Yavatmal	3.85	3.86	3.84
29	Wardha	5.45	5.30	5.61
30	Nagpur	12.32	12.11	12.54
31	Bhandara	2.69	2.81	2.57
32	Gondia	—	—	—
33	Chandrapur	5.97	5.92	6.03
34	Gadchiroli	1.87	1.88	1.85
	Maharashtra	7.67	7.68	7.65

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Population Census 1991.

## Education

Table 81

District-wise Distribution of Educational Institutions during 1970–2000

Sr. No. District	1970		1980		1990		2000(E)		Ratio: Pri. School for One Sec. School				
	Primary	Sec.	Primary	Sec.	Primary	Sec.	Primary	Sec.	1970	1980	1990	2000	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Mumbai #	1611	679	2036	765	2179	1026	2135	1238	2.4	2.7	2.1	1.7
2	Thane	2086	184	2498	246	3259	461	4338	808	11.3	10.2	7.1	5.4
3	Raigad	1815	113	2226	140	2386	225	2771	324	16.1	15.9	10.6	8.6
4	Ratnagiri	2759	226	3501	264	2539	240	2730	305	12.2	13.3	10.6	9.0
5	Sindhudurg	–	–	–	–	1470	161	1523	189	–	–	9.1	8.1
6	Nashik	2076	226	2573	281	2957	417	3379	785	9.2	9.2	7.1	4.3
7	Dhule	1635	147	1817	182	2080	322	1198	328	11.1	10.0	6.5	3.7
8	Nandurbar	–	–	–	–	–	–	1364	206	–	–	–	6.6
9	Jalgaon	1657	207	1774	246	1906	346	2082	513	8.0	7.2	5.5	4.1
10	Ahmednagar	2063	213	2465	265	2634	416	3108	646	9.7	9.3	6.3	4.8
11	Pune	2301	315	3287	379	3677	559	4285	931	7.3	8.7	6.6	4.6
12	Satara	1743	236	2134	258	2371	377	2610	529	7.4	8.3	6.3	4.9
13	Sangli	1281	200	1312	232	1526	336	1846	485	6.4	5.7	4.5	3.8
14	Solapur	1825	198	1900	230	2379	390	2871	644	9.2	8.3	6.1	4.5
15	Kolhapur	1820	230	1944	239	2100	408	2113	655	7.9	8.1	5.1	3.2
16	Aurangabad	1970	184	2220	227	1513	257	1835	410	10.7	9.8	5.9	4.5
17	Jalna	–	–	–	–	1106	116	1301	190	–	–	9.5	6.8
18	Parbhani	1497	119	1710	126	1627	189	1085	190	12.6	13.6	8.6	5.7
19	Hingoli	–	–	–	–	–	–	838	122	–	–	–	6.9
20	Beed	1446	141	1619	151	1695	294	2027	440	10.3	10.7	5.8	4.6
21	Nanded	1586	153	1709	155	2031	288	2326	405	10.4	11.0	7.1	5.7
22	Osmanabad	1636	225	1739	254	862	195	1068	306	7.3	6.8	4.4	3.5
23	Latur	–	–	–	–	1146	274	1383	482	–	–	4.2	2.9
24	Buldhana	1246	132	1341	152	1425	211	1501	304	9.4	8.8	6.8	4.9
25	Akola	1504	159	1636	183	1746	342	1124	293	9.5	8.9	5.1	3.8
26	Washim	–	–	–	–	–	–	826	180	–	–	–	4.6
27	Amaravati	1418	209	1519	227	1672	404	1893	506	6.8	6.7	4.1	3.7
28	Yavatmal	1670	156	1845	173	1951	286	2113	407	10.7	10.7	6.8	5.2
29	Wardha	863	106	932	120	1000	192	1066	234	8.1	7.8	5.2	4.6
30	Nagpur	1763	286	1796	303	2132	549	2500	703	6.2	5.9	3.9	3.6
31	Bhandara	1250	146	1389	168	1804	370	876	239	8.6	8.3	4.9	3.7
32	Gondia	–	–	–	–	–	–	1100	229	–	–	–	4.8
33	Chandrapur	2014	123	2123	153	1553	226	1755	348	16.4	13.9	6.9	5.0
34	Gadchiroli	–	–	–	–	1018	101	1397	193	–	–	10.1	7.2
	Maharashtra	44535	5313	51045	6119	57744	9978	66367	14767	8.4	8.3	5.8	4.5

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* Directorate of Education, Pune.

## Education

Table 82

Number of Students at Different Levels of Education for every one lakh population—1998–99

<i>Sr. No.</i>	<i>District</i>	<i>Primary School</i>	<i>Secondary School</i>	<i>Junior College</i>	<i>Senior College</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
1	Mumbai #	9719	8896	980	1241
2	Thane	12936	6976	349	670
3	Raigad	14314	8684	122	566
4	Ratnagiri	13768	6704	256	324
5	Sindhudurg	10804	7728	192	542
6	Nashik	14232	8418	515	903
7	Dhule	12221	9177	259	685
8	Nandurbar	—	—	—	—
9	Jalgaon	12604	10446	481	755
10	Ahmednagar	12796	9544	479	757
11	Pune	11782	8772	549	1119
12	Satara	14670	9376	691	1108
13	Sangli	12984	8742	479	853
14	Solapur	13804	8183	471	744
15	Kolhapur	12339	8831	647	965
16	Aurangabad	16848	7872	732	942
17	Jalna	14744	5255	188	370
18	Parbhani	19110	6540	399	467
19	Hingoli	—	—	—	—
20	Beed	16881	9335	672	1151
21	Nanded	15858	8137	239	513
22	Osmanabad	14610	7880	480	850
23	Latur	15799	9939	564	683
24	Buldhana	14283	8253	186	377
25	Akola	14768	9887	404	649
26	Washim	—	—	—	—
97	Amaravati	16623	9396	407	910
28	Yavatmal	15355	7044	379	525
29	Wardha	11445	10774	542	887
30	Nagpur	11652	10203	592	1194
31	Bhandara	13047	9449	203	732
32	Gondia	—	—	—	—
33	Chandrapur	12669	8905	408	783
34	Gadchiroli	14994	8624	203	403
	<b>Maharashtra</b>	<b>13265</b>	<b>8633</b>	<b>503</b>	<b>835</b>

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

# Includes Mumbai City and Mumbai Suburban District.

*Source:* District-wise Educational Progressive Indicators 1998–1999, Directorate of Education, Pune.

## Education

Table 83

### Children's Primary Activity

<i>Year</i>	<i>Age Group</i>	<i>Total Child Population</i>			<i>Percentage of Children</i>			
		<i>Boys</i>	<i>Girls</i>	<i>Total</i>	<i>Attending School and Not Working</i>	<i>Attending School and Working</i>	<i>Not Attending School and Not Working</i>	<i>Not Attending School and Working</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>
1971	6 to 10	3801522	3708590	7510112	–	–	–	–
	11 to 14	2381729	2120202	4501931	–	–	–	–
1981	6 to 10	4459473	4361746	8821219	63.2	0.1	33.6	3.1
	11 to 14	3147849	2886986	6034835	60.2	0.5	18.7	20.6
1991	6 to 10	5097130	4865698	9962828	68.8	0.3	28.9	2.0
	11 to 14	3419225	3114134	6533359	74.7	1.1	12.5	11.7

*Source:* Census of India, 1971, 1981, 1991; Maharashtra Social and Cultural Tables.

## Education

Table 84

### Schools, Teachers and Students Ratio-Time Series

Sr. No.	Item	1970	1980	1990	2000
1	2	3	4	5	6
<b>1</b>	<b>PRIMARY SCHOOL</b>				
	Total number of primary schools	44535	51045	57744	66370
	Total number of primary school teachers	177946	222070	268302	316322
	Total Primary school enrolment	6199325	8392356	10423766	12694398
<b>2</b>	<b>SECONDARY SCHOOL</b>				
	Total number of secondary schools	5313	6119	9972	14767
	Total number of secondary school teachers	74685	114065	181842	236301
	Total secondary school enrolment	2077127	3309333	5794120	8274750
<b>3</b>	<b>PRIMARY SCHOOL RATIOS</b>				
	Number of teachers per school	4.0	4.4	4.6	4.8
	Number of students per school	139.2	164.4	180.5	191.3
	Number of students per teacher	34.8	37.8	38.9	40.1
<b>4</b>	<b>SECONDARY SCHOOL RATIOS</b>				
	Number of teachers per school	14.1	18.6	18.2	16.0
	Number of students per school	391.0	540.8	581.0	560.4
	Number of students per teacher	27.8	29.0	31.9	35.0
<b>5</b>	<b>PRIMARY SCHOOL INCREASE</b>				
	Percentage increase in last 10 years:				
	Number of primary schools	–	14.6	13.1	14.9
	Number of primary school teachers	–	24.8	20.8	17.9
	Number of children in primary school	–	35.4	24.2	21.8
<b>6</b>	<b>SECONDARY SCHOOL INCREASE</b>				
	Percentage increase in last 10 years:				
	Number of secondary schools	–	15.2	63.0	48.1
	Number of secondary school teachers	–	52.7	59.4	29.9
	Number of children in secondary school	–	59.3	75.1	42.8

Source: Directorate of Education, Pune.



## Education

Table 85

Percentage of Household Population of Age 6–17 Years Attending School by Sex and Area—1998–99

<i>School Attendance</i>	<i>State</i>			
	<i>Maharashtra</i>	<i>Kerala</i>	<i>Bihar</i>	<i>India</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
MALE				
Urban	86.3	95.6	79.1	83.0
Rural	82.6	89.7	66.8	75.8
Total	84.1	91.0	68.2	77.6
FEMALE				
Urban	84.6	94.5	72.1	80.0
Rural	75.7	89.8	47.5	61.7
Total	79.1	90.8	50.5	66.2
TOTAL				
Urban	85.5	95.0	75.5	81.5
Rural	79.3	89.8	57.4	69.0
Total	81.8	90.9	59.6	72.1

*Note:* The questionnaire asks whether the respondents are currently attending school. This is a proxy for current enrolment. Total sample was 91,196 households and 417,055 persons. Out of this total population, the sample had 7,327 boys and 7,868 girls in the age group 6 to 17 years.

*Source:* National Family Health Survey-2, 1998–99.

## Education

Table 86

Stage-wise Enrolment: Total and Girls Primary and Secondary Schools (1985–1999)

Year	I to IV			V to VII			VIII to X			XI to XII		
	Total ('000)	Girls ('000)	% Girls	Total ('000)	Girls ('000)	% Girls	Total ('000)	Girls ('000)	% Girls	Total ('000)	Girls ('000)	% Girls
1	2	3	4	5	6	7	8	9	10	11	12	13
1985–86	7890	3575	45.3	3610	1444	40.0	2220	754	34.0	577	177	30.7
1986–87	7978	3649	45.7	3812	1547	40.6	2372	817	34.4	586	185	31.6
1987–88	8086	3727	46.1	3943	1622	41.1	2505	875	34.9	646	207	32.0
1988–89	8228	3801	46.2	4033	1683	41.7	2670	961	36.0	704	230	32.7
1989–90	8398	3885	46.3	4122	1739	42.2	2809	1030	36.7	724	239	33.0
1990–91	8595	3991	46.4	4264	1823	42.8	2925	1099	37.6	800	273	34.1
1991–92	8809	4078	46.3	4426	1915	43.3	3015	1151	38.2	898	313	34.9
1992–93	8958	4197	46.9	4621	2017	43.6	3117	1217	39.0	922	324	35.1
1993–94	9179	4332	47.2	4896	2155	44.0	3242	1282	39.5	982	355	36.2
1994–95	9330	4419	47.4	5101	2268	44.5	3366	1365	40.6	1045	382	36.6
1995–96	9496	4522	47.6	5276	2369	44.9	3466	1428	41.2	1094	419	38.3
1996–97	9674	4612	47.7	5418	2460	45.4	3620	1521	42.0	1102	432	39.2
1997–98	9761	4675	47.9	5637	2591	46.0	3882	1653	42.6	1072	429	40.0
1998–99	9764	4685	48.0	5794	2699	46.6	4063	1758	43.3	1133	463	40.9

Source: Directorate of Education, Pune.

## Education

Table 87

Standard-wise Enrolment: Total and Girls Primary, Secondary Schools and Colleges, 1998–99

<i>Standard</i>	<i>Enrolment in Primary Schools</i>		<i>Enrolment in Secondary Schools</i>		<i>Enrolment in Junior Colleges</i>		<i>Girls as % of Total Enrolment in Primary Schools</i>	<i>Girls as % of Total Enrolment in Secondary Schools</i>
	<i>Total</i>	<i>Girls</i>	<i>Total</i>	<i>Girls</i>	<i>Total</i>	<i>Girls</i>		
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>
I	2499249	1197329	16544	6828	–	–	47.9	41.3
II	2388676	1152872	17091	7237	–	–	48.3	42.3
III	2517494	1214880	15973	6717	–	–	48.3	42.1
IV	2273205	1084000	14867	5982	–	–	47.7	40.2
V	1042411	501753	708623	329028	–	–	48.1	46.4
VI	847593	406988	673625	317705	–	–	48.0	47.2
VII	722423	345772	637508	295974	–	–	47.9	46.4
VIII	–	–	1041228	467871	–	–	–	44.9
IX	–	–	926367	409241	–	–	–	44.2
X	–	–	696484	303819	–	–	–	43.6
XI	–	–	–	–	245445	98290	–	–
XII	–	–	–	–	220273	87481	–	–

Source: Directorate of Education, Pune.

## Education

Table 88

### Retention Rates at Different Stages

Sr. No. District	Std. IV (1998–99)		Std. VII (1998–99)		Std. X (1998–99)	
	Boys	Girls	Boys	Girls	Boys	Girls
1 2	3	4	5	6	7	8
1 Mumbai #	85	86	85	78	49	45
2 Thane	79	81	66	67	38	39
3 Raigad	67	64	58	55	37	31
4 Ratnagiri	85	86	91	81	51	35
5 Sindhudurg	85	86	93	85	68	63
6 Nashik	99	96	80	75	41	31
7 Dhule	80	81	56	54	48	38
8 Jalgaon	85	84	72	69	52	49
9 Ahmednagar	86	77	62	56	46	34
10 Pune	88	87	77	73	52	48
11 Satara	93	93	85	79	66	50
12 Sangli	87	85	71	66	44	35
13 Solapur	91	87	64	61	40	28
14 Kolhapur	85	86	90	88	67	51
15 Aurangabad	79	85	65	61	58	47
16 Jalna	73	74	53	45	35	20
17 Parbhani	85	82	57	49	34	21
18 Beed	79	78	59	50	44	30
19 Nanded	74	77	49	46	36	22
20 Osmanabad	85	81	63	57	46	31
21 Latur	74	86	69	61	46	35
22 Buldhana	86	85	66	60	43	29
23 Akola	96	88	66	66	56	46
24 Amaravati	83	86	60	70	44	45
25 Yavatmal	71	76	54	53	38	34
26 Wardha	63	66	67	71	54	55
27 Nagpur	94	91	79	80	63	66
28 Bhandara	85	87	71	72	55	52
29 Chandrapur	84	88	72	73	45	45
30 Gadchiroli	78	78	63	71	49	43
Maharashtra	85	86	69	66	47	40

# Includes Mumbai City and Mumbai Suburban District.

Source: Directorate of Education, Pune

## Education

Table 89

Percentage of Educational Attainments of Different Social Groups in Maharashtra

<i>Item</i>	<i>Age Group</i>	<i>Not-literate</i>	<i>Primary</i>	<i>Middle</i>	<i>Secondary</i>	<i>Higher Secondary</i>	<i>Graduate</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
Rural Females: Others	15-29	20.1	28.3	24.6	17.3	7.8	1.9
	40-49	67.7	20.2	7.8	2.0	1.5	0.9
Rural Females: SC	15-29	37.5	29.5	19.7	9.0	3.5	0.7
	40-49	81.3	11.8	4.1	1.4	0.0	1.4
Urban Males: Others	15-29	4.4	13.9	26.7	25.2	17.0	12.8
	40-49	8.7	15.6	17.9	25.1	11.9	20.7
Urban Males: SC	15-29	8.4	12.1	38.1	21.9	12.9	7.5
	40-49	20.0	21.9	26.5	21.0	4.8	5.8
Urban Females: Others	15-29	9.3	14.2	27.2	22.0	16.2	11.1
	40-49	24.5	19.8	16.4	18.3	7.3	13.8
Urban Females: SC	15-29	19.9	19.6	29.5	15.5	9.5	5.9
	40-49	44.7	26.5	18.8	6.0	1.5	1.6
Rural Males: Others	15-29	6.2	14.0	28.2	31.7	13.8	6.1
	40-49	29.7	29.7	15.9	13.2	7.3	4.2
Rural Males: SC	15-29	19.8	18.6	32.6	19.5	6.7	2.8
	40-49	57.1	19.8	11.0	6.8	1.9	3.5

Source: National Sample Survey 55th Round (State sample).

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## Gender Issues

Table 90

Percentage of Child Population and Sex Ratio in Age Group 0–6 as per 1991 and 2001

Sr. No. District	Percentage of Child Population				Sex-Ratio in Age Group 0–6					
	1991		2001		1991			2001		
	Persons	Females	Persons	Females	Total	Rural	Urban	Total	Rural	Urban
1	2	3	4	5	6	7	8	9	10	11
1 Mumbai #	13.60	14.59	11.02	11.75	933	0	933	913	–	913
2 Thane	16.87	17.58	13.71	14.34	952	973	939	933	971	915
3 Raigad	16.77	16.36	13.79	13.56	961	967	933	943	952	914
4 Ratnagiri	15.43	13.83	13.56	12.44	961	961	958	954	959	911
5 Sindhudurg	13.09	12.07	11.75	11.01	963	963	961	946	948	925
6 Nashik	18.83	18.97	15.35	15.46	954	961	941	936	948	916
7 Dhule	18.11	18.13	14.36	14.06	960	968	927	907	914	888
8 Nandurbar	–	–	16.83	16.85	–	–	–	966	976	895
9 Jalgaon	17.31	17.17	13.90	13.37	925	929	915	867	865	871
10 Ahmednagar	18.23	18.23	13.91	13.51	949	951	941	890	892	878
11 Pune	16.17	16.25	12.83	12.74	943	943	942	906	912	900
12 Satara	16.20	15.49	12.57	11.83	941	945	910	884	888	857
13 Sangli	15.85	15.56	12.56	11.80	924	927	911	850	850	851
14 Solapur	17.97	17.98	14.20	13.89	935	935	932	897	890	914
15 Kolhapur	15.32	15.07	12.49	11.85	931	938	911	859	870	832
16 Aurangabad	20.30	20.42	14.72	14.42	933	954	888	884	886	882
17 Jalna	21.45	21.38	15.60	15.27	951	953	945	914	913	917
18 Parbhani	21.05	21.07	16.05	15.78	955	957	947	926	931	915
19 Hingoli	–	–	16.38	16.22	–	–	–	935	938	919
20 Beed	20.74	20.69	14.96	14.71	939	941	930	898	897	898
21 Nanded	21.04	21.20	16.01	16.02	960	961	958	944	948	929
22 Osmanabad	19.10	19.21	14.93	14.91	947	946	953	927	933	895
23 Latur	20.20	20.25	15.17	15.07	947	951	930	923	926	912
24 Buldhana	19.21	19.13	14.83	14.57	945	948	934	915	921	890
25 Akola	18.10	18.05	14.04	14.02	934	940	918	936	941	927
26 Washim	–	–	15.38	15.23	–	–	–	921	917	945
27 Amaravati	16.33	16.45	13.32	13.37	950	952	948	947	953	935
28 Yavatmal	17.74	17.83	14.61	14.61	961	965	936	942	948	910
29 Wardha	15.03	15.13	12.21	12.20	952	951	956	934	946	898
30 Nagpur	15.86	16.12	12.60	12.71	951	958	946	949	964	939
31 Bhandara	16.10	15.96	11.20	13.07	971	975	939	958	961	939
32 Gondia	–	–	13.95	13.66	–	–	–	964	966	946
33 Chandrapur	16.51	16.67	13.07	12.95	965	970	951	944	965	897
34 Gadchiroli	17.98	18.02	15.62	15.60	980	983	941	974	976	941
Maharashtra	17.11	17.23	13.63	13.59	946	953	936	917	923	908

# Includes Mumbai City and Mumbai Suburban District.

Note: (1) Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

(2) Figures for 2001 are provisional.

Source: Population Census-1991 and 2001.

## Gender Issues

Table 91

Number of Primary Schools, High Schools and Colleges for Girls—1995

Sr. No.	District	Primary		Secondary		Higher Secondary		Junior Colleges	Senior Colleges
		Schools	Enrolment	Schools	Enrolment	Schools	Enrolment		
1	2	3	4	5	6	7	8	9	10
1	Mumbai #	100	70096	98	79458	10	13033	10	11
2	Thane	34	15492	14	9759	4	5209	0	4
3	Raigad	25	7077	6	3999	1	1208	0	1
4	Ratnagiri	19	4429	6	1704	0	0	0	0
5	Sindhudurg	8	1071	2	280	0	0	0	0
6	Nashik	131	46640	26	22886	4	8379	1	3
7	Dhule	90	24431	28	13372	11	11190	2	2
8	Nandurbar	—	—	—	—	—	—	—	—
9	Jalgaon	183	54007	39	14490	3	6167	4	5
10	Ahmednagar	38	13719	36	19487	4	6568	0	1
11	Pune	276	146265	34	30118	15	26406	3	4
12	Satara	37	10212	25	8690	4	6094	0	3
13	Sangli	168	49572	47	14207	11	9743	5	7
14	Solapur	103	28748	29	14362	4	5541	0	4
15	Kolhapur	160	56709	44	9772	11	10178	3	3
16	Aurangabad	43	19311	37	15399	3	3433	2	2
17	Jalna	17	7666	7	2283	2	1438	0	1
18	Parbhani	45	17885	6	2091	7	6343	0	1
19	Hingoli	—	—	—	—	—	—	—	—
20	Beed	53	15358	20	7066	5	4032	4	4
21	Nanded	45	18004	33	10306	5	1528	0	2
22	Osmanabad	38	12991	25	6800	2	1947	0	0
23	Latur	43	15464	41	5375	8	1713	0	1
24	Buldhana	58	16704	19	5769	3	1992	0	0
25	Akola	77	23325	30	13653	9	6256	1	2
26	Washim	—	—	—	—	—	—	—	—
27	Amaravati	95	31778	60	21939	9	6806	0	4
28	Yavatmal	54	16698	25	6824	10	9427	2	2
29	Wardha	67	12653	18	5874	8	4945	1	1
30	Nagpur	114	32806	66	38328	15	16221	4	8
31	Bhandara	57	13485	25	9125	11	9968	1	3
32	Gondia	—	—	—	—	—	—	—	—
33	Chandrapur	44	10942	16	8671	6	6101	0	2
34	Gadchiroli	23	4772	6	1148	4	2078	1	1
	Maharashtra	2245	798310	868	403235	189	193944	44	82

# Includes Mumbai City and Mumbai Suburban District.

Note: Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

Source: Directorate of Education, Pune.

## Gender Issues

Table 92

Number of Primary Schools, High Schools and Colleges for Girls—2000

Sr. No.	District	Primary		Secondary		Higher Secondary		Junior Colleges	Senior Colleges
		Schools	Enrolment	Schools	Enrolment	Schools	Enrolment		
1	2	3	4	5	6	7	8	9	10
1	Mumbai #	63	25612	96	75309	9	14359	13	11
2	Thane	37	16434	15	10107	9	8795	0	5
3	Raigad	21	5531	7	4487	1	3668	0	1
4	Ratnagiri	16	3002	6	2251	0	0	0	0
5	Sindhudurg	6	781	2	325	0	0	0	0
6	Nashik	120	42275	20	18325	5	11338	1	3
7	Dhule	62	16351	22	9502	9	11287	2	2
8	Nandurbar	27	13436	7	2496	3	3343	0	0
9	Jalgaon	175	55099	37	19739	4	5728	0	5
10	Ahmednagar	38	14338	37	20374	5	6628	0	1
11	Pune	208	82205	32	25499	15	24085	4	4
12	Satara	39	9462	28	10692	5	7069	0	3
13	Sangli	170	44121	53	16164	11	11661	5	7
14	Solapur	90	26025	27	12428	8	9791	0	4
15	Kolhapur	164	53311	52	17344	14	13618	3	4
16	Aurangabad	44	16871	31	16727	14	10720	2	2
17	Jalna	18	8901	7	3114	2	1823	0	1
18	Parbhani	24	9318	6	3180	7	7659	0	1
19	Hingoli	21	5234	3	1604	2	1177	0	0
20	Beed	53	16913	20	10691	8	5254	4	4
21	Nanded	47	19217	35	12754	5	12750	0	2
22	Osmanabad	38	11878	23	6363	2	1582	0	0
23	Latur	38	14864	26	11306	16	8331	0	1
24	Buldhana	56	15798	16	6661	3	2400	0	0
25	Akola	67	16522	19	10265	10	6850	1	2
26	Washim	13	3691	20	3375	2	2143	0	0
27	Amaravati	82	23710	43	12776	8	4225	2	4
28	Yavatmal	52	17440	23	7088	11	10708	2	2
29	Wardha	62	10008	16	6610	7	4949	1	1
30	Nagpur	94	27408	60	34868	20	14522	5	8
31	Bhandara	17	4169	9	2298	5	4501	1	3
32	Gondia	36	7960	7	3081	6	3631	0	0
33	Chandrapur	45	10635	20	10303	4	6062	0	2
34	Gadchiroli	21	3852	8	2271	2	1106	1	1
	Maharashtra	2064	652372	833	410377	232	241763	47	84

# Includes Mumbai City and Mumbai Suburban District.

Note: Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given in undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

Source: Directorate of Education, Pune.



## Gender Issues

Table 93

Women's Literacy Rate as per 1961, 1971, 1981, 1991 and 2001 Censuses

Sr. No. District	1961			1971			1981		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
1 2	3	4	5	6	7	8	9	10	11
1 Mumbai #	48.81	–	48.81	55.72	–	55.72	60.75	–	60.75
2 Thane	19.06	9.93	41.99	29.80	18.74	50.89	40.15	27.01	57.73
3 Raigad	13.40	10.62	39.90	24.03	20.82	49.39	34.27	30.66	58.20
4 Ratnagiri	17.44	15.71	39.53	29.64	27.79	51.97	38.15	36.29	61.77
5 Sindhudurg	–	–	–	–	–	–	–	–	–
6 Nashik	13.71	8.02	31.19	23.67	16.27	41.57	31.85	23.50	51.15
7 Dhule	12.45	9.31	29.51	20.30	16.10	41.06	26.01	20.79	48.24
8 Nandurbar	–	–	–	–	–	–	–	–	–
9 Jalgaon	18.02	14.46	30.60	31.32	27.93	42.49	34.39	29.86	48.10
10 Ahmednagar	13.03	10.36	36.70	22.91	20.11	46.65	29.24	25.91	52.61
11 Pune	21.74	9.96	42.21	32.10	19.35	50.99	42.14	28.91	57.75
12 Satara	21.16	18.86	41.09	24.77	21.70	46.95	35.67	32.77	56.73
13 Sangli	13.64	10.63	30.38	23.24	19.53	40.08	33.60	29.41	49.39
14 Solapur	12.60	7.78	25.25	20.49	15.23	34.66	26.96	21.03	41.34
15 Kolhapur	12.04	7.19	30.52	20.34	14.52	42.70	30.79	24.31	51.51
16 Aurangabad	6.67	3.73	25.31	14.02	9.97	35.37	19.96	13.62	43.24
17 Jalna	–	–	–	–	–	–	–	–	–
18 Parbhani	5.19	3.20	17.92	11.25	8.22	27.53	15.53	11.07	35.28
19 Hingoli	–	–	–	–	–	–	–	–	–
20 Beed	5.27	3.79	19.18	11.17	8.96	28.81	17.27	13.63	37.81
21 Nanded	5.16	3.12	17.68	10.36	7.42	26.03	15.67	11.15	35.80
22 Osmanabad	6.02	4.47	19.47	14.70	12.83	28.25	21.40	18.48	38.00
23 Latur	–	–	–	–	–	–	–	–	–
24 Buldhana	12.22	9.30	27.53	22.68	19.15	39.82	29.97	25.77	48.87
25 Akola	16.69	12.73	31.25	26.48	21.80	42.12	35.45	30.57	50.43
26 Washim	–	–	–	–	–	–	–	–	–
27 Amaravati	20.57	16.75	31.73	31.69	27.26	43.63	42.55	37.80	54.14
28 Yavatmal	11.27	8.56	30.74	19.88	16.73	40.52	26.86	22.82	50.29
29 Wardha	16.98	12.11	33.23	30.29	25.45	45.67	40.53	35.27	56.54
30 Nagpur	21.26	8.28	33.75	33.51	19.60	45.54	44.62	29.88	56.03
31 Bhandara	8.19	6.20	25.45	20.59	18.23	39.56	29.49	26.25	51.47
32 Gondia	–	–	–	–	–	–	–	–	–
33 Chandrapur	5.79	4.24	25.31	14.54	12.12	37.17	22.22	18.67	47.50
34 Gadchiroli	–	–	–	–	–	–	–	–	–
Maharashtra	16.76	9.34	37.90	26.43	17.84	47.33	34.79	24.88	54.65

# Includes Mumbai City and Mumbai Suburban District.

Note: Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

Source: Population Census, 1961, 1971, 1981, 1991 and 2001.

## Gender Issues

Table 93 (continued)

Women's Literacy Rate as per 1961, 1971, 1981, 1991 and 2001 Censuses

Sr. No. District	1991			2001		
	Total	Rural	Urban	Total	Rural	Urban
1 2	12	13	14	15	16	17
1 Mumbai #	75.80	–	75.80	81.03	–	81.03
2 Thane	60.28	37.68	73.26	75.00	57.76	81.74
3 Raigad	52.20	48.21	71.32	68.06	64.01	81.50
4 Ratnagiri	51.61	49.33	77.2.5	65.98	63.73	85.37
5 Sindhudurg	66.87	65.67	82.44	71.67	70.28	85.49
6 Nashik	49.89	38.94	69.83	64.16	56.35	76.60
7 Dhule	45.75	38.96	67.26	61.76	55.93	78.34
8 Nandurbar	29.15	18.88	53.16	45.55	40.50	72.46
9 Jalgaon	50.34	44.55	65.63	64.95	60.23	76.66
10 Ahmednagar	45.99	42.03	67.01	64.88	61.77	77.66
11 Pune	59.77	46.28	73.02	72.32	60.98	80.59
12 Satara	53.35	50.75	71.58	68.71	66.79	80.62
13 Sangli	49.94	45.69	64.57	66.88	63.68	76.74
14 Solapur	41.73	35.61	56.32	60.07	56.33	67.81
15 Kolhapur	53.08	47.25	69.84	66.38	61.07	79.05
16 Aurangabad	39.64	28.39	63.11	61.28	53.24	75.07
17 Jalna	27.30	21.86	54.14	49.25	45.17	66.79
18 Parbhani	29.41	22.80	52.32	52.98	46.22	67.04
19 Hingoli	–	–	–	51.96	49.02	67.81
20 Beed	32.34	26.99	57.29	55.38	51.82	71.57
21 Nanded	30.96	24.29	54.88	55.12	50.67	69.21
22 Osmanabad	39.16	35.80	58.27	57.55	54.87	71.70
23 Latur	39.74	35.35	57.44	60.28	56.60	72.29
24 Buldhana	46.13	41.45	64.09	64.55	61.46	75.98
25 Akola	53.28	46.88	69.10	73.82	69.65	80.39
26 Washim	–	–	–	61.32	58.39	75.09
27 Amaravati	61.13	54.94	73.82	76.21	71.57	84.85
28 Yavatmal	44.81	39.75	68.91	63.01	58.94	80.28
29 Wardha	61.02	55.63	75.75	72.80	69.02	83.18
30 Nagpur	64.74	50.39	73.55	77.65	66.73	83.58
31 Bhandara	50.44	47.26	71.60	68.11	65.50	82.16
32 Gondia	–	–	–	67.89	65.88	82.60
33 Chandrapur	46.81	39.55	66.12	62.56	56.44	75.08
34 Gadchiroli	28.87	26.12	59.26	50.64	48.77	75.33
Maharashtra	52.32	40.96	70.87	67.51	59.12	79.25

# Includes Mumbai City and Mumbai Suburban District.

Note: Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

Source: Population Census, 1961, 1971, 1981, 1991 and 2001.

## Gender Issues

Table 94

Women's Participation in Local Bodies as on 1 April 2001

Sr. No.	District	Municipal Corporation		Municipal Council		Zilla Parishad	
		% of Women Corporators	% of Women Chairpersons in Standing Committees	% of Municipal Members	% of Women Chairpersons in Standing Committees	% of Women Z.P. Members	% of Women Chairpersons in Standing Committees
1	2	3	4	5	6	7	8
1	Mumbai #	34.07	50.00	0.00	0.00	0.00	0.00
2	Thane	33.23	20.69	31.04	30.26	34.21	10.00
3	Raigad	0.00	0.00	33.48	33.87	33.90	30.00
4	Ratnagiri	0.00	0.00	32.58	38.10	28.79	25.00
5	Sindhudurg	0.00	0.00	35.29	28.57	34.00	40.00
6	Nashik	32.22	20.00	31.49	18.37	33.80	25.00
7	Dhule	0.00	0.00	30.97	30.00	32.76	11.11
8	Nandurbar	—	—	30.30	32.00	22.81	18.18
9	Jalgaon	0.00	0.00	32.30	35.44	33.82	20.00
10	Ahmednagar	0.00	0.00	33.18	9.80	34.25	10.00
11	Pune	34.13	18.18	32.00	35.71	33.33	10.00
12	Satara	0.00	0.00	34.39	40.00	52.27	10.00
13	Sangli	30.14	37.50	30.59	33.33	28.99	30.00
14	Solapur	33.33	0.00	36.81	20.00	34.85	20.00
15	Kolhapur	32.47	40.00	24.17	36.84	32.84	20.00
16	Aurangabad	31.82	16.67	29.31	17.86	31.03	10.00
17	Jalna	0.00	0.00	31.19	16.67	32.73	20.00
18	Parbhani	0.00	0.00	30.10	50.00	0.00	0.00
19	Hingoli	—	—	29.17	0.00	0.00	0.00
20	Beed	0.00	0.00	18.52	12.50	28.81	11.11
21	Nanded	33.85	0.00	5.21	13.73	35.48	10.00
22	Osmanabad	0.00	0.00	30.67	35.00	33.33	10.00
23	Latur	0.00	0.00	29.17	21.05	32.76	10.00
24	Buldhana	0.00	0.00	29.64	15.94	32.76	10.00
25	Akola	0.00	0.00	30.22	20.00	32.76	10.00
26	Washim	—	—	31.11	20.00	34.00	28.57
27	Amaravati	30.38	20.00	33.02	27.08	25.86	33.33
28	Yavatmal	0.00	0.00	29.61	18.60	34.43	30.00
29	Wardha	0.00	0.00	35.46	21.05	33.33	40.00
30	Nagpur	33.58	7.69	32.34	41.30	33.33	11.11
31	Bhandara	0.00	0.00	34.33	16.67	34.62	20.00
32	Gondia	—	—	33.93	16.67	32.69	10.00
33	Chandrapur	0.00	0.00	27.69	21.74	33.93	10.00
34	Gadchiroli	0.00	0.00	35.29	30.00	34.00	20.00
	Maharashtra	24.54	21.90	18.70	72.38	55.64	21.61

# Includes Mumbai City and Mumbai Suburban District.

Note: Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

Source: Directorate of Economics and Statistics, Mumbai.

## Gender Issues

Table 94 (continued)

Women's Participation in Local Bodies as on 1 April 2001

Sr. No.	District	Panchayat Samitis		Gram Panchayats	
		% of Women Panchayat Samiti Members	% of Women Chairper- sons in Panchayat Samitis	% of Women Gram Panchayat Members	% of Women Sarpanches in Gram Panchayats
1	2	9	10	11	12
1	Mumbai #	—	—	—	—
2	Thane	32.03	58.33	26.79	12.66
3	Raigad	32.46	57.14	31.11	35.19
4	Ratnagiri	32.76	33.33	27.86	27.20
5	Sindhudurg	33.00	28.57	44.86	28.50
6	Nashik	30.28	23.08	26.66	24.87
7	Dhule	33.33	25.00	20.64	23.22
8	Nandurbar	35.58	16.67	27.42	12.45
9	Jalgaon	32.35	30.77	26.60	38.36
10	Ahmednagar	33.11	15.38	17.39	16.51
11	Pune	34.97	46.15	27.16	31.77
12	Satara	34.09	63.64	26.38	20.55
13	Sangli	35.25	37.50	31.20	33.43
14	Solapur	34.09	27.27	29.05	30.09
15	Kolhapur	33.58	25.00	31.74	32.75
16	Aurangabad	32.76	37.50	22.76	33.33
17	Jalna	32.73	80.00	31.01	39.67
18	Parbhani	33.82	28.57	30.50	36.30
19	Hingoli	34.55	0.00	29.02	34.16
20	Beed	19.49	0.00	28.59	28.47
21	Nanded	33.06	37.50	24.74	21.13
22	Osmanabad	25.00	33.33	30.21	35.24
23	Latur	33.62	40.00	31.54	38.80
24	Buldhana	33.62	23.08	29.73	25.81
25	Akola	31.37	30.77	26.64	19.04
26	Washim	34.00	0.00	28.57	24.14
27	Amaravati	34.48	38.46	31.02	41.73
28	Yavatmal	33.61	35.71	32.89	31.01
29	Wardha	34.31	50.00	24.84	27.61
30	Nagpur	34.21	61.54	29.90	41.16
31	Bhandara	32.69	15.38	31.21	34.83
32	Gondia	32.69	0.00	29.55	0.00
33	Chandrapur	34.23	50.00	33.06	33.29
34	Gadchiroli	34.00	75.00	30.75	36.40
Maharashtra		32.72	39.73	28.12	29.40

# Includes Mumbai City and Mumbai Suburban District.

Source: Directorate of Economics and Statistics, Mumbai.

## Gender Issues

Table 95

Women Employment Rate (per cent) for 2000

Sr. No.	District	Central Government	State Government	Local Government
1	2	3	4	5
1	Mumbai #	12.00	17.00	21.73
2	Thane	13.77	12.89	32.99
3	Raigad	7.66	9.19	30.65
4	Ratnagiri	20.43	12.08	36.59
5	Sindhudurg	9.68	9.10	40.07
6	Nashik	6.25	8.82	28.85
7	Dhule	6.09	9.14	25.70
8	Nandurbar	—	—	—
9	Jalgaon	4.83	7.24	22.85
10	Ahmednagar	12.99	6.26	26.57
11	Pune	15.22	14.57	33.09
12	Satara	9.50	7.15	30.98
13	Sangli	12.48	10.53	32.04
14	Solapur	5.13	9.67	23.26
15	Kolhapur	10.50	8.57	24.78
16	Aurangabad	7.78	11.59	25.05
17	Jalna	5.17	3.89	22.86
18	Parbhani	19.08	5.15	12.91
19	Hingoli	—	—	—
20	Beed	2.52	18.43	16.36
21	Nanded	3.91	6.83	17.67
22	Osmanabad	2.11	6.97	33.58
23	Latur	9.19	5.91	23.62
24	Buldhana	3.24	6.74	23.14
25	Akola	5.75	8.76	24.22
26	Washim	—	—	—
27	Amaravati	8.19	9.12	27.92
28	Yavatmal	0.00	4.93	16.29
29	Wardha	5.51	8.36	28.16
30	Nagpur	6.34	13.80	34.43
31	Bhandara	5.96	7.87	20.50
32	Gondia	—	—	—
33	Chandrapur	4.65	8.93	27.69
34	Gadchiroli	0.00	13.64	19.46
	Maharashtra	10.02	11.16	25.70

# Includes Mumbai City and Mumbai Suburban District.

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence, combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

*Source:* Commissioner, Employment and Self Employment, Navi Mumbai.

## Gender Issues

Table 96

### Crimes Against Women

Sr. No. Head of Crime	Years						
	1994	1995	1996	1997	1998	1999	2000
1 2	3	4	5	6	7	8	9
1 Rape	1303	1364	1443	1243	1155	1317	1308
2 Molestation	3080	3477	3231	3117	2941	2761	2799
3 Kidnapping and Abduction	912	960	940	968	981	1104	961
4 Eve-teasing	541	703	950	974	905	1146	1222
5 Dowry murder by burning	50	63	67	57	73	62	56
6 Dowry murder by other means	75	67	74	48	54	53	71
7 Dowry attempt to commit murder by burning	22	28	25	33	31	22	25
8 Dowry attempt to commit murder by other means	14	17	19	19	28	18	31
9 Dowry attempt to commit suicide by burning	50	58	9	23	22	59	37
10 Dowry attempt to commit suicide by other means	79	39	26	19	20	64	82
11 Death U/S 304-B IPC by burning	163	142	116	120	125	97	79
12 Death U/S 304-B I PC by other means	231	230	215	159	181	137	191
13 Cruelty by husband or relatives of husband 498-A IPC	7105	8208	8589	7610	7006	6352	6091
14 Abetment of suicide (If victim is woman)	1097	1350	1372	1468	1580	1552	1293
15 Importing of girls (upto 21 years)	41	13	17	0	0	6	20
16 Immoral Traffic Prevention Act	163	181	206	1401	398	313	149
17 Indecent presentation of women (Prohibited)	5	1	9	5	150	2	27
<b>Total</b>	<b>14931</b>	<b>16901</b>	<b>17308</b>	<b>17264</b>	<b>15650</b>	<b>15065</b>	<b>14442</b>

Source: Director General of Police, Maharashtra State, Mumbai,

## Gender Issues

Table 97

Performance of States with Respect to Different Measures of Gender Development

Sr. No.	States	Hirway & Mahadevia <sup>1</sup>		Shivkumar <sup>2</sup>	
		GDM Index	Rank	Value of GDI Rank	Rank
1	2	3	4	5	6
1	Andhra Pradesh	0.4411	10	0.371	8
2	Assam	0.4579	9	0.347	10
3	Bihar	0.3280	12	0.306	14
4	Gujarat	0.5444	6	0.437	3
5	Haryana	0.5485	5	0.370	9
6	Karnataka	0.4893	7	0.417	5
7	Kerala	0.6955	1	0.565	1
8	Madhya Pradesh	0.2891	14	0.312	12
9	Maharashtra	0.5596	4	0.492	2
10	Orissa	0.2998	13	0.329	11
11	Punjab	0.6366	2	0.424	4
12	Rajasthan	0.2865	15	0.309	13
13	Tamil Nadu	0.5763	3	0.402	6
14	Uttar Pradesh	0.3561	11	0.293	15
15	West Bengal	0.4776	8	0.399	7
India		0.4441		0.388	

1. The authors have used 30 variables among which figure demographic ones, housing, water, work participation rate, non-farm work, accidental deaths, suicides, political participation, female male sex ratio. They thus incorporate various social environmental factors in addition to the conventional ones used by the UNDP.
2. The indices and ranks compiled by Shivkumar for major States for 1992 include fewer variables. They give us a higher rank for Maharashtra.

Source: Hirway and Mahadevia (1996) 'Critique of Gender Development Index. Towards an Alternative', *Economic and Political Weekly*, 26 October. Shivkumar, A.K. (1996) 'UNDP's Gender Related Development Index. A Comparison for Indian States', *Economic and Political Weekly*, 16 April.

## Gender Issues

Table 98

Some Important Demographic Indicators–2001, India and Maharashtra

Sr. No.	Indicator	Maharashtra	India
1	2	3	4
1	Population (2001) million†	96.75	1027
	Males	50.33	531
	Females	46.42	496
2	Percentage Decadal Growth of Population 1991–2001	22.57	21.34
3	Children 0-6 years (million)†	13.19	158
	Males	6.88	82
	Females	6.31	76
4	Natural Growth Rate 1991–2001	13.6	17.4
5	Overall Sex Ratio 2001†	922	933
6	Child Sex Ratio (CSR) 2001†	917	927
7	Sex Ratio at Birth: SRB 1998–99*	914	901
8	Crude Birth Rate: 1998–99‡	21.1	26.1
9	Crude Death Rate: 1998–99‡	7.5	8.7
	Male	8.2	9
	Female	6.7	8.3
10	Infant Mortality Rate (IMR) (per 1000 live births) 1999	48	70
	Male	48	70
	Female	49	71
11	Life Expectancy 2001 (years)**		
	Male	65	62
	Female	68	65

† Population Census 2001 (Provisional)

\* SRS, 1996

‡ SRS Bulletin, April, 2001

\*\* Population projection for Indian States (Estimated)

Source: 'Missing Girl Child', *Economic and Political Weekly*, 26 May 2001.



## Gender Issues

Table 99

### Singulate Mean Age at Marriage

Sr. No.	State	NFHS-2 (1998–99)							
		1991 Census		Urban		Rural		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9	10
1	India	24.0	19.3	26.5	21.5	24.2	19.0	24.9	19.7
2	Delhi	24.2	20.6	26.0	22.1	24.1	19.9	25.8	21.9
3	Haryana	22.8	18.8	25.2	21.4	24.3	19.2	24.6	19.8
4	Himachal Pradesh	24.5	20.3	27.2	23.7	26.6	21.9	26.7	22.1
5	Jammu & Kashmir	U	U	29.1	24.5	26.5	21.9	27.1	22.5
6	Punjab	24.3	21.0	26.4	23.2	25.5	21.6	25.7	22.1
7	Rajasthan	21.3	17.5	24.1	19.9	21.6	17.8	22.3	18.3
8	Madhya Pradesh	21.7	17.8	26.0	20.9	22.4	18.2	23.5	18.9
9	Uttar Pradesh	21.9	18.0	26.2	21.5	22.4	18.3	23.3	19.0
10	Bihar	22.1	17.5	26.3	20.9	23.5	18.5	23.8	18.8
11	Orissa	25.0	20.2	27.7	22.8	26.4	21.0	26.6	21.2
12	West Bengal	25.9	19.7	29.0	22.4	25.2	18.7	26.2	19.6
13	Arunachal Pradesh	25.1	20.1	23.9	21.9	25.3	21.6	25.1	21.6
14	Assam	U	U	29.3	23.6	27.7	21.5	27.8	21.7
15	Manipur	28.1	24.7	28.7	25.9	28.6	25.0	28.6	25.4
16	Meghalaya	25.8	21.4	27.8	25.0	26.7	22.2	27.0	23.0
17	Mizoram	26.7	22.4	27.5	24.7	26.3	23.2	27.0	24.1
18	Nagaland	28.9	24.9	28.4	23.4	27.3	22.9	27.6	23.0
19	Sikkim	25.8	21.4	24.7	23.0	26.5	21.7	26.2	21.9
20	Goa	29.4	24.2	30.3	25.2	30.1	24.4	30.2	24.8
21	Gujarat	23.4	19.9	25.0	21.1	23.8	19.6	24.4	20.2
22	Maharashtra	24.8	19.7	26.0	21.3	24.6	18.6	25.3	19.8
23	Andhra Pradesh	23.5	18.3	25.8	20.3	23.1	17.6	23.9	18.3
24	Karnataka	26.2	20.1	27.8	21.5	26.1	19.4	26.7	20.1
25	Kerala	27.7	22.2	28.9	22.7	27.6	21.2	27.9	21.5
26	Tamil Nadu	26.4	20.9	27.1	21.7	26.4	20.4	26.6	20.9

Note: Table is based on the de jure population

U: not available.

Source: NFHS-2, IIPS, Mumbai, 1998–99, p. 21.

## Gender Issues

Table 100

Percentages of Family Planning Acceptors by Various Methods

Sr. No.	Year	Sterilisation		I.U.D. Insertion	Equivalent C.C. Users	Equivalent OCP Users	Total Acceptors Number
		Vasectomy	Tubectomy				
1	2	3	4	5	6	7	8
1	1980-81	15.67	44.29	7.29	30.84	1.91	520133
2	1985-86	6.44	25.52	23.98	34.14	9.92	1739962
3	1986-87	4.46	24.43	21.89	38.17	11.05	1922251
4	1987-88	2.11	23.05	21.51	39.81	13.52	1830796
5	1988-89	1.83	24.16	20.23	41.06	12.72	1962556
6	1989-90	1.04	23.10	19.96	41.98	13.91	2180152
7	1990-91	0.89	20.64	18.40	43.29	16.78	2564871
8	1991-92	0.64	21.10	18.90	44.02	15.34	2475197
9	1992-93	0.66	22.71	19.65	46.29	10.69	2401893
10	1993-94	0.43	19.60	16.81	49.56	13.60	2694540
11	1994-95	0.38	20.17	16.80	47.89	14.75	2834411
12	1995-96	0.31	19.67	16.61	48.05	15.36	2833431
13	1996-97	0.23	22.25	19.40	41.82	16.28	2306800
14	1997-98	0.26	28.92	21.41	30.25	19.16	1957000
15	1998-99	0.27	28.08	21.38	31.17	19.10	1880000

Source: Director General of Health Services, Mumbai.

## Gender Issues

Table 101

### Indicators of Reproductive and Child Health in Maharashtra

(Percentage)

Sr. No.	District	Girls Married below 18	Birth Order of 3+	Women aged 15-44 knowing All FP	CPR Using Any Modern Method	Total Unmet Needs for Contra- ceptions	Receiving ANC	Receiving Full ANC	Institutional Deliveries
1	2	3	4	5	6	7	8	9	10
1	Mumbai #	8.0	29.9	88.1	54.9	18.4	96.8	81.8	93.2
2	Thane	19.7	34.9	84.5	52.6	23.4	93.0	57.4	71.2
3	Raigad	15.9	28.7	78.8	55.3	22.5	95.3	63.2	56.0
4	Ratnagiri	13.0	30.9	63.4	49.8	14.1	96.4	75.7	51.8
5	Sindhudurg	3.8	28.0	64.7	47.1	27.9	99.5	79.0	76.7
6	Nashik	32.1	35.6	53.5	55.1	20.9	64.4	31.5	54.5
7	Dhule	40.0	39.6	46.4	57.5	22.3	69.9	35.2	31.0
8	Jalgaon	46.0	35.7	54.9	62.2	21.1	83.7	41.0	44.2
9	Ahmednagar	40.8	33.4	63.7	62.6	12.8	91.3	54.9	60.0
10	Pune	30.4	27.7	53.8	63.8	13.2	90.9	57.6	75.0
11	Satara	21.9	27.5	72.3	68.1	10.1	87.0	61.3	60.9
12	Sangli	25.6	20.7	48.8	63.3	17.0	95.7	65.3	68.8
13	Solapur	41.8	38.6	62.2	61.9	15.9	84.9	50.7	57.1
14	Kolhapur	18.4	18.8	33.0	65.3	18.5	90.7	59.9	73.7
15	Aurangabad	50.9	42.2	54.6	49.9	30.5	81.6	39.8	49.7
16	Jalna	55.6	44.0	51.7	50.6	24.2	77.0	41.5	28.0
17	Parbhani	46.6	47.0	41.6	55.5	26.3	76.8	38.1	32.4
18	Beed	59.4	41.6	33.4	55.8	26.4	73.6	40.3	42.8
19	Nanded	63.7	43.5	48.7	51.4	30.5	85.3	46.9	29.9
20	Osmanabad	46.5	33.3	55.5	57.4	19.1	79.8	50.2	36.5
21	Latur	58.1	40.2	62.5	59.3	19.2	86.6	44.6	40.8
22	Buldhana	33.5	42.8	56.7	54.3	22.3	86.3	49.2	44.0
23	Akola	38.2	41.0	80.5	56.5	24.7	92.4	59.1	49.3
24	Amaravati	10.2	37.6	42.0	63.0	18.7	87.8	50.0	53.0
25	Yavatmal	27.1	37.9	58.9	59.2	19.9	91.3	53.2	37.1
26	Wardha	12.3	22.9	70.0	68.6	14.5	98.7	65.9	62.8
27	Nagpur	11.3	29.8	80.8	62.3	14.2	97.0	52.1	67.3
28	Bhandara	9.3	37.9	39.2	58.9	21.8	86.0	45.6	24.6
29	Chandrapur	25.7	31.1	78.3	65.5	16.9	96.3	62.2	41.0
30	Gadchiroli	26.8	35.9	55.5	57.9	23.5	95.5	67.8	16.5
	Maharashtra	30.9	34.6	62.6	58.3	19.6	87.8	54.8	57.1

# Includes Mumbai City and Mumbai Suburban District.

Source: Rapid household survey under RCH project 1998-99, IIPS Mumbai.

## Gender Issues

Table 101 (continued)

### Indicators of Reproductive and Child Health in Maharashtra

(Percentage)

Sr. No.	District	Safe Deliveries	Children Receiving Full Immunisation	Children Receiving No Vaccination	Women Aware of AIDS	Women Having at least One of RTI/STI Symptoms	Men Aware of AIDS	Men Having at least One of RTI/STI Symptoms	Rural Women Visited by ANM
1	2	11	12	13	14	15	16	17	18
1	Mumbai #	94.1	89.8	3.2	94.1	22.0	99.6	4.3	n.a.
2	Thane	73.3	92.6	0.3	74.9	25.2	81.0	9.6	58.2
3	Raigad	59.3	67.3	3.8	57.2	17.7	73.3	9.0	71.4
4	Ratnagiri	57.9	92.9	0.4	62.9	23.0	85.7	3.6	48.2
5	Sindhudurg	81.2	87.4	0.0	60.1	19.8	81.3	5.8	52.3
6	Nashik	60.6	68.0	4.3	54.2	25.6	73.7	7.6	24.0
7	Dhule	38.6	70.1	3.3	33.7	24.5	60.7	9.2	34.2
8	Jalgaon	50.6	85.8	1.5	38.0	27.7	61.2	8.4	18.9
9	Ahmednagar	66.9	74.4	2.6	83.6	21.2	97.4	6.4	29.2
10	Pune	77.7	72.4	0.5	82.3	21.8	93.0	9.0	27.3
11	Satara	62.6	92.6	0.0	81.5	18.9	92.3	4.9	33.0
12	Sangli	72.4	87.3	0.0	85.5	19.0	94.0	4.8	34.4
13	Solapur	61.1	84.0	2.0	66.2	20.3	83.4	5.9	21.0
14	Kolhapur	79.4	78.5	1.8	75.8	16.8	87.7	10.4	30.3
15	Aurangabad	56.9	59.2	1.6	43.3	29.5	69.9	8.7	15.8
16	Jalna	34.6	78.1	2.9	30.9	36.6	61.0	9.3	17.2
17	Parbhani	36.6	71.4	3.5	32.0	24.9	63.2	12.0	20.4
18	Beed	47.4	0.0	0.0	44.3	23.7	53.9	7.4	28.1
19	Nanded	36.7	76.0	1.5	34.0	37.7	66.5	13.4	51.4
20	Osmanabad	42.7	79.6	3.0	59.6	26.1	75.8	7.4	18.3
21	Latur	44.3	88.8	2.0	58.0	24.0	79.7	7.0	17.2
22	Buldhana	49.2	78.6	1.9	35.2	28.1	66.6	11.7	26.9
23	Akola	52.9	81.6	2.5	57.2	43.5	78.5	11.7	56.1
24	Amaravati	56.7	71.9	2.0	43.1	32.1	64.6	14.7	19.6
25	Yavatmal	41.3	84.9	1.9	40.5	28.4	62.6	14.6	47.4
26	Wardha	65.9	90.9	0.0	49.0	31.9	71.7	14.8	26.1
27	Nagpur	69.6	76.3	1.1	66.9	28.0	75.6	8.9	46.2
28	Bhandara	35.7	78.8	2.4	26.3	28.1	51.4	16.9	22.5
29	Chandrapur	45.8	63.1	0.7	48.7	34.9	64.5	13.7	65.3
30	Gadchiroli	20.5	92.7	0.0	32.0	34.2	48.2	13.8	79.8
	Maharashtra	61.2	79.7	1.9	62.3	25.4	44.7	8.9	28.8

# Includes Mumbai City and Mumbai Suburban District.

Source: Rapid household survey under RCH project 1998-99, IIPS Mumbai.

## Gender Issues

Table 102

Division-wise Distribution of Literate and Non-literate in Maharashtra

*(figures in millions)*

Sr. No.	Division	Population aged 7+			Literate			Non-Literate		
		Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1	2	3	4	5	6	7	8	9	10	11
1	Konkan	10.60	5.89	4.71	9.23	5.41	3.82	1.37	0.48	0.89
2	Nashik	16.96	8.93	8.03	12.93	7.53	5.39	4.03	1.40	2.64
3	Pune	15.03	7.74	7.28	11.59	6.69	4.90	3.44	1.05	2.38
4	Kolhapur	9.65	4.97	5.04	7.74	4.35	3.40	1.91	0.62	1.64
5	Aurangabad	13.19	6.71	6.39	9.17	5.57	3.59	4.02	1.14	2.80
6	Amaravati	8.52	4.39	4.13	6.66	3.83	2.83	1.86	0.56	1.30
7	Nagpur	9.26	4.74	4.53	7.25	4.10	3.15	2.01	0.64	1.38
	Maharashtra	83.67	43.46	40.11	64.57	37.49	27.08	19.00	6.97	13.03

*Note:* Details may not add up to totals due to rounding-off.

*Source:* Derived from Table 4, Census 2001, Maharashtra, Paper 1, p. 59, 60.

## Gender Issues

Table 103

Number of Women Engaged in Household Duties (Principal Status) and also Participating in Specified Additional Activities per 1000 Women Engaged in Household Duties

<i>Sr. No.</i>	<i>Specified Additional Activities</i>	<i>Rural</i>	<i>Urban</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
1	Maintenance of kitchen garden	47	16
2	Work in household poultry/dairy etc.	205	16
3	Either item 1 or 2	223	30
4	Free collection of fish etc.	89	6
5	Free collection of firewood etc.	344	27
6	Either item 4 or 5	352	29
7	Any of items 1, 2, 4 or 5	433	55
8	Husking of (own) paddy	23	0
9	Grinding of (own) food grains	14	1
10	Preparation of gur	0	0
11	Preservation of meat	1	0
12	Making of baskets	3	1
13	Any of items 8–12	33	1
14	Any of items 1, 2, 4, 5, 8–12	437	57
15	Husking of (acquired) paddy	11	2
16	Grinding of (acquired) food grains	10	2
17	Preparation of gur (acquired)	7	1
18	Preservation of meat (acquired)	8	1
19	Making of baskets (acquired)	9	1
20	Any items 15–19	16	3
21	Any of items 1, 2, 4, 5, 8–12, 15–19	442	59
22	Preparation of cow-dung cakes	344	27
23	Sewing, Tailoring	64	137
24	Tutoring of (own) children	44	100
25	Bringing water from outside household premises	608	234
26	Bringing water from outside village	46	0
27	Any items 1, 2, 4, 5, 8–12, 15–19, 22–26	789	418

Source: NSS Report 416 (1993–94).

## Gender Issues

Table 104

Number of Persons in the Labour Force per 1000 Persons:  
Usual Status, Current Weekly Status and Current Daily Status for Maharashtra and India: 1999–2000

<i>Item</i>	<i>Usual Status</i>		<i>Current Weekly Status</i>	<i>Current Daily Status</i>
	<i>Principal</i>	<i>Principal + Subsidiary</i>		
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<b>Rural Male</b>				
Maharashtra	536	542	534	513
India	533	540	531	515
<b>Rural Female</b>				
Maharashtra	397	437	389	346
India	235	302	263	220
<b>Urban Male</b>				
Maharashtra	562	563	562	551
India	539	542	539	528
<b>Urban Female</b>				
Maharashtra	132	146	140	129
India	126	147	138	123

*Source:* NSS Report 458 (55th Round): Employment and Unemployment Situation in India, 1999–2000, Government of India, 2001, p. 62, 63.

## Gender Issues

Table 105

Percentage of Women Members in Maharashtra Legislative Assembly: 1937–2000

<i>Sr. No.</i>	<i>Tenure of Assembly</i>	<i>Total Seats</i>	<i>Number of Women Members</i>	<i>Percentage of Women</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
1	1937–39	175	7	4.00
2	1946–52	175	9	5.14
3	1952–56	316	15	4.75
4	1957–62	233	30	12.88
5	1962–67	265	17	6.42
6	1967–72	271	12	4.43
7	1972–77	271	28	10.33
8	1978–80	289	9	3.11
9	1980–85	289	20	6.92
10	1985–90	289	16	5.54
11	1990–95	289	6	2.08
12	1995–2000	289	11	3.81

Source: Vidhan Sabha, Government of Maharashtra, Mumbai.



## Gender Issues

Table 106

Percentage of Women Members in Maharashtra Legislative Council: 1937–1996

<i>Sr. No.</i>	<i>Tenure of Council</i>	<i>Total Seats</i>	<i>Number of Women Members</i>	<i>Percentage of Women</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
1	1937–39	30	1	3.33
2	1940–46	29	1	3.45
3	1946–52	29	2	6.90
4	1952–58	72	10	13.89
5	1958–64	72	4	5.56
6	1962–68	78	3	3.85
7	1964–70	78	3	3.85
8	1968–74	78	2	2.56
9	1974–80	78	3	3.85
10	1978–84	78	5	6.41
11	1980–85	78	6	7.69
12	1987–92	78	4	5.13
13	1992–94	78	–	–
14	1994–96	78	7	8.97

Source: General Administrative Department, Government of Maharashtra, Mumbai.

## Gender Issues

Table 107

### All Women Panchayats in Maharashtra

<i>Name of village</i>	<i>District</i>	<i>Point of interest</i>	<i>Term</i>	<i>Sarpanch</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
Brahmanghar taluka Bhor	Pune	Most men have migrated out	1992–97	Pushpalata Dhumal
Bhende Khurd taluka Newasa	Ahmednagar	A farce; male dominated	1992–97	Kusum Nawle
Metikheda taluka Ralegaon	Yavatmal	Shetkari Sanghatana elected	1989–94	Maiah Wankhede
Vitner taluka Chopada	Jalgaon	Shetkari Sanghatana, land transferred to women	1989–94	Shubha Raisingh
Yenora taluka Hinganghat	Wardha	Shetkari Sanghatana	1989–94	Ujwala Rishi Gote
Salod taluka Nandgaon-Khandeshwar	Amaravati	Shetkari Sanghatana	1989–94	Sairabi Sattar Khan
Erangaon taluka Nandgaon-Khandeshwar	Amaravati	Shetkari Sanghatana, two men on Panchayat	1989–94	Anjana Toras
Bitargaon taluka Mhada	Solapur	Fully literate Panchayat	1989–94	Satyabhama Lawand
Nimbgaon Bhogi taluka Shirur	Pune	Four women resigned	1989–94	Usha Badhe
Ralegaon Siddhi taluka Parner	Ahmednagar	Village went through major social reform	1989–94	Contact: Anna Hazare
Mauje Rui taluka Indapur	Pune	Older Panchayat	1984–89	Padmavati Ramchandra Kare
Nimbut taluka Baramati	Pune	Oldest known all-women Panchayat	1963–68	Kamal Babulal Kakade

*Source:* ‘“And Who Will Make the Chapatis?” A Study of All-Women Panchayats in Maharashtra’, edited by Bishakha Datta, *Stree*, Calcutta; p. XIX.

## Gender Issues

Table 107A

Percentage Distribution of Population by Marital Status and Age in Maharashtra, 1996

Sr. No.	Age Group	Never Married			Married			Widowed/Divorced/Separated		
		Female	Male	Total	Female	Male	Total	Female	Male	Total
1	2	3	4	5	6	7	8	9	10	11
1	1-10	22.9	23.2	23.0	0	0	0	0	0	0
2	10-14	11.1	11.4	11.3	0	0	0	0	0	0
3	15-19	6.5	9.3	7.9	2.3	0.3	1.3	0	0	0
4	20-24	2.0	6.3	4.2	6.6	2.6	4.6	0.1	0	0.1
5	25-29	0.5	2.2	1.4	8.1	6.2	7.1	0.3	0.1	0.2
6	30-34	0.1	0.4	0.3	7.2	6.7	6.9	0.4	0.1	0.2
7	35-39	0.1	0.1	0.1	6.5	6.9	6.7	0.5	0.1	0.3
8	40-44	0	0.1	0.1	4.7	5.5	5.1	0.6	0.1	0.3
9	45-49	0	0.1	0.1	3.9	4.6	4.2	0.7	0.1	0.4
10	50-54	0	0	0	2.8	3.4	3.1	0.8	0.2	0.5
11	55-59	0	0	0	2.4	2.7	2.6	0.9	0.2	0.6
12	60+	0	0	0	3.2	5.8	4.5	4.8	1.3	3.0
13	All Ages	43.3	53.2	48.4	47.6	44.7	46.1	9.1	2.1	5.0

Source: Sample Registration System, Statistical Report, 1996.

## Gender Issues

Table 108

### Gender Dimensions in Educational Attainment

Sr. No.	District	Literacy Rate (Age 7+) 2001 (%)		Dropout Rate (per 100), 1998-99			
		Males	Females	7th Std.		10th Std.	
1	2	3	4	5	6	7	8
1	Mumbai	89.95	82.71	15	23	51	55
2	Mumbai (Suburban)	92.65	80.39	n.a.	n.a.	n.a.	n.a.
3	Thane	86.06	75.00	44	33	62	61
4	Raigad	86.40	68.06	41	55	63	69
5	Ratnagiri	86.28	65.98	19	19	49	65
6	Sindhudurg	90.12	71.67	15	15	32	37
7	Nashik	85.19	64.16	20	25	59	69
8	Dhule	81.90	61.76	44	46	52	62
9	Nandurbar	66.32	45.55	n.a.	n.a.	n.a.	n.a.
10	Jalgaon	86.53	64.95	28	32	48	51
11	Ahmednagar	86.21	64.88	36	43	54	64
12	Pune	88.55	72.32	33	28	48	52
13	Satara	88.45	68.71	15	21	34	50
14	Sangli	86.25	66.88	29	34	56	65
15	Solapur	82.28	60.07	34	39	60	71
16	Kolhapur	87.67	66.38	10	12	33	49
17	Aurangabad	85.07	61.28	35	39	52	62
18	Jalna	79.17	49.25	47	55	65	80
19	Parbhani	80.58	52.98	43	51	66	79
20	Hingoli	81.11	51.96	n.a.	n.a.	n.a.	n.a.
21	Beed	80.69	55.38	41	50	56	70
22	Nanded	81.14	55.12	51	54	64	78
23	Osmanabad	82.03	57.55	37	43	54	69
24	Latur	83.63	60.28	31	39	54	65
25	Buldhana	87.17	64.55	34	41	57	71
26	Akola	89.22	73.82	34	34	44	54
27	Washim	86.01	61.32	n.a.	n.a.	n.a.	n.a.
28	Amaravati	89.28	76.21	40	30	56	55
29	Yavatmal	84.57	63.01	46	47	62	64
30	Wardha	87.70	72.80	33	29	46	46
31	Nagpur	90.25	77.65	21	20	37	34
32	Bhandara	89.11	68.11	29	28	45	48
33	Gondia	89.54	67.89	n.a.	n.a.	n.a.	n.a.
34	Chandrapur	83.19	62.56	28	27	45	45
35	Gadchiroli	69.72	50.64	37	29	51	57
	Maharashtra	8627	6751	34	32	60	56

*Note:* (1) Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

*Source:* (1) Population Census-2001.  
(2) Directorate of Education, Pune.

Human Development Indicators: Tables 109 – 117 →

← Contents

## Human Development Indicators

Table 109

Infant Mortality Rate and Child Mortality Rate—1991

Sr. No.	District	Infant Mortality Rate			Child Mortality Rate		
		Total	Female	Male	Total	Female	Male
1	2	3	4	5	6	7	8
1	Mumbai #	37	35	39	50	49	51
2	Thane	46	41	44	54	51	56
3	Raigad	63	56	74	87	75	101
4	Ratnagiri	75	62	81	90	81	94
5	Sindhudurg	70	61	74	87	82	89
6	Nashik	79	55	88	88	90	87
7	Dhule	73	78	56	95	94	96
8	Nandurbar	—	—	—	—	—	—
9	Jalgaon	71	70	72	84	88	81
10	Ahmednagar	47	42	52	60	60	60
11	Pune	52	44	59	70	56	74
12	Satara	51	49	52	61	62	64
13	Sangli	41	31	50	53	50	55
14	Solapur	68	60	74	83	77	85
15	Kolhapur	55	47	61	74	64	76
16	Aurangabad	56	58	51	81	83	79
17	Jalna	76	76	77	94	95	92
18	Parbhani	50	48	52	95	93	97
19	Hingoli	—	—	—	—	—	—
20	Beed	52	52	52	80	85	75
21	Nanded	68	66	76	87	87	87
22	Osmanabad	7	83	61	96	97	95
23	Latur	57	50	64	71	76	67
24	Buldhana	82	68	84	97	96	97
25	Akola	101	96	103	115	112	117
27	Amaravati	94	88	101	114	107	116
28	Yavatmal	124	126	112	143	143	144
29	Wardha	88	86	91	104	110	99
30	Nagpur	75	78	72	101	101	100
31	Bhandara	81	76	85	115	112	118
33	Chandrapur	96	101	89	137	138	136
34	Gadchiroli	106	117	95	144	143	144
	Maharashtra	74	76	72	91	93	89

Note: (1) Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available hence, combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

(2) District-wise information as per 2001 is not available. However IMR and CMR for 1999 is given in table no. 1 against cols 13 and 17.

# Includes Mumbai City and Mumbai Suburban District.

Source: Registrar General of India, New Delhi.

## Human Development Indicators

Table 110

Nutrition (below 2 years of age)—1997

Sr. No.	District	Weight for Age		Height for Age	
		Below-2 SD	Below-3 SD	Below-2 SD	Below-3 SD
1	2	3	4	5	6
1	Mumbai	n.a.	n.a.	n.a.	n.a.
2	Mumbai (Suburban)	n.a.	n.a.	n.a.	n.a.
3	Thane	38.2	13.7	46.2	24.7
4	Raigad	30.3	7.9	38.7	18.2
5	Ratnagiri	45.9	20.1	50.8	28.0
6	Sindhudurg	29.9	11.0	44.0	20.8
7	Nashik	40.8	16.1	48.8	26.3
8	Dhule	n.a.	n.a.	n.a.	n.a.
9	Nandurbar	n.a.	n.a.	n.a.	n.a.
10	Jalgaon	42.8	15.1	56.8	36.5
11	Ahmednagar	46.8	24.2	63.6	38.3
12	Pune	42.2	19.8	60.6	34.5
13	Satara	37.8	15.3	49.6	28.2
14	Sangli	33.6	13.4	49.9	23.8
15	Solapur	38.2	13.8	49.5	24.3
16	Kolhapur	31.9	10.5	42.6	18.9
17	Aurangabad	45.5	17.8	57.0	34.9
18	Jalna	32.3	14.8	59.1	32.7
19	Parbhani	40.9	12.5	58.0	32.2
20	Hingoli	n.a.	N.A	n.a.	n.a.
21	Beed	43.2	19.3	55.9	37.8
22	Nanded	39.8	15.4	59.1	35.8
23	Osmanabad	31.4	7.0	55.9	31.8
24	Latur	31.7	12.3	52.7	27.1
25	Buldhana	49.9	17.9	65.9	45.0
26	Akola	39.8	12.0	47.5	28.9
27	Washim	n.a.	N.A	n.a.	n.a.
28	Amaravati	49.7	20.9	64.9	42.7
29	Yavatmal	43.8	13.0	56.6	33.5
30	Wardha	n.a.	N.A	n.a.	n.a.
31	Nagpur	40.4	16.8	61.7	34.2
32	Bhandara	48.5	20.2	68.9	45.3
33	Gondia	n.a.	N.A	n.a.	n.a.
34	Chandrapur	51.1	25.8	60.3	40.6
35	Gadchiroli	50.8	21.9	50.8	29.7
	Maharashtra	40.6	15.9	54.6	31.7

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

*Source:* 'Programme for Children In Maharashtra: An Assessment', Directorate of Health Services, Mumbai.

## Human Development Indicators

Table 111

HDI and Per Capita District Domestic Product (at current prices)

<i>Sr. No.</i>	<i>District</i>	<i>HDI 2000</i>	<i>Rank</i>	<i>PCDDP 1988–99 (Rs)</i>	<i>Rank</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
1	Mumbai	1.00	2	31922	2
2	Mumbai (Suburban)	1.00	1	31922	1
3	Thane	0.83	3	23558	3
4	Raigad	0.71	6	22132	4
5	Ratnagiri	0.46	17	10926	19
6	Sindhudurg	0.64	9	16018	7
7	Nashik	0.51	13	14505	9
8	Dhule	0.36	29	8195	33
9	Nandurbar	0.20	35	8195	34
10	Jalgaon	0.49	14	11112	17
11	Ahmednagar	0.57	11	10512	20
12	Pune	0.76	4	19629	6
13	Satara	0.59	10	10930	18
14	Sangli	0.68	7	14476	10
15	Solapur	0.46	18	11558	15
16	Kolhapur	0.64	8	15051	8
17	Aurangabad	0.56	12	13183	11
18	Jalna	0.26	32	8049	35
19	Parbhani	0.42	23	9272	26
20	Hingoli	0.42	24	9272	27
21	Beed	0.44	22	9570	25
22	Nanded	0.36	30	8788	32
23	Osmanabad	0.38	28	8963	30
24	Latur	0.46	20	9129	28
25	Buldhana	0.39	27	8849	31
26	Akola	0.42	25	10402	21
27	Washim	0.34	31	10402	22
28	Amaravati	0.48	16	11405	16
29	Yavatmal	0.21	33	8990	29
30	Wardha	0.49	15	11661	13
31	Nagpur	0.71	5	19859	5
32	Bhandara	0.46	19	9989	23
33	Gondia	0.46	21	9989	24
34	Chandrapur	0.41	26	13003	12
35	Gadchiroli	0.20	34	11635	14
	Maharashtra	0.58	–	15804	–

*Note:* Due to the paucity of data, use of indicators for allocation and various limitations of estimation procedure, the district domestic products are to be accepted with margin of errors and can be used to have a broad judgement on the level of income in the districts.

*Source:* Directorate of Economics and Statistics, Mumbai.

## Human Development Indicators

Table 112

Literacy Rate, Mean Year of Schooling and Dropout Rate

Sr. No.	District	Literacy Rate (Age 7+)		Mean Years of Schooling (Std. 1-7)		Dropout Rate (per 100)			
		2001				1998-99			
		Per Cent	Rank	Years	Rank	7th Std.	Rank	10th Std.	Rank
1	2	3	4	5	6	7	8	9	10
1	Mumbai	86.82	2	5.852	6	19	4	53	13
2	Mumbai (Suburban)	87.14	1	5.852	7	19	5	53	14
3	Thane	81.00	6	5.460	13	34	16	62	24
4	Raigad	77.32	13	5.313	17	43	27	66	31
5	Ratnagiri	75.35	19	4.921	20	19	6	57	19
6	Sindhudurg	80.52	8	6.356	1	15	2	34	1
7	Nashik	75.10	20	4.151	28	23	8	64	27
8	Dhule	72.08	26	3.836	30	45	28	56	16
9	Nandurbar	56.06	35	3.836	31	45	29	56	17
10	Jalgaon	76.06	17	5.131	19	29	10	50	11
11	Ahmednagar	75.82	18	4.550	22	41	26	60	22
12	Pune	80.78	7	5.740	9	30	13	50	12
13	Satara	78.52	12	5.425	14	18	3	42	4
14	Sangli	76.70	15	5.600	10	31	14	60	23
15	Solapur	71.50	27	4.228	26	38	24	65	30
16	Kolhapur	77.23	14	5.768	8	11	1	41	3
17	Aurangabad	73.63	23	4.207	27	37	22	57	20
18	Jalna	64.52	33	2.870	35	51	34	73	35
19	Parbhani	67.04	31	3.017	33	47	31	72	33
20	Hingoli	66.86	32	3.017	34	47	32	72	34
21	Beed	68.48	30	4.116	29	45	30	62	25
22	Nanded	68.52	29	3.507	32	53	35	69	32
23	Osmanabad	70.24	28	4.249	25	40	25	62	26
24	Latur	72.34	25	5.306	18	35	20	59	21
25	Buldhana	76.14	16	4.305	24	37	23	64	28
26	Akola	81.77	5	5.355	15	34	17	49	9
27	Washim	74.03	22	5.355	16	34	18	49	10
28	Amaravati	82.96	4	5.586	11	35	21	56	18
29	Yavatmal	74.06	21	4.263	23	47	33	64	29
30	Wardha	80.50	9	6.258	3	31	15	46	6
31	Nagpur	54.18	3	6.286	2	19	7	36	2
32	Bhandara	78.68	10	6.104	4	29	11	47	7
33	Gondia	78.65	11	6.104	5	29	12	47	8
34	Chandrapur	73.07	24	5.551	12	27	9	45	5
35	Gadchiroli	60.29	34	4.872	21	34	19	54	15
	Maharashtra	77.27	-	4.970	-	31	-	53	-

Source: Population Census 2001.  
Directorate of Education, Pune.



## Human Development Indicators

Table 113

Achievement and Improvement Indices for Literacy (1991–2001)

<i>Sr. No.</i>	<i>District</i>	<i>AIL* 1991</i>	<i>Rank</i>	<i>AIL 2000</i>	<i>Rank</i>	<i>IIL** 1991–2001</i>	<i>Rank</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
1	Mumbai	0.8056	1	0.8536	2	0.0630	32
2	Mumbai (Suburban)	0.8056	2	0.8571	1	0.0685	31
3	Thane	0.6616	8	0.7889	6	0.1049	14
4	Raigad	0.5994	16	0.7480	13	0.1030	17
5	Ratnagiri	0.5856	17	0.7261	19	0.0921	24
6	Sindhudurg	0.7312	3	0.7836	8	0.0481	34
7	Nashik	0.5814	19	0.7233	20	0.0920	25
8	Dhule	0.4580	28	0.6898	26	0.1240	3
9	Nandurbar	0.4580	29	0.5118	35	0.0232	35
10	Jalgaon	0.6033	15	0.7340	17	0.0888	28
11	Ahmednagar	0.5670	21	0.7313	18	0.1061	10
12	Pune	0.6783	5	0.7864	7	0.0910	27
13	Satara	0.6297	10	0.7613	12	0.0976	19
14	Sangli	0.5846	18	0.7411	15	0.1051	13
15	Solapur	0.5154	25	0.6833	27	0.0945	22
16	Kolhapur	0.6327	9	0.7470	14	0.0829	29
17	Aurangabad	0.5220	24	0.7070	23	0.1088	8
18	Jalna	0.4028	34	0.6058	33	0.0923	23
19	Parbhani	0.4176	32	0.6338	31	0.1031	16
20	Hingoli	0.4176	33	0.6318	32	0.1019	18
21	Beed	0.4424	30	0.6498	30	0.1033	15
22	Nanded	0.4241	31	0.6502	29	0.1108	7
23	Osmanabad	0.4919	27	0.6693	28	0.0955	21
24	Latur	0.5063	26	0.6927	25	0.1053	11
25	Buldhana	0.5743	20	0.7349	16	0.1052	12
26	Akola	0.6203	11	0.7974	5	0.1396	1
27	Washim	0.6203	12	0.7114	22	0.0610	33
28	Amaravati	0.6673	6	0.8107	4	0.1253	2
29	Yavatmal	0.5329	23	0.7118	21	0.1073	9
30	Wardha	0.6661	7	0.7833	9	0.0961	20
31	Nagpur	0.7071	4	0.8242	3	0.1135	4
32	Bhandara	0.6077	13	0.7631	10	0.1121	5
33	Gondia	0.6077	14	0.7628	11	0.1118	6
34	Chandrapur	0.5490	22	0.7008	24	0.0912	26
35	Gadchiroli	0.3654	35	0.5588	34	0.0808	
	Maharashtra	0.6097	–	0.7474	–	0.0968	–

\* Achievement indices for literacy.

\*\* Improvement indices for literacy.

Source: Population Census 1991 and 2001.

## Human Development Indicators

Table 114

Achievement and Improvement Indices for IMR (1981–1991)

<i>Sr. No.</i>	<i>District</i>	<i>AIMR* 1981</i>	<i>Rank</i>	<i>AIMR 1991</i>	<i>Rank</i>	<i>IIMR** 1981–1991</i>	<i>Rank</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
1	Mumbai #	0.6554	1	0.7908	1	0.1354	29
2	Thane	0.2885	14	0.6838	3	0.3953	3
3	Raigad	0.1633	23	0.5459	12	0.3825	4
4	Ratnagiri	0.3386	6	0.4697	19	0.1311	30
5	Sindhudurg	0.3386	7	0.5000	15	0.1614	26
6	Nashik	0.2929	13	0.4466	22	0.1537	28
7	Dhule	0.2841	16	0.4816	18	0.1975	22
8	Nandurbar	0.0000	0	0.0000	0	0.0000	0
9	Jalgaon	0.2094	18	0.4938	17	0.2844	15
10	Ahmednagar	0.3433	5	0.6740	4	0.3307	6
11	Pune	0.4245	2	0.6292	7	0.2047	20
12	Satara	0.3199	8	0.6377	6	0.3178	10
13	Sangli	0.4191	3	0.7378	2	0.3187	9
14	Solapur	0.3199	9	0.5127	13	0.1927	23
15	Kolhapur	0.3675	4	0.6047	9	0.2372	19
16	Aurangabad	0.2885	15	0.5969	10	0.3084	13
17	Jalna	0.1822	20	0.4638	21	0.2816	16
18	Parbhani	0.1822	21	0.6464	5	0.4642	1
19	Hingoli	0.0000	0	0.0000	0	0.0000	0
20	Beed	0.3199	10	0.6292	8	0.3093	12
21	Nanded	0.1977	19	0.5127	14	0.3150	11
22	Osmanabad	0.3108	11	0.5000	16	0.1892	24
23	Latur	0.3108	12	0.5892	11	0.2784	17
24	Buldhana	0.1056	25	0.4299	24	0.3243	7
25	Akola	0.1784	22	0.3339	28	0.1554	27
26	Washim	0.0000	0	0.0000	0	0.0000	0
27	Amaravati	0.1633	24	0.3675	26	0.2042	21
28	Yavatmal	0.0679	27	0.2335	30	0.1656	25
29	Wardha	0.0780	26	0.3979	25	0.3199	8
30	Nagpur	0.2254	17	0.4697	20	0.2443	18
31	Bhandara	0.0285	28	0.4354	23	0.4069	2
32	Gondia	0.0000	0	0.0000	0	0.0000	0
33	Chandrapur	0.0253	29	0.3577	27	0.3324	5
34	Gadchiroli	0.0253	30	0.3108	29	0.2855	14
	Maharashtra	0.2542		0.4756		0.2214	

\* Achievement Indices for Infant Mortality Rate.

\*\* Improvement Indices for Infant Mortality Rate.

# Includes Mumbai City and Mumbai Suburban District.

*Note:* Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available hence, combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

*Source:* Registrar General of India, New Delhi.

## Human Development Indicators

Table 115

### District-wise Classification of Village Amenities

Sr. No.	District	Total number of Villages	Number of Villages with Facilities Available-2001			
			Post Office	Bank	Pucca Road	Telephones
1	2	3	4	5	6	7
1	Mumbai	-	-	-	-	-
2	Mumbai (Suburban)	-	-	-	-	-
3	Thane	1746	250	111	1475	412
4	Raigad	1919	335	86	1455	1105
5	Ratnagiri	1543	677	124	1327	821
6	Sindhudurg	743	339	97	645	266
7	Nashik	1931	612	207	1484	573
8	Dhule	681	238	88	571	265
9	Nandurbar	947	166	49	721	151
10	Jalgaon	1522	524	282	1394	1306
11	Ahmednagar	1581	649	294	1286	1128
12	Pune	1860	542	201	1545	934
13	Satara	1730	649	224	1505	754
14	Sangli	724	372	192	657	590
15	Solapur	1148	505	186	1102	665
16	Kolhapur	1217	446	231	1009	650
17	Aurangabad	1344	326	146	998	356
18	Jalna	971	189	80	739	255
19	Parbhani	840	158	62	738	162
20	Hingoli	710	475	60	121	92
21	Beed	1365	914	100	118	326
22	Nanded	1611	851	295	1073	439
23	Osmanabad	735	621	83	130	261
24	Latur	945	799	98	329	292
25	Buldhana	1466	376	118	875	587
26	Akola	988	218	178	684	191
27	Washim	802	160	44	444	188
28	Amaravati	2004	427	123	1149	738
29	Yavatmal	2131	346	120	1358	261
30	Wardha	1382	197	65	729	446
31	Nagpur	1869	270	99	1205	685
32	Bhandara	872	114	48	368	505
33	Gondia	952	131	43	392	563
34	Chandrapur	1791	310	108	920	195
35	Gadchiroli	1679	170	51	795	123
	Maharashtra	43749	13356	42993	29341	16285

Source: Directorate of Economics and Statistics, Mumbai.

## Human Development Indicators

Table 116

Percentage Distribution of Census Houses by Kutcha, Semi Pucca and Pucca,  
and Households Having Facilities Available

Sr. No.	District	Total No. of Census Houses	Percentage Distribution of Census Houses as per 1991 Census			Percentage of Facilities Available to Households as per 1991 Census		
			Kutcha	Semi Pucca	Pucca	Electricity	Safe Drinking Water	Toilets
1	2	3	4	5	6	7	8	9
1	Mumbai #	2768910	1.81	6.37	91.82	89.61	96.39	78.18
2	Thane	1476730	19.42	9.04	71.53	79.11	72.35	46.60
3	Raigad	505960	23.47	18.76	57.77	83.32	47.39	18.90
4	Ratnagiri	451490	12.56	66.94	20.51	83.83	26.08	14.77
5	Sindhudurg	248105	7.59	74.00	18.41	87.40	14.64	16.11
6	Nashik	906430	9.72	40.82	49.46	72.37	63.54	23.32
7	Dhule	610145	24.26	49.74	26.00	70.23	73.99	10.88
8	Nandurbar	—	—	—	—	—	—	—
9	Jalgaon	791230	8.99	49.90	41.11	68.76	80.55	16.60
10	Ahmednagar	823185	5.88	33.28	60.84	68.61	52.55	13.49
11	Pune	1433440	4.40	17.08	78.52	74.77	71.76	40.93
12	Satara	637660	8.73	38.93	52.34	65.80	71.02	11.44
13	Sangli	520535	7.11	38.07	54.83	68.89	73.76	16.32
14	Solapur	738920	10.21	11.89	77.90	41.87	73.25	16.95
15	Kolhapur	738920	10.21	38.00	51.79	77.68	77.26	20.37
16	Aurangabad	507190	5.59	35.51	58.90	66.17	75.25	23.40
17	Jalna	304855	4.33	54.39	41.28	42.04	71.07	10.74
18	Parbhani	466310	6.76	44.71	48.53	50.27	62.94	11.69
20	Beed	450675	6.23	37.20	56.57	49.95	71.26	9.90
21	Nanded	502010	15.33	36.44	48.23	59.13	73.48	13.71
22	Osmanabad	283645	9.97	24.20	65.83	46.45	81.66	5.74
23	Latur	344300	7.70	17.13	75.17	61.55	80.26	10.86
24	Buldhana	464550	13.00	51.07	35.93	57.95	51.26	12.16
25	Akola	533845	9.27	53.68	37.05	54.40	55.34	20.44
27	Amaravati	521195	11.37	60.03	28.60	74.56	68.08	26.87
28	Yavatmal	528650	24.62	49.10	26.28	51.98	46.06	11.64
29	Wardha	272155	10.50	57.42	32.08	75.82	49.59	17.75
30	Nagpur	773170	8.57	45.44	45.99	74.65	65.34	42.81
31	Bhandara	540010	2.59	75.66	21.75	62.64	36.51	13.84
33	Chandrapur	480980	18.99	46.72	34.29	50.22	43.35	15.49
34	Gadchiroli	230950	29.42	51.95	18.64	31.00	38.67	7.05
	Maharashtra	19830735	9.83	32.24	57.93	69.40	68.49	29.56

# Includes Mumbai City and Mumbai Suburban District.

Note: Figures for newly formed districts i.e. Nandurbar, Hingoli, Washim and Gondia are not available, hence combined figures are given for undivided districts viz. Dhule, Parbhani, Akola and Bhandara respectively.

Source: Population Census Table on Houses and Household Amenities-1991.

## Human Development Indicators

Table 117

HDI, AIL, AIIMR, IIL and IIIMR

Sr. No.	District	HDI 2000	AIL 2001	AIIMR 1991	IIL 1991–2001	IIIMR 1981–1991	Backward Districts
1	2	3	4	5	6	7	8
1	Mumbai, High	High	High	High	Low	Low	
2	Mumbai (Suburban)	High	High	High	Low	Low	
3	Thane	High	High	High		High	
4	Raigad	High	High			High	
5	Ratnagiri	Low				Low	Backward
6	Sindhudurg	High	High		Low	Low	Backward
7	Nashik	Medium		Low		Low	
8	Dhule	Low	Low		High	Low	Backward
9	Nandurbar	Low	Low		Low	Low	
10	Jalgaon	Medium			Low		
11	Ahmednagar	Medium		High	High		
12	Pune	High	High	High		Low	
13	Satara	High	High	High			
14	Sangli	High		High	High		
15	Solapur	Low	Low			Low	
16	Kolhapur	High	High	High	Low		
17	Aurangabad	Medium		High	High		
18	Jalna	Low	Low				Backward
19	Parbhani	Low	Low	High		High	Backward
20	Hingoli	Low	Low	High			
21	Beed	Low	Low	High			Backward
22	Nanded	Low	Low		High		Backward
23	Osmanabad	Low	Low			Low	Backward
24	Latur	Low	Low		High		Backward
25	Buldhana	Low		Low	High		Backward
26	Akola	Low	High	Low	High	Low	Backward
27	Washim	Low		Low	Low	Low	
28	Amaravati	Medium	High	Low	High	Low	Backward
29	Yavatmal	Low		Low	High	Low	Backward
30	Wardha	Medium	High	Low			Backward
31	Nagpur	High	High		High		
32	Bhandara	Low	High	Low	High	High	Backward
33	Gondiya	Low	High	Low	High	High	
34	Chandrapur	Low	Low	Low			Backward
35	Gadchiroli	Low	Low	Low	Low		Backward

HDI – Human Development Indices; AIL – Achievement Indices for Literacy; AIIMR – Achievement Indices for Infant Mortality Rate; IIL – Improvement Indices for Literacy; IIIMR – Improvement Indices for Infant Mortality Rate.

**Note:** High, Medium, Low, Backward as reported in Government of Maharashtra (1997).

High AIL, 2001: 0.75 to 1.00;

High AIIMR, 1991: 0.60 to 1.00

Low AIL, 2001: 0.70 and below;

Low AIIMR, 1991: 0.45 and below.

High IIL, 1991 to 2001: 0.11 to 0.14;

High IIIMR, 1981 to 1991: 0.4 to 0.5;

Low IIL, 1991 to 2001: 0.02 and below;

Low IIIMR, 1981 to 1991: 0.20 and below.

[References →](#)

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## References

- Acharya, Sarthi V.G. Panwalker (1988), *The Employment Guarantee Scheme in Maharashtra: Impact on Men and Women Workers*, Regional Research Paper, The Population Council, Bangkok.
- Acharya, Sarthi (1997), *Costs and Utilisation of Education: Empirical Explorations from Maharashtra*, Discussion Paper Series 26, Project of the United Nations Development Programme, UNDP/GoI/IDRC Research Project, Centre for Development Studies, Thiruvananthapuram.
- Agnes, F. (1988), 'Violence in the Family: Wife Beating', in R. Ghadially (edited) 'Women in Indian Society, A Reader', Sage, New Delhi.
- Agnihotri, Satish B. (2001), 'Declining Infant and Child Mortality in India: How do Girl Child Fare?', *Economic and Political Weekly*, 20 January.
- Ahluwalia, M.S. (2000), 'Economic Performance of States in Post-Reforms Period', *Economic and Political Weekly*, Vol. XXXV, No. 19, pp. 1637–48.
- Ahuja, Ram (1998), *Violence against Women*, Rawat Publications, New Delhi.
- Banerji, Rukmini (2000), 'Poverty and Primary Schooling, Field Studies from Mumbai and Delhi', *Economic and Political Weekly*, 4–10 March.
- Bang, Rani undated, 'Child Deaths in the Tribal Areas in Vidarbha: The Problem and the Possible Solutions', Report to the Governor of Maharashtra, Vidarbha Statutory Development Board.
- Banthia, J.K. (2001), *Census of India 2001*, Series-1, India, Provisional Population Totals, Paper 1 of 2001, New Delhi.
- Basu, Kaushik, James E. Foster and S. Subramanian (2000), 'Isolated and Proximate Illiteracy and Why These Concepts Matter in Measuring Literacy and in Designing Educational Programmes', *Economic and Political Weekly*, 8–14 January.
- Bhat, Mari P.N. (1996), 'Contours of Fertility Decline in India: A District-level Study Based on the 1991 Census', in *Population Policy and Reproductive Health*, edited by K. Srinivasan, Population Foundation of India, Hindustan Publishing Corporation, New Delhi.
- Bhatia, M. and A. Mills (1997), 'Contracting Out Dietary Services by Public Hospitals in Mumbai', in Bennet, McPake and Mills eds, *Private Health Providers in Developing Countries*, Zed Books, London.
- Bhatty, Kiran (1998), 'Educational Deprivation in India: A Survey of Field Investigations', *Economic and Political Weekly*, 11 July.
- Bhende, M.J., T.S. Walkar, S.S. Lieberman, and J.V. Venkataram (1990), *The EGS and The Poor: Evidence from Longitudinal Village Studies*, International Crops Research Institute for the Semi-Arid Tropics, Hyderabad.
- Birdsall, Nancy (1993), *Social Development Is Economic Development*, WPS 1123, World Bank, Washington D.C.
- Biswas, Samir Kumar (2001), 'Provisional Population Totals Paper-1 of 2001', *Census of India 2001*, Series-28, Maharashtra, Director of Census Operations, Maharashtra.
- Biswas, S.K. (2001), *Census of India 2001*, Series-28, Maharashtra, Provisional Population Tables, Paper 2 of 2001, Rural-Urban Distribution of Population, New Delhi.
- (2001), *Census of India 2001*, Maharashtra Series-28, Provision Population Totals, Paper 1 of 2001, New Delhi.
- Bose, Ashish (2001), 'Census of India 2001 and After', *Economic and Political Weekly*, 19 May.
- Central Bureau of Health Intelligence (CBHI) (1998), 'Health Information of India 1995–96', CBHI, Directorate General of Health Services, Government of India, New Delhi.
- Central Statistical Organisation (CSO) (1997), *Statistical Abstract of India 1997*, Ministry of Planning and Programme Implementation, New Delhi, India.
- (1998), Government of India, Selected Socio-Economic Statistics, 1998, New Delhi, India.
- (2000), *Statistical Abstract of India 1999*, Ministry of Planning and Programme Implementation, Government of India, New Delhi.
- Centre for Operational Research and Training (CORT) (1998 and 1999), *Rapid House Hold Survey RCH Project Phase I and Phase II (all districts)*, CORT, Baroda.
- Centre for Operations Research and Training, Vadodara and International Institute for Population Sciences, Mumbai (2000), National Family Health Survey (1998–99), Maharashtra Preliminary Report, Mumbai.
- Chatterjee, G.S. and N. Bhattacharya (1974), 'Between State Variations in Consumer Prices and Per Capita Household Consumption in Rural India', in P.K.

- Bardhan and T.N. Srinivasan (eds), *Poverty and Income Distribution in India*, Statistical Publishing Society, Calcutta, pp. 337–68.
- Committee on the Status of Women in India (1974), 'Towards Equality, Department of Social Welfare', Government of India, New Delhi.
- D'Lima, H. (1983), *Women in Local Government, A Study of Maharashtra*, Concept Publishing Company, Delhi.
- Dandekar, Kumudini and Manju Sathe (1980), 'Employment Guarantee Scheme: An Employment Opportunity for Women', *Economic and Political Weekly*, Vol. XV, No. 15, pp. 707–13.
- Datta, Bishakha (1998) ed., 'And Who Will Make The Chapatis? A Study of All-Women Panchayats in Maharashtra', *Stree*, Calcutta, p. XIX.
- Davar, Bhargavi V. (1985), 'Mental Illness among Indian Women', *Economic and Political Weekly*, 11 November.
- De, Anuradha, Claire Noronha and Meera Samson (2001), 'India: Private Schools and Universal Elementary Education, South Asia Education Sector, Technical Working Paper No. 3', The World Bank, New Delhi.
- Deaton, Angus and J. Muellbauer (1988), *Economics and Consumer Behaviour*, Cambridge University Press, Cambridge.
- Deshpande, R.S. (1998), 'Land Reforms and Agrarian Structure in Maharashtra', *Journal of Indian School of Political Economy*, Vol. 10, No. 1, pp. 1–23.
- Deshpande, Sudha L. (2000), 'Population and Demographic Features in Socio-Economic Review of Brihanmumbai (1997–98)', Centre for Research and Development, Mumbai.
- Deshpande, Sudha L. and L.K. Deshpande (1990), 'Labour Mobility in Bombay's Manufacturing Sector', International Labour Organisation/Asian Regional Team for Employment Promotion, New Delhi.
- Diewert, Erwin (1976), 'Exact and Superlative Index Numbers', *Journal of Econometrics*, Vol. 4, No. 2, pp. 115–45.
- Directorate General of Health Services (DGHS) (2000), *Bulletin on Rural Health Statistics in India June 2000*, DGHS, Ministry of Health And Family Welfare, Government of India, New Delhi.
- Directorate of Census Operations Maharashtra (2001), *Census of India Series-28 Maharashtra*, Directorate of Census Operations, Mumbai.
- Directorate of Economics and Statistics (1997), *Statistical Abstract of Maharashtra State 1991–92 and 1992–93*, Government of Maharashtra, Mumbai.
- (2000), *Statistical Abstract of Maharashtra State 1993–94 and 1994–95*, Government of Maharashtra, Mumbai.
- (2001), *District Domestic Product of Maharashtra*, Government of Maharashtra, Mumbai.
- Dixit, Rekha (2001), 'Strong Arm Tactics in Birth Control May Backfire', *Times of India*, 10 July.
- (2001), 'Population Miseries Multiply as the "C" Word Remains Taboo', *Times of India*, 11 July.
- (2001), 'Twist to the Census Tale: Should States Script Their Own Population Policy?', *Times of India*, 8 July.
- Drèze, Jean (1990), 'Famine Prevention in India', in Jean Drèze and Amartya Sen (eds) *The Political Economy of Hunger, Famine Prevention Volume 2*, Oxford University Press, Oxford, pp. 13–122.
- Drèze, Jean and Amartya Sen (1995), *India: Economic Development and Social Opportunity*, Oxford University Press, New Delhi.
- Duggal, R.S., Nandraj and A. Vadair (1995a), 'Health Expenditure across States—Part-1', *Economic and Political Weekly*, 30(15), pp. 834–44.
- Duggal, Ravi and Sucheta Amin (1989), 'Cost of Health Care: A Household Survey in Community Health', Foundation for Research in Community Health (Mimeograph), Mumbai.
- Dutta, Bhaskar, Manoj Panda and Wilima Wadhwa (1997), 'Human Development in India', in (ed.) S. Subramaniam, *Measurement of Inequality and Poverty*, Oxford University Press.
- Dutta, K.K. (1990), 'Mortality Patterns amongst Rural Pregnant Women in Alwar, Rajasthan—A Cohort Study', *Health Population Perspective*, Volume 3.
- (1999), 'Impact of Irrigation Management Transfer in Maharashtra', *EPW Review of Agriculture*, 27 March–2 April.
- (2001), Editor, 'Behind the Population Numbers', 31 March.
- Faujdar, Ram and T.K. Roy (1997), 'Fertility Transition in Maharashtra and Its Future Prospects', Paper presented at the Conference organized by Institute of Health Management, Pune.
- Friedrich Ebert Stiftung (1992), 'Woman in Politics: Forms and Processes', Delhi.
- Fukuzawa, H. (1982), 'Agrarian Relations in Western India', in Cambridge Economic History of India, Volume II c, 1757–c, 1970, edited by Dharma Kumar and Meghnad Desai, Orient Longman, New Delhi.
- Gait, E.A. (1913), *Census of India 1911 India*, Vol. I, Part II-Tables, Calcutta.
- Geetha, S. and M.H. Suryanarayana (1993), 'Revamping

- PDS: Some Issues and Implications', *Economic and Political Weekly*, Vol. XXVIII, No. 41, pp. 2207–13.
- George, Alex, I. Shah and S. Nandraj (1993), *Household Expenditure in Madhya Pradesh*, Foundation for Research in Community Health, Pune/Mumbai.
- Goodkind, D. (1996), 'On Substituting Sex Preference Strategies in East Asia: Does Prenatal Sex Selection Redap. Postnatal Discrimination?', *Population and Development Review*, 22(1).
- Gopalan, C. (1995), 'Towards Food and Nutrition Security', *Economic and Political Weekly*, 30 December.
- Government of India (1979), *Report of the Task Force on Projections of Minimum Needs and Effective Consumption Demand*, Perspective Planning Division, Planning Commission, New Delhi.
- (1993), *Report of the Expert Group on Estimation of Proportion and Number of Poor*, Perspective Planning Division, Planning Commission, New Delhi.
- (1997), *Focus on the Poor*, Ministry of Civil Supplies, Consumer Affairs and Public Distribution, New Delhi.
- (2000), *Ninth Five Year Plan 1997–2002 Volume-I, Development Goals, Strategy and Policies and Volume II Thematic Issues and Sectoral Programmes*, Vidhi Publishing Private Limited, New Delhi.
- (2000), National Population Policy 2000, as reprinted in the *Yojana*, August 2000.
- (2001a), *Census of India 2001*, Maharashtra Population Data, Directorate of Census Operations, Maharashtra, Mumbai.
- (2001b), *Poverty Estimates for 1999–2000*, Press Information Bureau, New Delhi.
- (2001c), *Economic Survey: 2000–2001*, Ministry of Finance, New Delhi.
- (2001d), *Report of the Task Force on Employment Opportunities*, Planning Commission, New Delhi.
- Government of Maharashtra (1980), *Joint Evaluation Report on Employment Guarantee Scheme of Maharashtra*, Directorate of Economics and Statistics, Mumbai.
- (1984), *Report of the Fact Finding Committee on Regional Imbalance in Maharashtra*, Planning Department, Mumbai.
- (1996), *A Report on Household Consumer Expenditure (Schedule 1.0) Based on National Sample Survey 43rd Round (July 1997 to June 1988)*, Directorate of Economics and Statistics, Mumbai.
- (1997), 'Maharashtra Health System Development Project Proposal 1997', Mumbai, GoM.
- (1997), *Relative Levels of Development, Backlog and Removal of Regional Imbalances*, Volume I, Report of the Indicators and Backlog Committee, Mumbai.
- (1998), 'Women and Men in Maharashtra' (1995), Directorate of Economics and Statistics, Planning Department, Mumbai.
- (2000), *Economic Survey of Maharashtra*, Directorate of Economics and Statistics, Planning Department.
- (2000), Maharashtra State Population Policy, 2000, Mumbai.
- (2000), *Statistical Abstract of Maharashtra 1993–94 and 1994–95*, Directorate of Economics and Statistics, Government of Maharashtra, Mumbai.
- (Not dated), Selected Indicators for Districts in Maharashtra and the States of India 1997–98, Directorate of Economics and Statistics, Planning Department, Mumbai.
- *Finance and Revenue Accounts*, Mumbai, Government of Maharashtra (various years).
- *Economic Survey of Maharashtra 2000–2001*, Directorate of Economics and Statistics, Planning Department, Government of Maharashtra.
- (2001), *District Domestic Product of Maharashtra 1993–94 to 1998–99*, Directorate of Economics and Statistics, Planning Department, Mumbai.
- *Lokrajya*, May 1985.
- Mahatma Phule, *Samagra Vanyamaya*, published by the Sahitya Sanskritik Mandal.
- Gupte, Manisha and Anita Borkar (1987), Women's Work, Fertility and Access to Health Care, Report Submitted to the Task Force on Health, National on Self-Employed Women and Women in the Unorganized Sector, Mumbai.
- International Institute for Population Science (1999), National Family Health Survey (1998–99), India Report, Mumbai.
- (2000), *Reproductive and Child Health Project Phase I Rapid Household Survey 1998*, International Institute for Population Sciences, Mumbai.
- (2001a), *Reproductive and Child Health: Rapid Household Survey Project Phase-I and Phase II*, International Institute for Population Sciences, Mumbai.
- (2001b), *Reproductive and Child Health Project Facility Survey Report*, International Institute for Population Sciences, Mumbai.
- International Institute for Population Sciences and MEASURE DHS+, ORC-MACRO (2000), National Family Health Survey (NFHS-2), 1998–99, Mumbai, India.
- Iyengar, Chandra (1997), 'Women in Politics: The Maharashtra Experience' in Veena Poonacha (edited) 'Women, Empowerment and Political Participation', Research Centre for Women's Studies, S.N.D.T Women's University.



- Jandhyala, Tilak B.G. (2000), *Education Poverty in India*, NIEPA Occasional Paper 29, National Institute of Educational Planning and Administration, New Delhi.
- (1995), 'Costs and Financing of Education in India: A Review of Issues, Problems and Prospects', Discussion of Paper Series No. 5, Centre for Development Studies, Trivandrum.
- Jesani, A., R. Duggal and M. Gupte (1996), *NGOs in Rural Healthcare*, FRCH, Pune.
- Kakwani, N. (1993), 'Performance in Living Standards: An International Comparison', *Journal of Development Economics*, 41, pp. 307–36.
- Kamdar, Sangita (2001), *Economic Growth and Human Development: A Study of Maharashtra*, Dissertation submitted for Ph.D. Degree, Department of Economics, University of Mumbai.
- Ketkar, Kumar, *Katha Swatantryachi*.
- Kishwar, Madhu (1988), 'Nature of Women's Mobilisation in Rural India', *Economic and Political Weekly*, 24–31 December.
- (1995), 'When Daughters are Unwanted: Sex Determination Tests, India', *Manushi* (86), January–February.
- Kulkarni, Sanjeev (1986), 'Prenatal Sex Determination Tests and Female Foeticide in Bombay City: A Study', FRCH, Mumbai.
- Kumari, Ranjana (1995), 'Rural Female Adolescence: Indian Scenario', *Social Change*, 25, Nos. 2 and 3, June–September.
- Labour Market Intervention*, International Labour Organisation, Asian Regional Team for Employment Promotion, New Delhi.
- Lieberman, S.S. (1985), 'Field-Level Perspectives on Maharashtra's Employment Guarantee Scheme', *Public Administration and Development*, Vol. 5, No. 2, pp. 109–27.
- Lingam, Lakshmi (1999), 'Women's Occupational and Reproductive Health: Research Evidences and Methodological Health', Centre for Health Studies, Tata Institute of Social Sciences, Mumbai and International Labour Organisation, New Delhi.
- Madhiwala, N., S. Nandraj and R. Sinha (2000), *Health Households and Women's Lives: A Study of Illness and Child Bearing among Women in Nashik District*, Centre for Enquiry into Health and Allied Themes, Mumbai.
- Maharashtra State Commission for Women (1997), 'Status of Women in Maharashtra, A Situational Analysis', 1981–95, Mumbai.
- Mahendra, Premi (2001), 'The Missing Girl Child', *Economic and Political Weekly*, 26 May.
- Malini, Karkal (2001), Paper prepared for a Seminar, 'Interrogating Disciplines/Disciplining Gender? Toward a History of Women's Studies in India', 19–22 February, New Delhi. Mehandale, G.B., *Shree Rala Shivachattrapati*, Volume I (1st Book).
- Minhas, B.S. and M.G. Sardana (1990), 'Note on Pooling of Central and State Samples Data of National Sample Survey', *Sarvekshana*, Vol. XIV, No. 1, Issue No. 44, pp. 1–4.
- Minhas, B.S., S.M. Kansal and L.R. Jain (1992), 'The Incidence of Urban Poverty in States (1970–1 to 1983)', in Barbara Harriss, S. Guhan and R.H. Cassen (eds), *Poverty in India: Research and Policy*, Oxford University Press, Mumbai, pp. 142–70.
- Ministry of Finance (MOF) (2000), *Economic Survey 1999–2000*, Economic Division, Ministry of Finance, Government of India, New Delhi.
- Ministry of Health and Family Welfare (MOHFW) (1999), *Family Welfare Programme in India: Year Book, 1997–98*, Department of Family Welfare, MOHFW, Government of India, New Delhi.
- Ministry of Health and Family Welfare (1999), *Family Welfare Year Book*, Government of India, New Delhi.
- Mitra, Nishi and Meera Gopichandran (2000), *Combating Violence, A Select Bibliography with Annotations*, Unit for Women's Studies, TISS Mumbai, India.
- Mulay, Sanjeevane (1999), 'Demographic Transition in Maharashtra, 1980–93', in *Economic and Political Weekly*, Vol. XXXIV, Nos. 42 and 43, 16–22/23–29 October, Mumbai.
- Nanda, A.R. (1992), *Final Population Totals: Brief Analysis of Primary Census Abstract of India 1991*, Series I, India, Paper 2 of 1992, Registrar General and Census Commissioner, India.
- Nandraj, S, N. Madhiwala, R. Sinha, and A. Jesani (1998), 'Women and Health Care in Mumbai—A Study of Morbidity, Utilisation and Expenditure on Healthcare in the Metropolis', CEHAT, Mumbai.
- Nandraj, S. and R. Duggal (1996), 'Physical Standards in Private Health Care Sector', *Radical Journal of Health*, II(2 and 3), pp. 141–84.
- National Alliance for the Fundamental Right to Education (2001), Draft-National Status Report on Education, National Convention, April 2001.
- National Council for Applied Economic Research (NCAER) (1992), *Household Survey of Medical Care*, NCAER, New Delhi. National Council for Educational Research and Training (NCERT) (1998), *Sixth All-India Educational Survey*, NCERT, New Delhi.

- National Council for Applied Economic Research (NCAER) (1993), 'Results on Participation in Education for Remaining 8 Major States', *Sarvekshana*, NSS 42nd Round, July 1986–87, 56th Issue, Vol. XVII (1), Department of Statistics, Ministry of Planning, Government of India, New Delhi.
- National Sample Survey Organisation (1983), 'Survey Results: Per Capita Per Diem Intake of Nutrients, NSS 27th Round, October 1972–September 1973', *Sarvekshana*, Vol. VI, Nos. 3–4, Issue No. 18, pp. S1–S88.
- (1986), 'Results on the Third Quinquennial Survey on Consumer Expenditure, NSS 38th Round', *Sarvekshana*, Vol. IX, No. 4, pp. S1–S102.
- (1989), 'Results on Per Capita Consumption of Cereals for Various Sections of Population, NSS 38th Round (1983)', *Sarvekshana*, Vol. XIII, No. 2, pp. S-1–S-176.
- (1992), 'Morbidity and Utilisation of Medical Services, NSS 42nd Round July 1986–June 1987', *Sarvekshana*, April 1992, pp. 55–75, pp. S-1–S-134.
- (1993), 'A Note on Fourth Quinquennial Survey on Consumer Expenditure, NSS 43rd Round (July 1987–June 1988)-Sub Sample 1 and 2 Results, (c) Proportions of Households Benefiting from Specified Poverty Alleviation Programmes by Socio-Economic Status', *Sarvekshana*, Vol. XVII, No. 2, pp. 100–12.
- (1997a), 'Survey Results on Nutritional Intake in India-NSS 50th Round (July 1993–June 1994)', *Sarvekshana*, Vol. XXI, No. 2, pp. S-1–S-214.
- (1997b), *Operational Land Holdings in India, 1991–92, Salient Features*, Department of Statistics, Ministry of Planning and Programme Implementation, New Delhi.
- (1998), 'A Note on IRDP Assistance and Participation in Public Works, 1993–94, NSS 50th Round (July 93–June 94)', *Sarvekshana*, Vol. XXI, No. 4, pp. 55–74.
- (1998a), *Morbidity and Treatment of Ailments Report No. 441*, NSSO, Department of Statistics, Government of India, New Delhi.
- (1998b), 'Changing Pattern of Consumption Expenditure in India', *Sarvekshana Analytical Report No. 2*, NSSO, Department of Statistics, Government of India, New Delhi.
- (1998c), 'Housing Conditions in India', *Report No. 429*, NSSO, Department of Statistics, Government of India, New Delhi.
- (2000), 'How Real Is the Secular Decline in Rural Poverty?', *Economic and Political Weekly*, Vol. XXXV, No. 25, pp. 2129–40.
- Nisonoff, Laurie (1997), Introduction to Part 3, in Nalini Vishvanathan (edited) 'The Women and Development Reader', Zed Books Ltd.
- Ortemeyer, L.E. (1979), 'Female's Natural Advantage? Or The Unhealthy Environment of Males? The Status of Sex Mortality Differentials', *Women's Health*, 4(2), pp. 121–33.
- Pai, Madhuri (1999), 'Inclusive Education of Children in Dharavi: A Case Study', *Indian Journal of Pediatrics*, Mumbai.
- Palanidurai, K.V. (2000), *Draft Chapter on Per Capita Income—State and Districts*, State Planning Commission, Government of Tamil Nadu, Chennai.
- Panikar, P.G.K. (1980), 'Inter-Regional Variation in Calorie Intake', *Economic and Political Weekly*, Vol. XV, Nos. 41, 42 and 43, pp. 1803–14.
- Parasuraman, Sulabha *et al* (2001), Rapid Household Survey Phase I and II, 1998–99, Reproductive and Child Health Project, International Institute for Population Sciences, Mumbai.
- Parish, William, Rukmini Banerji and Nidhi Mehrotra (1994), 'Gender Wage Gap in Malaysia and Taiwan', Population Research Center, Discussion Paper Series, NORC/University of Chicago, Chicago.
- Patankar, Indumati (1984), 'Confronting Male Power: All Women Panel Contests Panchayat Election', *Manushi* No. 25.
- Phadke, Y.D., *Visavya Shatakatil Maharashtra*, Volume IV, Planning Division, Government of Maharashtra, (1992), 'Maharashtra's Population Problem Study Committee's Report', 1992, Mumbai.
- Poonacha, Veena (1997), (ed.) *Women, Empowerment and Political Participation*, Research Centre for Women's Studies, S.N.D.T. Women's University.
- Population Foundation of India (2001), *District Profile: Maharashtra*, New Delhi.
- Population Research Centre, Gokhale Institute of Politics and Economics, Pune and International Institute for Population Sciences, Mumbai (1994), *National Family Health Survey (MCH and Family Planning)*, Maharashtra, 1992–93, Mumbai.
- Prabhu, Seeta K. (1992), 'Regional Dimensions of Human Development in India: Implications for the Eighth Plan', Paper presented at the seminar, 'Issues Pertaining to the Eighth Plan', University of Mumbai, 16 April, mimeo.
- (1997), *Structural Adjustment and Human Development: A Study of Two Indian States*, Prepared for the UNDP Research Project on Strategies and Financing for Human Development, Thiruvananthapuram.
- (2000), *Economic Reform and Social Sector Development: A Study of Two Indian States*, Sage, New Delhi.

- Prabhu, Seeta K. and P.C. Sarkar (1992), 'Identification of Levels of Development: Case of Maharashtra', *Economic and Political Weekly*, Vol. XXVII, No. 36, pp. 1927–37.
- Prabhu, Seeta K. and Sangita Kamdar (1999), *Maharashtra's Social Sectors: Growth without Human Development*, Working Paper 99/1, March, Department of Economics, University of Mumbai, Mumbai.
- Prabhu, Seeta, K. and Somnath Chatterjee (1993), *Social Sectors Expenditures and Human Development: A Study of Indian States*, Development Research Group, Study No. 6, Reserve Bank of India, Mumbai.
- Rajasekaran, N. (1998), 'Land Reforms in Maharashtra: A Regional Analysis', *Review of Development and Change*, Vol. III(2), July–December, pp. 238–63.
- Rajasekaran, N. 'Trends in Operational Holdings in Maharashtra: An Analysis of Determinants', published by Gokhale Institute of Politics and Economics.
- Raju, Saraswati (1991), 'Gender and Deprivation: A Theme Revisited with a Geographical Perspective', *Economic and Political Weekly*, 7 December.
- Ramachandran, Vimala, Subir Shukla, Philip Cohen, Robin Alexander and Malcolm Mercer (2001), Reflections on Equity, Quality and Local Planning in the District Primary Education Programme, Occasional Papers, The European Commission, New Delhi.
- Rao, Mohan (2001), *Times of India*, (interview with Rupa Chinai), July 1.
- Rao, Mohan and Devaki Jain (2001), 'National Population Policy 2000: Re-examining Critical Issues', *Economic and Political Weekly*, 21–7 April, p. 1299.
- Ravallion, Martin (1991), 'Reaching the Rural Poor through Public Employment: Arguments, Evidence, and Lessons from South Asia', *The World Bank Research Observer*, Vol. 6, No. 2, pp. 153–75.
- Ravallion, Martin, Gaurav Datt and Shubham Chaudhuri (1993), 'Does Maharashtra's Employment Guarantee Scheme Guarantee Employment? Effects of the 1988 Wage Increase', *Economic Development and Cultural Change*, Vol. 41, No. 2, pp. 251–75.
- Ravindra, R.P. (1991), *Fighting Female Foeticide—A Long Way to Go*, The Lawyers Collectives, Mumbai, August.
- Registrar General, India (RGI) (1997), 'District Level Estimates of Fertility and Mortality for 1991 and Their Inter Relation with Other Variables', Occasional Paper No 1 of 1997, Registrar General, India, New Delhi.
- (1998), *Maharashtra State District Profile 1991*, Registrar General, India, New Delhi.
- (1999), *SRS Bulletin*, Sample Registration System, New Delhi.
- (1998), Medical Certification of Cause of Death, 1993, Registrar General, India, New Delhi.
- (1999), Compendium of India's Fertility and Mortality Indicators, 1971–1997, Based on the Sample Registration System', Registrar General, India, New Delhi.
- (1999), Medical Certification of Cause of Death, 1994, Registrar General, India, New Delhi.
- Registrar General, India, *Census of India (2001)*, India and Maharashtra, Provisional Population Totals, Paper I of 2001, Registrar General, New Delhi.
- Sakhalkar, Eknath and Subhash Bhende, *Maharashtrachi Manachinhe*, Volume I and II.
- Saldanha, Denzil (1999), Residual Illiteracy and Uneven Development I, II and III, *Economic and Political Weekly*, 3–9, 10–16, and 17–23 July.
- Salunke, S.R., S.S. Narvekar, V.T. Godbole, M.A. Talwalkar (1997), *Program For Children in Maharashtra: An Assessment*, Directorate of Health Services, Maharashtra, UNICEF, Mumbai.
- Santappa, V. (1996), 'Estimates of District Income in Karnataka', *The Journal of Income and Wealth*, Vol. 18, No. 1, pp. 7–28.
- Schultz, T.P. (1968), 'Transforming Traditional Agriculture', University of Chicago Press, Chicago.
- Sen, Amartya (1984), *Resources, Values and Development*, Oxford University Press, New Delhi.
- (1987), 'The Standard of Living: Lecture II, Lives and Capabilities', in Amartya Sen, John Muellbauer, Ravi Kanbur, Keith Hart and Bernard Williams, *The Standard of Living*, The Tanner Lectures, 1985, Cambridge University Press, Cambridge, pp. 20–38.
- (1990), 'More than 100 Million Women are Missing', *The New York Review*, 20 December.
- (1992), *Inequality Reexamined*, Russell Sage Foundation, Clarendon Press, Oxford, New York.
- (1993), 'Capability and Well-Being' in (eds) Martha Nussbaum and Amartya Sen, *The Quality of Life*, A Study Prepared for the World Institute for Development Economics Research (WIDER) of the United Nation University, Oxford University Press, New Delhi, pp. 30–53.
- Shah, Nandita and Nandita Gandhi (1997), The Quota Question: Women and Electoral Seats in Veena, Poonacha (edited) 'Women, Empowerment and Political Participation', Research Centre for Women's Studies, S.N.D.T. Women's University.

- Shariff, Abusaleh (1999), *Human Development Report: A Profile of Indian States*, Oxford, Delhi.
- Shiratsuka, Shigenori (1999), 'Measurement Errors in the Japanese Consumer Price Index', *Monetary and Economic Studies*, pp. 69–101.
- Shiva Kumar, K. (1991), 'Human Development Index for Indian States', *Economic and Political Weekly*, pp. 2243–44.
- Shiva, Mira, Omita Goyal and Poonam Krishnan (1992), *State of India's Health*, Voluntary Health Association of India, Delhi.
- Sonpar, Shobna and Ravi Kapur (2001), 'Non-Conventional Indicators: Gender Disparities under Structural Reforms', *Economic and Political Weekly*, 6 January.
- Sujan*, bi-monthly published by Yuva Shakti Pratishthan, A mouthpiece of Voluntary Organisations, Issues published in January 1991, March 1991, May 1991 and August 1991.
- Sundar, Ramamani (1995), 'Household Survey of Health Care Utilisation and Expenditure', Working Paper No. 53, National Council for Applied Economic Research, New Delhi.
- Sundaram, K. (2001), 'Employment-Unemployment Situation in the Nineties: Some Results from NSS 55th Round Survey', *Economic and Political Weekly*, 17 March.
- Suryanarayana, M.H. (1996), 'Food Security and Calorie Adequacy Across States: Implications for Reform', *Journal of Indian School of Political Economy*, Vol. VIII, No. 2, pp. 203–65.
- Tata Institute of Social Sciences, 'Impact of the Maharashtra Rural Credit Programme in Phase I', District-Study conducted in January 2000.
- Thakkar, Usha and Rohini Gawankar (1997), *Reservation of Seats and the Empowerment of Women: Emerging Issues* in Veena Poonacha (edited) 'Women, Empowerment and Political Participation', Research Centre for Women's Studies, S.N.D.T. Women's University.
- UNDP (1997), *Human Development Report*, Published for UNDP—Oxford University Press, New York.
- Uplekar, M. and S. Rangan (1996), *Tackling TB*, Foundation for Research in Community Health, Pune.
- Vaidyanathan, A. (1986), 'Labour Use in Rural India: A Study of Spatial and Temporal Variations', *Economic and Political Weekly*, Review of Agriculture, Vol. XXI, No. 52. pp. A–130–A–146.
- Vanaik, Achin (1986), 'Female Foeticide in India', *The Times of India*, 20 June.
- Vetticad, Anna M.M. and Ramesh Vinayak (2001), 'The Gender Gestapo', *India Today*, 16 July.
- Visaria, Leela (1999), 'Deficit of Women in India: Magnitude, Trends, Regional Variations and Determinants', in Bharati Ray and Aparna Basu (eds) *From Independence Towards Freedom: Indian Women Since 1947*, Oxford University Press, New Delhi.
- Walker, Thomas S. and James G. Ryan (1990), *Village and Household Economies in India's Semi-Arid Tropics*, Johns Hopkins University Press, Baltimore.
- Walker, Thomas S., R.P. Singh, and M. Asokan (1986), 'Risk, Benefits, Crop Insurance and Dryland Agriculture', *Economic and Political Weekly*, Vol. XXI, Nos. 25 and 26, pp. A81–A88.
- World Bank (1990), *World Development Report 1990: Poverty*, Oxford University Press, Oxford.
- (1997), 'India: Achievements and Challenges in Reducing Poverty', A World Bank Country Study, World Bank, Washington DC.
- (2001), *World Development Report 2000–2001, 'Attacking Poverty'*, Oxford University Press, New York.

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