India

Human Development Report 2011

Towards Social Inclusion

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India Human Development Report 2011

India Human Development Report 2011 Team

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India Human Development Report 2011

Towards Social Inclusion

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Foreword

Planning Commission published the first *National Human Development Report* (NHDR) for India in 2002. This is the second in the series.

This *Report* shows that the Human Development Index (HDI) between 1999–2000 and 2007–8 (the latest year for which it can be estimated) has increased by 21 per cent. The major driver of improvement in HDI has been the Education Index, which has seen an improvement of over 28 per cent between 1999–2000 and 2007–8. Equally important, the *Report* shows that the increases in HDI in the poorest states of India have been much sharper than the national average. Hence there is convergence taking place in HDI across states.

The focus of this *Report* is not only on inter-state disparities in indicators of well-being, but also two other types of inequalities: first, between caste and social groups in the country—Scheduled Castes, Scheduled Tribes, Other Backward Classes, and Others; and second, between various religious communities of India. The 11th Five Year Plan aimed at inclusive growth. India's development in the past decade has shown a move towards convergence in terms of several human development outcomes of the socially excluded groups.

Montek Singh Ahluwalia
Deputy Chairman,
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Acknowledgements

India Human Development Report 2011 is an outcome of immense hard work and team effort of over two years. It is the second Human Development Report for the country, the earlier one being published in the year 2002. This work was initiated in the Planning Commission (when the team leader headed Rural Development Division) and subsequently carried forward by the Institute of Applied Manpower Research—the only research institute under the aegis of Planning Commission.

The *Report* is a collective endeavour of a dedicated team of researchers, well supported by technical as well as administrative staff at the Institute. The entire process of preparation of the *Report* involved close consultation with domain experts (national as well as international) at every stage. For every chapter, feedback from external (national as well as international) experts was sought and revisions were made accordingly. The work greatly benefitted from intellectual advice from Mr Anoop Satpathy, Mr Biraj Patnaik, Professor Caroline Dyer, Dr Geeta Kingdon, Dr Harsh Mander, Dr N.C. Saxena, Dr Seeta Prabhu, Mrs Shantha Sinha, and Dr T. Sundararaman on earlier drafts.

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In addition, the *Report* benefitted from consultations with Dr Montek Singh Ahluwalia, Deputy Chairman, Planning Commission and HDR Steering Committee Members—Dr Syeda Hameed, Dr Narendra Jadhav, Dr Saumitra Chaudhary, and Dr Pronab Sen, Principal Adviser, Planning Commission. However, the *Report* does not necessarily reflect the view of the Planning Commission.

We extend our gratitude to United Nations Development Programme for facilitating the editorial work on the *Report* and also for providing three consultants to complete it.

We thank all those directly or indirectly involved in giving the *Report* its final shape. However, we take the responsibility for any possible errors and omissions in the process.

Abbreviations

AAY	Antyodaya Anna Yojana
ADB	Asian Development Bank
AIDIS	All India Debt and Investment Survey
ANC	Antenatal Care
APL	Above Poverty Line
ASHA	Accredited Social Health Activist
BMI	Body Mass Index
BMVSS	Bhagwan Mahaveer Viklang Sahayata Samiti
BOT	Build, Operate and Transfer
BPL	Below Poverty Line
BRC	Brazil, Russia, and China
BRIC	Brazil, Russia, India, and China
CACP	Commission for Agricultural Costs and Prices
CHC	Community Health Centre
CIP	Central Issue Price
CLTS	Community Led Total Sanitation
CPIAL	Consumer Price Index for Agricultural Labourers
CPIIW	Consumer Price Index for Industrial Workers
CPR	Contraception Prevalence Rates
DDRC	District Disability Rehabilitation Centre
DISE	District Information System for Education
DRDA	District Rural Development Agency
EAG	Empowered Action Group
EGS	Employment Guarantee Scheme
FAO	Food and Agriculture Organization
FCI	Food Corporation of India
FPS	Fair Price Shop

GDP	Gross Domestic Product
GER	Gross Enrolment Ratio
GNP	Gross National Product
GP	Gram Panchayat
GPI	Gender Parity Index
GSDP	Gross State Domestic Product
HDI	Human Development Index
HDR	Human Development Report
IAY	Indira Awaas Yojana
ICDS	Integrated Child Development Services
IDA	Iron Defi ciency Anaemia
IEC	Information Education and Communication
IGNDPS	Indira Gandhi National Disability Pension Scheme
IGNOAPS	Indira Gandhi National Old Age Pension Scheme
IGNWPS	Indira Gandhi National Widow Pension Scheme
ILO	International Labour Organization
IMR	Infant Mortality Rate
INDUS Project	Indo-US Child Labour Project
INGCP	Indian National Goitre Control Programme
IPEC	International Programme on the Elimination of Child Labour
IPHS	Indian Public Health Standard
JNNURM	Jawaharlal Nehru National Urban Renewable Mission
JSY	Janani Suraksha Yojana
KGBVS	Kasturba Gandhi Balika Vidyalaya Scheme
KMS	Kharif Marketing Season
KSY	Kishori Shakti Yojana
LBW	Low Birth Weight
LCL	Low Cost Latrines
LFPR	Labour Force Participation Rate
MDG	Millennium Development Goal
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MMR	Maternal Mortality Ratio
MNC	Multinational Corporation
MPCE	Monthly Per Capita Consumption Expenditure
MRP	Mixed Reference Period
MSP	Minimum Support Price
MWCD	Ministry of Women and Child Development
NAC	National Advisory Council
NACO	National AIDS Control Organisation
NAR	Net Attendance Ratio
NCD	Non Communicable Diseases
NCF	National Commission on Farmers

NCLP	National Child Labour Project
NCPCR	National Commission for the Protection of Child Rights
NER	Net Enrolment Ratio
NFHS	National Family and Health Survey
NGCP	National Goitre Control Programme
NGO	Non Governmental Organisation
NHA	National Health Accounts
NHDP	National Highways Development Project
NHDR	National Human Development Report
NHFDC	National Handicapped and Finance Development Corporation
NIDDCP	National Iodine Defi ciency Disorders Control Programme
NIJNNURM	New Improved Jawaharlal Nehru National Urban Renewal Mission
NNMB	National Nutrition Monitoring Bureau
NPAG	National Programme for Adolescent Girls
NPEGEL	National Programme for Education of Girls at Elementary Level
NPHCE	National Programme for the Healthcare of the Elderly
NPP	National Population Policy
NPS	New Pension System
NRHM	National Rural Health Mission
NSAS	National Social Assistance Scheme
NSDP	Net State Domestic Product
NSS	National Sample Survey
NSSO	National Sample Survey Organization
NUEPA	National University of Educational Planning and Administration
NWC	Nowhere Children
OASIS	Old Age Social and Income Security
OBC	Other Backward Classes
OD	Open Defection
ODF	Open Defection Free
OMMAS	Online Management, Monitoring and Accounting System
OOP	Out of Pocket
PDS	Public Distribution System
PHC	Primary Health Centre
PMGSY	Pradhan Mantri Grameen Sadak Yojana
RCH	Reproductive and Child Health
RCI	Rehabilitation Council of India
RDI	Recommended Dietary Intake
RGGVY	Rajiv Gandhi Grameen Vidyutikaran Yojana
RSBY	Rashtriya Swasthya Bima Yojana
RTE	Right to Education
SC	Scheduled Caste
SCR	Student-Classroom Ratio

SDP	State Domestic Product
SNP	Supplementary Nutrition Programme
SRS	Survey Registration Scheme
SSA	Sarva Shiksha Abhiyaan
ST	Scheduled Tribe
TDPS	Targeted Public Distribution System
TFR	Total Fertility Rate
TSC	Total Sanitation Campaign
U5MR	Under five Mortality Rate
UEE	Universalisation of Elementary Education
UPBEP	Uttar Pradesh Basic Education Project
URP	Uniform Reference Period
VAD	Vitamin A Deficiency
VEC	Village Education Committee
VPT	Village Public Telephone
WFPR	Workforce Participation Rate
WHO	World Health Organization

1

Overview

Conceptual Framework and Key Findings

INTRODUCTION

In any nation, human development (HD) outcomes are a function of economic growth, social policy, and poverty reduction measures at the macro-level. These, in turn, are the result of various synergies in the form of feedback loops, operating in terms of both inputs and outputs in the development process. The expansion of human functionings in terms of health and educational attainments, reduction of income poverty, and economic growth are linked in a synergistic manner through these feedback loops. These synergies lead to improved health and educational outcomes. Poverty is likely to be reduced if there is rapid economic growth. Faster and more sustainable economic growth can be attained if, among other policy determined interventions, poverty is reduced through direct policies aimed at the income-poor, and simultaneously, if the health and educational status of the population is enhanced.

There exists a two-way relationship between these interventions at the macro-economic level. For instance, investment in health and education can enhance human functioning, which can eventually alleviate income poverty (by improving employability) and further economic growth. Similarly, resources generated through income poverty reduction and economic growth can be used to enhance human functionings. This in turn gives a push to economic growth (Figure 1.1).

The *India Human Development Report 2011* (*IHDR*) argues that interventions in human capital and expansion of human functionings are key requirements for economic growth to be more successful in reducing income poverty, and calls for an integration of social and economic policies.

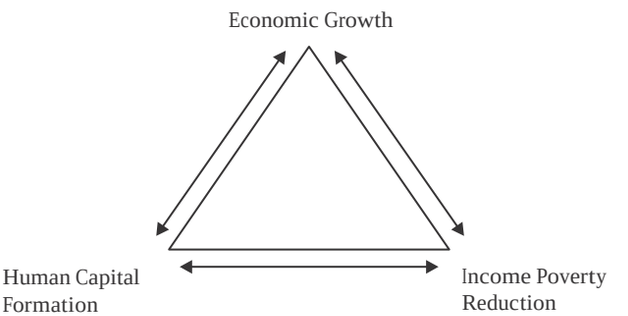

Figure 1.1 Feedback Loops at the Macro-economic Level

The feedback loops can be better understood from Table 1.1 which shows how various parameters can act as both inputs and outcomes in the human development process. While the rows represent the inputs, the columns represent the human development outcomes or outputs. The shaded cells show the relationship between an input and the output variable, and the arrow depicts the feedback effects from the development outcomes to the inputs. For example, education as an input can lead to better health and nutritional status of an individual, which feeds back into improved learning ability and better attendance at school. Similarly, a healthy mother giving birth to a healthy child with higher chances of survival leads to lower

Table 1.1 Feedback Loops in the Human Development Process—At the Micro-economic Level

Social services inputs/processes	*Human development outcomes/outputs*				
	Knowledge	*Family size*	*Health status*	*Nutritional status*	*Healthy living conditions*
Education					
Family Planning	↵				
Health	↵	↵		↵	↵
Nutrition	↵	↵	↵		
Water and Sanitation					

Source: Mehrotra and Delamonica (2007).

fertility and smaller family size, which in turn increases the per capita availability of resources to improve health and educational attainments.

In the context of feedback loops, this Report attempts to highlight whether certain sections of Indian society suffer from multiple deprivations, and hence fail to enjoy the benefits of these feedback loops. A state-wise analysis is done of India's unique socially stratified society to examine how different caste and religious groups fare in terms of various socio-economic indicators. It may be noted that the poorer states, namely, Bihar, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh, Chhattisgarh, and West Bengal, account for 56 per cent of the Scheduled Caste (SC) and 55 per cent of the Scheduled Tribe (ST) population of the entire country. Further,
58 per cent of the Muslim population is concentrated in these states. There is a two-way relationship here; poorer states are so because there are large proportions of the excluded social groups (who are generally poorer) living there; conversely, in the poorer states the different development programmes do not reach the targeted population—especially the economically and socially deprived sections. This Report focuses especially on the question of whether the social indicators of excluded groups are converging or diverging with the rest of the population. The analysis provides interesting insights on the following.

- Whether different social groups like the SCs, STs, or Muslims, get excluded from the development process;
- Whether India is experiencing inclusive growth in the true sense;
- How are the Government's various flagship programmes/schemes addressing some of these issues.

This chapter summarizes the key findings of the report. Chapter 2 of the report estimates the Human Development Index for India and each of the states. It also presents a state-by-state human development profile. Chapter 3 examines the economic attainments of the population, especially the two major sources of income: employment and assets. Chapter 4 examines the availability, access and absorption of food, and discusses the state of hunger and malnutrition. Chapter 5 focuses on how healthy we are, and carries out a detailed analysis of health inputs, processes, and outcomes. Chapter 6 examines the achievements and challenges in the education sector. Chapter 7 analyses the state of support infrastructure (roads, electricity, housing, and telephony), which forms the basis of the human development outcomes. Finally, Chapter 8 discusses the challenges facing vulnerable sections of India's population: the child labourers, the elderly, and the disabled. In all chapters, the social exclusion of SCs, STs, and Muslims is focused upon, wherever the data permits.

HUMAN DEVELOPMENT INDEX

The Human Development Index (HDI) is a composite index of outcome indicators in three dimensions:

a. A long and healthy life, as reflected in life expectancy at birth.
b. The acquisition of education and knowledge, as reflected in the mean years of schooling (adjusted for out of school children) and literacy rate (age 7 years and above).
c. The standard of living and command over resources, as reflected in the monthly per capita expenditure adjusted for inflation and inequality.

In 2010, India ranked 119 among 192 countries across the world, with a medium level HDI of 0.52, moving one notch higher as compared to 2005. According to United Nations Development Programme (UNDP) data, it is among the top 10 movers in gross domestic product (GDP) growth. However, despite this, certain sections of society remain excluded, especially in terms of improvements in human capabilities and entitlements.

For historical reasons, Indian society is segregated into castes, and some of them are economically and socially deprived to a great extent. It is therefore essential to bridge the caste gaps and ultimately eliminate all forms of discriminating social barriers. Also, the tribal groups of central and eastern India in particular have remained deprived in multiple dimensions (a factor that cannot be ignored if the extremist violence in that region is to be addressed).

Figure 1.2 presents data on HDI for diff erent states for 1999–2000 and 2007–8. It is seen that the ranking of the states in terms of HDI has barely changed over this past decade. The generally well-performing states are Kerala, Delhi, Himachal Pradesh, Goa, and Punjab, which occupy the fi rst fi ve places in both the years. On the other hand, Bihar, Jharkhand, Madhya Pradesh, Uttar Pradesh, Orissa, Rajasthan, and Chhattisgarh appear at the bottom of the list in both the years. Thus, despite some catching-up witnessed in the states with low human development, the progress has not been rapid enough to change the inter se ranking radically.

This *IHDR* shows that the HDI has increased by 21 per cent between 1999–2000 and 2007–8 (the latest year for which it can be estimated). Equally importantly, it shows that the increase in HDI in the states that are among the poorest has been much faster than the national average, and hence there is a convergence taking place between states in terms of HDI.

The improvement in HDI for a state could be driven by the Income Index, the Education Index, or the Health Index, or a combination of the three indices. It is the improvement of 28.5 per cent in the Education Index during the period 1999–2000 and 2007–8 that has driven India's HDI upwards, while the change in the Income Index (which in this case is really an indicator of the change in consumption rather than income per se) is only as large as the overall change in the HDI. The good news is that the poor states, by and large, have registered a signifi cantly higher than average improvement in the Income Index. Similarly, the educationally backward and poorer states (Uttar Pradesh, Rajasthan, Orissa, Madhya Pradesh, Andhra Pradesh, and Bihar) are the ones which have shown the greatest improvement in the Education Index. The improvement in the Education Index in the educationally backward states suggests a strong trend of convergence in educational outcomes across states.

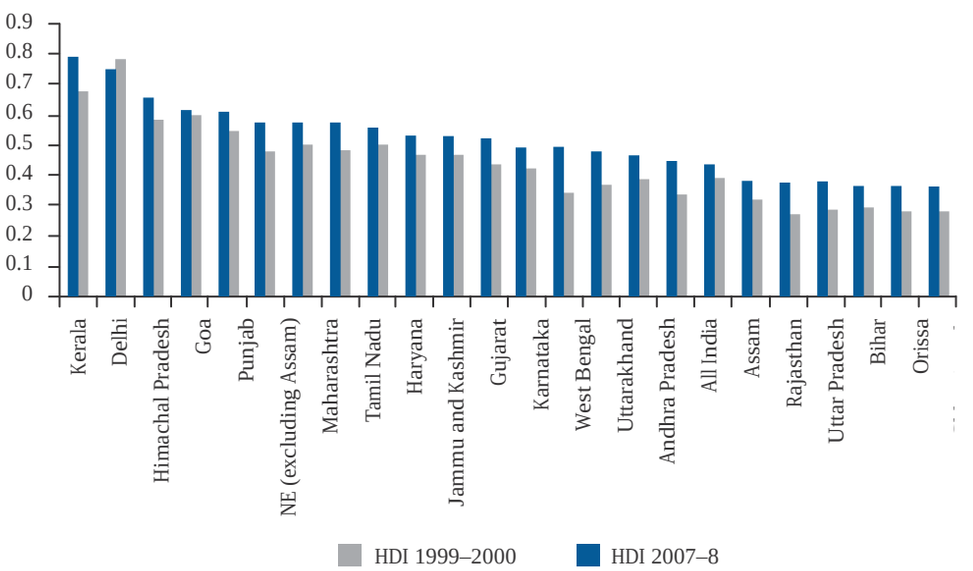

Figure 1.2 HDI across States, 1999–2000 and 2007–8

Remarkably, the improvement in the Health Index during the period 1999–2000 to 2007–8 is well below the improvement in the HDI overall. In other words, while the Income Index has improved at the same rate as the HDI for India, and the Education Index by much more than the improvement in the HDI, the Health Index has not shown any significant change; a subject that we return to later in this chapter, while examining the outcomes in health.

Next, there are states that do not necessarily have high incomes, but the authorities there have taken sufficient measures to ensure better education and health for the people. Some typical examples are Kerala, Himachal Pradesh and the smaller north-eastern states. Another trend seen is that the relatively richer states have also performed well on human development indicators; for example, Delhi, Goa, and Punjab.

A clear message that emerges is in regard to the relationship between the caste composition of a state and its outcomes in terms of health and education. Kerala and Tamil Nadu have a composition of social groups similar to those in Bihar and Uttar Pradesh (See Table 2A.1), but have better than average health and educational status, suggesting that the social composition of a state's population does not determine its 'destiny' in terms of human development outcomes. The 'destiny' of the population can be changed through appropriate policies that address the needs of the marginalized communities. The analysis in the India HDR 2011 makes a strong argument for all state Governments to act as agents of change to make the development process truly inclusive.

EMPLOYMENT, ASSET OWNERSHIP, AND POVERTY

Chapter 3 specifically addresses the two fundamental determinants of the income levels of households, namely employment status and ownership of assets.

At the outset it needs to be stated that the proportion of persons below the poverty line (using the uniform recall period method of calculating poverty) has fallen steadily in both rural and urban areas through the 1980s, 1990s, and in the new millennium. In fact, the proportion of people below the poverty line in 2004–5 was roughly half of that in 1983. This implies that the country is well on its way to achieving the Millennium Development Goal (MDG) target related to poverty reduction.

Even more importantly, there has been a very sharp reduction in poverty, between 2004–5 and 2007–8 (using the mixed recall period method). In 2004–5 overall poverty had stood at 21.8 per cent, but by 2007–8 it had declined sharply to 14.9 per cent in rural and 14.5 per cent in urban areas (Table 1.2).

Table 1.2 All India Incidence of Poverty[1] in Rural and Urban Areas

Year	*Rural*	*Urban*
1983	45.7	40.8
1993–4	37.3	32.4
2004–5	28.3	25.7
2007–8	14.9	14.5

Source: Eleventh Five Year Plan, Planning Commission, Government of India for 1988 to 2004–5, which is based on the 'Uniform Recall Period'. For 2007–8, the estimate is based on the 'Mixed Recall Period Method, and hence is not comparable. For the year 2004–5, the incidence of poverty by Mixed Recall Period Method was 21.8 per cent for the country as a whole.

While it is true that the incidence of poverty has declined over time in India and more so in the more recent years, the incidence of poverty among SCs and STs, however, is much higher than the national aggregate by 8.5 (SC-rural) and 19.4 (ST-rural) percentage points. The gap across social groups in poverty has reduced somewhat over time, though it is still present. Across religious groups, the incidence of poverty among Muslims in rural areas is actually less than the aggregate. However, this community exhibits greater poverty incidence than the aggregate in urban areas. There is a high concentration of Muslims in the urban areas, as a result of which they become more visible. Finally, poverty among Christians and Sikhs is considerably lower than the aggregate.

There are considerable interstate variations in the incidence of poverty; there was a very high concentration of poor people in the states of Bihar (including Jharkhand), Madhya Pradesh (including Chhattisgarh), Maharashtra, and Uttar Pradesh (including Uttarakhand) in 1993–4. In fact, these four territories accounted for 49 per cent of the poor of the country in 1993–4, which rose to

[1] Poverty for the year 2007–8 has been calculated using a poverty line based on adjusting the 2004–5 poverty line to 2007–8 prices.

58 per cent by 2004–5. Thus, the spatial dimension of poverty remains a major concern.

An equally important dimension that remains of concern is that the total number of poor (based on a

fallen at all over a 30 year period. In 1973–4, the number of poor was 322 million, in 1983–4 it was the same, in 1993–4 it was 320 million, and in 2004–5 it was still
320 million.

Recently, based on a slightly different methodology, the incidence of poverty in India for the year 2004–5 was estimated to be 37.2 per cent (Tendulkar Committee). Based on the Tendulkar Committee methodology after adjusting for inflation, the incidence of poverty for the year 2009–10 was estimated to be 32 per cent.[2]

In India, the estimates of poverty are based on consumption expenditure, the estimates of which are obtained from National Sample Surveys (NSSs) on consumer expenditure. Even though over the years, there has been an increase in inequality in consumption expenditure in both rural and urban India, the disparity between states has declined.

Across social groups and religious communities, it may be noted that even though the consumption expenditures for SCs, STs, and Muslims have been rising over time, the rate of increase was lower than the all India average. Further, while there has been a divergence in Monthly Per Capita Consumption Expenditure (MPCE) from the national average for STs and Muslims, SC households have seen almost no change during 1999–2000 and
2007–8 (Figures 1.3 to
1.5).

The analysis of employment status primarily examines changes in the labour force participation rate (LFPR),
worker participation ratio (WPR), and unemployment rate during the period 1993–4 to 2007–8. If this is split
into two time periods namely, period 1 (1993–4 to 1999–2000) and period 2 (1999–2000 to 2007–8), it
is observed that the annual growth rate of employment increased from 1.25 per cent in period 1 to 1.4 per cent in period 2, explained by the much faster economic growth in India in the latter period.

There was a decrease in unemployment rate (by current daily status) from 7.3 per cent in 1999–2000 to
6.6 per cent in 2009–10 implying that high growth translates into employment growth fast enough to productively employ youth entering the labour force. This would be especially the case for those engaged in casual labour—who tend to be among the unskilled, and hence,

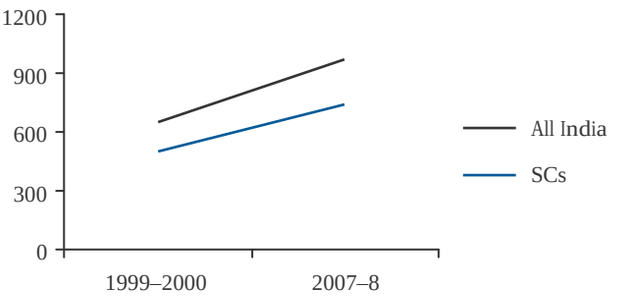

Figure 1.3 MPCE, All India and SCs (1999, 2000, and 2007–8)

Source: NSS 55th and 64th Rounds.

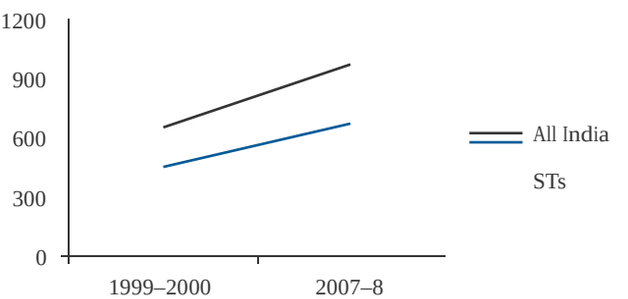

Figure 1.4 MPCE, All India and STs (1999–2000 and 2007–8)

Source: NSS 55th and 64th Rounds.

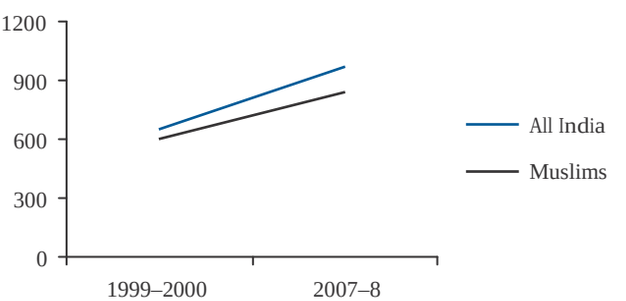

Figure 1.5 MPCE, All India and Muslims (1999–2000 and 2007–8)

Source: NSS 55th and 64th Rounds.

[2] The poverty estimate for the year 2009– 10 is provided by Professor Abhijit Sen (Member, Planning Commission, Government of India).

poor. Seen over a shorter time horizon—2004–5 to 2009–10 there was a decline in unemployment rate by current daily status (8.3 per cent to 6.6 per cent) for the country as a whole. In 2009–10, unemployment rate fell to 6.6 per cent.

There is also a declining trend in the unemployment rate in rural and urban areas during the period 2004–5 to 2009–10. Rural areas experienced decrease in unemployment rate probably due to shift in the pattern of occupations in favour of the non-agricultural sector. Urban India experienced a marginal decline since both the service and industrial sectors are predominantly located there.

The unemployment rate among SC and ST workers decreased in both rural and urban areas. Among the Muslims as well there is a similar pattern (Table 1.3). In other words, the rising tide was lifting all boats.

Table 1.3 All India Unemployment Rate, by Social Group, by Current Daily Status, 2004–5 to 2009–10

Social Group	*Rural*			*Urban*		
	2004–5	*2007–8*	*2009–10*	*2004–5*	*2007–8*	*2009–10*
SCs	12	12	9.4	11.4	10.1	7.8
STs	6.5	7.5	6.3	7.5	10	7.0
OBCs	7.7	7.9	6.5	8.5	7.7	6.2
Others	6.6	6.4	5.3	7.1	6	4.6
All	8.2	8.4	6.8	8.3	7.4	5.8

Source: Calculated from NSS Database, 2004–5 and 2007–8.

Over 2004–5 to 2009–10 there has been a decline of over 20 million women (19 million in rural areas) in India's workforce. This is partly explained by the rising secondary school enrolment rates for girls, particularly in rural areas.

Other than employment, assets are the other source of income. Asset ownership in both rural and urban India is characterized by extremely high concentrations of ownership. In 2002–3 (the latest year for which asset-ownership date is available), the top 5 per cent households in rural India owned 36 per cent of the total value assets, while the bottom 60 per cent of households owned only 15 per cent of the total value of assets. In urban India, ownership distribution of assets was even more unequal, with the bottom 60 per cent of households owning only 10 per cent of the total value of assets. This pattern of asset ownership reflects the inequality of wealth distribution in India *that is in sharp contrast to its otherwise low inequality in consumption expenditure*.

The relative deprivation of SCs, STs, and Muslims was evident in their ownership of assets as well. The Access Index of asset ownership (defined as the share of assets owned by the community divided by the community's share of population) across social groups was the lowest for SCs, while across religious communities it was the lowest among Muslims (in 2002–3).

THE RIGHT TO FOOD AND NUTRITION

As shown in Table 1.1, better nutritional inputs improve learning as well as health status. There is a critical link between people's health status and nutritional outcome; interventions to reduce hunger improve nutrition levels and promote good health. As Table 1.1 also shows, there is a feedback loop from improved knowledge and learning to better nutritional status, from small family size to better nutrition, and also better health status to improved nutritional status. On the other hand, malnutrition, caused by both micro- and macro-nutrient deficiencies, often begins even before a child is born. The effect of this early damage on health and brain development is irreversible in later life, and hence reduces educability and productivity in later life. Thus, child malnutrition is not a problem just confined to childhood; a malnourished under three-old will grow up to be a malnourished adult, and fail to realize her potential as a human being. Malnutrition is an indicator of chronic hunger.

An international comparison of India's hunger indicators presents a dismal picture. As quoted in the Nutrition Report of 2009 of the *National Family and Health Survey 3* (*NFHS 3*), the average percentage of undernourished children under five years for 26 Sub-Saharan African countries was 25 per cent, about half the Indian average of 46 per cent. Except for Kerala, Himachal Pradesh, Punjab, Sikkim, Manipur, and Mizoram, all the Indian states were either at par or worse than Sub-Saharan African countries' average. Weight and height of Indians on average have not shown significant improvement over the last 25 years. A staggering 21.5 per cent of babies in India are born with low birth weight, a problem that begins in the womb.

The background to these outcome indicators has to be understood. For one, the per capita availability of cereals has declined, and second, the share of non-cereals in food consumption has not grown to compensate for the decline in cereal availability. Further, there may well be

a problem for signifi cant sections of the population who may be feeling the distress caused by falling per capita cereal availability, and who do not have the purchasing power to diversify their food consumption away from

What is most distressing is that the average per capita calorie intake was already below the minimum nutritional level of 2,400 in rural areas and 2,100 in urban areas a quarter of a century ago (1983– 4). Since then, there has been a *decline* in per capita consumption of calories, as shown by NSS data in 1993– 4 as well as 2004– 5. Moreover, there has also been a consistent decline in the per capita consumption of proteins since 1983– 4. It is hardly surprising then, that nutritional outcome indicators for both children and adults are low, and have hardly improved over the past two decades.

In some states, the status of hunger and malnutrition is very worrisome. In 12 of 17 major states the condition is ' alarming' as stated in an International Food Policy Research Institute (IFPRI) report of 2009. Sixty years after Independence, nearly half of India' s children under three years of age are malnourished. In addition, India has the largest number of malnourished children in the world.

A third of India' s adult population has a body mass index (BMI) of less than 18.5 (the number below which people are declared malnourished). The percentage of women having a BMI<18.5 in poorer states (except Orissa) recorded a slight improvement between 1998– 9 and 2005– 6. Socially marginalized castes/tribes also have a higher percentage of women with BMI<18.5. Figures 1.6 to 1.8 show how the various social and religious groups are faring compared to the national average. It is seen that SCs, STs, and Muslims are diverging from the national average in terms of female malnutrition, during 1998– 9 and 2005– 6.

Hidden hunger indicators, or micro-nutrient defi cien-cies show a situation that is even worse. Anaemia among women has been increasing over the years in India. In 2005– 6, more than half of women aged 15– 49 years suff ered from anaemia (55.3 per cent), an increase of three percentage points over 1998– 9. The incidence of anaemia among women in poor states is high compared to their richer counterparts (except Gujarat where the prevalence of women with anaemia is at par with the national average).

A higher percentage of rural children suff ered from malnutrition as compared to those residing in urban areas. A primary reason for the high incidence of malnu-trition amongst the rural poor is lower food intake, and a majority of socially marginalized (SC and ST) groups live in rural areas. Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, and Uttar Pradesh have child malnutrition rates well above the national average of 46 per cent.

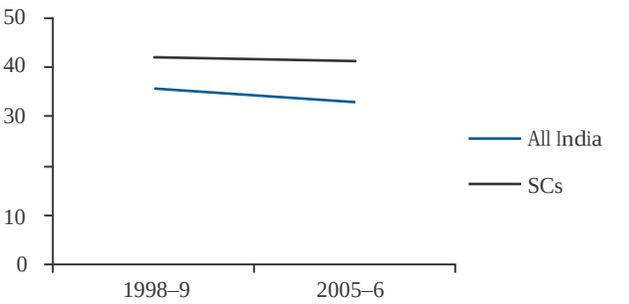

Figure 1.6 Percentage of Women with BMI < 18.5, All India and SCs (1998–9 and 2005–6).

Source: *NFHS 2 and 3.*

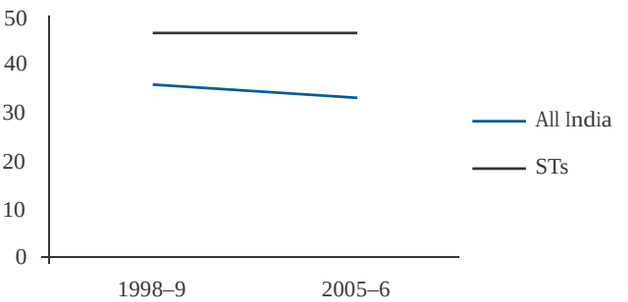

Figure 1.7 Percentage of Women with BMI < 18.5, All India and STs (1998–9 and 2005–6)

Source: *NFHS 2 and 3.*

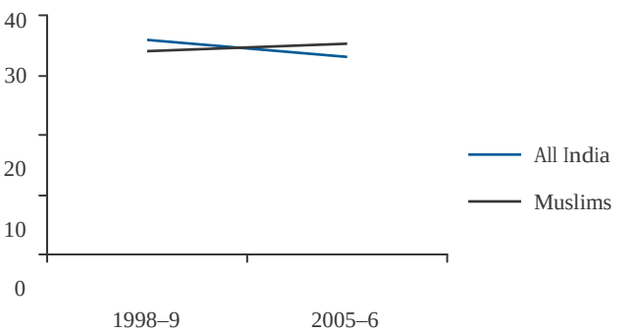

Figure 1.8 Percentage of Women with BMI < 18.5, All India and Muslims (1998–9 and 2005–6)

Source: *NFHS 2 and 3.*

Among the major states, the lowest incidence of anaemia in the age group 0–5 years was recorded in Kerala (45 per cent). Incidence of anaemia was the highest for Bihar (78 per cent), followed by Uttar Pradesh and Madhya Pradesh (74 per cent each). States which have recorded more than the national average are the poor states (with the exception of Gujarat).

Female malnutrition among the SCs and STs is higher than the national average; it is even worse amongst both these groups in the low per capita income states (Bihar and Orissa). Further, female malnutrition among SCs and STs has been increasing over the years. The highest percentage of underweight and stunted children was recorded for STs (54.5% and 53.9% respectively) followed by SCs (47.9% and 53.9% respectively). Children belonging to the STs had the highest percentage suffering from anaemia in 2005–6, followed by SCs. Among both SCs and STs, a high percentage of children suffering from anaemia hail from states with a low per capita income, namely, West Bengal, Madhya Pradesh, Uttar Pradesh, Orissa, Jharkhand, Chhattisgarh, and Bihar.

Across major religious communities, incidence of female malnutrition and children suffering from anaemia and stunting was above the national average among Muslims. States with a high concentration of India's Muslims registered a higher incidence of anaemia among Muslim children (for example, Uttar Pradesh and Bihar) compared to other states. Next, while female malnutrition has been reducing over time, it is increasing for Muslims (data between 1998–9 and 2005–6). The percentage of women suffering from anaemia, however, increased in all communities, including Muslims, in this period.

All in all, it seems that the programmes to address these problems are not having the required impact. A fundamental problem, common to many developing countries, is that hunger and nutrition require multi-sectoral interventions, and no one ministry can deal with them. Yet, the degree of coordination required to ensure multi-sectoral interventions (safe water and sanitation, functional public health services, and adequate nutritional intake of both macro- and micro-nutrients) is not yet in place, and lack of a well coordinated set of interventions has reduced their individual effectiveness. Inclusive growth, which has been a goal of the Eleventh Plan (2007–12), and will remain a goal of the Twelfth Five Year Plan (2012–17), is unachievable without hunger and malnutrition declining significantly.

HEALTH AND DEMOGRAPHY

Table 1.1 shows that health inputs impact not only health outcomes, but also knowledge and learning outcomes, family size, and nutritional status. Equally important, it also shows that greater knowledge and education positively feed back to improved health; smaller family size is an enabler for better health at household level; sanitary living conditions and hygiene improves health. These complex feedback loops are the conceptual framework for our analysis of health outcomes.

Health indicators (outcome, process as well as inputs) in India have shown improvement over the decade. However, in absolute terms, the overall situation continues to be worrisome.

Outcome Indicators

- The Infant Mortality Rate (IMR) is high at 50 per 1,000 live births (2009), Under 5 Mortality Rate (U5MR) is 64 per 1,000 live births (2009), and Maternal Mortality Rate (MMR) is 212 per 10,000 births (2008). Thus, IMR, U5MR, and MMR continue to remain well above the MDG targets despite the decline seen in recent years. Given that the nutritional status of a large section of the population is a problem, mortality is going to be high since malnutrition is considered to be the underlying cause for half of all child deaths.

Over time, these indicators for the marginalized groups like SCs/STs and Muslims are converging with the national average (Figures 1.9 to 1.11).

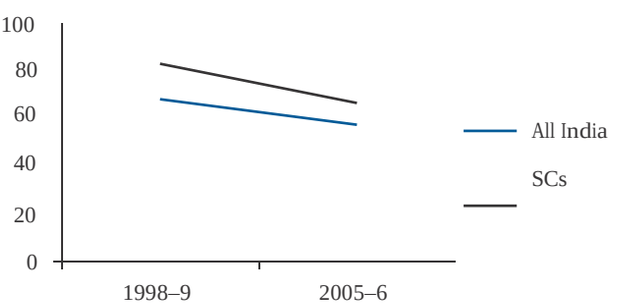

Figure 1.9 Infant Mortality Rate, All India and SCs (1998–9 and 2005–6)

Source: *NFHS 2 and 3.*

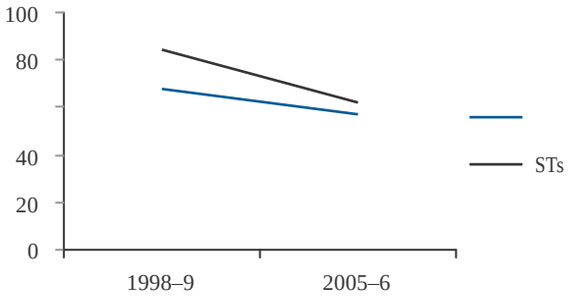

Figure 1.10 Infant Mortality Rate, All India and STs (1998–9 and 2005–6)

Source: *NFHS 2 and 3.*

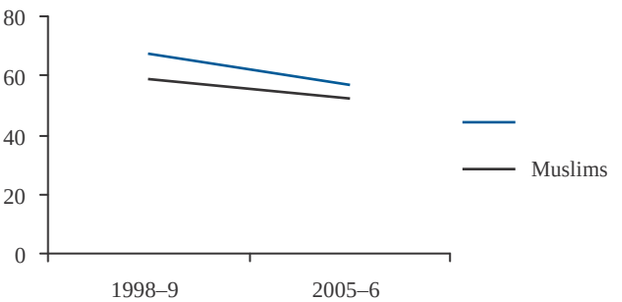

Figure 1.11 Infant Mortality Rate, All India and Muslims (1998–9 and 2005–6)

Source: *NFHS 2 and 3.*

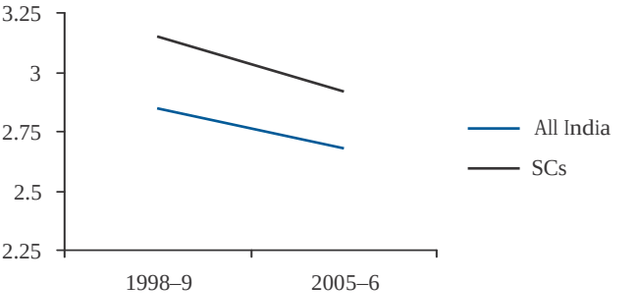

Figure 1.12 Total Fertility Rate, All India and SCs (1998–9 and 2005–6)

Source: *NFHS 2 and 3.*

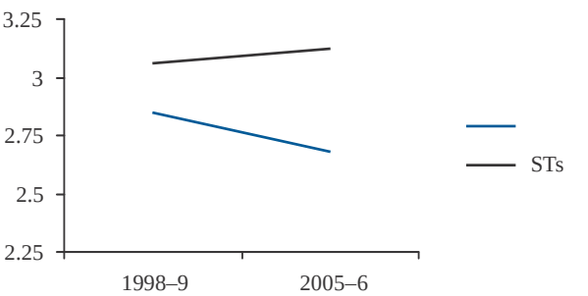

Figure 1.13 Total Fertility Rate, All India and STs (1998–9 and 2005–6)

Source: *NFHS 2 and 3.*

On the demographic outcome indicators, there is some good news:

- There has been an appreciable decline in the total fertility rate over the decade with nine of the major states reaching the replacement level of 2.1. However, while SCs and Muslims are converging with the national average, STs are seen to be diverging with respect to TFR (Figures 1.12 to 1.14).
- Gender discrimination, as shown in an adverse sex-ratio is still serious and is more pronounced in the case of non-SC/ST and Hindu households, compared to Muslims, SCs and STs. Even though the overall sex-ratio has improved from 933 females per 1,000 males in 2001 to 940 females per 1,000 males in 2011, there was a decline in child sex-ratio. Not only has the child sex-ratio (0– 6 years) declined from 927 in 2001 to 914 in 2011, it is the lowest ever (Census 2011).

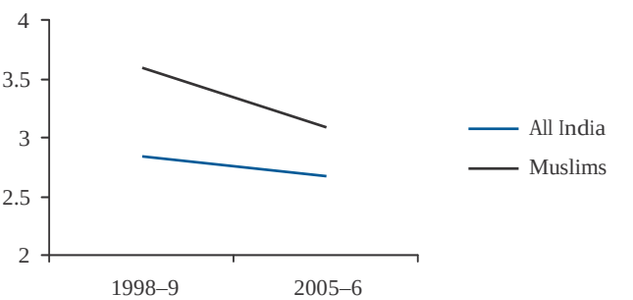

Figure 1.14 Total Fertility Rate, All India and Muslims (1998–9 and 2005–6)

Source: *NFHS 2 and 3.*

Process Indicators

- Less than 50 per cent of Indian women had institutional deliveries in 2005– 6 compared to more than 90 per cent in China and Sri Lanka. However, after

the launch of the National Rural Health Mission (NRHM) and Janani Suraksha Yojana (JSY) around 2005–6, these figures have improved remarkably, with institutional deliveries as a percentage of total reported deliveries reaching 78 per cent (March 2008).

- Only a little over 50 per cent of the households used contraception in 2005–6. Since then, contraceptive prevalence has increased among all socio-religious groups and contraceptive prevalence among minorities is converging with the national average (*NFHS 3*).
- Regarding immunization of our children, not even 50 per cent children received 'all vaccines' in 2005–6. However, there has been an increase in the percentage of ST and Muslim children receiving 'all vaccinations' over the period 1998–9 and 2005–6.

Input Indicators

- The most worrisome aspect of India's health system is that the share of public expenditure on healthcare remains consistently low at just over one per cent of GDP (1.3 per cent). Consequently, the share of private expenditure in total health expenditure in 2008 was 72 per cent compared to 53 per cent in China.
- Despite improvements in physical infrastructure and human resources in health centres due to NRHM, huge deficits exist. A shortage of Primary Health Centres, Community Health Centres and Sub-Centres, and doctors and paramedics in these health centres persists. For instance, Indian hospitals have nine beds and six physicians per 1,000 population compared to 30 and 14 per 1,000 respectively, in China. In Bihar, there is one government hospital bed for more than 4,000 patients.
- India fares the worst in terms of sanitation. Fifty per cent of the Indian households lack access to sanitation facilities and the situation is even worse in rural areas where around two-thirds of households do not have toilet facilities.
- What is commendable is that the country has been successful in providing access to safe sources of drinking water to its population, both rural and urban. More than 90 per cent of households used improved sources of drinking water in 2008–9, even in poorer states like Bihar, Chhattisgarh, Madhya Pradesh, and Uttar Pradesh.

The interstate variation in health indicators is also high. For instance, the fertility rate in Bihar, Madhya Pradesh,

Rajasthan, and Uttar Pradesh is higher than (almost double), that in Tamil Nadu, Kerala, and Andhra Pradesh, due to a greater prevalence of contraception among the latter (southern) states. Similarly, the highest IMRs are found in Uttar Pradesh, Madhya Pradesh, Orissa, and Bihar, whereas the southern states of Karnataka, Kerala, Tamil Nadu, and Andhra Pradesh have IMRs well below the national average of 50. Further, the southern states have a greater proportion of women who deliver at a health facility and more households have access to sanitation facilities compared to those in the northern states.

It is seen that certain states like Kerala, Tamil Nadu, Goa, Himachal Pradesh, Delhi, and the smaller north-eastern states consistently perform well in terms of various health indicators. This is primarily due to the state governments' interventions in the health systems; while on the other end of the spectrum are the relatively poorer states of Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, and Uttar Pradesh, which perform well below the national average in terms of health outcomes, processes, and input indicators. As stated earlier, there is a two-way relationship here, poorer states have a larger population of excluded groups; also, since disadvantaged groups form a significant proportion of the population, the states are poorer and have poorer health outcomes.

The SCs, STs, and Muslims suffer the most on account of poor health status. STs and Muslims have the highest Total Fertility Rate (TFR). Only one-third of Muslim and SC women have institutional deliveries, and ST women have even fewer. Also, only around 50 per cent of Muslim, SC, and ST women receive three or more Antenatal ANC (I), visits. The most striking shortcoming of our public health system has been the failure to reach out to the bottom of the pyramid, to the 300 million poor, who are often excluded. Given the pace of improvement on various health indicators, achieving the health related MDG targets by 2015 is unlikely. Investments in the Twelfth Plan will have to ensure that these problems are addressed. It is the relatively slow improvement between
1999–2000 and 2007–8 in the health index of the HDI that has held back the overall HDI improvement, that is, of the three component indices of HDI (income index, education index, and health index), it is the health index that has improved the slowest.

Without a healthy population, it will be difficult to realize the demographic dividend. A functional public health system will be critical to stabilizing the total population and reducing the total fertility rate further to

replacement level (2.1) in all states of India. The Indian economy must take advantage of the demographic dividend if it is to become a high-income country by the time the demographic dividend is ending (that is around 2035). Reducing fertility further and establishing a truly functional public health system for those at the bottom of the pyramid is going to be a sine qua non for realizing the demographic dividend, and the latter is essential if India is to escape the middle-income trap that many Latin American emerging market economies have remained trapped in for decades.

EDUCATION: ACHIEVEMENTS AND CHALLENGES

Within the social sector, the infl uence of education is the most widespread, and education impacts all types of human development outcomes (Table 1.1). Education (especially of the girl child) is an important input as well as an outcome indicator, infl uencing other development indicators like health, nutritional status, income, and family planning. In fact, unlike any of the other social service inputs, it impacts all types of human development outcomes—not only knowledge, but also family size, health status, nutritional status, and healthy living conditions. Remarkably, as Table 1.1 shows, there are feedback loops from each of these outcomes to education itself, which in turn become inputs into education.

The benefi ts of education, particularly girls' education, accrue from one generation to another. Among the diff erent parameters of educational attainment, literacy is the most fundamental, as it paves the way for further learning and training.

India has achieved historically high levels of enrolment and has been able to retain more students at the primary levels than ever before. Programmes such as Sarva Shiksha Abhiyan (SSA), the Mid-day Meal programme and the tireless eff orts made by civil society have all contributed to this achievement. The resulting improvement in the mean education index that has led the HDI from the front, that is, it has increased between 1999–2000 and 2007–8 at a rate faster than the health and income index as well as the HDI.

On the downside, despite considerable improvement in the literacy status, India is home to the largest number of illiterate people in the world, accounting for about one-third of all illiterates. Since the dropout rates at the primary level remain high, the number of illiterate (or almost illiterate) could be rising. This is because children who do not complete a minimum of fi ve years of schooling are unlikely to retain literacy or numeracy skills in their adulthood. The problem of illiteracy was more acute in rural areas, particularly among rural females, 43 per cent of whom were illiterate in 2007–8.

Literacy rate in India has improved from 64.8 per cent in 2001 to 74 per cent in 2011. Recently, female literacy has shown considerable improvement by nearly 50 per cent from 224 million in 2001 to 334 million in 2011. The declining trend in overall population growth can be an indirect consequence of rising female literacy level.

Across social groups and religious communities, the problem of illiteracy in both rural and urban areas was most pronounced among SCs, STs, and Muslims, and relatively more pronounced among females. In rural areas, close to 60 per cent females belonging to the SCs and STs were illiterate in 2007–8. The literacy rate in urban areas is higher than that in rural areas; however, over the years the rural-urban literacy gap has declined from 24 percentage points in 1999–2000 to 17 percentage points in 2007–8. The good news, all the three groups (SCs, STs, and Muslims) have been converging towards the national average in terms of literacy rate (Figures 1.15 to 1.17).

Even though enrolment and attendance in schools have improved over the years, their declining trends at progressively higher levels of education, which was a common feature (albeit in varying degrees) across all social groups and religious communities, suggests that quality issues remain very serious in the school education system. Further, despite attaining internationally comparable level of the Gender Parity Index, less than half of the girls be- longing to Muslims and Other Backward Classes (OBCs) were enrolled at primary and upper-primary levels.

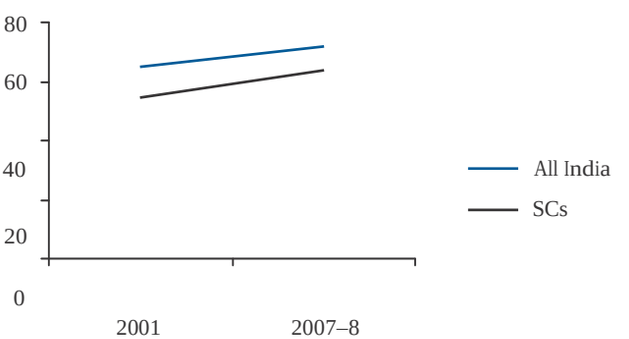

Figure 1.15 Literacy Rate, All India and SCs (2001 and 2007–8)

Source: Census 2001 and NSS 64th Round.

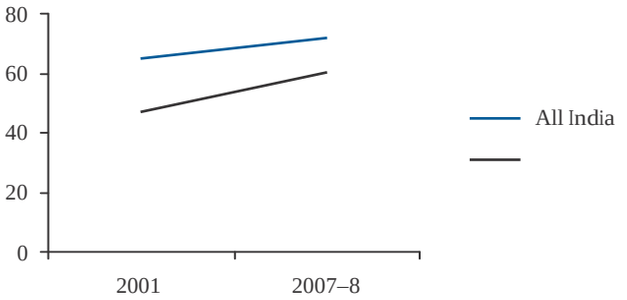

Figure 1.16 Literacy Rate, All India and STs (2001 and 2007–8)

Source: Census 2001 and NSS 64th Round.

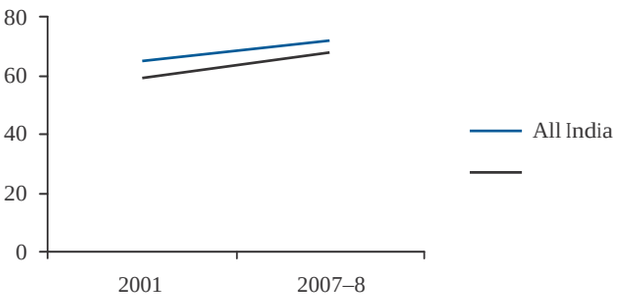

Figure 1.17 Literacy Rate, All India and Muslims (2001 and 2007–8)

Source: Census 2001 and NSS 64th Round.

On the whole however, the gender gaps in education at all levels, which have traditionally been the bane of Indian society, are being bridged.

Non-performance in government schools, plagued by various problems like teacher shortage and absenteeism and lack of infrastructural facilities, have paved the way for the establishment of private unaided institutions. The fee structure in these institutions is generally much higher than in government and local body institutions. This acts as a deterrent against participation in school education, which in turn, tends to widen the extant inequality. Not surprisingly, therefore, close to one-fifth of the children in the age group 6–17 years were out of school (as per data pertaining to 2007–8), financial constraint being an important reason.

The proportion of out of school children is higher among SCs, STs, and Muslims who are the most vulnerable amongst the different socio-religious groups. The proportion of school teachers belonging to these socio-religious groups is also low compared to their share

under-representation of teachers belonging to these socio-religious groups creates a social distance between teachers

ers have limited commitment towards the educational development of their students.

An important feature of the education system in India is that, despite several programmes being implemented by the Government, public expenditure on education is still quite low at 3.2 per cent of the Gross National Product (GNP). This share is not less than 5 per cent of GDP in any Organization for Economic Cooperation and Development (OECD) country, despite the fact that

ago. Unfortunately, our public expenditure is lower than that in Sub-Saharan Africa, a region known for its low human development indicators. Thus, the combination of low public expenditure on both health and education has

human development levels.

increasing participation of private institutions in imparting education, results in the alienation of the deprived and economically weaker sections from the education system. This issue, however, is receiving high priority with the enactment of the Right to Education (RTE) Act. The Act emphasises both access and quality, in addition to the

'rights'

component.

The high incidence of poverty, and low participation in school education and higher education, feed into each other. Establishing publicly funded educational institutions and pro-active policies alone can break this vicious cycle as they can ensure greater participation from among the economically disadvantaged communities. At the same time, there is need for a large number of private institutions for higher and technical education as with growing enrolment in secondary education, there will be a growing demand for both public and private provision in higher education.

SUPPORTING HUMAN DEVELOPMENT: HOUSING, ELECTRICITY, TELEPHONY, AND ROADS

In addition to health (which includes drinking water and sanitation) and education systems, the other critical aspects of social infrastructure are housing, electricity, roads, and telephony. Improving the quality of human

resources and the standard of living, electricity, roads, and proper housing, all result in providing stimulus to growth and human capability enhancement. The provision of these reinforces the state's commitment towards the populace, especially in rural areas where there is limited support infrastructure.

State-wise analyses of *housing* conditions, access to electricity, telephony, and road connectivity highlight the fact that the lack of access to such facilities in Bihar, Jharkhand, Uttar Pradesh, Orissa, and Rajasthan reinforces poverty and is also reflected in poor health and education outcomes. In contrast, states like Kerala, Delhi, and Goa have a lower incidence of poverty and better infrastructure to the extent that even the SCs and OBCs in these states perform better than the all-India average for the general castes. For instance, a higher percentage of SC and OBC households in Delhi, Andhra Pradesh, Tamil Nadu, and Kerala live in *pucca* (permanent) houses and have better access to electricity compared to the general castes in some states. Union Territories in general fare better in terms of support infrastructure.

Around two-thirds of Indian households lived in pucca houses in 2008–9. This implies that there is still some way to go before the unhealthy and unsustainable living conditions of people are fully taken care of. The situation is worse in rural India where 45 per cent of the households live in either *kutcha* (temporary) or semi-pucca houses. On the flip side, there has been an increase in the proportion of pucca houses between 2002 and 2008–9 for both urban as well as rural households.

Poorer states like Bihar, Jharkhand, Orissa, Chhattisgarh, and Uttar Pradesh have the lowest share of households living in pucca houses. The north-eastern states in general have a higher proportion of households living in kutcha and semi-pucca houses.

One-third STs and around half of SCs reside in pucca houses, compared to 66 per cent for all India. Over time, SC and ST households, due to a slower pace in improvement, have experienced a growing divergence from the national average of households residing in pucca houses. Also, a greater proportion of Muslims compared to SCs/STs live in pucca houses, perhaps because a higher proportion of Muslim households live in urban areas.

The lack of *electricity connections* remains a major hurdle in the development prospects of poorer states like Uttar Pradesh, Bihar, Jharkhand, Orissa, and Assam. However, India has seen an increase in the proportion of households having electricity connections from 64 to 75 per cent between 2002 to 2008–9. However, about one-third of the rural households still do not have access to electricity for domestic use.

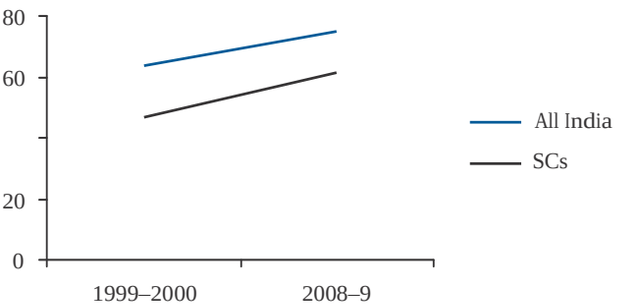

Figure 1.18 Percentage of Households with Electricity, All India and SCs (2002 and 2008–9)

Source: NSS 58th and 65th Rounds.

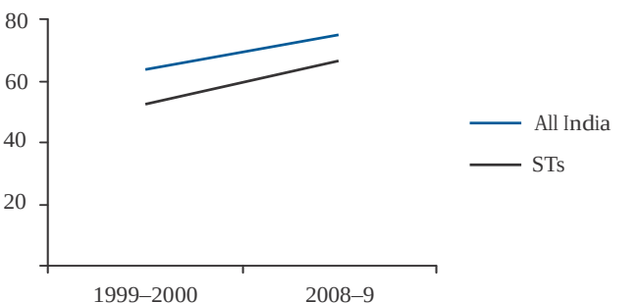

Figure 1.19 Percentage of Households with Electricity, India and STs (2002 and 2008–9)

Source: NSS 58th and 65th Rounds.

In terms of using electricity for domestic purposes, the SC and ST households are steadily coming closer to the all India average (Figures 1.18 and 1.19). Additionally, a higher proportion of Muslim households now have access to electricity for domestic use.

There has been a remarkable improvement in *teledensity* in the last two to three years. Teledensity increased from 26 per cent in 2008 to 66 per cent as on December 2010. What is to be appreciated is that teledensity has increased for both rural and urban areas, from 10 per cent to 31 per cent and 66 per cent to 148 per cent, respectively, in the same period. There has been a remarkable increase even in the rural areas of the poorer states of Bihar, Madhya Pradesh, Orissa, Rajasthan, and Uttar Pradesh.

Inadequate *road connectivity* continues to be a major hurdle for poor families, affecting their access to markets,

hospitals and schools, especially in rural areas. However, progress has been rapid. At the national level, the total road length per 100 square kilometres has increased consistently—from about 45 kilometres in 1981 to 61 kilometres in 1991 to 81 kilometres in 2004. Kerala has the highest road length per 100 square kilometres of area. However, over 40 per cent of the roads are un-surfaced or kutcha roads, which is a serious constraint to mobility. The government initiated the Pradhan Mantri Grameen Sadak Yojana (PMGSY), focussed on rural roads, to address this situation. A lot has been achieved under this programme, especially in the poorer states.

VULNERABLE GROUPS

Chapter 8 throws light on the current conditions and development in the last decade of the three main vulner- able groups, that is, child labourers, the disabled, and the elderly. From a human rights perspective, all citizens should receive adequate health, education, food and nutrition, housing, participation, equal treatment, and freedom from discrimination and violence. However, these groups are often marginalized, overlooked in the public delivery system, and also subject to multidimen- sional problems whose underlying factors are intertwined. When persons from these three groups belong to the excluded communities (for example, SCs or STs), they suff er from double jeopardy. For example, the incidence of child labour among ST groups is twice as high as for upper caste children.

Child Labour

A redeeming feature is that the magnitude of child labour has sharply dipped in the decade 2000– 10. However, the problem of children who are shown in the records as neither working nor studying (the so-called ' nowhere children') is still very large; in fact, four times as large as the number of children who are working.

Boys are traditionally economically more active in the labour market than girls, though girls are now entering the labour market in larger numbers. This problem is more acute among STs and in rural areas. Across religious groups, Muslims have the highest incidence of child labour, and the pace of decline in child labour is also the slowest among them.

Child labour is more prevalent in rural areas than in urban areas and higher among boys than girls, but both the rural– urban gap and gender disparity have been falling in recent times. Uttar Pradesh and Andhra Pradesh are two states with some of the highest child labour rates. The problem of nowhere children (NWC) is acute in the states of Bihar, Jharkhand, Rajasthan, and Uttar Pradesh.

Working children must be withdrawn from work and parents need to be given incentives to encourage them to be sent to schools. For the NWC, there is need for a variety of collaborative policies between parents and the school to encourage them to join schools.

The Disabled

Official estimates of disability are low (around 2 per cent), while other estimates using more inclusive defi nitions suggest a higher incidence of disability (of at least 5– 8 per cent, that is, around 55– 90 million individuals). Locomotor disability is the highest, followed by visual and hearing disability. Disability from accidents and non-communicable diseases has been rising of late.

There is a high prevalence of disability in rural areas and among males, with variation across states. The prevalence is low among north-eastern states.

Estimates show that there is a huge demand for trained personnel in handling the problems of the disabled, but the supply is scarce. Estimates also indicate the shortage of a large number of trained teachers in addition to limited facilities.

The disabled population is underprivileged in terms of education and employment opportunities. In India, nearly 55 per cent of the disabled are illiterate against 35 (based on Census 2001) per cent for the general population. Similarly, the share of out of school disabled children is around fi ve-and-a-half times the general rate. In other words, of all the socially excluded groups in Indian society, the disabled are the most vulnerable.

Only 26 per cent of the disabled persons in the working age group are employed. In the case of disabled women, this ratio is only 10 per cent. Only 3 per cent of the disabled population has regular jobs. Likewise, the share of disabled persons in public sector jobs and in multinational corporations (MNCs) is minimal (that is, 0.44 and 0.05 per cent, respectively).

The Elderly

India has a special window of opportunity in its development process, which is open till 2035, in terms of having the youngest population of the world, best known as the demographic dividend. Meeting the human development defi cit of this youthful population is one important

concern of this HDR. At the same time, the rapidly increasing aged population is a gently ringing alarm bell warning of an impending problem. The increasing 'Old Age Dependency Ratio' is the indicator of the problem. India now has the second largest aged population in the world, which is increasing at a higher rate than the overall population growth in the country. The increase is relatively higher in urban areas, which has resulted in a declining rural–urban gap. Similarly, a quick jump in the proportion of the elderly female population has resulted in an increased gender gap, that is, there are more elderly females now than elderly males. In fact, there are 40 million widows in India, whose living conditions and exploitation makes them one of the most vulnerable groups of India's population.

In addition, the percentage of elderly persons working, particularly women, is declining; and a large number of elderly people are not covered under any pension scheme, which has made conditions worse for the aged population of India. In India, only about one in ten workers are covered by a formal pension scheme. Hence, the reliance of the elderly on transfer incomes, particularly on subsidies and transfer of public money, is expected to grow. Keeping in view the upcoming challenge, the Government of India recently launched a pension scheme called 'Swavalamban' for the workers in the unorganized sector. It is hoped that schemes such as this will be expanded, and provide succour to the people.

Human development levels have historically been low in India owing to social, economic, and other inequalities that the country inherited. However, sustained efforts made in the post Independence period have gradually, though definitively, begun to show results. With higher economic growth this process has picked up speed, but the path ahead is thorny and challenging. Among the key policy initiatives now required are increased inputs in social and physical infrastructure to strengthen human attainments and empowerment, and providing a voice to the hitherto voiceless. Additionally, the country needs to provide many more job opportunities to the growing workforce, which will help income distribution across regions and classes, and also empower the populace both socially and economically.

2

Human Development Index

INTRODUCTION

The *raison d'être* of development is to improve the quality of people's lives by creating an environment for them to engage in a wider range of activities, to be healthy and well nourished, to be knowledgeable, and to be able to participate in community life. Sen (1985) calls these 'basic functionings'. However, aspects like democracy and freedom to participate in local level government decisions that impact our lives, and freedom from fear, which Sen refers to as 'complex functionings', are equally important dimensions of an individual's capability set. More practically, development is about removing obstacles to what a person can do in life: illiteracy, ill health, lack of access to productive (and consumptive) resources, or lack of civil and political freedoms.

Following this approach, the global Human Development Reports brought out by United Nations Development Programme (UNDP) since 1990 have focused on various dimensions of human development: reduction in income poverty, spreading education and primary healthcare, providing safe water to all, reducing malnutrition, raising human security (freedom from fear, freedom from want, safety from chronic threats such as hunger and disease, and repression as well as sudden and harmful disruptions in the patterns of daily life), preserving human rights, sustainable development, cultural liberty, international cooperation, enabling migration, reducing water scarcity, and improving political freedom.[1] These concepts are intrinsic to the formation of human capital in addition to income growth and thus economic development. Development thinking has been changing over time: it began with equating growth and development, moving on successively to the role of human capital, the functioning of markets and policies, and the critical role of institutions (UNDP 2010). However, education, health, and income have remained the three core indicators used for defining the Human Development Index in all the reports.

For a nation to achieve sustainable growth, it is essential to ensure human development because it aims at enlarging people's choices and enhances their power to participate actively in the development process. Without *capabilities* a country's population would fail to realize the benefits of income. In other words, assessing only the material dimension of life while leaving out the overall quality of life that people enjoy, presents a one-dimensional measure of development. In order to have a multidimensional measure, it is important to focus on the ability of people to do or achieve certain 'functionings'.[2]

Knowledge, ability to learn, and to live a long and healthy life are essential inputs that enhance human capabilities. However, this is not to negate the significance of income, which is essential for achieving the 'functionings' and expanding people's freedom. Thus a

[1] These have been some of the subjects of different Human Development Reports of UNDP since its inception.
[2] The word 'functionings' has been used in the literature after the seminal work of Amartya Sen (see, Sen 1988).

measure of human development must include all the three dimensions—knowledge and ability to learn, a long and healthy life, and a decent standard of living. The Human Development Index (HDI) is one such composite outcome index which looks at achievements in outcome indicators in these three dimensions. It essentially involves constructing three indices which capture these dimen- sions—the Education Index, the Health Index, and the Income Index—and then aggregating them.

The global Human Development Report (HDR) categorizes and ranks countries by low, medium, and high values of the HDI. In the 2010 Report, India with an index value of 0.512, is placed 119th among 192 countries, and is categorized at medium level. The 2010 Report recognizes that India is among the top 10 movers in gross domestic product (GDP) growth. However, there are concerns that despite high growth rates, many people are being left out of India' s growth story and in- equality is on the rise. According to UNDP (2010), ' after adjusting for inequality, the HDI value for the country falls to 0.365, implying a loss of 30 per cent in the HDI value' . Further, it is disheartening to note that between
2005 and 2010, the country has moved only one notch higher in the HDI ranking (from 120 to 119). India became a low-middle-income country from being a low-income country in 2007. However, there is still a lot to achieve on the components of human development other than aggregate income to match other middle-income countries.

India' s position on the HDI scale is equivalent to the South Asian average and is better than the Sub-Saharan Africa' s average, where the HDI is 0.389. In South Asia, India stood third, behind Sri Lanka and Maldives. Sri Lanka had a HDI of 0.658, the highest in South Asia. The comparison with Sri Lanka and Maldives is not strictly valid, since Sri Lanka has a population smaller than a small state like Kerala, which has health and education indicators comparable to that of Sri Lanka. Among the BRIC countries (Brazil, Russia, India, and China) India appears at the bottom on the HDI scale (Table 2.1). This is a partly due to the fact that while the rest of the BRIC group has had middle-income country level GDP per capita for some time, India became a low-middle income country only recently. In addition, India' s health and education indicators have also been historically much lower than the other BRIC countries.

The concept of the HDI is defi ned in the next section. Then the demographic profi le of India, along with the rates of growth for some of the states is discussed. The states are then ranked according to human development, health, education, and income indices in the next section on. The last section highlights the performance of 22 major states on various human development indicators.

Table 2.1 HDI Ranking for Different Regions and Countries across the Globe

Region/ Country	*HDI Value*	*HDI Rank*
South Asia	0.516	
Sub-Saharan Africa	0.389	
India	0.519	119
Afghanistan	0.349	155
Bangladesh	0.469	129
Maldives	0.602	107
Nepal	0.428	138
Pakistan	0.490	125
Sri Lanka	0.658	91
Brazil	0.690	73
China	0.663	89
Russia	0.719	65

Source: UNDP (2010).

CONCEPTUALIZING THE HUMAN DEVELOPMENT INDEX

One purpose of this Report is to capture the progress in human development at the state level in India. In order to do this, three indices are constructed—the Health Index, the Education Index, and the Income Index. The Health Index is constructed using life expectancy at birth, which is indicative of a long and healthy life and is the most comprehensive indicator of the state of health of the pop- ulation. A person with a long and healthy life span is also able to convert achievements into ' functionings' . In addi- tion to good health, a person must be educated in order to enhance his capabilities. To construct the Education Index, the two indicators used are ' adjusted mean years of schooling' and ' literacy rate for population 7 years and above' . These indicators are expected to refl ect people' s ability to acquire education and knowledge, which are important components of human development (Table
2.2). The global HDR of 2010, however, constructs the

Table 2.2 Comparison between Indicators in *NHDR 2001* and *IHDR 2011*

Index	*NHDR 2001*	*India HDR 2011*	*Global HDR 2010*
Health	Life expectancy at age 1 Infant mortality rate	Life expectancy at birth	Life expectancy at birth
Education	Literacy rate (7 years and above) Intensity of formal education	Literacy rate (7 years and above) Adjusted mean years of schooling	Mean years of schooling Expected years of schooling
Income	Inequality adjusted per capita real consumption expenditure	Inequality adjusted per capita real consumption expenditure	Gross National Income per capita (US$)

Source: Planning Commission (2002) and UNDP (2010).

Education Index using ' mean years of schooling' and
' expected years of schooling' .

The third dimension, that of standard of living, determines people' s command over resources necessary to
access food, shelter and clothing, and permit much broader options such as working in meaningful and rewarding activities, or spending more time with loved ones (UNDP 2010). To construct the Income Index, the mean per capita expenditure (at 1999– 2000 prices) weighted by the Gini coefficient of inequality of consumption expenditure is taken for each state. Box 2.1 below discusses in greater detail the computation of HDI along with its three component indices.

The calculation of HDI in this Report diff ers from that in the *National Human Development Report* (NHDR) *2001* and that in the global HDR 2010. Table 2.2 highlights the diff erence in indicators chosen for constructing HDI in this Report, compared to *NHDR 2001* and global HDR 2010. For this reason, the HDI values and ranks for states cannot be compared across the two NHDRs. The methodology for constructing the HDI is outlined in detail in the Technical Appendix.

Box 2.1 Calculating the Human Development Index

Human Development Index (HDI) is a simple average of three indices in diff erent dimensions.

HDI = 1/3 (Health index + Education Index + Income index)

where each index is calculated as:

$$Dimension\ Index\ of\ X_i = \frac{Observed\ Value\ of\ X_i - Min\ X_i}{Max\ X_i - Min\ X_i}$$

Health Index

The Health Index has been calculated using life expectancy at birth for the years 2000 and 2008.

Data source: SRS, Report of the Technical Group on Population Projections 2001–26 (*for projected levels of life expectancy at birth*)

Education Index

The Education Index is a weighted simple average of literacy and adjusted mean years of schooling.

Education index = 1/3 (literacy index) + 2/3 (adjusted mean years of schooling index)

where Literacy Index = Literacy rate of 7+ population

Adjusted mean years of schooling index = Average number of years of school education for 7+ population, adjusted for out of school children in the school going age group 6– 17 years.

Income Index

Per capita consumption expenditure adjusted for infl ation and inequality (Gini coefficient).

Data Sources: NSS 1999– 2000 and 2007– 8.

India Human Development Report 2011 has used life expectancy at birth instead of life expectancy at age one and Infant Mortality Rate (IMR) for constructing the Health Index. Life expectancy at age one abstracts out the impact of IMR from life expectancy at birth. In addition, the correlation between life expectancy at birth and at age one is as high as 0.98. Therefore, in this Report life expectancy at birth, for which more recent data was available, was used in the construction of health index. Also, since the National Council of Educational Research and Training (NCERT) School Educational Survey's latest round was not available, mean years of schooling using National Sample Survey (NSS) data for 2007–8 (which provides data on level of education—primary, secondary, and so on rather than class-wise data as provided by NCERT) has been used for calculating the Education Index for both periods.

DEMOGRAPHIC PROFILE OF INDIA

A unique feature of this Report is its focus on social inequalities extant in the country. An attempt is made here to discuss how inclusive has been India's development process.

The analysis of social groups—Scheduled Castes (SC), Scheduled Tribes (ST), and Other Backward Classes (OBC)—deserves special mention for a country where 71 per cent of the population is classified as SCs, STs, or OBCs (Table 2A.1). Similarly, the four major religious communities—Hindus, Muslims, Christians, and Sikhs—comprise 99 per cent of the country's population (Table 2A.3).

The Report analyses distribution of social and religious groups within and across states in 2007–8 (Tables 2A.1 to 2A.4).

The distribution of SC population shows that within the states, SCs have the highest share (37 per cent) Punjab. In states like West Bengal, Himachal Pradesh, Delhi, Uttar Pradesh, and Haryana, SCs account for one-fourth of the population. However, when looked at distribution of SC population among states, it is found that 60 per cent of the country's SCs are concentrated in Uttar Pradesh (which accounts for 17 per cent of total

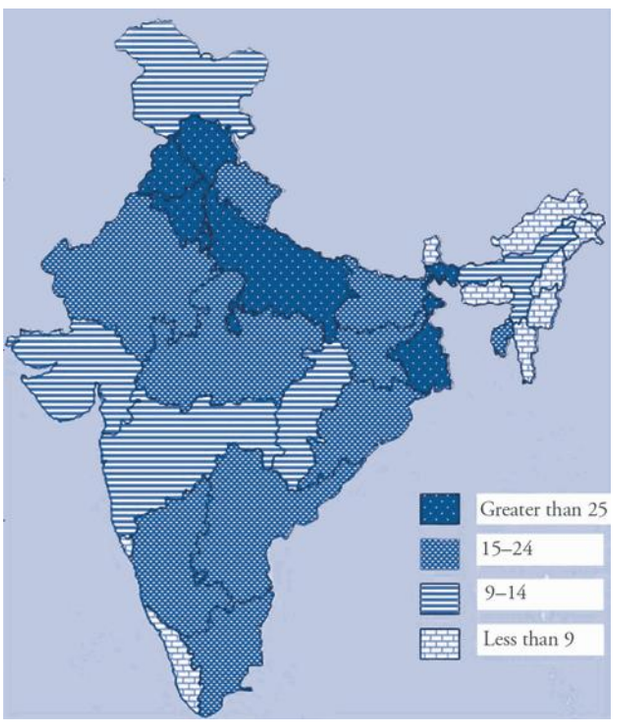

Figure 2.1 Distribution of SC Population within States, 2007–8 (per cent)

Source: Appendix Table 2A.1.

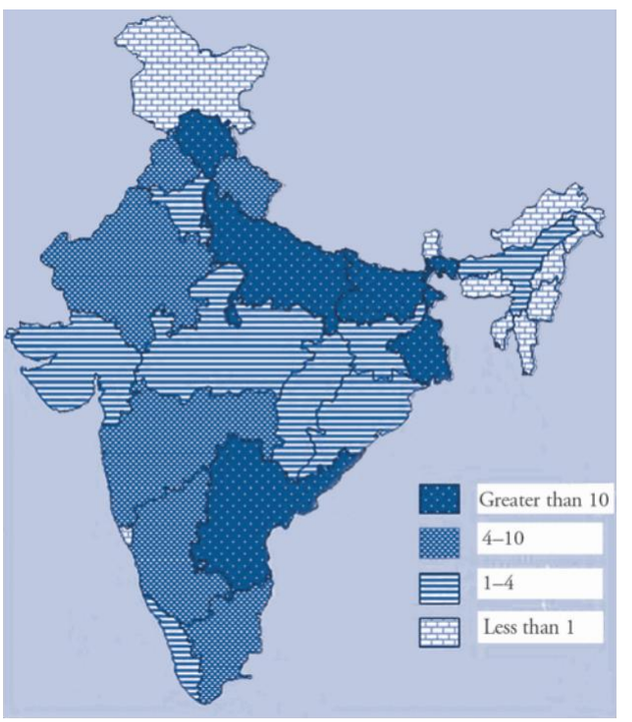

Figure 2.2 Distribution of SC Population among States, 2007–8 (per cent)

Source: Appendix Table 2A.2.

SCs in the country), Bihar, Andhra Pradesh, West Bengal, Tamil Nadu, and Rajasthan (Figures 2.1 and 2.2).

The distribution of ST population shows that high percentage of ST population resides within the north-eastern states. For instance, in Mizoram, Nagaland, Meghalaya, and Arunachal Pradesh more than 70 per cent of the population is ST. However, the distribution of STs in the country shows that 76 per cent of the STs are concentrated in eight states—Gujarat (which accounts for 12 per cent of country's ST), Madhya Pradesh, Chhattisgarh, Orissa, Jharkhand, Rajasthan, Andhra Pradesh, and Maharashtra (Figures 2.3 and 2.4).

Fifty six per cent of the population in Jammu and Kashmir are Muslims and in states like West Bengal, Assam, and Kerala more than 24 per cent of the residing population are Muslims. However, 71 per cent of the country's Muslim population is concentrated in Uttar Pradesh (which accounts for 19 per cent of all Muslims in India), West Bengal, Bihar, Maharashtra, Assam, Andhra Pradesh, and Kerala (Figures 2.5 and 2.6).

Thus, it is seen that there is a geographical concentration of these social groups in some states. Almost half of each of the three major social groups (SC, ST, and OBC) lives in eight of the poorer states, namely, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh, and Uttarakhand. Forty-four per cent of the country's Muslim population also lives in these states. The analysis of these states should thus in- clude a scrutiny of the status of various social and religious groups therein.

The Report tries to assess which way the relationship runs, that is, whether the poor human development outcomes of the population in the relatively poorer states can be attributed to the lack of resources and services infrastructure; or is it the high concentration of the historically excluded social groups (who are generally poorer) in these states that pulls down the average human development outcomes for these states.

Table 2.3 shows the socio-economic and demographic profi le of the eight poorer states as per the Planning Commission's estimates. Nearly 48 per cent of all SCs in the country live in these states as do 52 per cent of the STs and 44 per cent of the Muslims. This issue of the social composition of the states will fi nd place in the rest

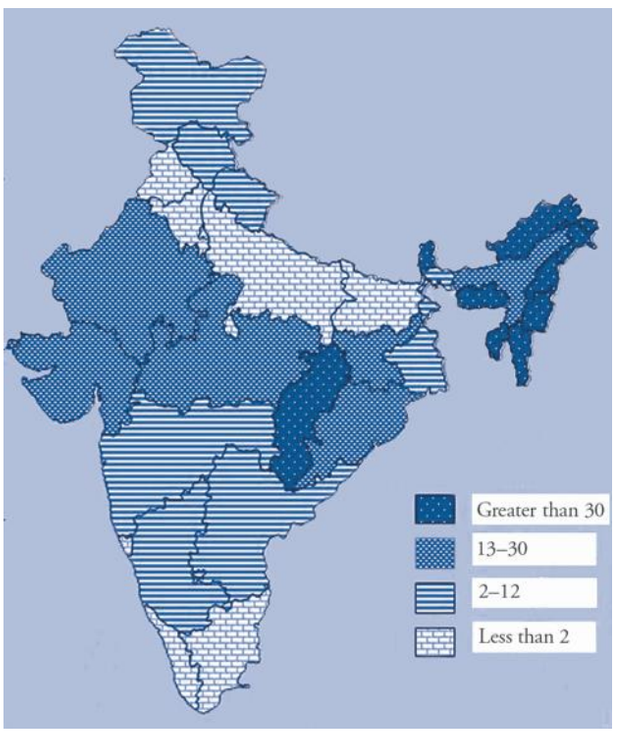

Figure 2.3 Distribution of ST Population within States, 2007–8 (per cent)

Source: Appendix Table 2A.1.

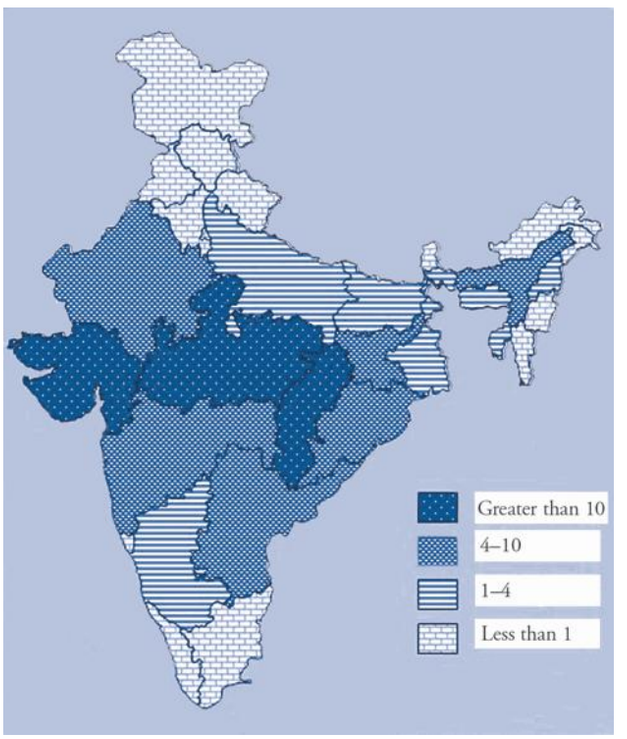

Figure 2.4 Distribution of ST Population among States, 2007–8 (per cent)

Source: Appendix Table 2A.2.

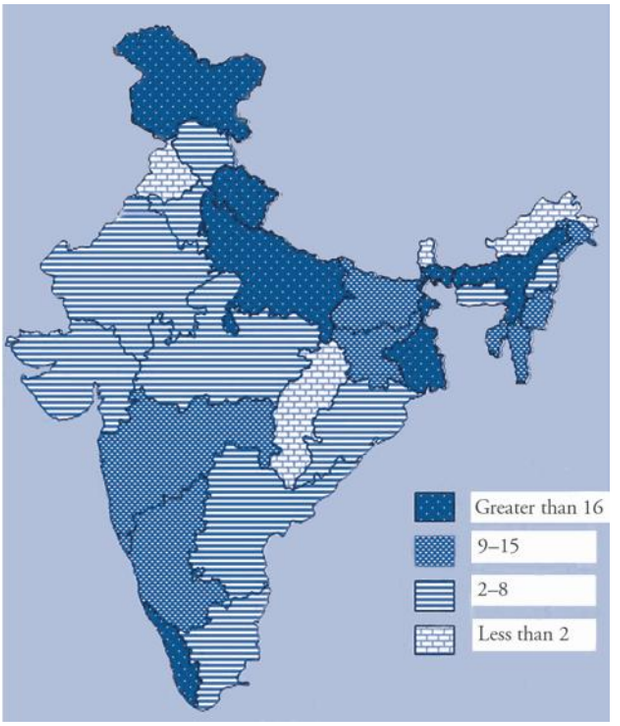

Figure 2.5 Distribution of Muslim Population within States, 2007–8 (per cent)

Source: Appendix Table 2A.3.

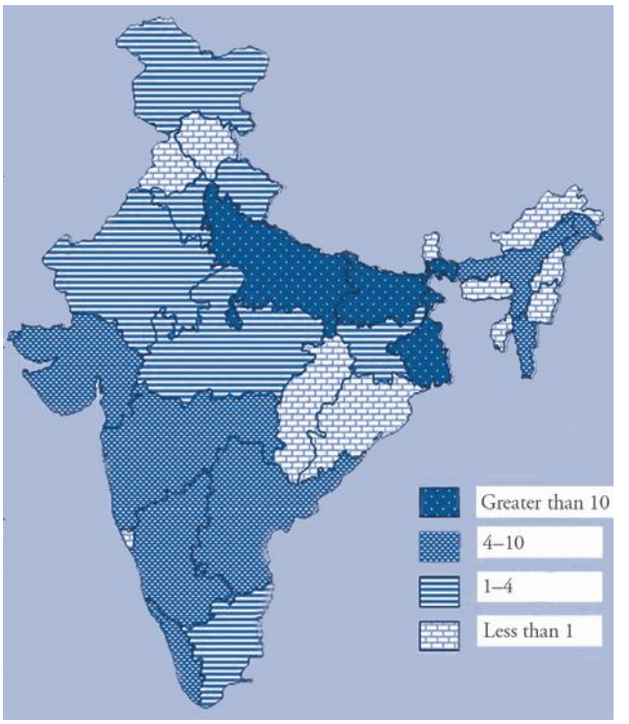

Figure 2.6 Distribution of Muslim Population among States, 2007–8 (per cent)

Source: Appendix Table 2A.4.

Table 2.3 Socio-economic and Demographic Profile of Eight Poor States

State	*Proportion of population across States*				*Per capita NSDP* compound annual Growth rate (1999–2000 to 2007–8)*	*Incidence of poverty (2004–5)*
	SCs	*STs*	*OBCs*	*Muslims*		
Bihar	11.7	1.2	16.6	13.4	4.5	41.4
Chhattisgarh	1.6	10.0	2.3	0.2	6.6	40.9
Jharkhand	3.8	9.6	3.0	3.4	4.8	40.3
Madhya Pradesh	3.9	11.1	4.3	2.4	1.6	38.3
Orissa	3.4	9.7	3.1	0.6	6.9	46.4
Rajasthan	5.6	8.7	6.5	3.5	4.5	22.1
Uttarakhand	0.9	0.2	0.4	1.2	7.00	39.6
Uttar Pradesh	17.0	1.2	16.3	19.2	2.6	32.8
Sub-Total	47.8	51.7	52.4	43.9		
All-India					5.6	28.3

Source: NSS 64th Round, Planning Commission (2008) and *Economic Surveys 2009–10.*
Note: *at 1999–2000 prices.

of the chapter, and especially in the 'State Profiles', which examine how well these marginalized communities are doing on various human development indicators, relative to the overall state average for that indicator. The profiles also examine how the excluded communities are doing compared to the national average on various indicators.

HUMAN DEVELOPMENT SEEN THROUGH INDIVIDUAL INDICATORS

As we noted in Chapter 1, human development outcomes are a function of economic growth, social policies, and poverty reduction strategies. To achieve faster economic growth, there is need to enhance human capabilities. Investments in health and education can enhance human 'functionings', which in turn promote economic growth and reduce (income) poverty. The states that perform better on health and education outcomes are also the states with higher HDI and thus higher per capita income. Figure 2.7 shows that most of the states that are performing low on human development outcomes are concentrated in the northern and central belt.

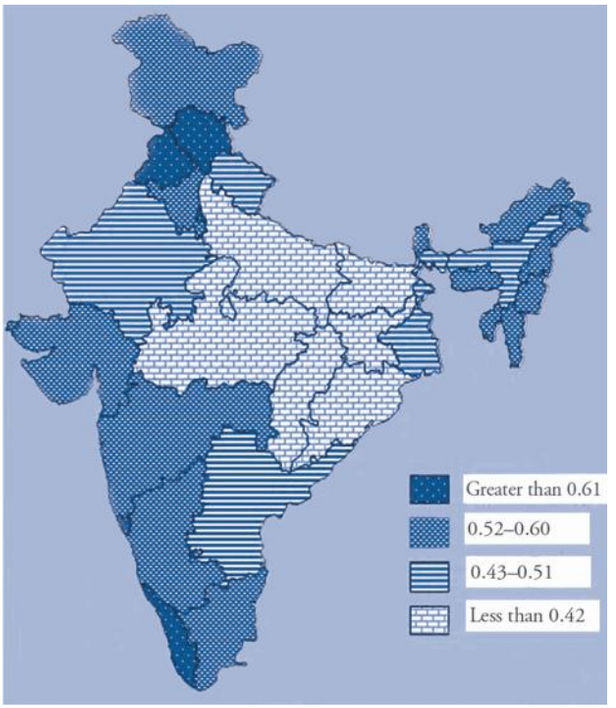

Figure 2.7 Human Development Index across States, 2007–8

Source: Appendix Table 2A.5.

The estimate of the all India HDI for the latest year for which data is available (that is, 2007–8) is 0.47 (if this is lower than the UNDP estimate in the global HDR 2010, it is primarily because they are using Gross National Product (GNP) per capita, which is inevitably higher than the consumption expenditure used by us to estimate the Income Index). As expected, the highest HDI (0.79) is for Kerala, followed by Delhi and Himachal Pradesh. Fourteen states and the north-eastern states (excluding Assam) have an HDI higher than the national average, that is, Andhra Pradesh, Uttarakhand, West Bengal, Karnataka, Gujarat, Jammu & Kashmir, Haryana, Tamil Nadu, Maharashtra, the north-eastern states excluding Assam, Punjab, Goa, Himachal Pradesh, Delhi, and Kerala, listed here in ascending order of HDI (Figure 2.8). Eight states (Chhattisgarh, Orissa, Bihar, Madhya Pradesh, Jharkhand, Uttar Pradesh, Rajasthan, and Assam), again listed in ascending order, have an HDI value below the national average of 0.47. Except for Rajasthan, these are also the states with a low Income Index (as will be seen later), reflecting a lower standard of living.

Figure 2.9 shows the change in HDI which has occurred between 1999–2000 and 2007–8. There has been a 21 per cent increase in the HDI value over this eight-year period.

What is remarkable is that for five of the low HDI states the improvement in HDI is considerably above the national average. These are Bihar, Andhra Pradesh, Madhya Pradesh, Orissa, and Assam. Even for a poor state like Uttar Pradesh the change in HDI is similar to the change that has occurred at the all India level. Among the poorer states, only West Bengal and Rajasthan have shown an improvement in HDI below the national average during the period 1999–2000 to 2007–8. All the other states that have shown an increase lower than the national average are relatively well-off states, suggesting a base-effect phenomenon. Thus, despite low absolute levels of HDI, there is a convergence in HDI across states over time.

Table 2.4 shows that the ranking of states by level of HDI has remained almost the same over the decade of the 2000s despite the huge differentials in percentage change in HDI. In fact, the rank correlation between the ranking of states by HDI in 1999–2000 and in 2007–8 is extremely high (0.97). The top five ranks in both the years go to the better performing states of Kerala, Delhi, Himachal Pradesh, Goa, and Punjab. At the other end of

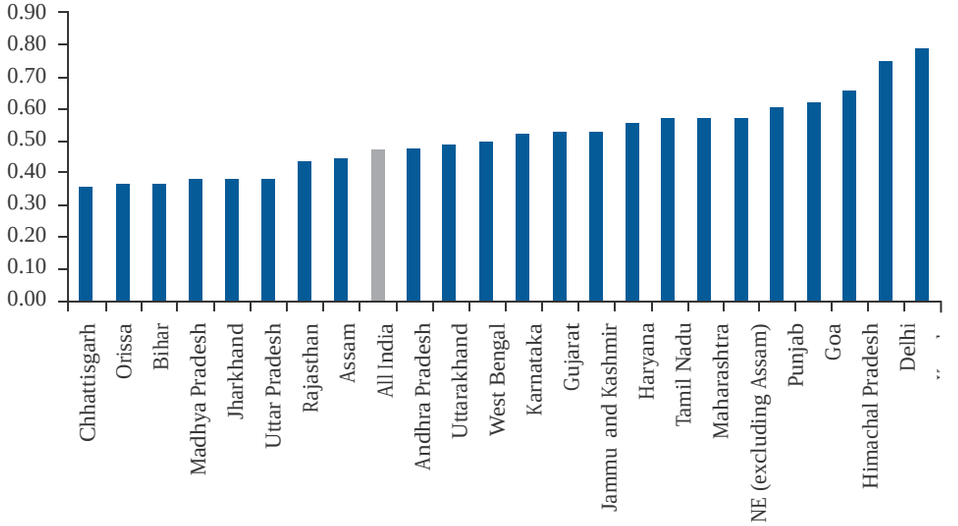

Figure 2.8 Indian States Ranked with respect to HDI in 2007–8

Source: Authors' calculations based on Appendix Table 2A.5.

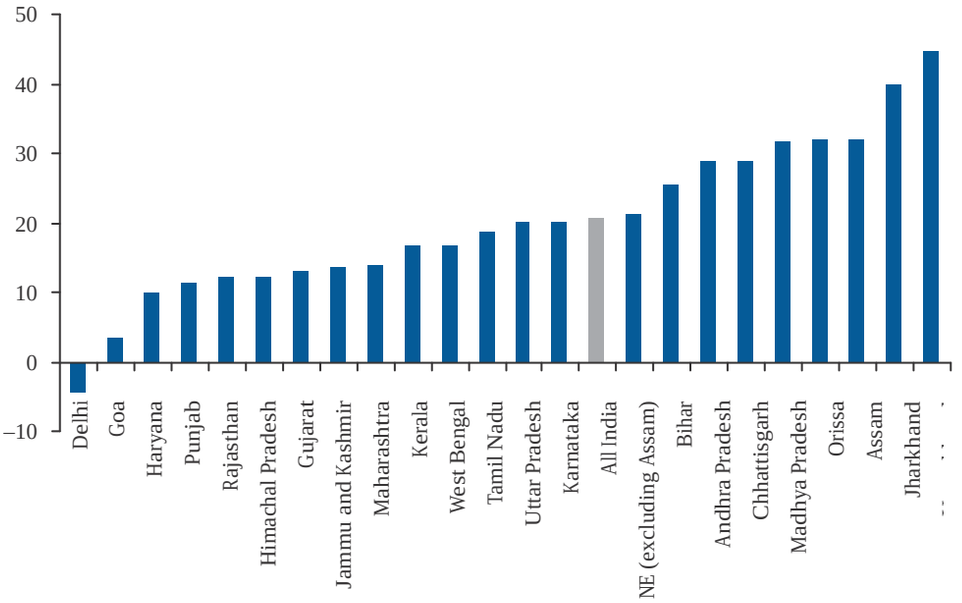

Figure 2.9 Percentage change in HDI between 1999–2000 and 2007–8

Source: Authors' calculations.

the spectrum are the eight relatively poorer states, as mentioned earlier. What is noteworthy is that the seven north-eastern states (taken together), excluding Assam, have done remarkably well in terms of human development outcomes. Over the period of eight years, this group has climbed three rungs.

Since health and education in particular affect social outcomes, they deserve policy attention. Social policy directly impacts social outcomes and, through the feedback loops, indirectly impacts economic outcomes. Since the government formulates the social policies, it has an important role to play in ensuring that a majority of the

Table 2.4 Ranking of States according to HDI Value

State	*HDI 1999–2000*	*HDI 2007–8*	*Rank 1999–2000*	*Rank 2007–8*
Kerala	0.677	0.790	2	1
Delhi	0.783	0.750	1	2
Himachal Pradesh	0.581	0.652	4	3
Goa	0.595	0.617	3	4
Punjab	0.543	0.605	5	5
NE (excluding Assam)	0.473	0.573	9	6
Maharashtra	0.501	0.572	6	7
Tamil Nadu	0.480	0.570	8	8
Haryana	0.501	0.552	7	9
Jammu and Kashmir	0.465	0.529	11	10
Gujarat	0.466	0.527	10	11
Karnataka	0.432	0.519	12	12
West Bengal	0.422	0.492	13	13
Uttarakhand	0.339	0.490	16	14
Andhra Pradesh	0.368	0.473	15	15
Assam	0.336	0.444	17	16
Rajasthan	0.387	0.434	14	17
Uttar Pradesh	0.316	0.380	18	18
Jharkhand	0.268	0.376	23	19
Madhya Pradesh	0.285	0.375	20	20
Bihar	0.292	0.367	19	21
Orissa	0.275	0.362	22	22
Chhattisgarh	0.278	0.358	21	23
All India	0.387	0.467		

Note: States are arranged according to 2007–8 rank.
Source: Authors' calculations.

population gets access to basic social services, by attaching higher priority to health and education. The performance of each state government is reflected in the HDI of that state and its constituents, which can guide social policies. The impact that HDI ranking can have on policy is demonstrated by the fact that some national governments have announced their aspirations for improving their HDI ranking (Engineer *et al.* 2008).

Income Index

A 21 per cent increase in the Income Index between 1999–2000 and 2007–8 seems low for a country that has experienced, among the large economies of the world, the second fastest economic growth after China. However, it must be pointed out that the so called 'Income Index' in this HDR is calculated (as with Planning Commission 2002) on the basis of consumption expenditure, and not income per se. By definition, consumption expenditure will tend to be lower than income. In fact, income growth in the 2000s has translated into a much higher than before savings to GDP ratio. However, as we note in Chapter 3, employment and wages (especially in the unorganized sector and agriculture) have not risen commensurately with the rest of the economy; hence, there

has been a corresponding constraint upon the increase in consumption. In other words, in the estimate of Income Index (and hence India's HDI) based on the Net Domestic Product per capita, rather than consumption expenditure per capita, the HDI increases by more than 10 percentage points than the estimate we present in this chapter.

The lowest standard of living as highlighted by the Income Index is evident in the poorer states like Assam, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, and Uttar Pradesh (Figure 2.10). These are also the states that have high concentrations of the marginalized groups like SCs, STs, and Muslims.

It is well known that these states (Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh, and Uttarakhand) have incomes below the national average, with Bihar having the lowest income per capita. This is also reflected in the lowest monthly per capita consumption expenditure (MPCE) adjusted for inflation and inequality for the state. Yet, what is worth highlighting is that these poorer states, despite low absolute incomes, have witnessed high Net State Domestic Product (NSDP) growth rates (especially Bihar, Chhattisgarh, Orissa, and Uttarakhand which had growth rates above 10 per cent per annum) during the Tenth Five Year Plan period (2002–7). Except for Orissa, these rates have been well above the national GDP growth rate, suggesting convergence over time in terms of economic growth. However, as noted earlier, the HDI level for these states in particular is well below the national average—even though their growth rate has been faster than the national average.

The change in the Income Index between 1999–2000 and 2007–8 is almost the same as the change in the HDI over the same period for India (that is, 21 per cent). The poorer states—Assam, Orissa, Uttarakhand, Andhra Pradesh, Madhya Pradesh, and Bihar (listed here in descending order of the percentage improvement over the 2000s) by and large, have registered a significantly higher than average improvement in the Income Index. Only three relatively more affluent states—Tamil Nadu, Karnataka, and Kerala have registered an improvement in the Income Index higher than the national average. A few of the poorer states—Rajasthan, Uttar Pradesh, and West Bengal—have experienced an improvement in the Income Index over the period, which is lower than the national average (Figure 2.11).

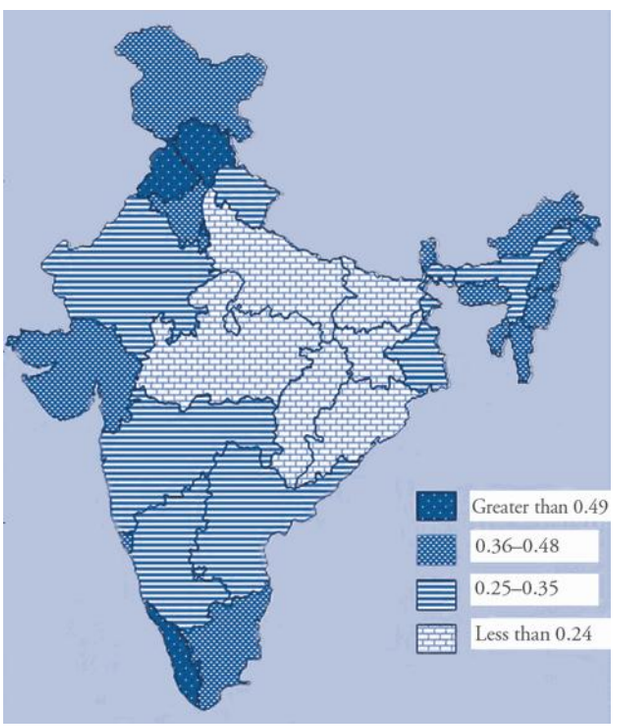

Figure 2.10 Income Index across States, 2007–8

Source: Appendix Table 2A.5.

Education Index

The Education Index, defined as the arithmetic mean of adjusted mean years of schooling index and literacy rate index, has seen a very impressive improvement for all states. Figure 2.12 shows states according to their educational attainments. In fact, we have seen that the Education Index for India has improved by 28 per cent between 1999 and 2000 and 2007–8, that is, much more than the Income Index. This relatively good performance in the education sector is borne out by the analysis in Chapter 6.

It is commendable that even in the relatively poorer states like Assam, Chhattisgarh, Orissa, Madhya Pradesh, and Uttarakhand the Education Index is above 0.5. The north-eastern states have been good performers despite low levels of income. This highlights the fact that income is not a necessary condition for improvement in educational outcomes.

The improvement of 28.5 per cent in the Education Index (Figure 2.13) during the period 1999–2000 to 2007–8 has driven the HDI for the country upwards.

Again, as with the Income Index, the improvement in the Education Index has been the greatest in the educationally backward and poorer states of India—Uttar Pradesh,

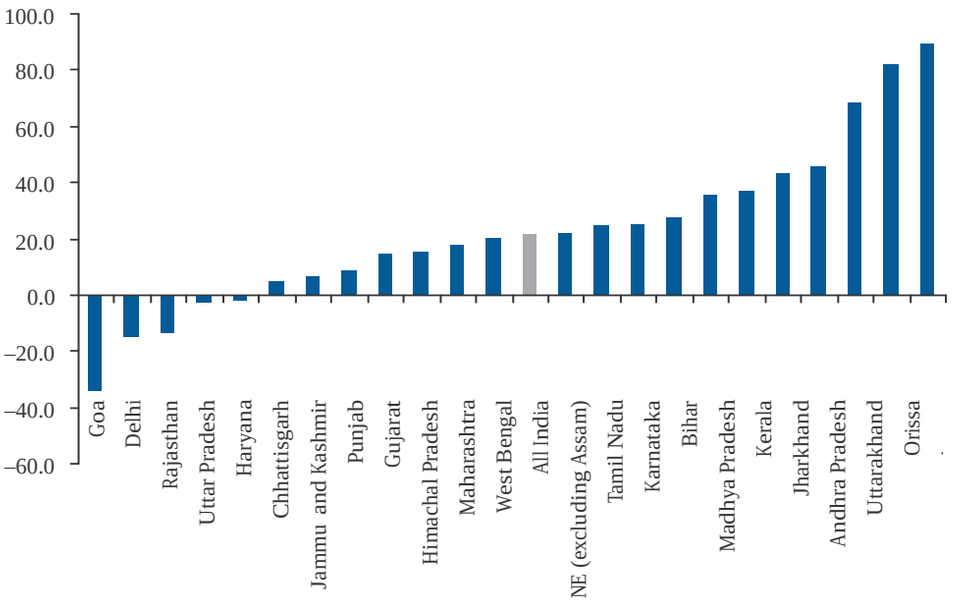

Figure 2.11 Percentage Change in Income Index from 1999–2000 to 2007–8

Source: Authors' calculations based on Appendix Table 2A.5.

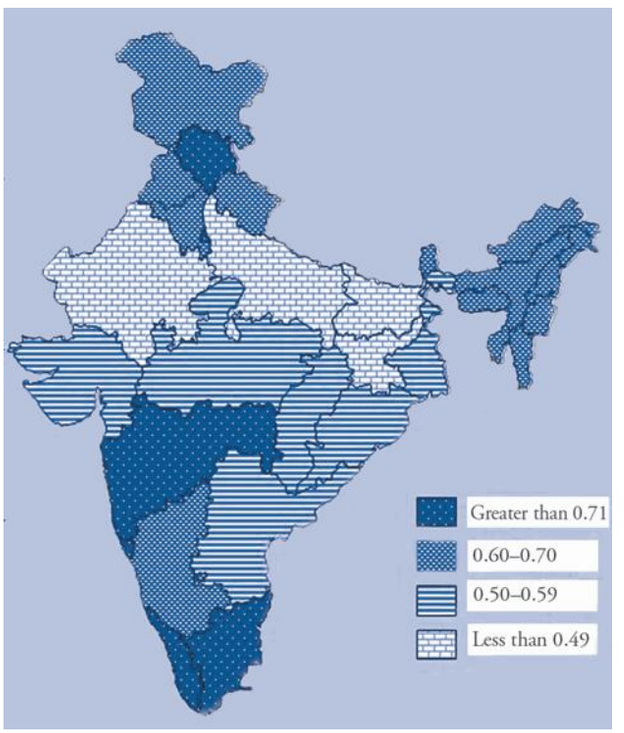

Figure 2.12 Education Index across States, 2007–8

Source: Appendix Table 2A.5.

Rajasthan, Orissa, Madhya Pradesh, Andhra Pradesh, Chhattisgarh, Bihar, Uttarakhand, and Jharkhand—listed here in ascending order of the improvement in the Education Index. The improvement in the educationally backward states suggests a strong trend of convergence across the states in terms of outputs and outcomes.

The progress achieved by Madhya Pradesh is worth highlighting. Despite being a poor state and performing below the national average in terms of other indices, it has done exceptionally well in terms of the education indicators. This can be attributed, inter alia, to the Educa- tion Guarantee Scheme (EGS) initiated in January 1997. Under this scheme, the state guaranteed a school within three months to any community that demanded one, provided it had more than 40 children. Thanks to this scheme, 30,000 new schools came up in Madhya Pradesh in a period of three years. A similar improvement is seen in the case of Uttarakhand, which despite low levels of income, fares better than the national average in terms of mean years of schooling and literacy rates.

Health Index

The Health Index is defi ned in terms of life expectancy at birth since a higher life expectancy at birth refl ects better health outcomes for an individual.

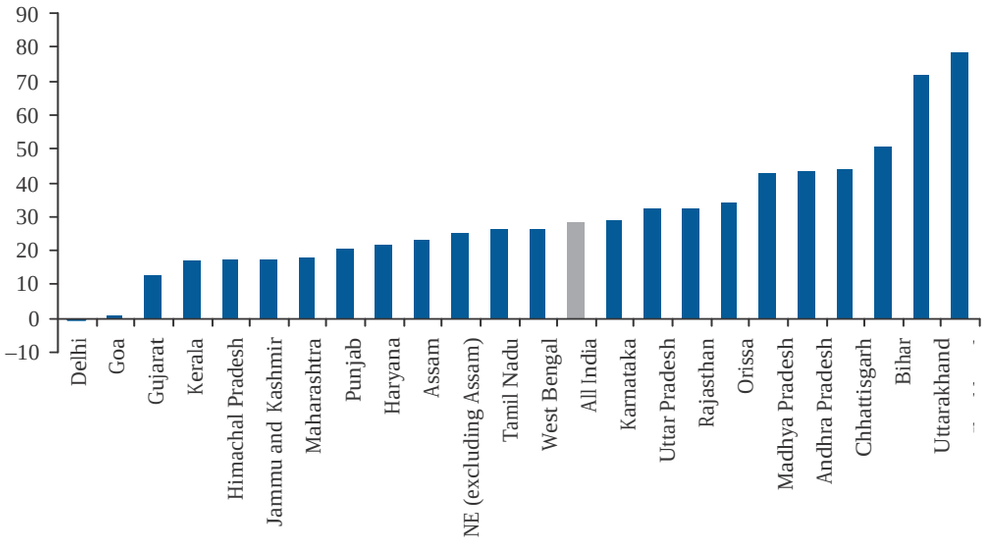

Figure 2.13 Percentage Change in Education Index from 1999–2000 to 2007–8

Source: Authors' calculations based on Appendix Table 2A.5.

As seen earlier, the improvement in the Health Index for India between 1999–2000 and 2007–8 was much lower than both the Income Index and the Education Index. This outcome for the Health Index is borne out by the analysis in Chapter 5, which suggests that while there have been improvements in health outcomes dur- ing the 2000s, the challenges that remain are very serious indeed.

There are already well-known cases of success in building an eff ective public health system in several states of India (for example, Kerala and Tamil Nadu). It is no surprise that with the best public health system in the country Kerala has the highest life expectancy at birth. What is worth mentioning is that Bihar, the state that ranks the lowest in terms of almost all human development indicators, has a life expectancy at birth at par with the national average. Similarly, the relatively poorer state of Rajasthan performs marginally better than the national average. The north-eastern states, excluding Assam, have a higher life expectancy at birth compared to the national average (Figure 2.14).

As argued in Chapter 5 in this Report, the improvement in the Health Index during the period 1999–2000 to 2007–8 (13 per cent) is well below the improvement in the overall HDI of the country. In other words, while the Income Index has improved at the same rate as the HDI, and the Education Index by much more than the improvement in the HDI, the Health Index has not shown any signifi cant change between 1999–2000 and 2007–8. Nevertheless, as in the case of the other two component indices (Income and Education), it is the

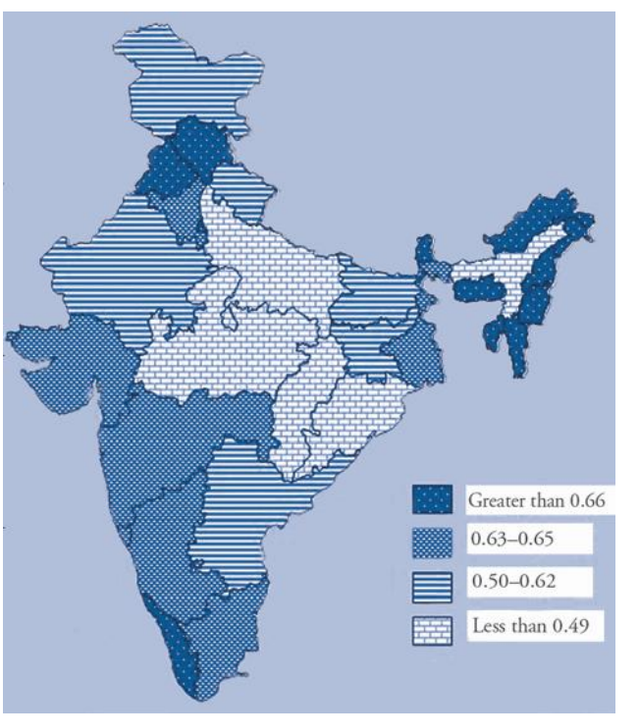

Figure 2.14 Health Index across States, 2008

Source: Appendix Table 2A.5.

states with the most serious health outcome indicators and the worst health process/input indicators, which have shown the most improvement over this period, namely, Madhya Pradesh, Uttar Pradesh, Orissa, and Assam. As one might expect, the smallest percentage improvement in the Health Index has occurred in states where outcomes were relatively better at the end of the 1990s—Delhi, Kerala, Himachal Pradesh, Punjab, Maharashtra, Tamil Nadu, Haryana, Karnataka, and Andhra Pradesh. The improvement in the Health Index in these states is lower presumably on account of the base effect of the indicators that were already higher than the national levels at the end of the 1990s (Figure 2.15).

After looking at the pace of improvement in HDI and its component indices over time, it is pertinent to analyse the course of this transition. Figure 2.16 shows the relationship between the level of HDI in 1999–2000 and the change in the HDI between 1999–2000 and 2007–8, to see how the states have evolved from their initial conditions. The states with relatively low levels of HDI in 1999–2000 that registered a high growth in HDI between 1999–2000 and 2007–8 were Andhra Pradesh, Assam, Bihar, Madhya Pradesh, and Orissa. These are the states that show convergence with the national average of HDI over time. Absolute value of HDI and its components for 1999–2000 and 2007–8 are reported in Table 2A.5.

There were no states which not only started out with low levels but also achieved only low growth—which is good news. However, there were states which started the decade with a medium level of HDI but managed to

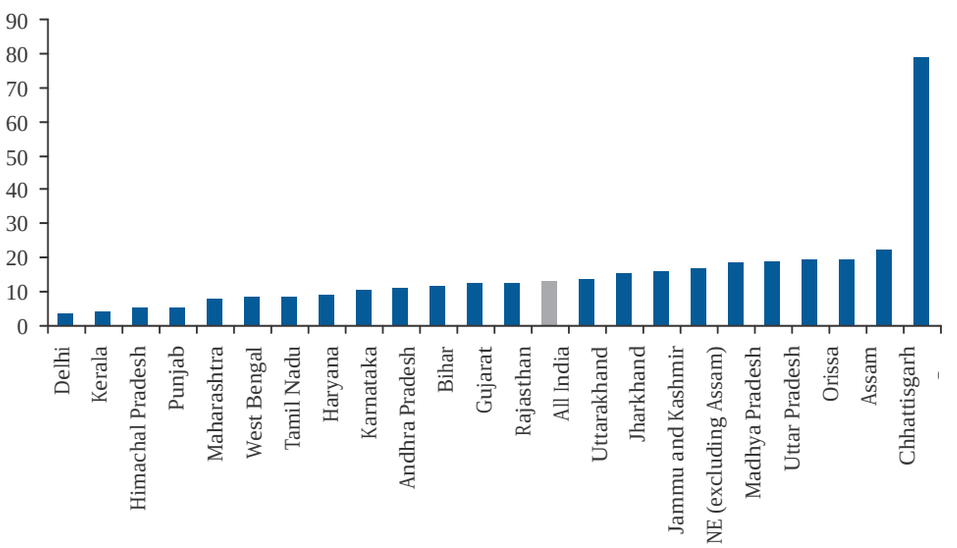

Figure 2.15 Percentage Change in Health Index from 2000 to 2008

Source: Authors' calculations based on Appendix Table 2A.5.

	Low growth 1999–2000 to 2007–8	Medium growth 1999–2000 to 2007–8	High growth 1999–2000 to 2007–8
Low level base 1999–2000		Uttar Pradesh	Andhra Pradesh, Assam, Bihar, Madhya Pradesh, Orissa
Medium level base 1999–2000	Haryana, Rajasthan	Maharashtra, Gujarat, Jammu and Kashmir, West Bengal	Karnataka
High level base 1999–2000	Delhi, Goa, Himachal Pradesh	Kerala	

Figure 2.16 Relationship between Level and Growth of HDI, 1999–2000 to 2007–8

Source: Authors' calculations based on Appendix Table 2A.5.

achieve only low HDI growth over the period 1999– 2000 to 2007– 8, namely Haryana and Rajasthan, and their pace of improvement is of some concern. However, for states like Delhi, Goa, and Himachal Pradesh, the low growth is a refl ection of the high base in 1999– 2000.

Finally Figure 2.17 shows a scatter diagram for the growth of NSDP per capita and the growth of HDI between 1999– 2000 and 2007– 8. It shows that in Assam, Andhra Pradesh, and Bihar (top left corner) the growth in NSDP per capita over this period was not as remarkable as the improvement in HDI. What is also interesting is that both Madhya Pradesh and Orissa have shown signifi cant improvements in NSDP per capita as well as in the HDI over the period.

It is quite apparent that there is a clear divide between the states that consistently perform well on all counts, and those that appear to be at the bottom of the league in terms of human development outcomes. These are generally the poorer states, which are also home to large proportions of various marginalized groups like SCs, STs, OBCs, and Muslims. The fact that these states lack access to service infrastructure as well resources, further reinforces the deprivation for these communities, which remain excluded from the development process. This social stratifi cation, particularly in the rural areas of these states, is one of the important causes of social inequalities.

On the other hand, there are states like Tamil Nadu and Kerala with a similar distribution of social groups as Bihar and Uttar Pradesh, and yet they perform very well in HDI and its component indices. These states highlight the importance of good governance and off er remarkable examples of what massive mobilization of the lower castes could potentially achieve. In fact, such is the result of these social movements that even the upper castes in Uttar Pradesh and Bihar are worse off than the SCs and OBCs in Tamil Nadu and Kerala (Mehrotra 2006).

Fertility rates in Kerala and Tamil Nadu suggest that their Reproductive and Child Healthcare (RCH) Programmes have been successful. The demographic transition of Kerala is widely acclaimed because its mortality and fertility levels have reached those of the developed countries. This is can largely be attributed to the high literacy rates among men and women in the state—as has been discussed in the conceptual framework for *IHDR 2011* (see Chapter 1). Despite relatively low levels of economic growth and per capita income in the fi rst four decades after Independence, Kerala achieved signifi cant leaps in terms of its human development indicators. These are largely a manifestation of the active role of the state government in health and education which is discernible in terms of well-functioning public health and education systems. Kerala is way ahead of the other states in terms of achieving the goal of universalizing elementary education, where the benefi ts are equally shared by the lower castes also.

As our conceptual framework predicts, in recent years Kerala has witnessed higher growth rates for NSDP per

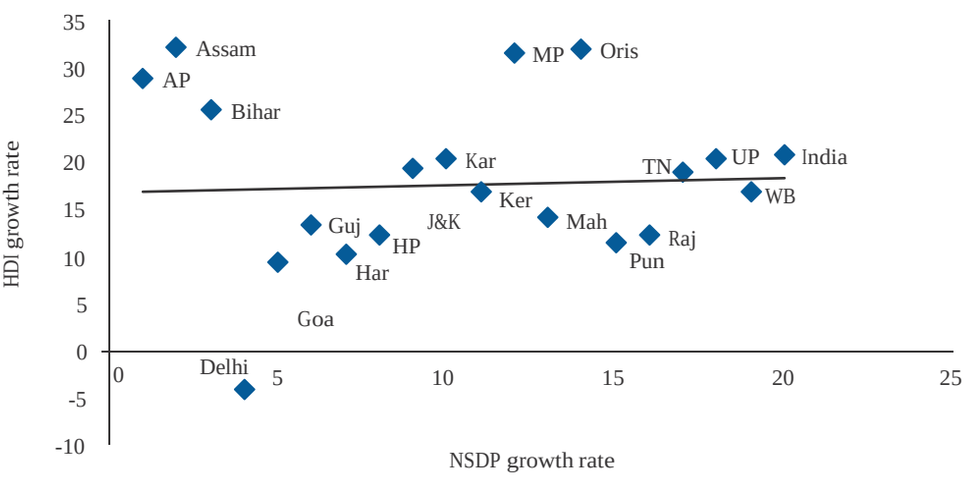

Figure 2.17 Relationship between HDI Growth and NSDP Growth between 1999–2000 and 2007–8

Source: Authors' calculations based on Appendix Table 2A.5 and CSO.

capita and this increase in income and income-earning capabilities is partly due to the feedback loop effect of better education, health, and nutritional status of the populace (see Chapter 1).

The case of Tamil Nadu is similar where the state government has taken strong measures to ensure the effectiveness of the public health system and its health policies. The Dravidian movement, which began in Tamil Nadu, aimed at providing opportunities to all, irrespective of the caste. With the dual objective of educating all and eradicating superstition, the movement proved to be one of the biggest achievements of the state government. This was one of the main reasons for higher enrolment rates for SC and OBC children in the state. Thus, the real explanation for the better than average health, education, and nutritional status of the populace lies in the social movements and technical interventions initiated by the Government of Tamil Nadu. The Dravidian movement in the state provided socio-political and cultural space for even the deprived sections, making the process of development more inclusive (Mehrotra 2006).

In the same way it has been observed in Delhi and Himachal Pradesh that indicators better than the national average are visible not only for the state as a whole, but also for the lower castes and minorities living there (For further discussion on these issues, see the section on 'State Profiles' later in this chapter). It is noteworthy that SCs and OBCs in Delhi perform even better than the upper castes in Uttar Pradesh and Bihar for some of the outcome indicators. However, one thing that is quite disturbing in the case of Delhi is that it has the worst sex-ratio in the country, with only 821 women per 1,000 men in 2001 (and 866 in 2011). A similar kind of discrimination against women is evident in terms of female literacy rates in Delhi which are 72.2 per cent and 77.8 per cent, respectively, for rural and urban areas as compared to 92.6 and 91.3 per cent, respectively, for males. To address this issue, the Delhi Government introduced the 'Laadli Scheme' in 2008. It is essentially a cash transfer with the objective of putting an end to female foeticide and promoting education of the girl child.

It is worth mentioning that better governed states produce better indicators across the board, and even the backward communities benefit from the process of development. Absence of social movements is manifested in the poor performance of the deprived classes. That is, despite high growth rates, there is discrimination against some social groups that end up being excluded from the development process. This in turn reflects the failure of the respective state governments. In this regard it is worth citing the progress achieved by two of the most economically backward states of the country—Uttar Pradesh and Bihar.

A study by Kapur *et al.* (2010) titled 'Rethinking Inequality: Dalits in the Market Reform Era' finds that there has been a veritable Dalit revolution in Uttar Pradesh in the last two decades. Despite their high absolute poverty, there have been huge improvements in economic and social indicators like grooming, eating, and ceremonial consumption patterns of Dalits. This signals their higher social status backed by higher status con- sumption patterns. With the high GDP and per capita growth rates in recent years, even the Dalits have come to share the 'new prosperity'. They can now be equal to the 'General' caste category people. There have been changes in accepted behaviours between castes with rapid erosion of discriminatory practices that stigmatized Dalits.

Similarly, there is a vast difference between the Bihar of today and the Bihar of 15–20 years ago (see the 'State Profile' of Bihar later in this chapter). The state witnessed an average growth rate of NSDP of around 15 per cent per annum during the Tenth Five Year Plan—unprecedented not only by Bihar standards but by any global standard. The boost has been provided by the increased government spending on infrastructure, particularly road construction. The share of development expenditure in the total state expenditure has been increasing gradually since 2003–4. In 2007–8, this figure stood at 53.5 per cent of the total expenditure. Moreover, per capita social sector expenditure in Bihar has increased significantly in the last five years. Further, the share of expenditure on welfare of the state's SCs and STs to total expenditure has almost doubled during the period 2004 (0.4 per cent) to 2008 (0.8 per cent).

Despite these efforts, the lower castes in these states have social indicators lower than their counterparts in the rest of the country. What is needed therefore is income growth along with social mobilization which seeks to enhance human capabilities.

Similarly, the north-eastern states, excluding Assam, are generally doing better in all development parameters, despite the high concentration of STs in the population. However, it is important to qualify here that these groups form the majority and the mainstream in the total population, unlike forest dwelling STs in states in the central and eastern belt. Thus, north-eastern state governments have

ensured that they share every benefi t of the development process. Any policy/scheme undertaken by the govern- ment is in eff ect directed towards this majority group and thus they are ' included' in the states' development achievements (Government of Nagaland 2004).

To enhance human development, the state governments have taken up a plethora of initiatives in their state. For instance, Nagaland, where 97 per cent of the popula- tion are STs, had a literacy rate among STs of 91.5 per cent in 2007– 8. In 2002, the state government enacted the Nagaland Communitisation of Public Institutions and Services Act, which called for communitizing of elementary education in the state. Under this Act, the management and development of the schools has been transferred to the community. This, coupled with Sarva Shiksha Abhiyan (SSA), created a momentum to univer- salize elementary education among communities, which comprise largely of STs.

Similarly, the state enjoys a Health Index equivalent to 0.64. This may be a consequence of communitizing health services since July 2002 whereby the management of health centres was handed over to the communities. Taking advantage of Nagaland' s traditional social capital, the state government has taken up the Total Sanitation Campaign in the districts. In another kind of initiative, the Nagaland State AIDS Control Society and Department of School Education are engaged in developing courses on HIV and AIDS, drug addiction, and alcoholism for school going students of standards and above.

Meghalaya is another state, where 80 per cent of the population belongs to the Scheduled Tribes. Many of the better human development outcomes can be traced back to the state initiatives to set up committees at diff erent levels to implement SSA. Thus, it is not surprising that rural Meghalaya has a literacy rate of 92 per cent. Also, the government initiated various health programmes—universal immunization, TB control, anti-malaria, and other such programmes which have helped curb morbidity in the state. In addition, the state increased the supply and availability of medicines and consumables.

Similarly in Mizoram, that became a state as late as 1986, the eff orts at expanding infrastructure at the primary and secondary level are refl ected in high levels
of literacy at 95.9 per cent. Literacy among the STs, which form almost 99 per cent of its population, is 95 per cent.

In contrast, that is not the case with other states with high ST concentration like Jharkhand, Orissa, Chhattisgarh, and Madhya Pradesh. The primary reason for their poor performance is the failure of the development process to reach the STs living in remote forest areas. The state governments have consistently failed to address issues specifi c to such deprived sections of society. Despite rapid economic growth marginalized groups like STs have faced signifi cant neglect in the development process, which is partly responsible for the continuing extremist violence that characterizes many districts in these states (Expert Group to the Planning Commission 2008). As they form a dominant proportion of the total population of these states, failure to address their needs is bound to make development in these states exclusionary.

GENDER⑩RELATED DEVELOPMENT INDEX

Inclusive development cannot be attained unless women participate equally in the development process. Developing countries like India face huge gender inequalities, which have a direct bearing on their human development. For instance, in a patriarchal set-up where gender discrimination is rampant, a female child is ignored when it comes to health or education. Females have little control over their lives and suff er a great deal from intra-household discrimination. Thus, HDI dimensions, by themselves, do not portray a complete picture of human development. In order to account for such inequalities, UNDP developed the Gender-related Development Index (GDI) in 1995.

GDI accounts for inequalities between men and women in the same dimensions as those of HDI. It is a gender sensitive HDI—the higher the gender inequality, the lower the GDI.

The Ministry of Women and Child Development (2009) calculated the GDI for 1996 and 2006 for 35 states/UTs. The all India GDI for 2006 was 0.590 compared to 0.514 in 1996. The HDI for the same years was 0.605 and 0.530, respectively, as calculated by MWCD. This shows that the loss in HDI on account of gender inequalities (which is the diff erence between HDI and GDI) has decreased over the decade, albeit only marginally. Comparing across states, Figure 2.18 shows that the GDI is low in the central and eastern states (excluding West Bengal).

Goa had the highest GDI in 2006. Some of the other states doing well in terms of GDI were Kerala, Delhi, Punjab, Himachal Pradesh, Maharashtra, and the north-eastern states (excluding Assam). They are also the states that perform well on HDI, as seen in the earlier

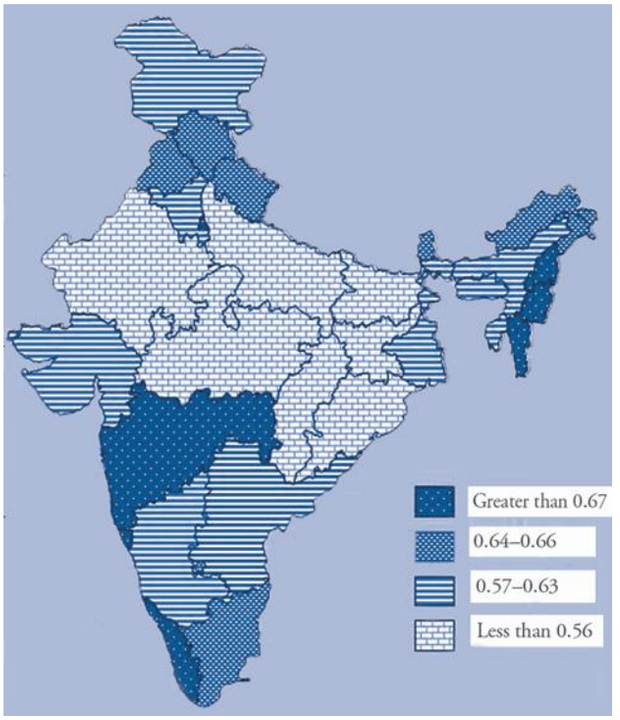

Figure 2.18 GDI across States, 2006

Source: Ministry of Women and Child Development (2009).

section. The lowest GDI was registered by Bihar in both time periods. Poorer states like Madhya Pradesh, Orissa, Rajasthan, and Uttar Pradesh were among the worst performers on GDI.

The loss in HDI due to gender inequalities (HDI–GDI) was 0.015 for India as a whole in 2006.

Among the states, it was the highest in Delhi, where it has increased over the decade. This is explained by the adverse sex-ratio in the state, which is the lowest among the major states (866 females per 1,000 males in 2011). Other states where loss on account of gender inequalities was higher than the all India level were Bihar, Jammu and Kashmir, West Bengal, Uttar Pradesh, Kerala, Goa, Jharkhand, and Rajasthan (listed here in descending order of the loss). On the other hand, the difference between HDI and GDI was the lowest in Himachal Pradesh, followed by Punjab, Uttarakhand, and Chhattisgarh. It is heartening to know that Punjab, which has historically had adverse sex-ratios, has shown more gender-friendly human development.

CONCLUDING REMARKS

The states' policies play a crucial role in shaping the nature of the development process. How inclusive the development process is for all the social groups residing in the state is a reflection of the state's commitment towards various dimensions of human welfare. Thus, the foregoing discussion makes a strong argument for state governments as agents of change. This is supported by the success of social mobilization states like Tamil Nadu, Kerala, and the north-eastern states, where strong state commitment resulted in the upliftment of the backward castes such that their performance in health and education indicators is even better than the upper castes in most of the other states.

The profiles of 22 major states which follow are an effort to highlight such state specific policies and examples to showcase the performance of the state as well as its marginalized groups compared to their counterparts in the rest of the country. A set of variables have been chosen for the analysis. These include:

- Average annual growth rates of NSDP and per capita NSDP, both at 1999–2000 prices.
- Demographic profile in terms of distribution of social and religious groups within and across states for the year 2007–8.
- Incidence of poverty by Uniform Recall Period, both across rural and urban areas, for 2004–5.
- Incidence of poverty by social groups, 2004–5.
- Nutritional and health indicators include—malnutrition among women measured by Body Mass Index (BMI) less than 18.5; Underweight children in the age 0–5 years measured by two standard deviation below the reference population; and under five mortality rate (number of children under five years dying per 1,000 live births) to measure the overall health status of children.
- Educational attainments have been measured by literacy rates of population in the age group seven years and above.
- As important input indicators in health and the overall development process, variables on drinking water and sanitation facilities have been incorporated. Therefore, variables like households with access to improved sources of drinking water—tap, handpump/tube well, protected well, and harvested rainwater; and households with no toilet facility have been used.

State Profiles

ANDHRA PRADESH

Economy and Demography

The state is well endowed with a stable economic base which is to a great extent reliant on agriculture and livestock. Andhra Pradesh is doing well when compared to the all India average in terms of NSDP per capita and its growth rate (Table 1). Improvement in economic freedom and business climate has resulted in doubling the state's growth rate. In the Ninth Five Year Plan period (1997–8 to 2001–2) the state had an average annual Gross State Domestic Product (GSDP) growth of 5.6 per cent. But in the last five years (2004–5 to 2008–9), GSDP growth accelerated to an average of 9.1 per cent per year, and NSDP growth rate at 7.7 per cent (for years 2000–1 to 2008–9). Growth in agriculture and industry has equally contributed to the state's growth story. Agricultural growth averaged 6.8 per cent per annum in 2004–9, more than double the all-India average of 3.3 per cent, whereas industrial growth in the state averaged 10.8 per cent, as compared to the national average of 8.7 per cent. The state was an outperformer, consistently growing faster than India as a whole, save in the drought of 2008–9 (Aiyar 2011).

The demographic profile of the state shows that the majority of the population (79 per cent) lives in rural areas (NSS 64th round). The SC and ST population of the state accounts for 9 per cent and 8 per cent, respectively of the total SC and ST population of India. Within the state, SCs and STs accounted for more than one-fourth of the population. Andhra Pradesh accounts for more than 9 per cent of the total population of India at present, but this share has been declining due to the low Total Fertility Rate (TFR) in the state, which is an encouraging sign. Another important point to notice is its very good sex-ratio of 992 females per 1,000 males, against all India's sex-ratio of 940 females per 1,000 males. However, it is not very encouraging to see the child sex-ratio, which is only 943, but still better than the all-India average of 914 (Census 2011).

Table 1 Average Annual Growth Rate, 2000–1 to 2008–9
(*per cent*)

(at 1999–2000 prices)	*State*	*All India*
NSDP/NDP (for India)	7.7	7.1
Per-Capita NSDP/NNP (for India)	6.6	5.4

Source: Central Statistical Organization (CSO), as on 12.4.2010.

Table 2 Distribution of social and religious groups, 2007–8
(per cent)

Across states			*Within State*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
7.67	9.28	5.59	7.09	19.76	7.70

Source: NSS 64th round.

Human Development and Social Groups

Human development in Andhra Pradesh has been noteworthy, and there was some convergence with regard to the quality of human development within the state, that is, the under developed districts are catching up (*Andhra Pradesh Human Development Report 2007*).

The incidence of poverty in the state contradicts the general belief that there is a higher incidence of poverty in rural areas as compared to urban areas. The incidence of urban poverty (28 per cent) is signifi cantly higher than the incidence of rural poverty (11 per cent) within the state (Figure 1). The lower incidence of rural poverty may be partially due to ' Velugu' a state-wide rural poverty eradication programme based on the social mobilization and empowerment of the rural poor women. The women' s self-help group (SHG) movement with 0.7 million such groups has been successful in the state and has contributed towards poverty reduction in the rural areas. It should be noted that the incidence of poverty among rural STs, and urban SCs and STs, is signifi cantly higher than the state average, and even higher than the incidence of poverty among SCs and STs at the national level in rural areas. This suggests that these disadvantaged groups are being deprived of the recent economic prosperity of the state.

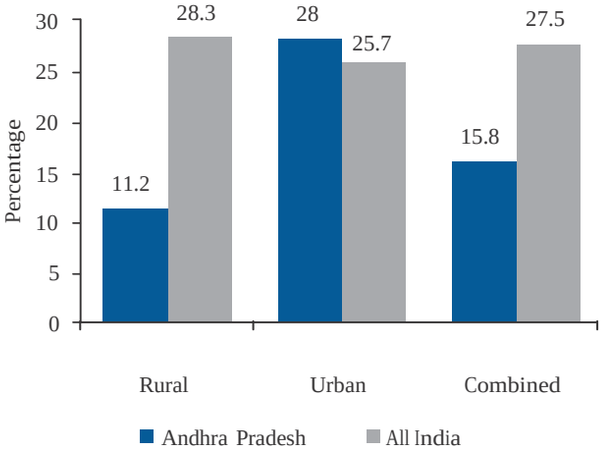

Figure 1 Incidence of Poverty, Andhra Pradesh and India, 2004–5

Source: Planning Commission (2008).

For health related indicators like proportion of females with BMI<18.5, under fi ve mortality rate (U5MR), and percentage of underweight children less than fi ve years of age, Andhra Pradesh has performed better than the national average.

The overall better performance in these health indicators may be due to the mobilization and empowerment of women though the SHG movement in the state. However, there are regional and social diff erences. The health indicators are very poor for SCs and STs, in particular for people residing in the neglected areas—the tribal areas in the north, and the drought prone districts in the south.

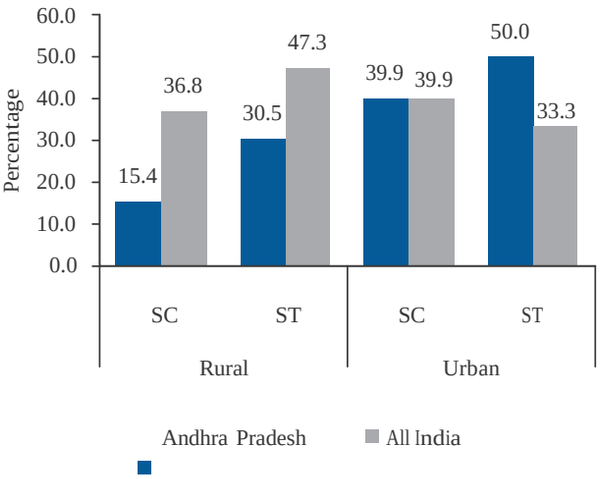

Figure 2 Incidence of Poverty by Social Groups, Andhra Pradesh and India, 2004–5

Source: Planning Commission (2008).

The eff ective delivery of quality basic health services is hampered by demand and supply side issues, including poor health infrastructure and staffing. In the case of underweight children, SCs and STs are in a signifi cantly better position than the all India average of these groups, but their performance is below the state average. The state government has started reforms in the health sector to improve healthcare delivery in the neglected areas. These reforms focus on preventive healthcare and enhancing the existing quality of and access to healthcare for ex- ample, strengthening of Primary Health Centres (PHCs) as 24-hour MCH centre.

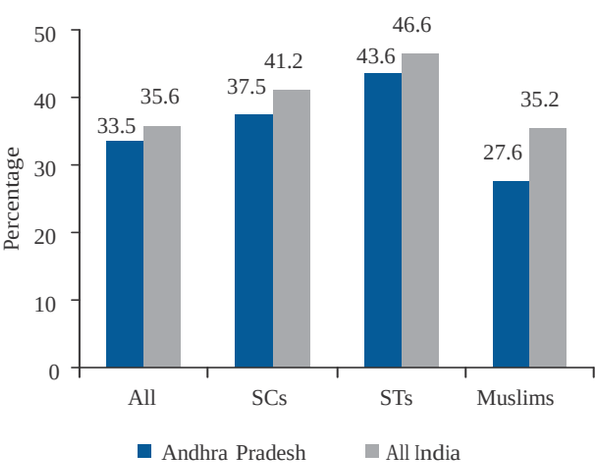

Figure 3 Percentage of Women with BMI<18.5, Andhra Pradesh and India, 2005–6

Source: *NFHS 3*.

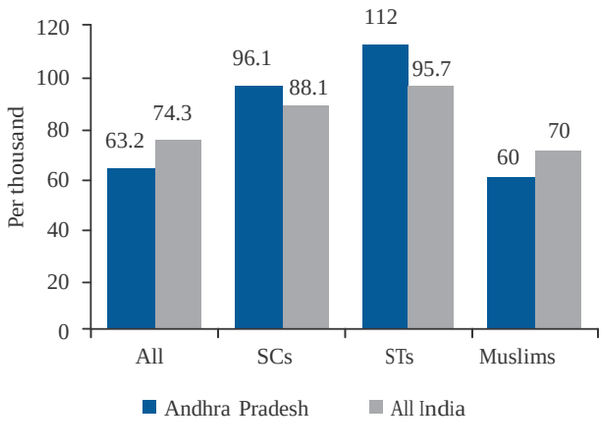

Figure 4 Under Five Mortality Rate, Andhra Pradesh and India, 2005–6

Source: *NFHS 3.*

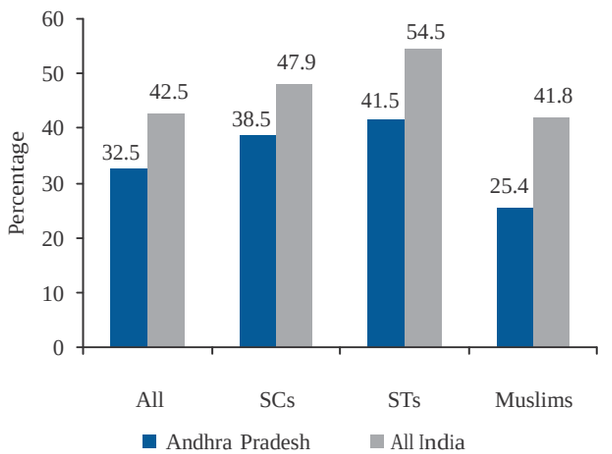

Figure 5 Percentage of Underweight Children (0–5 Years), 2005–6, Andhra Pradesh and India

Source: *NFHS 3.*

The overall literacy rate in Andhra Pradesh is lower than the national average. The state has a literacy rate of 67.7 per cent, against an all India literacy rate of 74 per cent in 2011 (Census 2011). As per NSS (2007– 8), Andhra Pradesh had a literacy rate of 63.5 per cent in 2007– 8 (Figure 6). The literacy rate for STs is lower than the state average and also lower than the national literacy rate for STs. In the case of SCs, the literacy rate is the same as the state average and the national average for SCs (Figure 6). Though the performance of the state with regard to income and health has been good in recent years, the state has performed below expectation on the literacy front. However, it has been doing better in higher education,

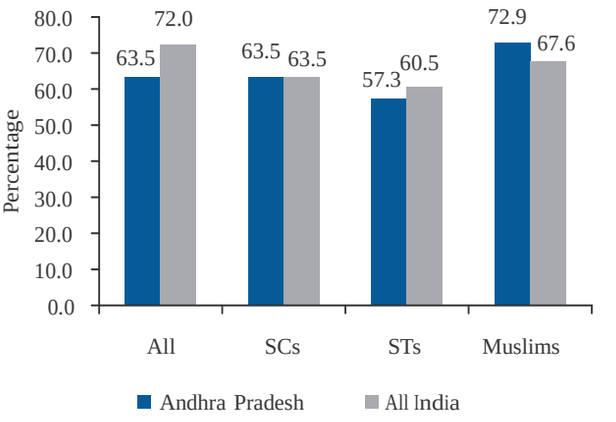

Figure 6 Literacy Rate, Andhra Pradesh and India, 2007–8

Source: NSS 64th Round.

particularly in engineering and technology. This may have magnifi ed the intra-state inequality, and aggravated the existing problem of Maoists in some parts of the state.

In terms of access to improved sources of drinking water and toilet facilities, the state's performance is fairly close to the national average (Figures 7 and 8). However, only about 40 per cent of SCs and 29 per cent of STs have access to any sanitation facility. This is mainly due to the fact that there are inadequate housing, electricity, drinking water, and other basic infrastructure facilities in the interior areas.

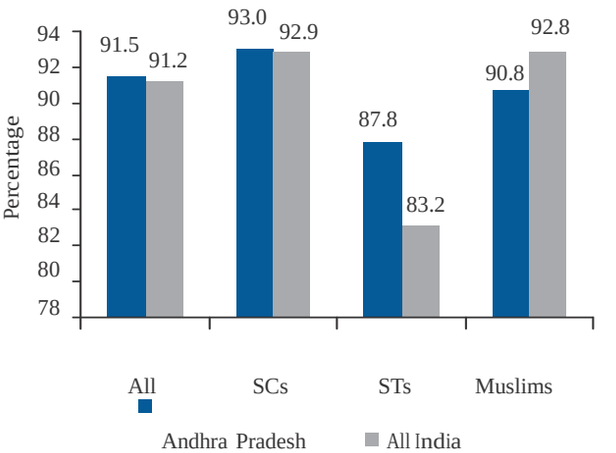

Figure 7 Percentage of Households with Improved Source of Drinking Water Facility, Andhra Pradesh and India, 2008–9

Source: NSS 65th Round.

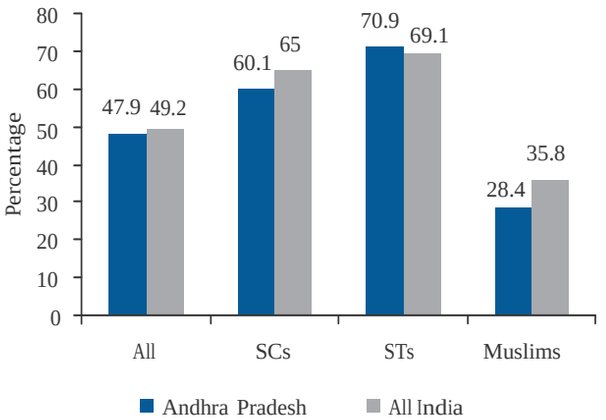

Figure 8 Percentage of Households with No Toilet Facility, Andhra Pradesh and India, 2008–9

Source: NSS 65th Round.

Human Development and Religious Groups

Across religious groups, Muslims are quite close to the state average in terms of health indicators. However, they are still lagging behind the all India averages for Muslims. In terms of the literacy rate, Muslims are doing better than the state average and also better than the national average for their community. In the case of basic amenities, Muslims are close to the state average for accessing drinking water from improved sources, but are far better off than the other religious communities of the state and the Muslims at all India level in terms of access to toilet facilities. It has been observed that in terms of economic growth, Andhra Pradesh has performed better than the national average in the last decade. However, this is not reflected in other human development indicators, particularly education and sanitation facilities. Moreover, the disadvantaged groups, particularly SCs and STs, are worse off in terms of economic as well as other human development indicators viz. health, education and sanitation. Thus these marginalized groups are further falling behind the development process in the state.

ASSAM

Economy and Demography

Assam is one of the more economically backward states in India and has recorded low NSDP and per capita NSDP growth rates in the last decade, that were below the corresponding growth rates for the country. Although there have been periods of encouraging growth, by and large the growth rate of NSDP has not kept pace with that of the country (Table 1). This trend has been noticeable since the early 1970s and has been accentuated in recent years.

More than two-thirds of the population lives in rural areas (NSS 64th round). Among the social groups, OBCs account for almost half the population (49.73 per cent). The next largest group is STs at 14.02 per cent. Amongst the religious communities, Muslims account for 30.38 per cent of the population (Table 2). The high percentage of Muslim population may perhaps be due to cross-border migration. The fertility rate in Assam is close to the all India average at 2.6. According to Census (2011), Assam has a better sex-ratio of 954 females per 1,000 males, which is higher than the sex-ratio of all India (940 females per 1,000 males). It would be interesting to note that child sex-ratio (957) is even higher than the overall sex-ratio in Assam, whereas it is only 914 at all India level.

Table 1 Average Annual Growth Rate, 2000–1 to 2008–9
(*per cent*)

(at 1999–2000 prices)	*State*	*All India*
NSDP/NDP (for India)	4.7	7.1
Per Capita NSDP/NNP (for India)	3.2	5.4

Source: CSO.

Table 2 Distribution of Social and Religious Groups, 2007–8
(*per cent*)

Across States			*within the State*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
4.02	1.15	5.85	14.02	9.25	30.38

Source: NSS 64th Round.

Human Development and Social Groups

The incidence of poverty in Assam is lower than the country's overall incidence of poverty. There is a huge rural–urban divide—about one out of five people in rural areas is likely to be below the poverty line, while in urban areas the incidence is one in 30 (Figure 1). Income poverty for both SCs and STs is significantly lower than their national counterparts and the state average, except for SCs in rural areas (Figure 2).

Both in health and education indicators, Assam's performance has been better than the country's average (Figures 3, 4, and 5). Assam's performance in the education sector, despite the low per capita income, is primarily due to the Sarva Siksha Abhiyan, and the participation of village communities through Village Education

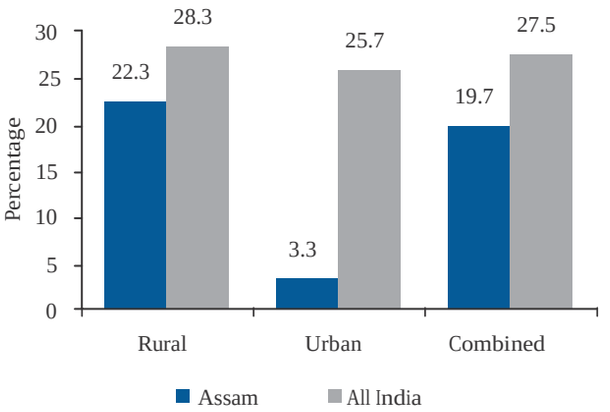

Figure 1 Incidence of Poverty, Assam and India, 2004–5

Source: Planning Commission (2008).

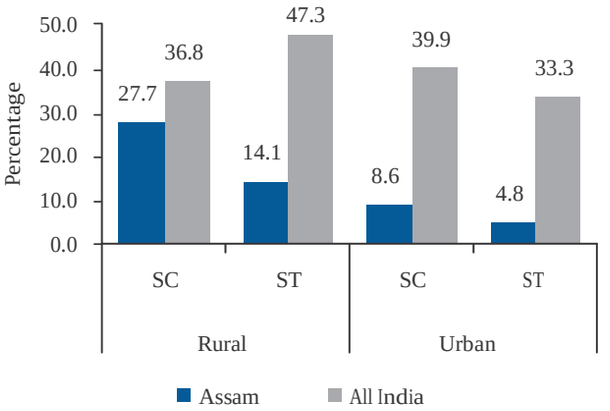

Figure 2 Incidence of Poverty by Social Groups, Assam and India, 2004–5

Source: Planning Commission (2008).

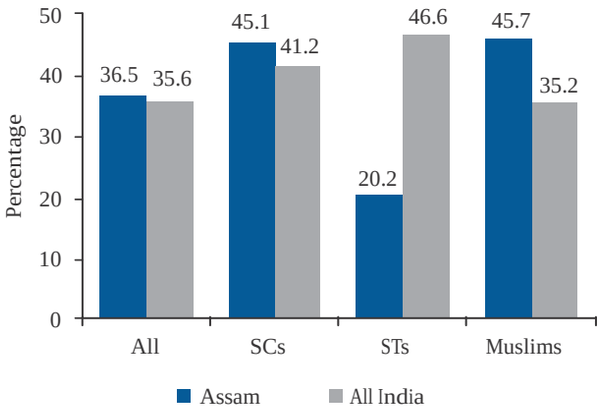

Figure 3 Percentage of Women with BMI<18.5, Assam and India, 2005–6

Source: *NFHS 3*.

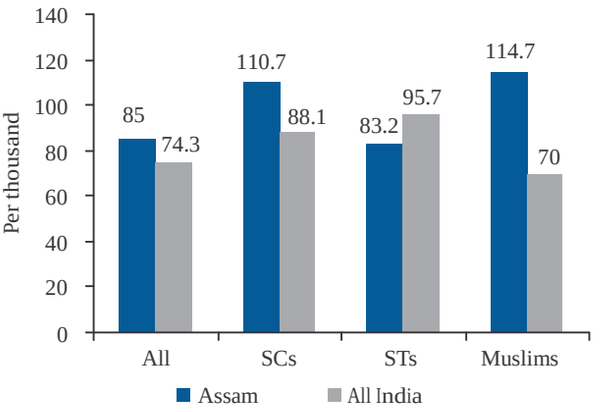

Figure 4 Under Five Mortality Rate, Assam and India, 2005–6

Source: *NFHS 3*.

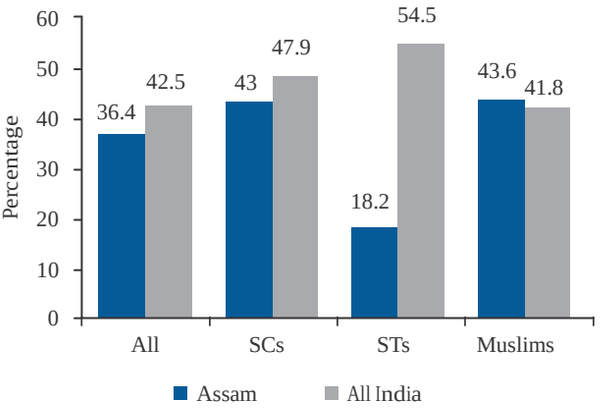

Figure 5 Percentage of Underweight Children (0–5 Years), Assam and India, 2005–6

Source: *NFHS 3*.

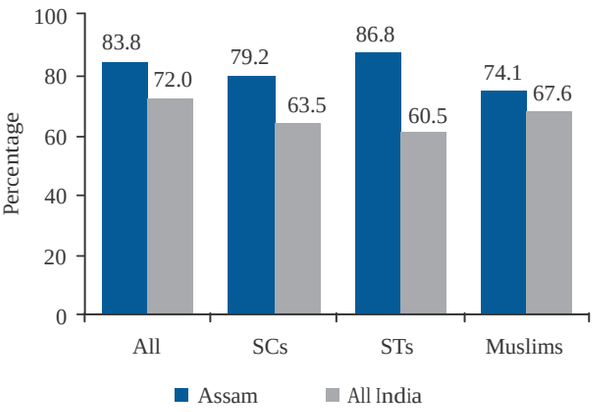

Figure 6 Literacy Rate, Assam and India, 2007–8

Source: NSS 64th Round.

Committees (VECs). The SCs in the state performed far better than the national average, but lower than the state average. The latest estimates of literacy rate from Census (2011) show that Assam is marginally lower than all India average for literacy rate with the value of 73.2 per cent against 74 per cent at all India. The incidence of female malnutrition among STs in Assam is slightly lower than at the national level, but higher than the state average. Scheduled Tribe children in Assam are better nourished compared to the state average and the national average for STs. The same is true for education, drinking water (Figure 7) and sanitation facilities (Figure 8) for the STs in the state, suggesting that the STs of Assam are better placed than their national counterparts and as well placed as other social groups in the state.

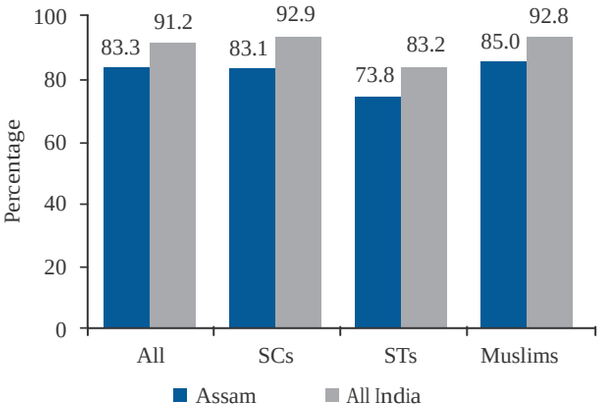

Figure 7 Percentage of Households with Improved Source of Drinking Water Facility, Assam and India, 2008–9

Source: NSS 65th Round.

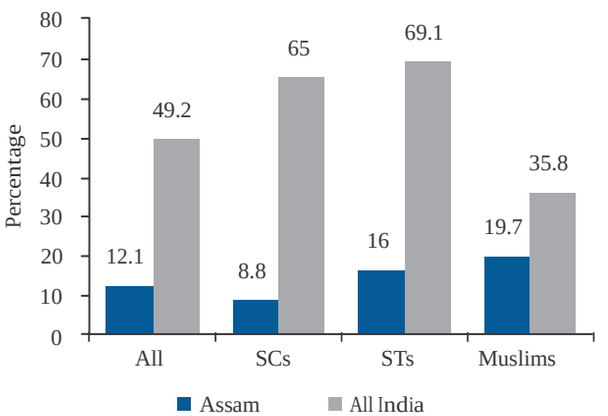

Figure 8 Percentage of Households with No Toilet Facility, Assam and India, 2008–9

Source: NSS 65th Round.

Human Development by Religious Communities

Muslims do not stand high on development indicators. In both education and health indicators, Muslims fared not only below the state average, but also lower than the STs and SCs of the state. Given the high percentage of Muslims in the state and their poor health and education status, Assam needs to pay special attention to them if it is to improve overall human development in the state. However, their performance is as good as the state average in access to improved sources of drinking water and sanitation facilities.

BIHAR

Economy and Demography

Bihar is one of the fastest growing states of India. In recent years the growth rate of NSDP and per capita NSDP of the state is better than the corresponding national growth rate (Table 1). The increase in road connectivity and better governance has created an investment friendly environment in the state. Though Bihar is leading the growth charts amongst the Indian states, its per capita income at constant prices is still the lowest in the country. Furthermore, there is a high intra-state disparity with north Bihar lagging behind. North Bihar is predominantly agrarian and is highly prone to floods, with poor irrigation facilities resulting in low agricultural productivity.

However, southern Bihar which has been growing at a faster pace accounted for a larger proportion of the SC population of the state, and the Samekit Karya Yojana has been incorporated in the seven tribal and backward districts—Arwal, Aurangabad, Jehanabad, Gaya, Jamui, Nawada, and Rohtas (all are in southern Bihar)—to build up infrastructure and services. Therefore, it appears that in recent years, not only has the pace of growth accelerated, it has also become more inclusive in nature (*Economic Survey of Bihar 2010–11*).

Scheduled castes constitute more than one-fifth of Bihar's population (Table 2) and it ranks third among all states/UTs in terms of the size of the SC population. Similarly, the Muslim population accounts for a higher share in Bihar compared to other major Indian states. The problem with Bihar's demographic profile is that it is one of the most populous states of India, and its share is expected to increase due to its high TFR of 3.9—the highest in India. Bihar also has a very low sex-ratio with

916 females per 1,000 males, against the 940 females per 1,000 males for the overall country. However, it is a good

sign that Bihar has a better child sex-ratio of 933, which is greater than both overall sex-ratio of the state and also all India's child sex-ratio (Census 2011).

Table 1 Average Annual Growth Rate, 2000–1 to 2008–9
(*per cent*)

(at 1999–2000 prices)	*State*	*All India*
NSDP/NDP (for India)	9.0	7.1
Per Capita NSDP/Per Capita NNP (for India)	7.0	5.4

Source: CSO.

Table 2 Distribution of Social and Religious Groups, 2007–8
(*per cent*)

Share of State			*Distribution within State*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
1.22	11.74	13.40	0.92	22.22	14.93

Source: NSS 64th Round.

Human Development and Social Groups

The incidence of poverty in Bihar is significantly higher than the national average, and it is worse for rural Bihar (Figure 1). In the case of SCs, the incidence of poverty in both rural and urban areas is higher than the state average and also the corresponding national average (Figure 2). Furthermore, in terms of other human development outcome indicators in health, education, and sanitation, Bihar's performance is below the national level. The literacy rate of Bihar is 63.8 per cent as compared to 74 per cent literacy of the country (Census 2011). The more serious concern is that in those indicators, SCs are falling far behind not only their national counterparts, but also within the state (Figures 3 to 6, and Figure 8). Given the large share of SC population in Bihar, this is a major bottleneck in the state's development process. The National Rural Health Mission (NRHM) has a significant role to play in improving the health status of Bihar.

Human Development and Religious Communities

Across religious communities, Muslims are one of the worst performers for health indicators like women with BMI<18.5, U5MR, and underweight children. The Muslims in the state are worse off than the Muslims for India as a whole in terms of health indicators. A similar situation has been observed for the education sector, where Muslims have lower literacy rates than the state average, and also as compared to the all India average for Muslims.

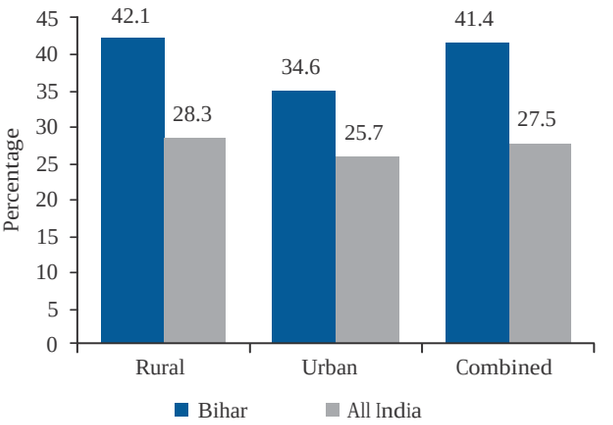

Figure 1 Incidence of Poverty, Bihar and India, 2004–5

Source: Planning Commission (2008).

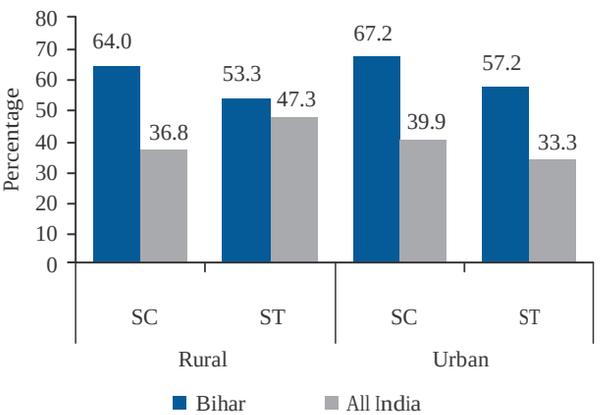

Figure 2 Incidence of Poverty by Social Groups, Bihar and India, 2004–5

Source: Planning Commission (2008).

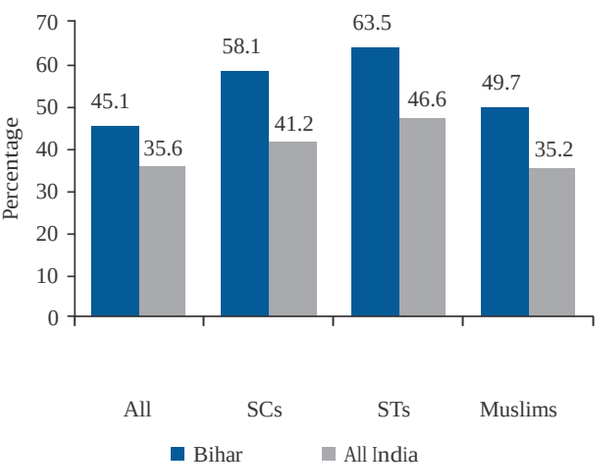

Figure 3 Percentage of Women with BMI<18.5, Bihar and India, 2005–6

Source: *NFHS 3.*

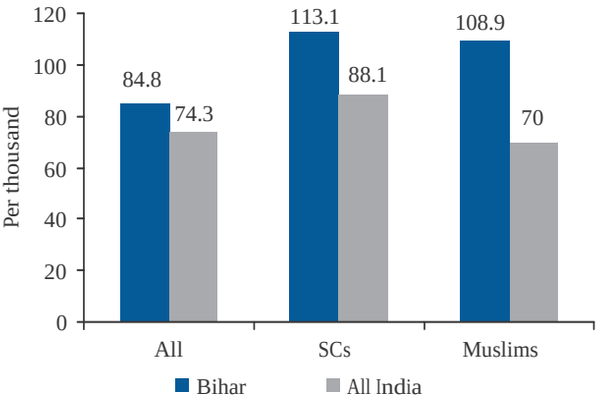

Figure 4 Under Five Mortality Rate, Bihar and India, 2005–6

Source: *NFHS 3.*

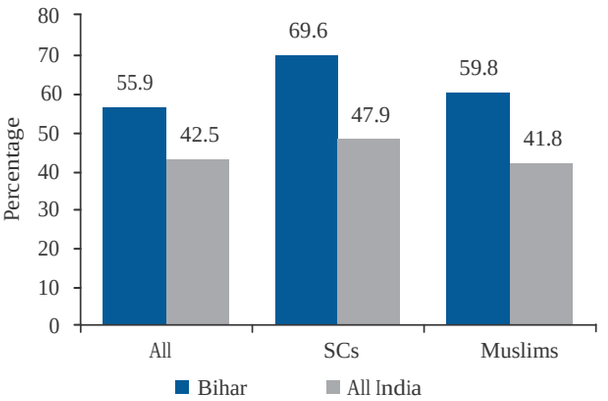

Figure 5 Percentage of Underweight Children (0–5 Years), Bihar and India, 2005–6

Source: *NFHS 3.*

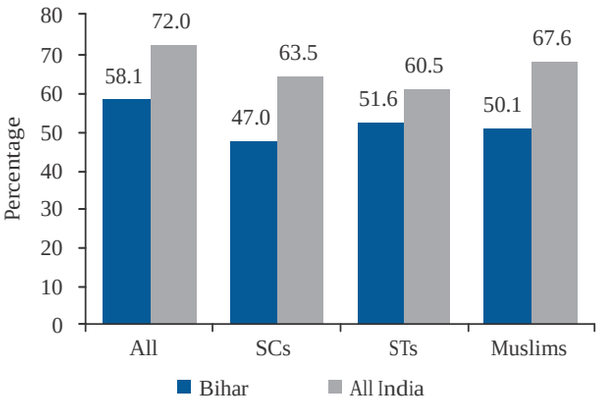

Figure 6 Literacy Rate, Bihar and India, 2007–8

Source: NSS 64th Round.

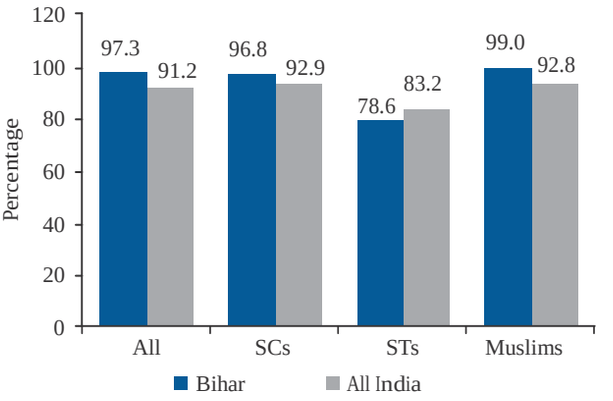

Figure 7 Percentage of Households with Improved Source of Drinking Water Facility, Bihar and India, 2008–9

Source: NSS 65th Round.

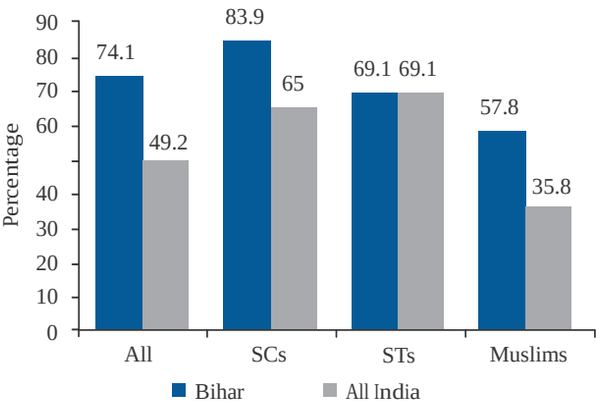

Figure 8 Percentage of Households with No Toilet Facility, Bihar and India, 2008–9

Source: NSS 65th Round.

Although there has been rapid economic growth in recent years, it is not reflected in other human development indicators namely, incidence of poverty, health, education and sanitation facilities, which remain poor. However, efforts have been made by the state government to reduce poverty and improve social indicators. For instance, about 4 million ration cards had been issued to the BPL population in Bihar till June 2009, and under the Antyodaya Anna Yojana (AAY) about 2.4 million people were issued ration cards. The share of development expenditure in the total expenditure has been increasing gradually since 2003–4. Moreover, per capita social sector expenditure in Bihar has increased significantly in the last five years. Further, the share of expenditure on welfare of the state's SCs and STs to total expenditure has almost

doubled during the period 2004 to 2008. In education, the annual upper primary enrolment rate has grown very signifi cantly (19.63 per cent overall, SCs, 23.24 per cent; STs, 27.87 per cent), and this is an indication of the recent initiatives made to correct the human development outcomes.

CHHATTISGARH

Economy and Demography

Chhattisgarh is a new state carved out from the state of Madhya Pradesh on 1 November 2000 with great expectations of rapid development. Over the years the Naxals have been placing many hurdles in the way of Chhattisgarh' s development. The state is rich in mineral resources and is a power surplus state—an ideal destination for investors. The northern and southern parts of the state are hilly and the central part is plain, fertile land. The southern parts of Chhattisgarh consisting of Dantewada, Bastar, Kanker, Rajnandangaon, and Narayanpur districts are the worst aff ected by Naxalites. Chhattisgarh is one of the emerging states with relatively high growth rates of NSDP and per capita NSDP. The growth rates of the said parameters are above the national averages, and thus it appears that Chhattisgarh is catching up with other states in this respect (Table 1). However, Chhattisgarh still has very low levels of per capita income as compared to the other states. In absolute terms at 1999– 2000 prices, the gap between the state per capita income and national per capita income has been decreasing.

Table 1 Average Annual Growth Rate, 2002–3 to 2007–8
(*per cent*)

(at 1999–2000 prices)	*State*	*All India*
NSDP/NDP (for India)	8.2	7.1
Per-Capita NSDP/NNP (for India)	6.2	5.4

Source: CSO.

The demographic profi le shows that about 80 per cent of the total population lived in rural areas. The sex ratio in the state is one of the best in India with 991 females per 1,000 males, as is the child sex-ratio with 964 females per 1,000 males (Census 2011). Chhattisgarh has a fairly high fertility rate as compared to other states. With the exception of the hilly states of the north-east, Chhattisgarh has one of highest shares of ST population within a state, accounting for about 10 per cent of the STs in India. SCs and STs together constitute more than 50 per cent of the state' s population (Table 2). The tribals of Chhattisgarh are an important part of the population and mainly inhabit the dense forests of Bastar and other districts of south Chhattisgarh. The share of Muslim population in the state and among the religious communities is low.

Table 2 Distribution of Social and Religious Groups, 2007–8
(*per cent*)

Across State			*Within the State*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
10.01	1.58	0.16	37.54	13.68	0.9

Source: NSS 64th Round.

Human Development and Social Groups

The incidence of poverty in Chhattisgarh is very high but is better than Orissa and Bihar. The estimated poverty ratio in 2004– 5 based on uniform reference period consumption was around 50 per cent, which is approximately double the all India level. The incidence of poverty in the rural and urban areas is almost the same. More than half of the rural STs and urban SCs are poor. In general, the proportion of poor SC and ST households in the state is higher than the state average and their community' s respective national averages (except for rural SC house- holds). Given that more than 50 per cent of the state' s population comprises of STs and SCs, the high incidence of income poverty among them is a matter of serious

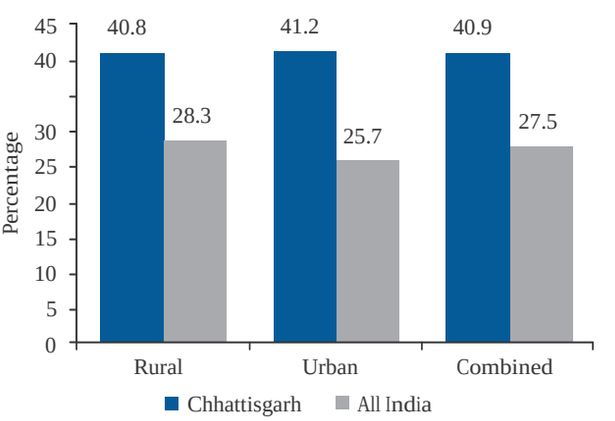

Figure 1 Incidence of Poverty, Chhattisgarh and India, 2004–5

Source: Planning Commission (2008).

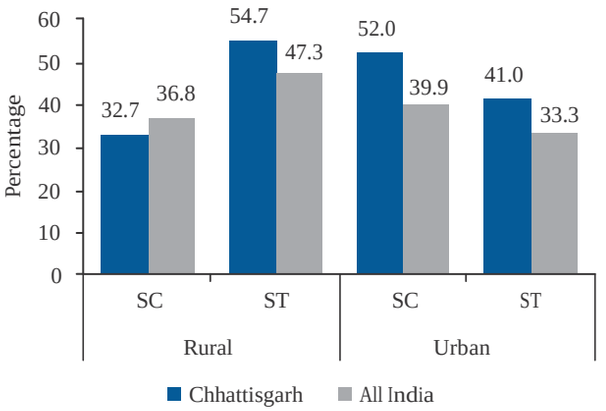

Figure 2 Incidence of Poverty by Social Groups, Chhattisgarh and India, 2004–5

Source: Planning Commission (2008).

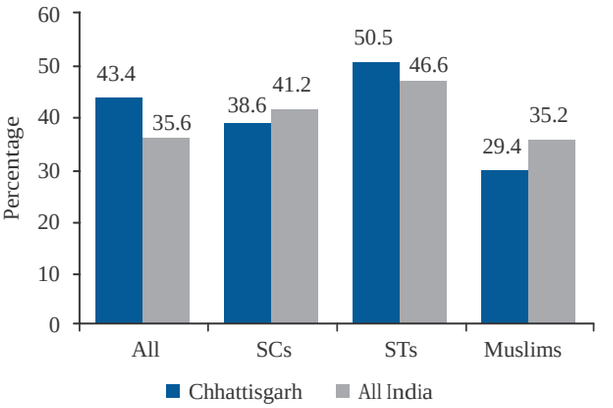

Figure 3 Percentage of Women with BMI<18.5, Chhattisgarh and India, 2005–6

Source: *NFHS 3*.

concern in the state, and a foundational reason for the growth of extremism. This indicates that the good economic performance in recent years has not percolated to this socially deprived group, which is reflected in their poor performance in human development indicators.

Despite different health related schemes and programmes, the health indicators such as percentage of women with BMI<18.5 (Figure 3), U5MR (Figure 4), and underweight children (Figure 5)—are poor. This may be due to the difficulty in accessing the hilly areas in the state. The prevalence of female malnutrition in Chhattisgarh is higher than the national average—half of the ST females are malnourished. The performance of SCs is a little better than the corresponding national and state average (Figure 3). The U5MR among STs is significantly higher than the national average. The health indicators for
SCs are slightly better than the overall state average and the national average for SCs. The percentage of underweight children in Chhattisgarh is also higher than the national average, further underlining the appalling health condition of the state's population.

With respect to literacy, the state fared just below the national average. The recent estimates from Census (2011) also depict a similar picture with the literacy rate of 71 per cent, which is close to the all India literacy rate of 74 per cent. According to NSS (2007–8), the literacy rate for STs and SCs was better than the corresponding national average, and this is a positive sign (Figure 5). Among the marginalized groups, STs are at the bottom of the rankings, further emphasizing the lack of social development in the state. Bastar and Dantewada in south

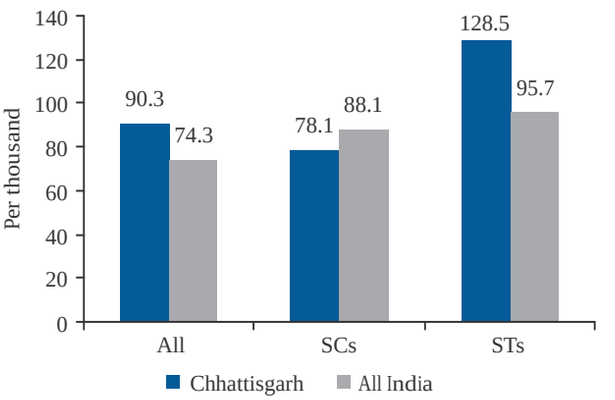

Figure 4 Under Five Mortality Rate, Chhattisgarh and India, 2005–6

Source: *NFHS 3*.

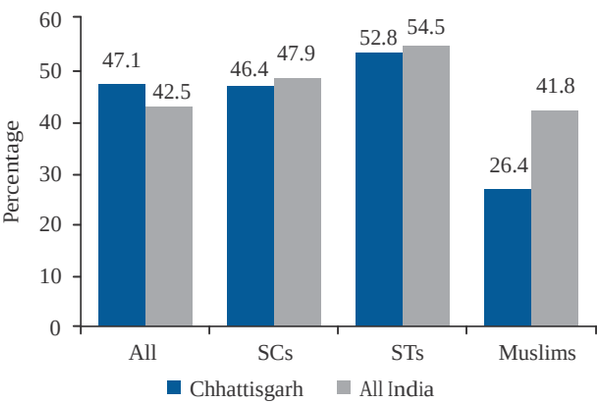

Figure 5 Percentage of Underweight Children (0–5 Years), Chhattisgarh and India, 2005–6

Source: *NFHS 3*.

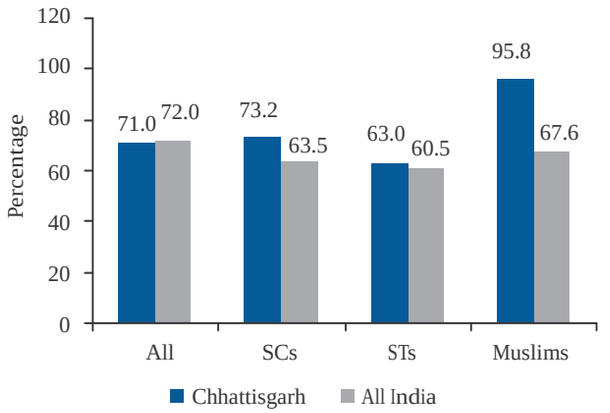

Figure 6 Literacy Rate, Chhattisgarh and India, 2007–8

Source: NSS 64th Round.

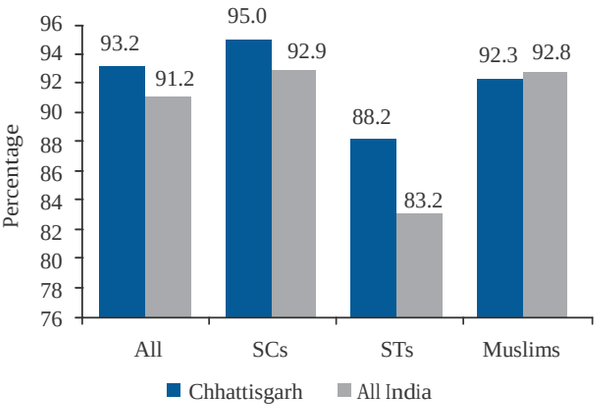

Figure 7 Percentage of Households with Improved Source of Drinking Water Facility, Chhattisgarh and India, 2008–9

Source: NSS 65th Round.

Chhattisgarh are the most illiterate districts and the drop out ratio is the highest among all the districts. The reason for this is the extreme poverty in rural areas.

In terms of access to improved drinking water sources, at the aggregate level, Chhattisgarh fared better than the national average, and the SCs of the state performed better than the corresponding national average. Scheduled Tribes are marginally below the state average, but still better than the STs at the all India level (Figure 7). Sanitation facilities in the state are abysmally low with only about 27 per cent having toilet facilities. The STs are the most deprived section in this regard with only 18 per cent of the ST households having toilet facilities, which is lower than the all India average for STs. The SCs also have a lower proportion of households with toilet facilities as compared to the all India average. Economic growth wit out social growth would further accentuate the regional, sectoral and communal disparities, and may subsequently worsen the existing Maoist problem which the state has been fi ghting.

Human Development and Religious Communities

Chhattisgarh is a Hindu majority state like most others. Muslims account for only 2 per cent of the total population of the state. In terms of human development, Muslims fare better than Hindus. For instance, Muslims have better health indicators like percentage of women with BMI<18.5 or underweight children than all com- munities together in the state. These are also better than

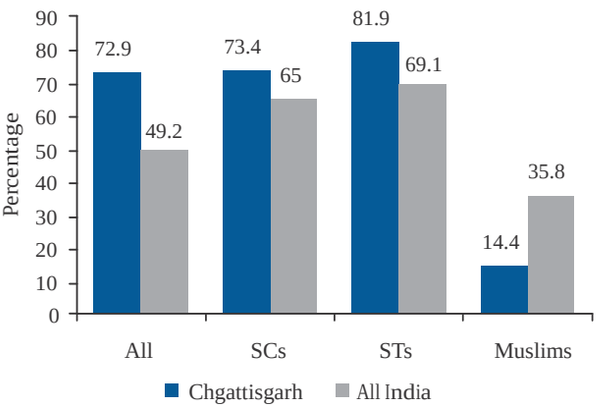

Figure 8 Percentage of Households with No Toilet facility, Chhattisgarh and India, 2008–9

Source: NSS 65th Round.

the all India levels for Muslims. Similarly, Muslims have a remarkably high literacy rate in the state, which is far better than the all India literacy rate for Muslims. In the case of basic amenities, like accessing drinking water from improved sources, the indicators for the Muslims are close to the state average and the national average for Muslims. Muslims are also comparatively better off than Hindus in terms of access to toilet facilities in the state and also compared to Muslims in India as a whole. In spite of Muslims being a minority in the state, they have better human development outcomes than other communities of the state.

DELHI

Economy and Demography

Delhi became a state only about a decade back. It is economically well-off since large amounts have been invested in the state over the decades. Also, as it is predominantly urban (76.2 per cent urban population), it does not carry the baggage of an agrarian structure from years past. During the period 2000–1 to 2007–8, Delhi fared better in its NSDP growth rate as compared to the national average, and its per capita NSDP was almost equal to the country average (Table 1). The reason for Delhi's high population growth is the large scale in-migration. The tertiary sector accounted for about 97 per cent of NSDP, while industry contributed less than 1 per cent during 2009–10, indicating that there is a huge potential for growth in this sector (RBI 2010).

The demographic profile shows that Delhi has a population density of 9,340 persons/km^2, which is the lowest among major metropolitan cities in India. Delhi has an impressive TFR of two. One disturbing aspect of Delhi's demographics is the low sex-ratio which deteriorated from 827 in 1991 to 821 per 1,000 in 2001. Equally disturbing is the sharp decline in Delhi's sex-ratio among children in the age group 0–6 years from 915 in 1991 to 868 per 1,000 in 2001. As per the latest estimates from Census (2011), the overall sex-ratio has increased to 866 females per 1,000 males. However, child sex-ratio (age group 0–6 years) has declined from its 2001 level to 866 in 2011, and is well below the national average of 914.

Table 1 Average Annual Growth Rate, 2000–1 to 2007–8

(*per cent*)

(at 1999–2000 prices)	*State*	*All India*
NSDP/NDP (for India)	8.9	7.1
Per Capita NSDP/NNP (for India)	5.7	5.4

Source: CSO.

Table 2 Distribution of Social and Religious Groups, 2007–8

(*per cent*)

Share of State			*Distribution within State*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
0.09	1.75	1.17	0.63	27.82	12.1

Source: NSS 64th Round.

Human Development and Social Groups

Across the social groups, the share of the general category in the total population of the state is more than half (54.5 per cent), followed by SCs (27.8 per cent), whereas STs constitute less than 1 per cent of the population. Across religious communities the largest group is Hindu (about 83 per cent). Muslims account for about 12 per cent of the state's population (Table 2).

On the HDI scale, Delhi slipped from the first position, which it occupied in 1999–2000 to the second position in 2007–8. Looking at the development indicators, the incidence of poverty in Delhi (14.7 per cent) was significantly lower than the national average (27.5 per cent) in 2004–5. The incidence of urban poverty is much higher than that of rural poverty due to interstate in-migration, particularly from the lower per capita income states (about 46 per cent of in-migrants during 1991–2001 came from Uttar Pradesh and Uttarakhand and another 23 per cent from Bihar) (*Delhi Human Development Report 2006*).

On all the three development indicators of health, namely, female malnutrition in terms of women with BMI<18.5, U5MR, and underweight children, Delhi has performed better than the national average. This holds true for the SCs and STs as well (Figures 3, 4, and 5). However, the SC population is behind the state averages in health indicators.

Close to 85 per cent of Delhi's population is literate, which is higher than the national average of 72 per cent (NSS, 2007–8). As per the latest estimates from Census (2011) for literacy rate, Delhi has a better literacy rate

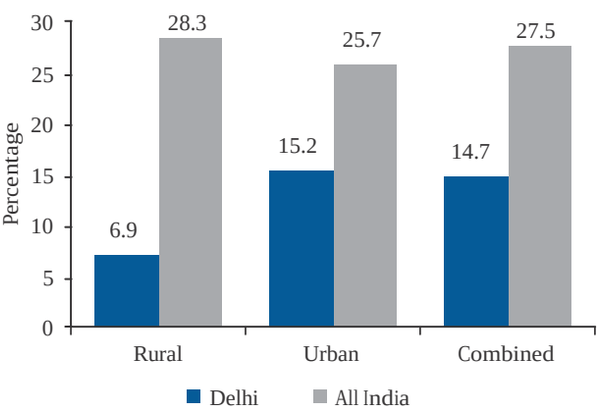

Figure 1 Incidence of Poverty, Delhi and India, 2004–5

Source: Planning Commission (2008).

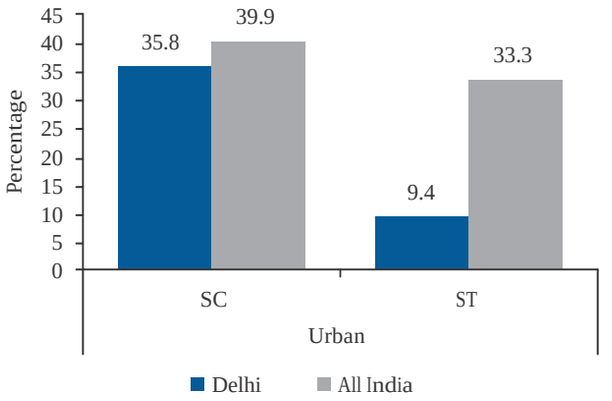

Figure 2 Incidence of Poverty by Social Groups, Delhi and India, 2004–5

Source: Planning Commission (2008).

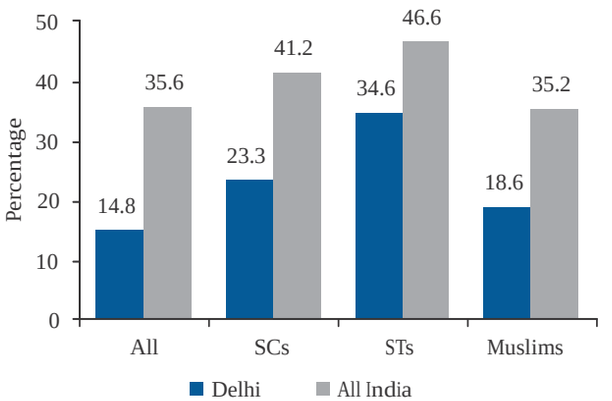

Figure 3 Percentage of Women with BMI<18.5, Delhi and India, 2005–6

Source: *NFHS 3*.

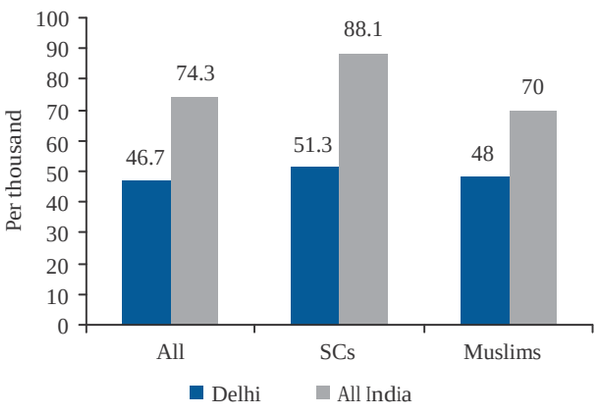

Figure 4 Under Five Mortality Rate, Delhi and India, 2005–6

Source: *NFHS 3*.

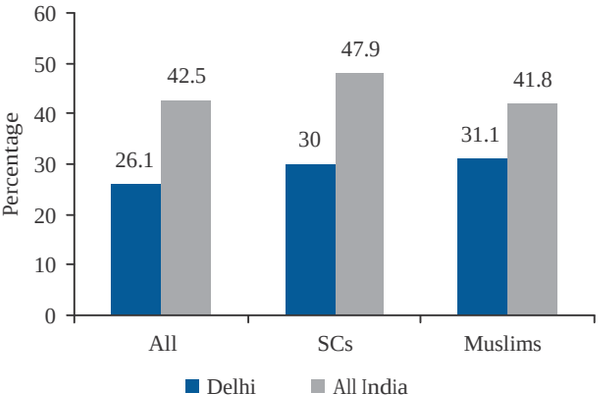

Figure 5 Percentage of Underweight Children (0–5 Years), Delhi and India, 2005–6

Source: *NFHS 3*.

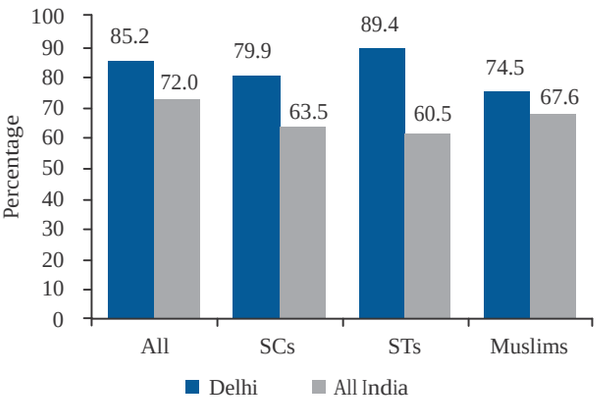

Figure 6 Literacy Rate, Delhi and India, 2007–8

Source: NSS 64th Round.

(86.3 per cent), against the all India literacy rate, which is 74 per cent in the year 2011. The literacy rate among SCs is marginally lower than the state average, but still higher than the all India average for SCs. Although Delhi fared better than the rest of the country in the overall literacy rate, female literacy is a challenge. Female literacy rates in Delhi are 72.2 per cent and 77.8 per cent for rural and urban areas, respectively, compared to the corresponding male literacy rates of 92.6 per cent and 91.3 per cent. The '*Ladli*' scheme (of 2008) mentioned earlier is expected to address this issue.

In terms of basic amenities, in 2008–9 around 96 per cent of households had access to improved sources of drinking water (Figure 7); yet, Delhi faces a severe water crisis. Nearly five out of six residents (84 per cent) felt that

the water supply was inadequate in their locality (*Delhi Human Development Report 2006*). All the social groups have equal access to improved sources of drinking water. Delhi is approaching the target of providing toilet facilities to almost all the households. In 2008–9, more than 98 per cent of households had access to toilet facilities. The SCs and STs in Delhi had better performance figures than the corresponding national averages (Figure 8).

Human Development and Religious Communities

On human development indicators across religious groups, Muslims to some extent lag behind the overall state performance, both in health and literacy. However, Muslims are in a fairly good position on human development indicators in the state vis-à-vis Muslims at the all India level. In terms of accessing basic amenities like improved sources of drinking water and toilet facilities, Muslims are at par with other communities in the state. In spite of good progress in many developmental indicators compared to the national averages, four categories of people in Delhi have been bypassed to a large extent—the aged, the disadvantaged, working and street children, and the disabled (*Delhi Human Development Report 2006*).

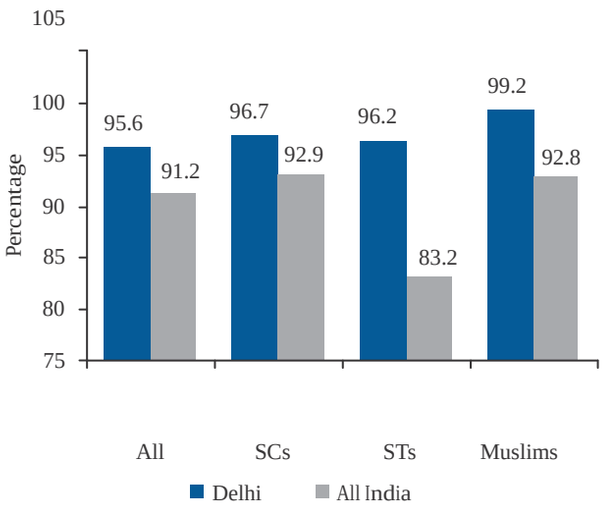

Figure 7 Percentage of Households with Improved Source of Drinking Water Facility, Delhi and India, 2008–9

Source: NSS 65th Round.

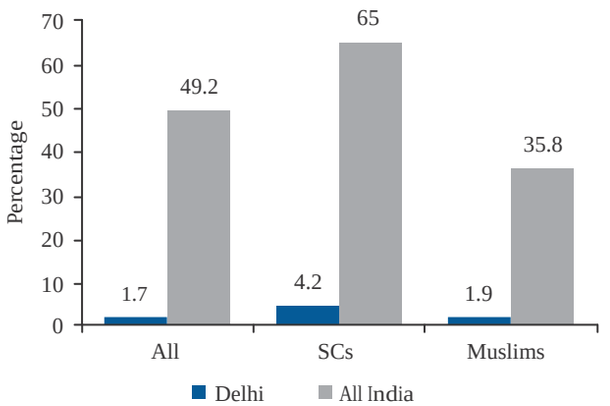

Figure 8 Percentage of Households with No Toilet facility, Delhi and India, 2008–9

Source: NSS 65th Round.

GOA

Economy and Demography

Goa, on the west coast of India, is the second smallest among the 29 states in India. In terms of economic growth, the state's performance was higher than the national average during the period 2002–3 to 2007–8 (Table 1). Goa's growth performance is driven to a considerable extent by the tourism industry. The state is also rich in minerals and ores; and mining is the second largest industry. Goa's agriculture base is insignificant, but it offers part-time employment to a sizeable population. The fishing industry also provides employment to about 40,000 people.

Hindus constitute three-fourths of the state's population, followed by Christians who account for 14 per cent. Among the social groups, SCs and STs account for 9 per cent of the state's population (Table 2). In terms of fertility rate, Goa is one of the best states, with a TFR of 1.5 in 1995–7, the lowest in India (all India TFR was 3.4 in 1995–7 and 2.6 in 2008). In terms of sex-ratio, Goa with 968 females per 1,000 males is better than all India average of 940 females per 1,000 males in 2011 (Census 2011). However, lower child sex-ratio (920) in Goa is a matter of concern, as it points towards the possible lower sex-ratio in the future.

Table 1 Average Annual Growth Rate, during 2002–3 to 2007–8 (*per cent*)

(at constant prices, 1999–2000)	*State*	*All India*
NSDP / NDP (for India)	9.5	7.9
Per Capita NSDP / Per Capita NNP (for India)	7.4	6.4

Source: CSO.

Human Development and Social Groups

The incidence of poverty was significantly lower than the national average in 2004–5. The incidence of poverty in urban areas was much higher than that in rural areas (Figure 1).

Table 2 Distribution of Social and Religious Groups, 2007–8 (*per cent*)

Share of State			*Distribution within State*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
0.03	0.05	0.1	1.8	7.2	9.8

Source: NSS 64th Round.

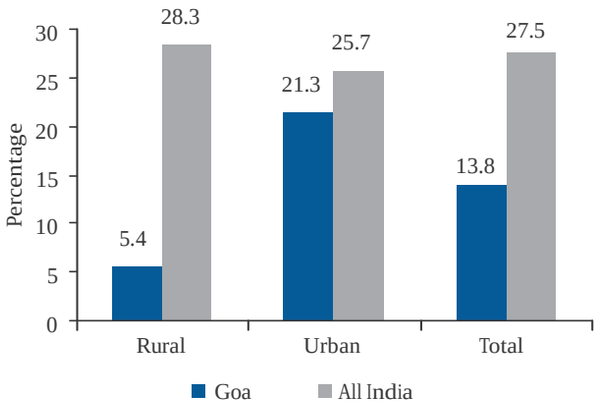

Figure 1 Incidence of Poverty, Goa and India, 2004–5

Source: Planning Commission (2008).

In terms of health indicators, the performance of the state was much better than the national average. The proportion of females with a BMI<18.5 (Figure 2), U5MR (20 compared to 74 for all India), and proportion of underweight children (25 compared to 42.5 for all India) were all below the national average.

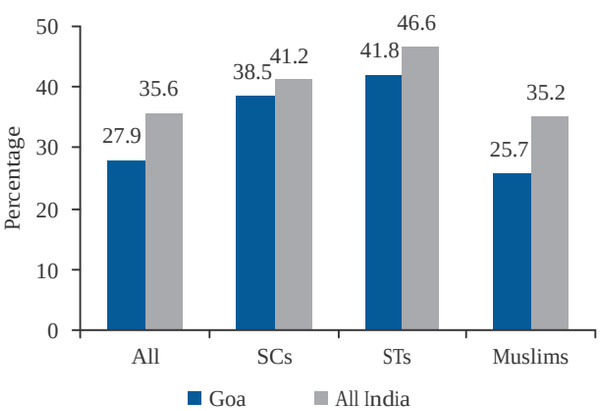

Figure 2 Percentage of Women with BMI<18.5, Goa and India, 2005–6

Source: *NFHS 3*.

Even though the performance of the state in terms of literacy was better than the national average, the literacy rate among SCs was lower than the state average, even though it was similar to the national average for SCs (Figure 3). According to latest estimates of Census (2011), the literacy rate of Goa is 87.4 per cent as compared to the 74 per cent national literacy rate.

In terms of basic household amenities, Goa's performance was better than the national average. The proportion of households with access to improved drinking water sources is marginally higher than the all India average (Figure 4). Less than one-fourth of the households did not have access to toilet facilities, much lower than the national average (Figure 5). On both these counts, SCs and STs in Goa are far better off than SCs and STs in the rest of the country.

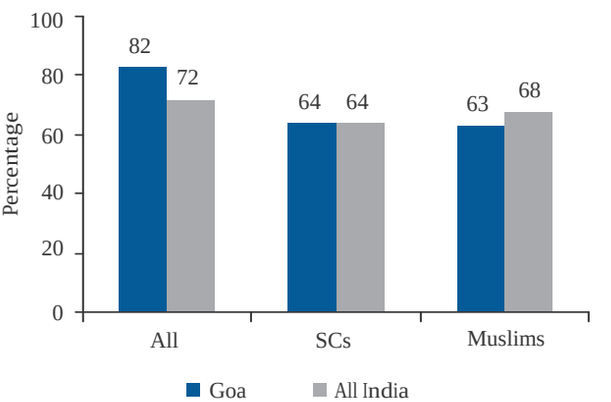

Figure 3 Literacy Rate, Goa and India, 2007–8 (*per cent*)

Source: 64th NSS Round.

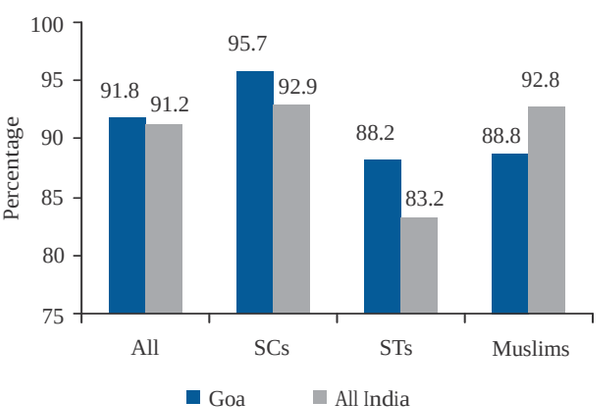

Figure 4 Percentage of Households with Improved Source of Drinking Water Facility, Goa and India, 2008–9

Source: 65th NSS Round.

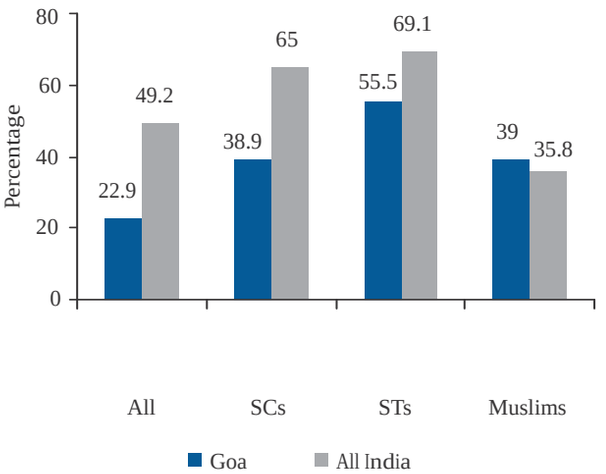

Figure 5 Proportion of Households with No Toilet Facility, Goa and India, 2008–9

Source: 65th NSS Round.

Human Development and Religious Communities

Christians are better performers across health indicators and have a better literacy rate, followed by Hindus, whereas Muslims are not doing so well for both the indicators. A similar situation is also observed with regard to amenities, that is, access to improved sources of drinking water and access to toilets. Christians have the best outcomes across these indicators, while Muslims have poorer outcomes.

GUJARAT

Economy and Demography

Gujarat is one of the major industrialized states of India. In recent years the average annual growth rate of the NSDP and the per capita NSDP has been faster than the national average (Table 1). About 84.5 per cent of its income came from non-primary sources, which employed 47.8 per cent of the workforce. Only 15.5 per cent of income came from the primary sector and was shared by the remaining 52.2 per cent of the workforce, which caused high intra-state disparities. Further, agriculture was almost stagnant in the 1980s and demonstrated a negative growth in the 1990s. This has been a major barrier to Gujarat's development (*Gujarat Human Development Report 2004*). However, during the period 2000–1 to 2007–8, agriculture and its allied sectors have grown at more than 10 per cent per annum who precedented in India, and as in Andhra Pradesh, been an important factor driving the overall GDP growth.

The demographic composition within the state shows that STs and SCs accounted for more than one-fourth of the state's population. Across states, there is a higher concentration of STs in Gujarat (Table 2). Approximately 4 per cent of the country's Muslim population lives in Gujarat, suggesting. that a fairly high proportion of the population belongs to marginalized groups. Gujarat's TFR (2.5) is quite close to the all India TFR (2.6). However, it is still on the higher side as compared to the optimal replacement rate of 2.1. In terms of sex-ratio, Gujarat (with 918 females per 1,000 males) is well below than the national sex-ratio of 940 females per 1,000 males in 2011. By and large, the sex-ratio is below the national average in many states that have a higher than average per capita income. The problem of low sex-ratio is even more serious in the state when we look at child sex-ratio (886 females only per 1,000 males), which is far below the current overall sex-ratio of the state and also below the national child sex-ratio of 914 (Census 2011).

Table 1 Average Annual Growth Rate, 2000–1 to 2007–8 (*per cent*)

(at 1999–2000 prices)	*State*	*All India*
NSDP/NDP (for India)	8.8	7.1
Per Capita NSDP / Per Capita NNP (for India)	7.0	5.4

Source: CSO.

Table 2 Distribution of Social and Religious Groups, 2007–8 (per cent)

Share of State			*Distribution within State*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
12.50	3.72	4.01	16.53	11.33	7.89

Source: NSS 64th Round.

Human Development and Social Groups

The incidence of poverty in Gujarat is lower than that of India for both rural and urban areas; however, rural poverty is higher than urban poverty for all social groups in the state (Figures 1 and 2). The incidence of poverty among STs is higher than the state average, but still lower than the incidence of poverty among SCs and STs at the all India level (Figure 2). Though Gujarat has a low incidence of income poverty, it is still signifi cant given the high economic growth it has achieved over the years.

Looking at the other human development outcome indicators, particularly health indicators, the performance of STs in Gujarat is worse than at the national level, and also worse than other social groups within the state

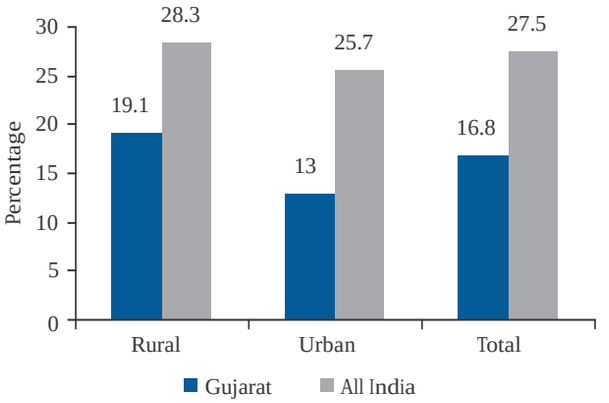

Figure 1 Incidence of Poverty, Gujarat and India, 2004–5

Source: Planning Commission (2008).

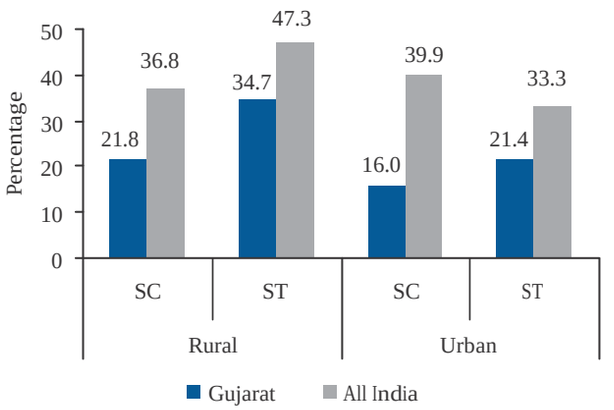

Figure 2 Incidence of Poverty by Social Groups, Gujarat and India, 2004–5

Source: Planning Commission (2008).

(Figures 3 to 5). This is primarily due to the fact that they are concentrated in rural areas, where the public health facilities are not as good as the facilities available in urban areas. A similar trend is observed for underweight children. This suggests that even if Gujarat is performing better than the country vis-à-vis the health indicators, the marginalized groups of the state, particularly the STs are deprived of health facilities. SCs are marginally worse off than the state average and quite close to their national averages for all the health indicators. Further, in recent years, environment related health problems due to high levels of contamination of ground water in the state are becoming a cause of concern (*Gujarat Human Development Report 2004*).

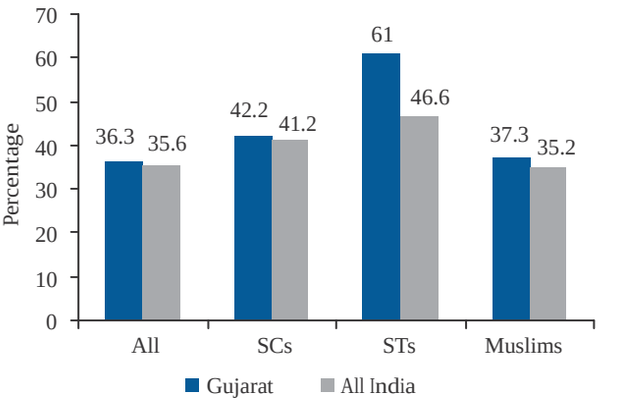

Figure 3 Percentage of Women with BMI<18.5, Gujarat and India, 2005–6

Source: *NFHS 3*.

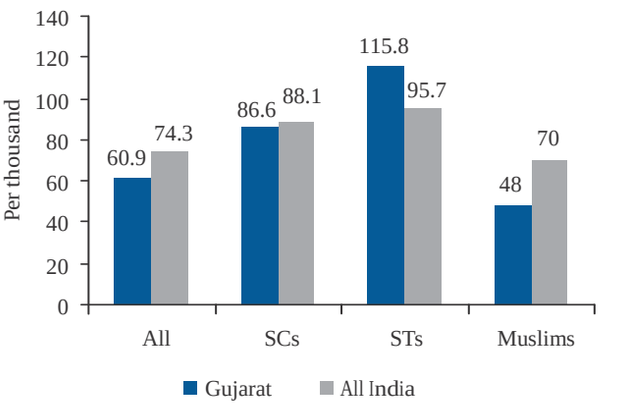

Figure 4 Under Five Mortality Rate, Gujarat and India, 2005–6

Source: *NFHS 3*.

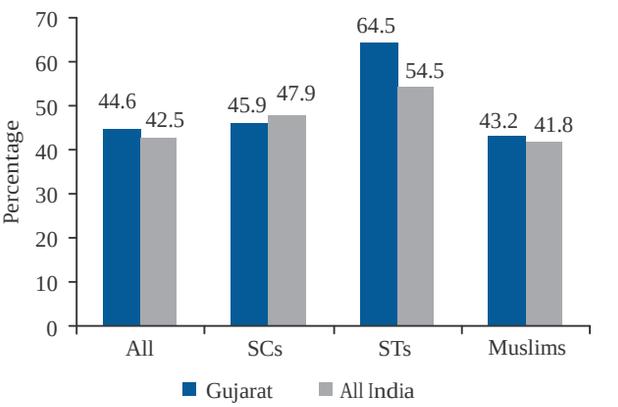

Figure 5 Percentage of Underweight Children (0–5 Years), Gujarat and India, 2005–6

Source: *NFHS 3*.

Gujarat's literacy rate is marginally above the national average (Figure 6). However, there is a high degree of intra-state variation in education levels, with the literacy rate being low in the tribal belt. The literacy rate among STs is the lowest among all the social groups in the state. Since STs constitute about 17 per cent of the state's population, their low literacy rate is a matter of serious concern (Figure 6). According to Census (2011), the literacy rate of Gujarat is 79.3 per cent in 2011, as compared to the national literacy rate of 74 per cent.

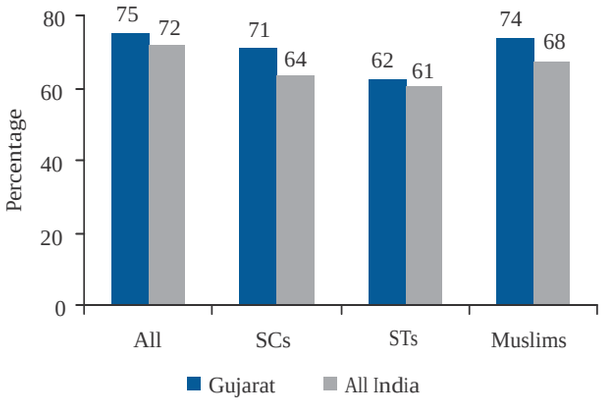

Figure 6 Literacy Rate, Gujarat and India, 2007–8

Source: NSS 64th Round.

In terms of basic household amenities, the state's performance is marginally better than the national average, with more than 93 per cent of the households having access to an improved source of drinking water as against the national average of 91 per cent (Figure 7). This amenity is fairly distributed across all the social groups, and their averages are quite close to the state average and greater than their corresponding national averages. Access to toilet facilities in the state is also slightly better than at the national level. Across the social groups, SCs and STs are worse off than the other social groups in the state, and also below the all India levels for SCs and STs (Figure 8). Realizing the importance of sanitation, the Government of Gujarat has introduced the *Gokul Gram Yojna*, and the Community Rural Sanitation Programme.

Human Development and Religious Communities

Across religious groups, the performance of the Muslim population, which accounts for only 8 per cent of the state's total population, is quite close to the state and national outcomes for Muslims in terms of health indicators. A similar trend has been observed for the literacy rate where Muslims have a slightly lower literacy rate than the state literacy rate, but higher than the all India literacy rate for Muslims. However, Muslims fare far better than other communities in the state as well as Muslims across India, in terms of accessing improved sources of drinking water and toilet facilities. It is worth mentioning that Muslims are faring better than SCs and STs in the state in all the above human development outcomes.

To sum up, it appears that the high growth rate achieved by the state over the years has not percolated to the marginalized sections of society, particularly STs and SCs, to help improve their human development outcomes.

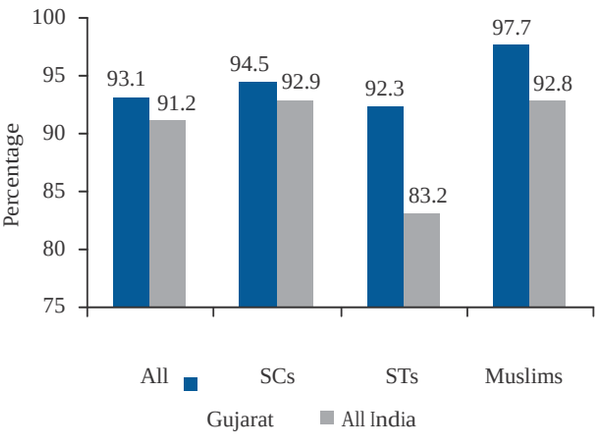

Figure 7 Percentage of Households with Improved Source of Drinking Water Facility, Gujarat and India, 2008–9

Source: NSS 65th Round.

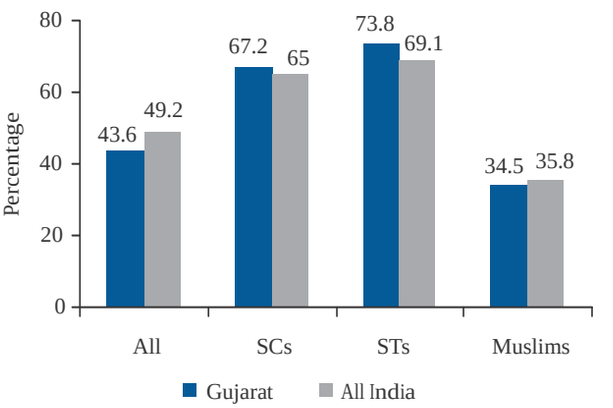

Figure 8 Percentage of Households with No Toilet Facility, Gujarat and India, 2008–9

Source: 65th NSS Round.

HARYANA

Economy and Demography

Haryana is one of the wealthiest states of India and has the highest per capita income in the country—more than 1.8 times the national per capita income. Haryana had lost its growth momentum in the 1990s, but has regained it in the new millennium. In recent years, Haryana's average annual growth rate in NSDP is more than two percentage points higher than the national NNP growth rate. Haryana surrounds Delhi on three sides, forming the northern, western, and southern borders of Delhi. Consequently, a large area of Haryana is included in the National Capital Region (NCR) and the districts in the NCR are more developed in comparison to other parts of the state.

The adverse sex-ratio in Haryana is a matter of grave concern. Haryana reported one of the lowest sex-ratio (861) among the major states against the all India figure of 933 per 1,000 in 2001. The child sex-ratio is even worse at 819. However, with the help of awareness campaigns, Haryana has managed to increase marginally its sex ratio to 877 per 1,000 in 2011, which is still among the lowest sex-ratios in India. A similar improvement has been observed for the child sex-ratio in 2011 (Census 2011). Scheduled Castes constitute about one-fourth of Haryana's population while STs and Muslims account for 0.13 and 7.69 per cent, respectively. Approximately 71 per cent of the state's population lives in rural areas. Around 2 per cent of the country's population lives in Haryana and its population is one of the fastest growing in India due its high TFR (2.5 in 2008) compared to the optimal replacement rate of 2.1.

Table 1 Average Annual Growth Rate, 2000–1 to 2008–9 (*per cent*)

(at 1999–2000 prices)	*State*	*All India*
NSDP/NDP (for India)	9.0	7.1
Per-Capita NSDP/NNP(for India)	6.8	5.4

Source: CSO.

Table 2 Distribution of Social and Religious Groups, 2007–8 (*per cent*)

Share of State			*Distribution within State*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
0.03	2.69	1.28	0.13	24.95	7.69

Source: NSS 64th Round.

Human Development and Social Groups

In terms of HDI, Haryana slipped two places down to ninth position in 2007–8 from the seventh position in1999–2000. The incidence of poverty in Haryana is very low compared to other major states. The estimated poverty ratio in 2004–5 based on Uniform Reference Period (URP) consumption was only 14 per cent, which is half the all India figure. The incidence of poverty in rural Haryana is less than that in urban areas. The lower incidence of rural poverty may be partially due to sustained growth in agriculture plus a deliberate policy of income and occupational diversification in the state.

The incidence of poverty among SCs is higher than the incidence of poverty in the state as a whole; however, STs have a very low incidence of poverty (Figure 2). It was found that SCs and STs in Haryana have been performing better than their national counterparts in this regard. This may be due to the relatively high wage rate prevailing in the state, particularly in the agriculture sector.

Haryana has performed better than the national average in the health related indicators such as women with BMI <18.5 (Figure 3), U5MR (Figure 4), and underweight children (Figure 5). The state has implemented various health related schemes to improve the nutrition levels of mothers and children. The health indicators of SCs and STs in the state are slightly worse than the state average, but still better than their average at the national level. Since its inception, the state of Haryana has made tremendous progress in the field of higher education. The overall literacy rate in Haryana is marginally higher than the all India level. Across social groups, SCs and STs have

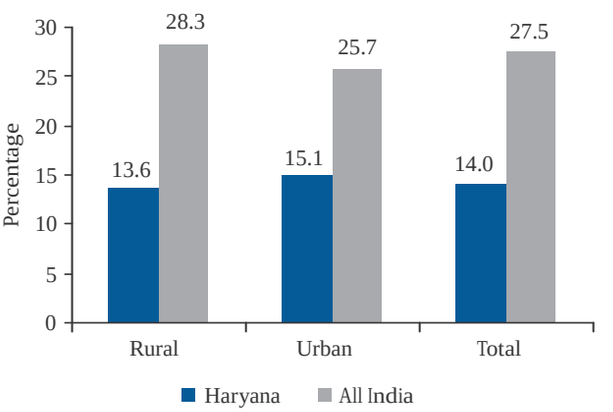

Figure 1 Incidence of Poverty, Haryana and India, 2004–5

Source: Planning Commission (2008).

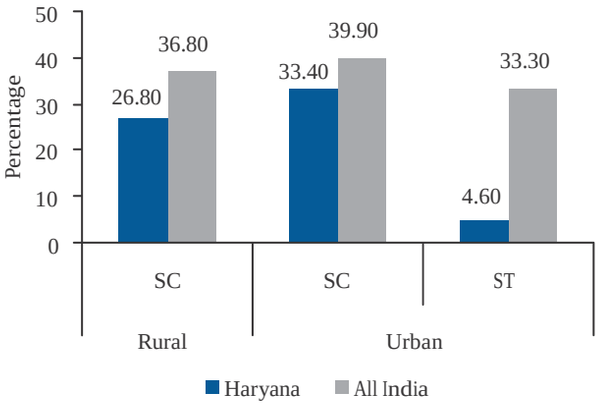

Figure 2 Incidence of Poverty by Social Groups, Haryana and India, 2004–5

Source: Planning Commission (2008).

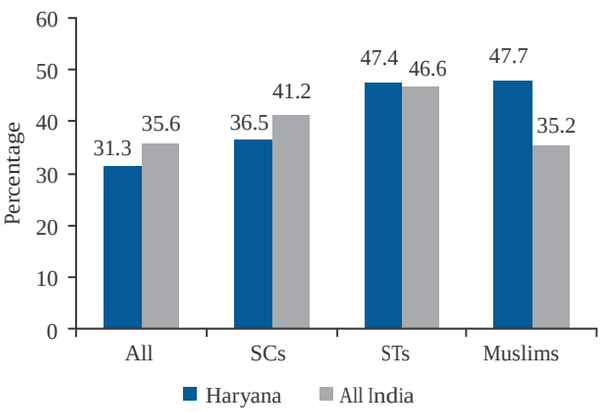

Figure 3 Percentage of Women with BMI<18.5, Haryana and India, 2005–6

Source: *NFHS 3*.

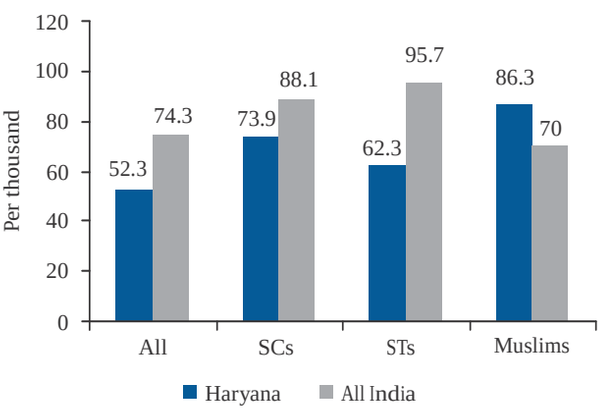

Figure 4 Under Five Mortality Rate, Haryana and India, 2005–6

Source: *NFHS 3*.

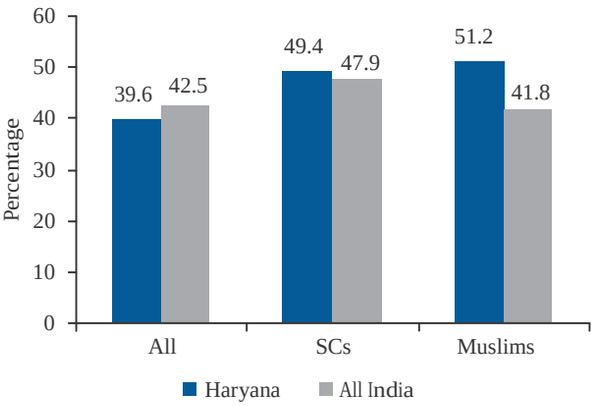

Figure 5 Percentage of Underweight Children (0–5 Years), Haryana and India, 2005–6

Source: *NFHS 3*.

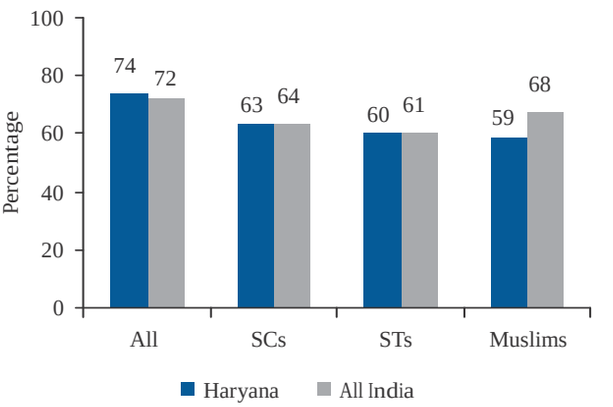

Figure 6 Literacy Rate, Haryana and India, 2007–8

Source: NSS 64th Round.

a lower literacy rate than the state average, but the literacy rate for SCs and STs is very close to the all India literacy rate of their communities. Latest estimates from Census (2011) also show that literacy rate of Haryana is 76.6 per cent which is slightly better than all India literacy rate of 74 per cent.

In terms of access to an improved source of drinking water, the state's performance is better than the national average. This amenity is fairly distributed across all the social groups (Figure 7). With regard sanitation, around two-thirds of the households in the state have access to toilet facilities (Figure 8), compared to 50 per cent at the all India level. However, a major area of concern for the state is that only half of the SC households have access to toilet facilities.

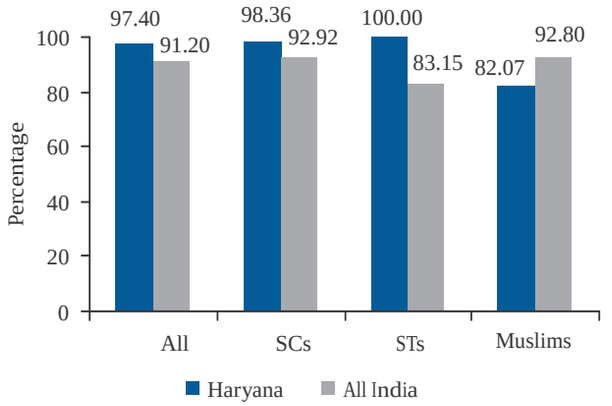

Figure 7 Percentage of Households with Improved Source of Drinking Water Facility, Haryana and India, 2008–9

Source: NSS 65th Round.

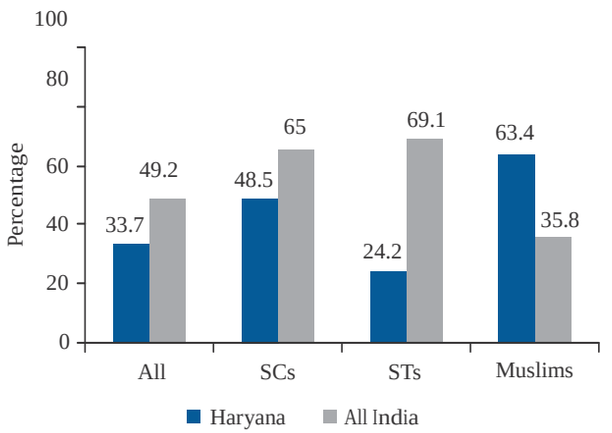

Figure 8 Percentage of Households with No Toilet Facility, Haryana and India, 2008–9

Source: NSS 65th Round.

Human Development and Religious Communities

Muslims are not benefi tting from the development process as much as other communities. In the case of health indicators, Muslims lag behind the SCs and STs of the state and Muslims at the all India level on every front. A similar picture has been observed for other development indicators like literacy rate, access to improved sources of drinking water and access to toilet facilities. For all these indicators, the Muslims of the state lag behind the state averages and their respective averages at all India level. Haryana is one of the rich states, but the development process across all socio-religious groups is not the same. There are a number of schemes and policies for the development of SCs, but for such incentives for Muslims for education and employment.

HIMACHAL PRADESH

Economy and Demography

Himachal Pradesh has consistently improved its position on several indicators over time. In its early years, due to geo-morphological, fi nancial limitations and poorly developed infrastructure, Himachal Pradesh was ranked near the bottom for per capita income across states. Gradually Himachal Pradesh increased its per capita income to a middle rank in the late 1990s (*Himachal Pradesh Human Development Report 2002*). In the last decade (2000– 9), the NSDP per capita of Himachal Pradesh was higher than the national per capita income. However, the growth of NSDP per capita for the state in the last fi ve years was slightly less than India' s per capita income (Table 1). Its per capita NSDP growth rate has been consistently higher than that of the other hilly states
like Jammu and Kashmir.

There is huge regional disparity within the state. Himachal Pradesh can broadly be divided into two distinct regions based on geo-morphological and climatic features. One is characterized by high mountains and is called the ' High Mountain Horse Shoe (HMHS)' region and it comprises seven districts. The second region has plains, wide valleys and low hills, and is known as the ' Low Hills and Plains (LHP)' region, and it comprises fi ve districts. In terms of development the LHP region is well ahead of the HMHS region because of its close proximity to the relatively developed parts of Punjab and Haryana. Most foodgrain production and industrial output comes from the LHP districts (*Himachal Pradesh Human Development Report 2002*).

The demographic profi le of Himachal Pradesh shows that SCs and STs account for 28 per cent and 5 per cent of its population, respectively. The share of Muslims and OBCs in the state is comparatively lower (2 per cent and 10 per cent, respectively) than their share of the country' s population. More than 63 per cent of the state' s population lives in rural areas (2007– 8).

Himachal Pradesh accounts for less than 1 per cent of India' s total population. This share would further de- crease in the future due to its lower population growth rate and lower TFR. Himachal Pradesh' s TFR (1.9) was considerably lower than the national TFR (2.6) in
2008. The state' s impressive TFR may be explained by

the fact that more than half of the married couples are effectively protected against unwanted pregnancies through the use of various family planning methods (*Himachal Pradesh Human Development Report 2002*). In terms of sex-ratio, Himachal Pradesh is one of the best performing states with 974 females per 1,000 males, against the 940 females per 1,000 males at all India level in 2011. However, its child sex-ratio is very low with 906 girls per 1,000 boys, which is a matter of serious concern (Census 2011).

Table 1 Average Annual Growth Rate, 2000–1 to 2008–9 (*per cent*)

(at 1999–2000 constant prices)	*State*	*All India*
NSDP/NDP (for India)	6.8	7.1
Per Capita NSDP / Per Capita NNP (for India)	5.0	5.4

Source: CSO.

Table 2 Distribution of Social and Religious Groups, 2007–8 (*per cent*)

Across States			*Within State*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
0.4	0.9	0.1	5.3	28.4	2.2

Source: NSS 64th Round.

Human Development and Social Groups

Himachal Pradesh has a very small proportion of people living below the poverty line (only 10 per cent) (Figure 1). The low incidence of poverty is the result of a prosperous rural economy, a high level of per capita government expenditure, greater women's participation in the workforce and strong local institutions, in addition to high out-migration and the consequent repatriations (*Himachal Pradesh Human Development Report 2002*). The urban areas are close to eradicating poverty, and this is true for all the social groups including SCs and STs. In spite of the low incidence of poverty, inequalities nevertheless exist. For instance, the incidence of rural poverty is much higher in the HMHS region as compared to the LHP region.

As a result of increased per capita public expenditure on health since 1970–1 (*Himachal Pradesh Human Development Report 2002*) all the health indicators such as percentage of women with BMI <18.5 (Figure 3), U5MR (Figure 4), and percentage of underweight children (Figure 5) are much better than the national average.

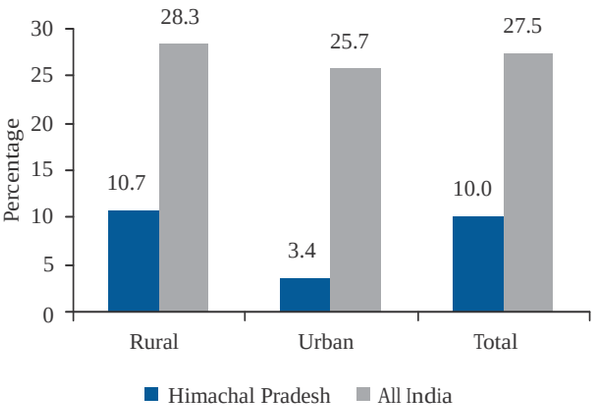

Figure 1 Incidence of Poverty, Himachal Pradesh and India, 2004–5

Source: Planning Commission (2008).

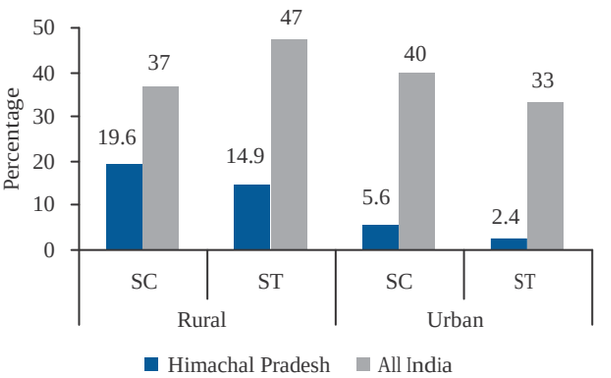

Figure 2 Incidence of Poverty by Social Groups, Himachal Pradesh and India, 2004–5

Source: Planning Commission (2008).

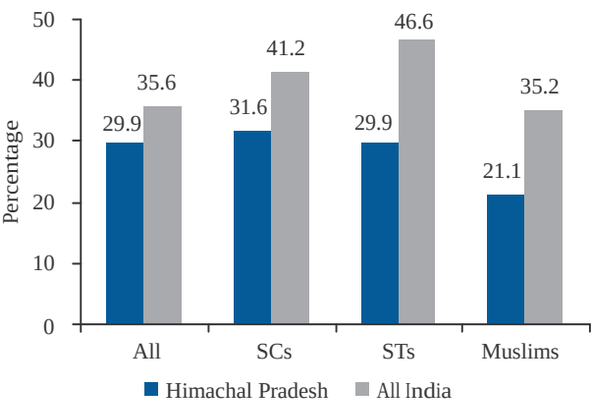

Figure 3 Percentage of Women with BMI<18.5, Himachal Pradesh and India, 2005–6

Source: NFHS 3.

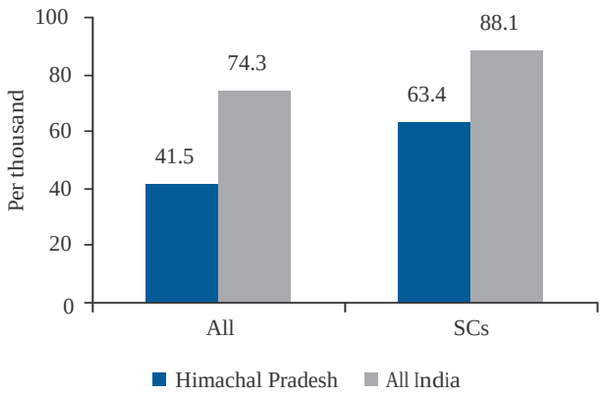

Figure 4 Under Five Mortality Rate, Himachal Pradesh and India, 2005–6

Source: *NFHS 3*.

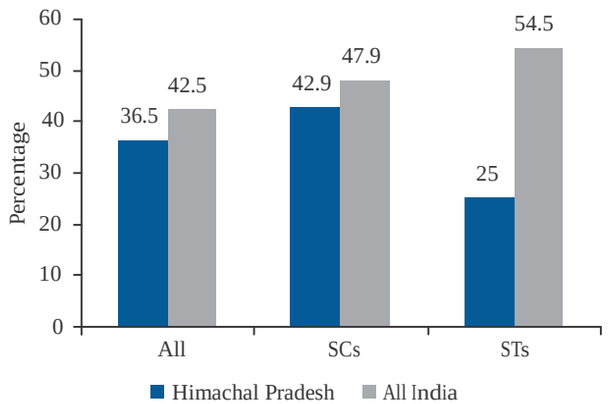

Figure 5 Percentage of Underweight Children (0–5 Years), Himachal Pradesh and India, 2005–6

Source: *NFHS 3*.

However, health related outcome indicators are poor in the HMHS region.

Across social groups, all the other health indicators, apart from U5MR for SCs, are close to the state averages. All social groups are performing well vis-à-vis the national averages for their respective communities, including SCs and STs. Due to the high budget allocation to the education sector, Himachal Pradesh has a very impressive
literacy rate. According to latest estimates from Census (2011), Himachal Pradesh has a 83.8 per cent literacy rate as compared to the 74 per cent literacy rate at all India level. The benefi ts of development of the education sector have spread across all social groups. As a result, all social groups have a higher literacy rate than their respective national averages (Figure 6). Gender disparity has also fallen over time for school enrolments.

The diff erent geo-morphological conditions of the state make it very difficult to provide access to potable water to the masses. As a result, the HMHS districts have poorer access to drinking water from improved sources than the LHP districts; hence, are not so good health indicators. In terms of access to toilet facilities, the state averages for all social groups including SCs and STs are better than the respective national averages (Figure 8). Overall, all the communities have benefi tted from the development process, including SCs and STs.

Human Development and Religious Communities

Across the religious groups, the performance of human development indicators is mixed. In terms of health

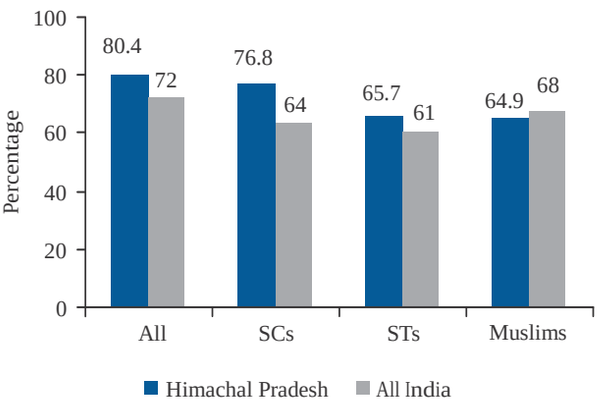

Figure 6 Literacy Rate, Himachal Pradesh and India, 2007–8

Source: NSS 64th Round.

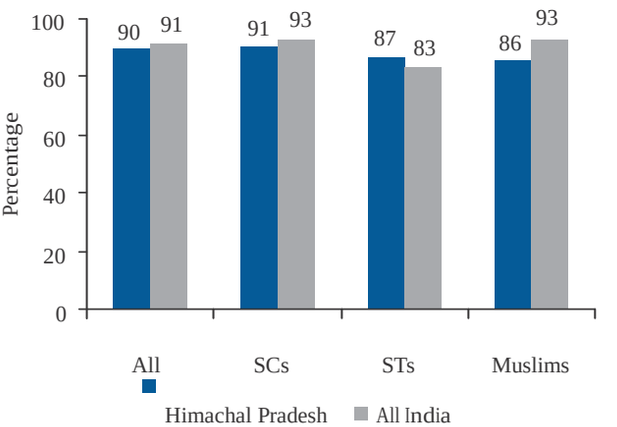

Figure 7 Percentage of Households with Improved Source of Drinking Water Facility, Himachal Pradesh and India, 2008–9

Source: 65th NSS Round.

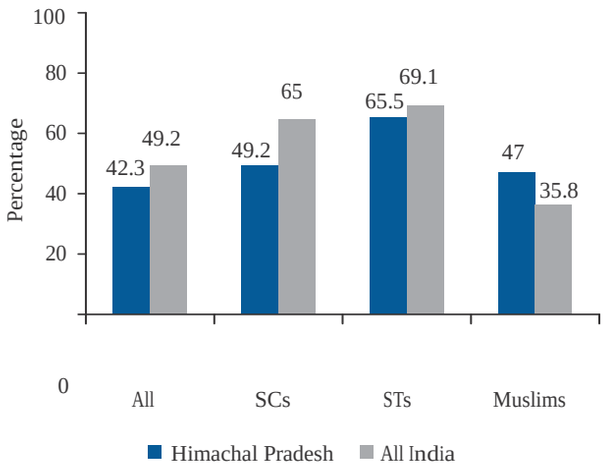

Figure 8 Proportion of Households with No Toilet Facility, Himachal Pradesh and India, 2008–9

Source: 65th NSS Round.

indicators like women with BMI<18.5, Muslims fare better than Hindus and Muslims in India as a whole. However, Muslims lag behind in terms of literacy. Also, Muslim households do not have equal access to improved sources of drinking water; and are even lower than their national average in terms of this indicator. In terms of households with toilet facilities, Muslims are fairly close to the rest of the state's population.

Summarizing the overall human development scenario, Himachal Pradesh is a good performer, but regional inequalities are a serious cause for concern. The HMHS region lags behind in all the development indicators like health outcomes, literacy rate or access to improved sources of drinking water. The issue of inadequate availability of infrastructure in these far-flung areas needs special attention for quick redress.

JAMMU & KASHMIR

Economy and Demography

Jammu & Kashmir (J&K) is the only state in India which enjoys special autonomy under Article 370 of the Constitution of India. According to this, no law enacted by the Parliament of India, except for those in the field of defence, communication, and foreign policy, will be extendable in J&K unless it is ratified by the state legislature of J&K. Jammu and Kashmir's economy is dependent on agriculture, tourism, and allied activities. It is famous for its handlooms and handicraft products, particularly carpets and woollen products. Due to the problem of insurgency over many years, the economy of the state is in bad shape. The tourism industry especially has been badly hit. The state is one of the largest recipients of grants from the Government of India. Jammu & Kashmir's average annual growth rate in NSDP and per capita NSDP lags far behind the national average growth rate in Net National Product (NNP) and per capita income (Table 1).

Jammu & Kashmir's demographic pattern differs from that of rest of the country with Muslims accounting for 56 per cent of the population in 2007–8 (Table 2). The share of the SC and ST communities in the state's population is 3.3 per cent and 12 per cent, respectively. More than 80 per cent of the population lives in rural areas, including 96 per cent of ST households. The TFR in 2008 was 2.2, which is quite close to the optimal replacement rate of 2.1. However, TFR in rural areas is quite high (2.5) as compared to urban areas (1.5). Looking at the sex-ratio in India, J&K has the second worst sex-ratio (only 883 females per 1,000 males). The situation is even worse for child sex-ratio, which is only 859 females per 1000 males compared with the all India child sex ratio of 913 females per 1,000 males in 2011 (Census 2011).

Table 1 Average Annual Growth Rate, 2000–1 to 2007–8 (*per cent*)

(at 1999–2000 constant prices)	*State*	*All India*
NSDP/NDP (for India)	5.9	7.1
Per Capita NSDP / Per Capita NNP (for India)	4.2	5.4

Source: CSO.

Table 2 Distribution of Social and Religious Groups, 2007–8 (*per cent*)

Across States			*Within the State*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
0.3	0.5	3.5	3.3	11.6	55.7

Source: NSS 64th Round.

Human Development and Social Groups

Looking into the performance of indicators related to human development, J&K has the lowest incidence of poverty compared to all other states in the country (Figure 1). The same holds true for all the social groups including SCs and STs (Figure 2).

There is a shortage of major health infrastructure in the state. While there is more than the required number of health centres and sub-centres, there is a shortage of health workers, doctors, technicians, and nurses (RHS Bulletin

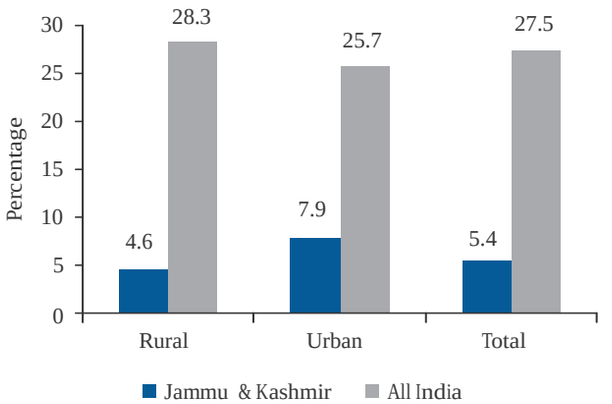

Figure 1 Incidence of Poverty, Jammu & Kashmir and India, 2004–5

Source: Planning Commission (2008).

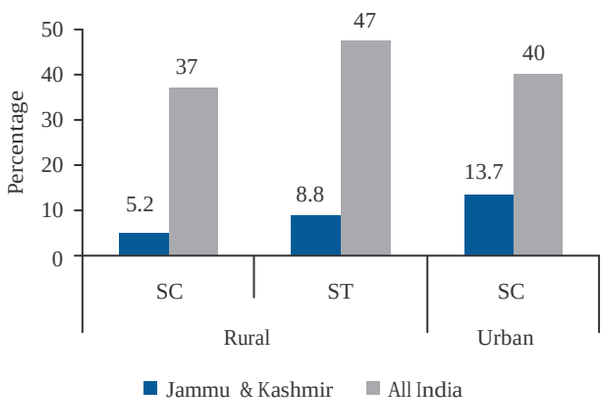

Figure 2 Incidence of Poverty by Social Groups, Jammu & Kashmir and India, 2004–5

Source: Planning Commission (2008).

2008). Despite this, the health indicators for the state are better than the all India averages—women with BMI <18.5 (Figure 3), U5MR (Figure 4), and underweight children (Figure 5). While the health indicators for SCs and STs are no better than their neighbours from other communities within the state, they are still better than the national averages of their respective communities. Education has been aff ected due to political and social disturbances. The liter- acy rate of J&K is only 68.7 per cent, against the national

literacy rate of 74 per cent in 2011 (Census 2011). Except for the SCs, Other social and religious groups in Jammu & Kashmir lag behind the national average literacy rate (NSS 2007– 8). The dropout rate is very high. In order to reduce the dropout ratio among women and to empower them, the state government launched the ' *Beti Anmol*'

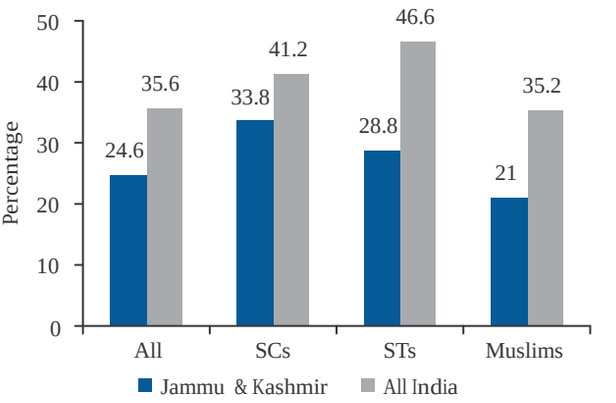

Figure 3 Percentage of Women with BMI<18.5, Jammu & Kashmir and India, 2005–6

Source: *NFHS 3*.

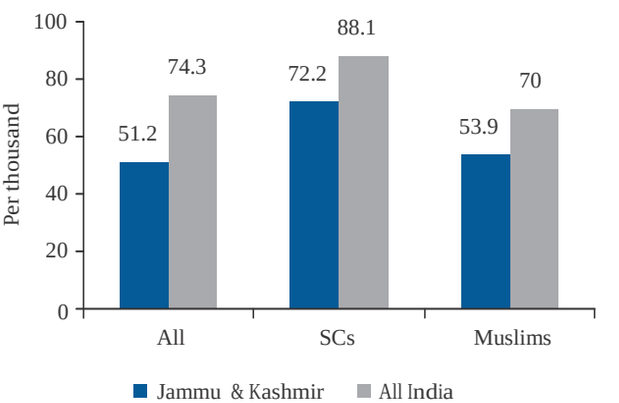

Figure 4 Under Five Mortality Rate, Jammu & Kashmir and India, 2005–6

Source: *NFHS 3*.

Figure 5 Percentage of Underweight Children (0–5 Years), Jammu & Kashmir and India, 2005–6

Source: *NFHS 3*.

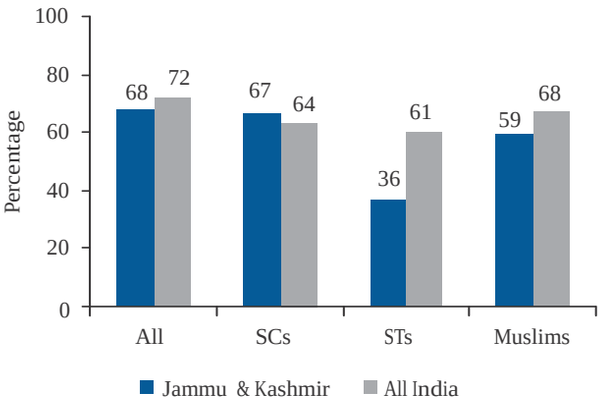

Figure 6 Literacy Rate, Jammu & Kashmir and India, 2007–8

Source: NSS 64th Round.

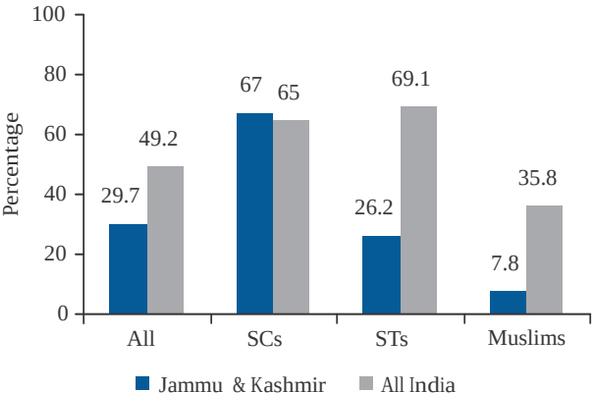

Figure 8 Proportion of Households with No Toilet Facility, Jammu & Kashmir and India, 2008–9

Source: NSS 65th Round.

Scheme. An amount of Rs 5,000 was placed in fixed deposit for girl students belonging to Below Poverty Line (BPL) families in all 97 educationally backward blocks.

The data for access to an improved source of drinking water are not satisfactory. The STs were the worst off as compared to all other social/religious groups. However, in the case of toilet/sanitation facilities, the percentage of households with toilet facilities is greater than the corresponding national average. Across the social groups, SCs are far below the state average and also national averages, while the access of STs to toilet facilities is higher than the state average and also the all India average for STs.

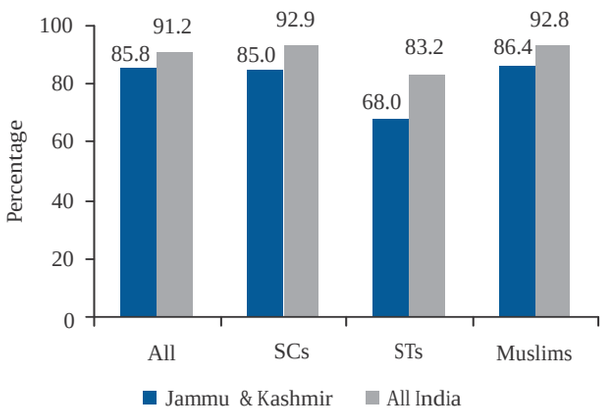

Figure 7 Percentage of Households with Improved Source of Drinking Water Facility, Jammu & Kashmir and India, 2008–9

Source: NSS 65th Round.

Human Development and Religious Communities

In terms of health indicators, Muslims are comparatively better off than Hindus. For instance, the percentage of women with BMI<18.5 for Muslims is only 21 per cent as compared to 32 per cent for Hindus. A similar gap has been observed for underweight children. Muslims are closer to the state's averages and fare better than the all India average for Muslims for all health indicators, while Hindus are below the state averages. However, Muslims lag behind both the state and Hindus on average for education indicators, that is, the literacy rate. Compared to a literacy rate of 78 per cent for Hindus and the state's overall literacy rate of 68 per cent, only 60 per cent of Muslims are literate, which is lower than the all India literacy rate (68 per cent) for Muslims (2007–8). For basic amenities like access to safe water and toilet facilities, Muslims are close to the state and national average, but slightly lower than the all India average for Muslims accessing improved sources of drinking water. In the case of toilet/sanitation facilities, Muslims are far better than the state's average and also their respective national averages. Overall, Muslims have better health and access to sanitation facilities, but lag behind in education and access to improved sources of drinking water.

JHARKHAND

Economy and Demography

Jharkhand, which came into existence in the year 2000, was earlier a part of Bihar. Jharkhand is known for its vast reserves of natural resources in terms of forests as

well as minerals and it accounted for more than 70 per cent of Bihar's domestic product before the state was bifurcated. However, it has not been able to capitalize on this immense potential and is still one of the most backward states in India, a status which it has inherited from Bihar. Its per capita NSDP is well below the national per capita income, and its comparatively slow growth rate (4.2 per cent) compared to the national per capita income growth rate (5.4 per cent) is further increasing the gap (Table 1).

Jharkhand's demographic profile shows a large share of ST, SC, and Muslim populations in the state at 21 per cent, 19 per cent, and 11 per cent, respectively. Jharkhand accounts for 10 per cent of STs, 4 per cent of SCs and
3 per cent of the Muslim population in the country (Table 2). Three-fourths of the state's population lives in rural areas, including 95 per cent of STs and 91 per cent
of SCs. Since these three social/religious groups are economically disadvantaged, it is evident that this disadvantage shows up in all aggregate development indicators.

Jharkhand accounts for close to 4 per cent of the total population of India, but it has not contributed even 2 per cent of the country's GDP in the last five years. In terms of sex-ratio, Jharkhand with the ratio of 947 females per 1,000 males is slightly better than the all India ratio of 940 females per 1,000 males in 2011. With regard to child sex-ratio, Jharkhand (943) is again better than all
India average (914), but still marginally lower than overall sex-ratio of the state (Census 2011). The state has one of the highest TFRs in India (at 3.2). The TFR is even higher in the rural areas, where its value was 3.5 in 2008. With a slower growth rate of NSDP per capita and a very high TFR, the economic gap between the state and the nation is going to widen further. It may also intensify the existing Naxalite problem in the state.

Table 1 Average Annual Growth Rate, 2000–1 to 2008–9 (*per cent*)

(at 1999–2000 constant prices)	*State*	*All India*
NSDP/NDP (for India)	5.9	7.1
Per Capita NSDP / Per Capita NNP (for India)	4.2	5.4

Source: CSO.

Human Development and Social Groups

More than 40 per cent of Jharkhand's population lives below the poverty line (Figure 1). The concentration of poor households is more in rural areas particularly for SCs

Table 2 Distribution of Social and Religious Groups, 2007–8 (*per cent*)

Across States			*Within the State*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
9.6	3.8	3.4	20.8	19.1	11.1

Source: NSS 64th Round. Central Statistical Organization as on 12.04.2010.

and STs, with more than half of the ST and SC households living in rural areas (Figure 2). The incidence of poverty for SCs and STs in the state is higher than the incidence of poverty among SCs and STs at the all India level. It is interesting to note that the incidence of poverty among urban SCs and STs is more than double the total urban incidence of poverty in the state (Figures 1 and 2).

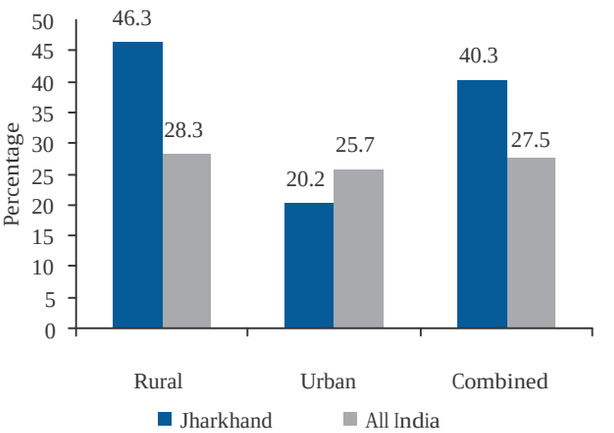

Figure 1 Incidence of Poverty, Jharkhand and India, 2004–5

Source: Planning Commission (2008).

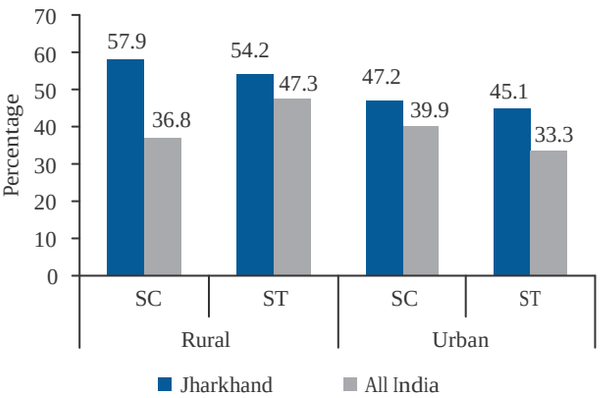

Figure 2 Incidence of Poverty by Social Groups, Jharkhand and India, 2004–5

Source: Planning Commission (2008).

Three health indicators, that is, BMI of women <18.5 (Figure 3), U5MR (Figure 4), and underweight children (Figure 5), with higher values for Jharkhand indicate the need for strengthening the public health system in the state, particularly for the SCs and STs. A higher percentage of rural children from SC and ST communities suff ered from malnutrition. Education is one of the fundamental re- quirements for better human development, and Jharkhand is lagging behind in this aspect. In 2007– 8, its literacy rate (65 per cent) was lower than the national literacy rate
(72 per cent). Moreover, SCs and STs have literacy rates even lower than the state average and also lower than the all India literacy rates for their respective communities (Figure 6). The SC and ST communities who together account for about 40 per cent of the state' s population need more focused attention with respect to healthcare
facilities. According to Census (2011), Jharkhand has 67.6 per cent literacy rate as compared to 74 per cent literacy rate for the country in 2011.

The basic amenities required for life are safe drinking
water (Figure 7) and access to toilet/sanitation facilities (Figure 8), and again, Jharkhand is one of the worst per- formers in these. Only two-thirds of the population has access to improved sources of drinking water. While SCs and STs in the state fare better than the state average, they are worse off than the SCs and STs at the national level. In terms of access to toilet facilities, only one out of four households in the state has access, and this ratio is even lower for ST households, which is half of the all India average for STs. Scheduled castes are slightly better off than the other communities in the state, but worse off

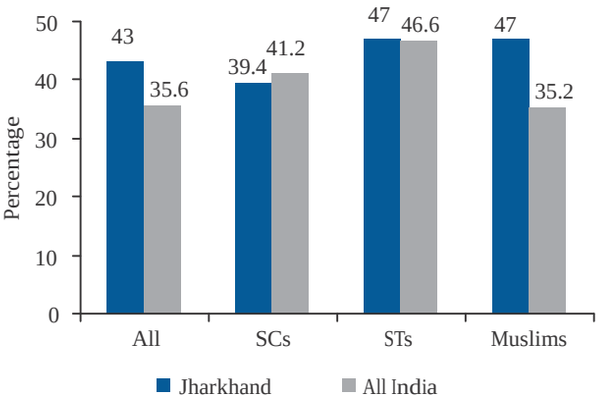

Figure 3 Percentage of Women with BMI<18.5, Jharkhand and India, 2005–6

Source: *NFHS 3.*

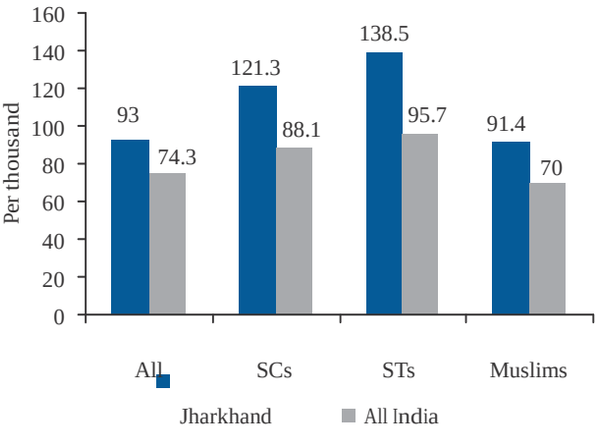

Figure 4 Under Five Mortality Rate, Jharkhand and India, 2005–6

Source: *NFHS 3.*

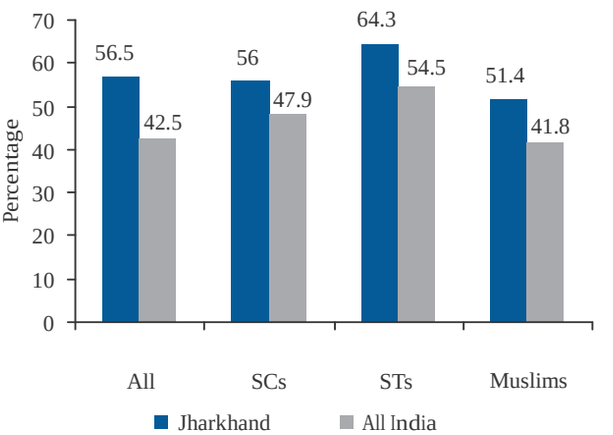

Figure 5 Percentage of Underweight Children (0–5 Years), Jharkhand and India, 2005–6

Source: *NFHS 3.*

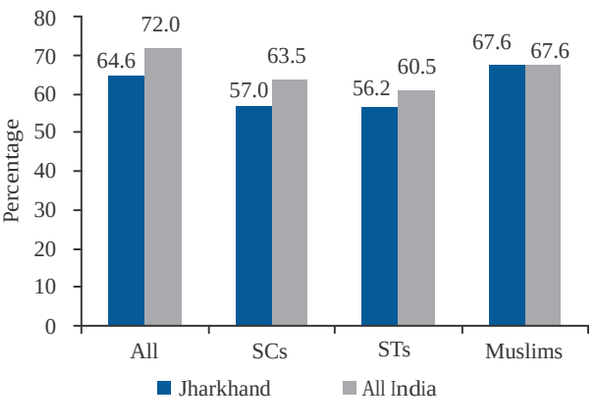

Figure 6 Literacy Rate, Jharkhand and India, 2007–8

Source: NSS 64th Round.

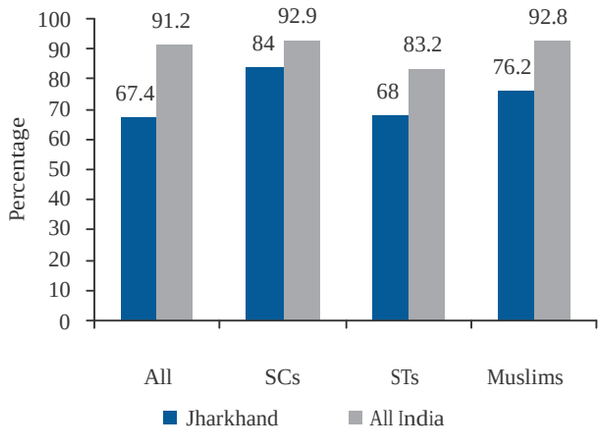

Figure 7 Proportion of Households with Improved Source of Drinking Water Facility, Jharkhand and India, 2008–9

Source: NSS 65th Round.

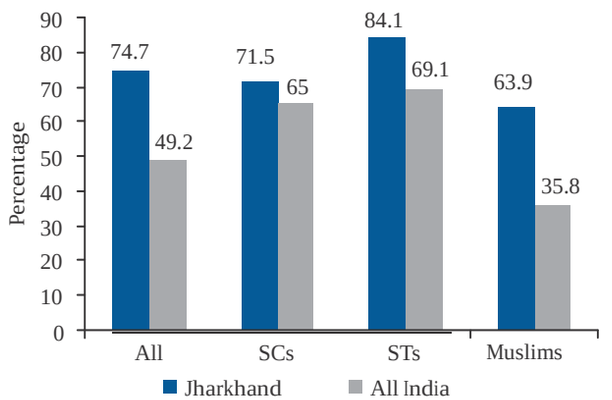

Figure 8 Proportion of Households with No Toilet Facility, Jharkhand and India, 2008–9

Source: NSS 65th Round.

than SCs at the national level. As described in the conceptual framework, the lack of basic amenities has an adverse impact on health outcomes, which is very evident from the poor health indicators of the state, particularly for SCs and STs.

Human Development and Religious Communities

In terms of health indicators, Muslims are better off than Hindus except for women with BMI<18.5. For basic amenities like access to improved sources of drinking water and toilet facilities, Muslims are better within the state, but lag in comparison to the national average for Muslims as only 36 per cent of Muslims in the state have toilet facilities.

The poor performance of the state on various human development outcomes (like high proportion of poverty, slow economic growth, high TFR, and low health and education indicators) further reinforces the deprivation in the state, which puts the state in a vicious circle. To get into the virtuous circle of development (which will work through feedback loops), more welfare schemes which will cover basic needs (like health, education, and employment), are required in the state. Rural areas and disadvantaged groups need special attention in this regard.

Looking at the overall picture, Jharkhand really needs to go a long way to reach even the average all India levels in terms of human development.

KARNATAKA

Economy and Demography

Karnataka is doing well when compared to the all India average in terms of NSDP per capita. However, the growth rates of NSDP and NSDP per capita in this millennium are slightly lower than the corresponding national growth rates (Table 1). The increase in the share of tertiary sector during the previous decades was spectacular (34 per cent in 1981 to 48 per cent in 2001– 2) (*Karnataka Human Development Report 2005*). The share of services has gone up to 54 per cent of the total SDP in 2008– 9, which is driven partly by the Bangalore based Information Technology (IT) services. The booming IT, electronics, and biotechnology sectors account for more than 50 per cent of the state's total export (*Karnataka Economic Survey 2010*). Information technology is one of the biggest economic success stories of the state.

Karnataka's SDP contributed almost 5.5 per cent to the nation's total GDP in the last five years, while its population share is a little higher than 5 per cent. Also, Karnataka accounts for 8 per cent of all Indian enterprises, and provides employment to more than 8 per cent of India's workforce (*Karnataka Human Development Report 2005*). However, differences in economic development across districts of the state are evident. Coastal and *malnad* districts are front-runners, whereas the northern districts, which share borders with Andhra Pradesh and Maharashtra (for example, Bidir, Bijapur, Gulbarga, Raichur) are below the state average.

The demographic profile of the state shows that the share of SCs, STs, and Muslims in the population is 18 per cent, 7 per cent and 12 per cent, respectively (Table 2). Three-fourths of the state's population lives in rural

areas (2007– 8). The population growth in Karnataka is considerably below the national population growth rate, driven by the signifi cant decline in the TFR from 3.1 in 1990– 2 to 2.0 in 2008. According to Census (2011), Karnataka has one of the best sex-ratio (968 females per 1,000 males) and child sex-ratio (943 females per 1,000 males) in India.

Table 1 Average Annual Growth Rate, 2000–1 to 2008–9
(*per cent*)

(at 1999–2000 constant prices)	*State*	*All India*
NSDP	6.5	7.1
Per Capita NSDP / Per Capita NNP (for India)	5.2	5.4

Source: Central Statiscal Organisation, as on 12.04.2010.

Table 2 Distribution of Social and Religious Groups, 2007–8
(*per cent*)

Across States			*Within State*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
3.9	4.6	4.5	6.8	18.4	11.6

Source: NSS 64th Round.

Human Development and Social Groups

A quarter of the population still lives below the poverty line (Figure 1). Contrary to the national trend, the proportion of poor is higher in urban areas than in the rural areas. At the same time, more than half of the population belonging to SCs and STs is living below the poverty line, which is signifi cantly higher than the incidence of poverty among SCs and STs in the country as a whole. It is important to note that the incidence of poverty is high in urban areas, whereas socially marginalized groups are poorer in rural areas, which shows that these groups are being excluded from the development process.

SCs and STs are doing much better on some health indicators than SCs and STs in India as a whole—for instance U5MR and underweight children.

A similar situation can be seen for indicators such as the literacy rate. As per the latest estimates from Census (2011), Karnataka has marginally higher literacy rate (75.6 per cent) than the national literacy rate of 74 per cent in 2011. According to NSS (2007– 8), both SCs and STs in Karnataka are doing worse than SCs and STs in the country as a whole—and their literacy rates are well below the national average (Figure 6).

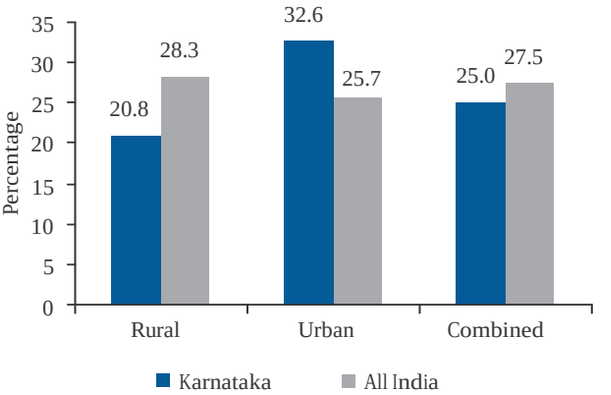

Figure 1 Incidence of Poverty, Karnataka and India, 2004–5

Source: Planning Commission (2008).

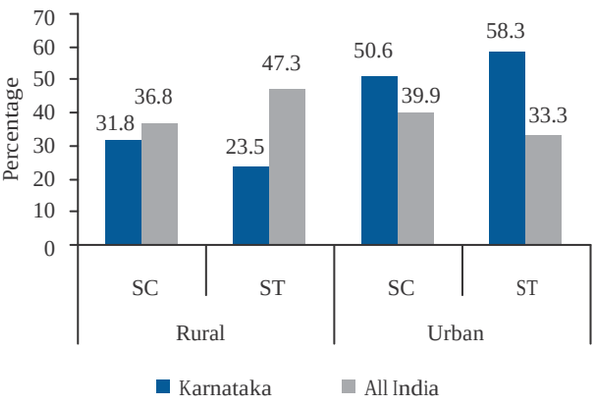

Figure 2 Incidence of Poverty by Social Groups, Karnataka and India, 2004–5

Source: Planning Commission (2008).

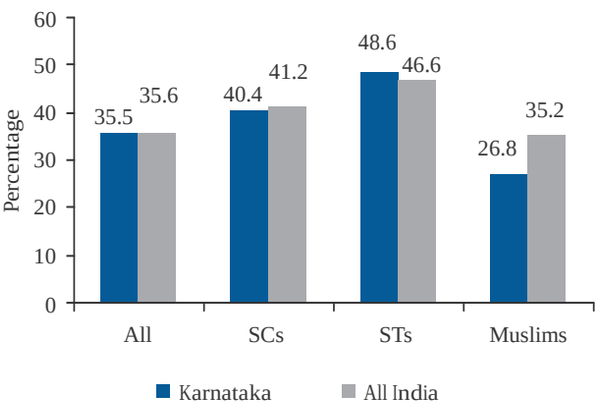

Figure 3 Percentage of Women with BMI<18.5, Karnataka and India, 2005–6

Source: NFHS 3.

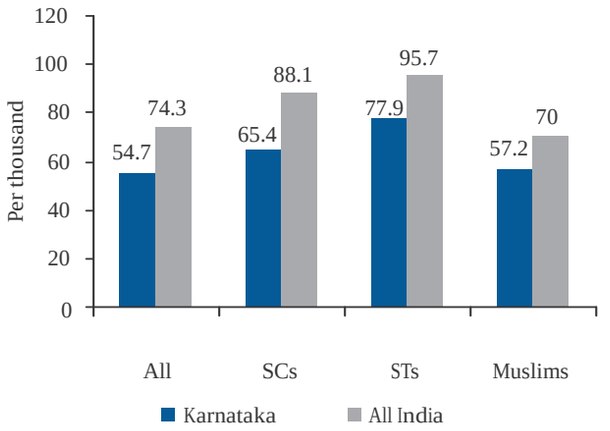

Figure 4 Under 5 Mortality Rate, Karnataka and India, 2005–6

Source: *NFHS 3*.

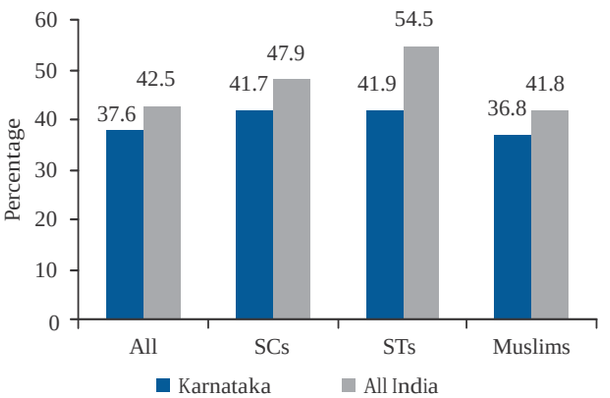

Figure 5 Percentage of Underweight Children (0–5 Years), Karnataka and India, 2005–6

Source: *NFHS 3*.

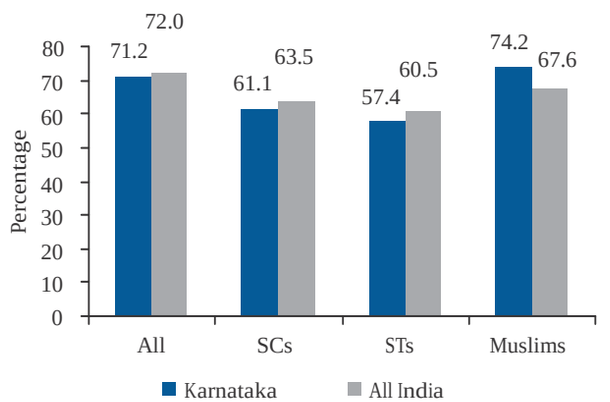

Figure 6 Literacy Rate, Karnataka and India, 2007–8

Source: NSS 64th Round.

In terms of improved drinking water, Karnataka is doing slightly better than the rest of India (Figure 7), but more importantly, the SC and ST population is doing better than the SCs and STs in the country as a whole, and also better than the overall national average. The improved access to drinking water facilities is the result of the state government' s initiatives like, Jal Nirmal Project, and proper utilization of funds under the Swajaldhara scheme provided by the central government. Unfortunately, this is not the case for toilet facilities, where only 30 per cent of the SC and ST households have access to toilet facilities in the state, which is even lower than their respective national averages. The problem of poor access to toilet facilities needs special attention for quick redress, as it has a long-term impact on other health indicators.

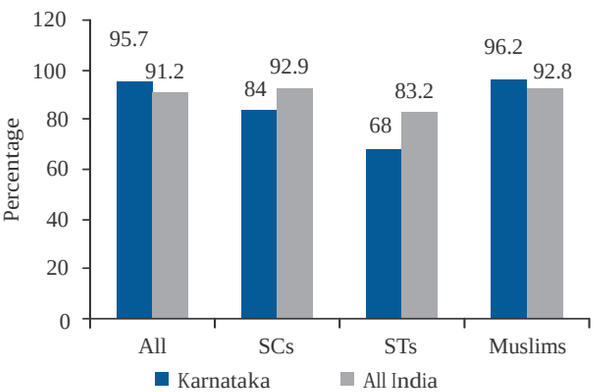

Figure 7 Percentage of Households with Improved Sources of Drinking Water, Karnataka and India, 2008–9

Source: NSS 65th Round.

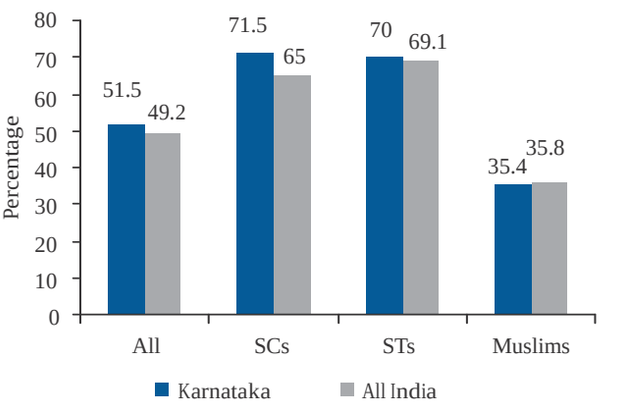

Figure 8 Percentage of Households with No Toilet Facility, 2008–9 in Karnataka and India

Source: NSS 65th Round.

Human Development and Religious Communities

Across religious groups, Muslims account for 12 per cent of the state's population. In terms of human development indicators, Muslims perform relatively better than Hindus in Karnataka, as two-thirds of their population is urbanized and is using better services in urban areas. The health indicators are relatively good for Muslims in comparison to the state averages and their community's corresponding national averages. A similar picture for Muslims has been observed for other development indicators like literacy rate (Figure 6), drinking water facilities (Figure 7), and toilet/sanitation facilities (Figure 8). Muslims are far better off than other communities in the state with respect to access to toilet facilities and also better than their national average. In other words, Karnataka has done well for its Muslim population as their health, nutritional, and educational indicators show relatively good outcomes.

All aspects of human development need to be improved over time. In the case of Karnataka, apart from the income component, other components also need to get more attention with better budget allocations. Moreover, human development should be more inclusive, so that the marginalized groups can also enjoy the fruits of development.

KERALA

Economy and Demography

Kerala is one of the leading states in India and its achievements in human development are well known. The state has been able to reduce the wide disparities in literacy and enrolment at all levels between the Malabar region of the erstwhile Madras Presidency and the regions covered by the former princely states of Travancore and Cochin.

Kerala was also among the top five major states in terms of NSDP per capita in 2007–8. The trajectory of its growth has been marked by a phase of stagnation since the early 1970s, and the second one a phase of recovery in the late 1980s, which continued in the 1990s and thereafter, and put the economy on a high growth path. The Land Reforms Act, 1969, which gave ownership rights to cultivating tenants and homestead rights to hutment dwellers, played a vital role in materializing some of Kerala's positive development achievements, including higher levels of literacy and lower birth and death rates. As expected, the largest shares of income and employment were generated in the services sector (*Kerala Human Development Report 2005*). During the years between 2000–1 and 2008–9, due to higher NSDP per capita growth rate (6.9 per cent) than the corresponding national growth rate (5.4 per cent), Kerala achieved higher levels of per capita income than India's average per capita income (Table 1). Kerala, more than any other state, exemplifies the feedback loops that form the conceptual backbone of *India Human Development Report 2011* (presented earlier in this chapter), in the sense that even though Kerala had relatively low GSDP growth rates until the early 1990s, its achievements in health and education enabled it to bring down the TFR to replacement rates well before even the other southern states, but it also eventually resulted in GSDP per capita growth rates through the 1990s and 2000s improving faster than those for India.

Kerala, which accounted for 3 per cent of the country's population, could contribute close to 4 per cent to the nation's GDP in 2007–8. According to National Sample Survey Organization (NSSO) (2007–8) data, Christians and Muslims have a greater share in the population of Kerala as compared to their all India share. Across social groups, OBCs have the highest share (62 per cent) in the population of Kerala, while SCs and STs have only 10 per cent and 1 per cent share, respectively (Table 2). In terms of sex-ratio, Kerala is the best state with sex-ratio of more than 1,064 females per 1,000 males in 2011, as compared to 940 females per 1,000 males at all India level in 2011. However, its child sex-ratio (959) is not as impressive as its overall sex-ratio (1,064), but still better than all India level (914) (Census 2011).

Table 1 Average Annual Growth Rate, 2000–1 to 2008–9 (*per cent*)

(at 1999–2000 constant prices)	*State*	*All India*
NSDP	7.8	7.1
Per Capita NSDP/Per Capita NNP (for India)	6.9	5.4

Source: Central Statistical Organization.

Table 2 Distribution of Social and Religious Groups, 2007–8 (*per cent*)

Across States			*Within State*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
0.4	1.5	5.5	1.1	10.3	24.1

Source: NSS 64th Round.

Human Development and Social Groups

In terms of human development, Kerala is way ahead of the other states in India. Among the major states, Kerala was placed third in the HDI ranking. The striking fact is even with a strong base eff ect phenomenon, Kerala showed considerable increase in the HDI from 1999-
2000 (Chapter 2). However, contrary to the national trend, Kerala has a high proportion of poor households in urban areas (Figure 1). Inequalities across social groups can still be observed from the high incidence of poverty for rural STs (44 per cent) and SCs (22 per cent), as compared to the state average of 15 per cent (Figure 2). It certainly indicates further room for convergence within social groups.

Kerala' s poverty has declined to one of the lowest lev- els in India (Figure 1). In fact, its achievements in key indicators of social development, such as literacy, infant
mortality, and life expectancy compare favourably with those of several developed countries. The most important reason for this accomplishment was the social changes triggered by land reform, Gulf migration, and democra- tization of education, and health in the state. Also, since the health and education indicators were particularly high, Kerala is an excellent example of the feedback loops between growth, poverty reduction and human capital formation.

In terms of health services, the performance of Kerala is the best in India. All the three health indicators such as BMI of women <18.5 (Figure 3), U5MR (Figure 4), and underweight children (Figure 5) are comparatively better in Kerala than the all India averages. However, the performance of SC and ST groups is slightly lower than

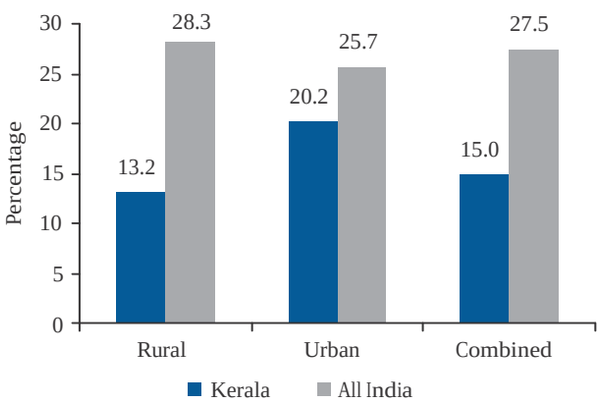

Figure 1 Incidence of Poverty, Kerala and India, 2004–5

Source: Planning Commission (2008).

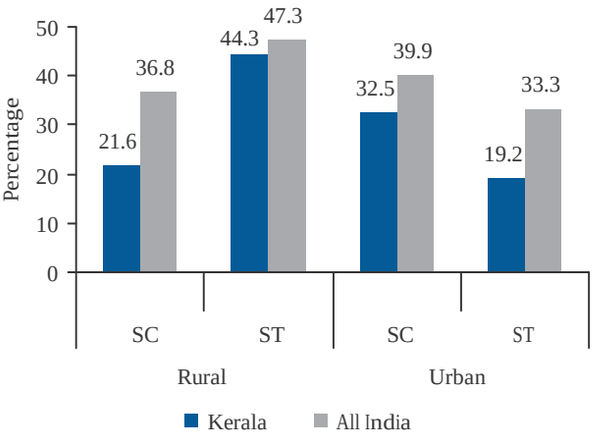

Figure 2 Incidence of Poverty by Social Groups, Kerala and India, 2004–5

Source: Planning Commission (2008).

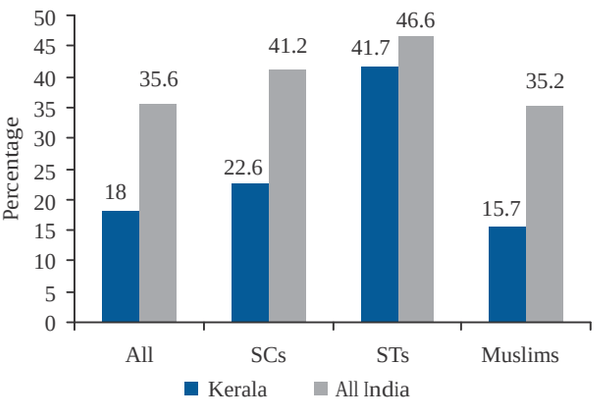

Figure 3 Percentage of Women with BMI<18.5, Kerala and India, 2005–6

Source: *NFHS 3*.

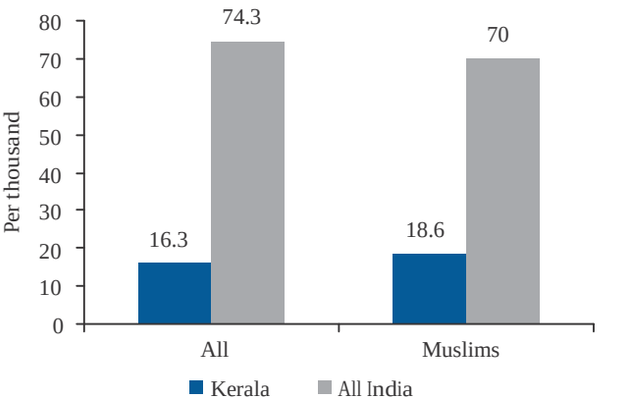

Figure 4 Under Five Mortality Rate, Kerala and India, 2005–6

Source: *NFHS 3*.

the state averages, but better than the respective national averages of their groups. Kerala has recorded the lowest incidence of anaemia in India (Chapter 4).The case of Kerala reiterates the role of state intervention in ensuring equity in various human development indicators.

A striking feature in Kerala's development experience is the role of education. Kerala is way ahead in achieving the goal of universalizing elementary education (*Kerala Human Development Report 2005*). According to Census (2011), Kerala has the highest literacy rate (93.9 per cent) in India, against the national literacy rate of 74 per cent in 2011. In addition, the widespread availability of public transport and the highly subsidized transport fares have facilitated easy access for rural students. As per NSS (2007– 8), all the social groups including SCs, STs, and OBCs are well above the national literacy rate of their respective groups (Figure 6). A similar distribution pattern for toilet/sanitation facilities (Figure 8) has been observed in Kerala.

However, the state surprisingly lags behind in providing drinking water facilities (Figure 7) to its population, which is again fairly distributed across social groups. In terms of access to improved sources of drinking water, all the social groups including SCs and STs are below the respective national averages for their communities. Even though the region has generally been regarded as having a water surplus owing to the high precipitation rate, the trends show the inability to put it to better use.

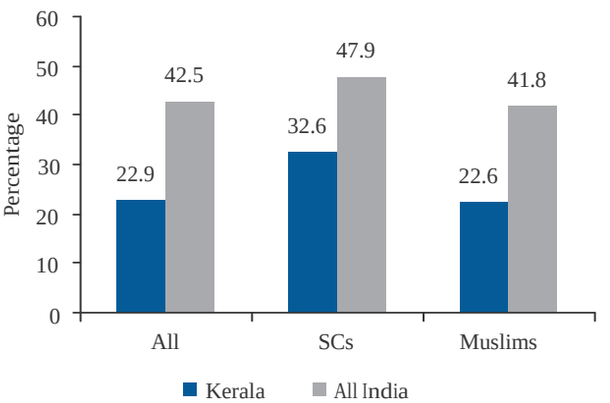

Figure 5 Percentage of Underweight Children (0–5 Years), Kerala and India, 2005–6

Source: *NFHS 3*.

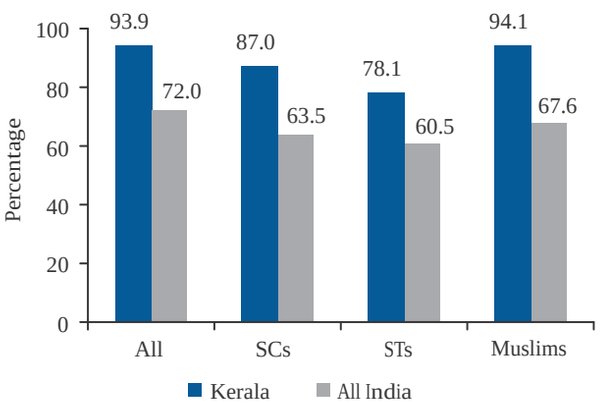

Figure 6 Literacy Rate, Kerala and India, 2007–8

Source: NSS 64th Round.

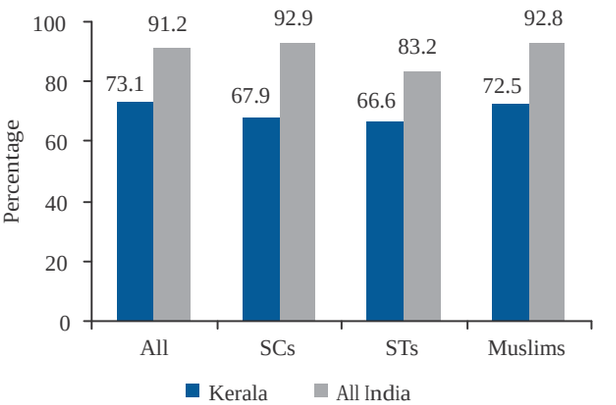

Figure 7 Percentage of Households with Improved Source of Drinking Water Facility, Kerala and India, 2008–9

Source: NSS 65th Round.

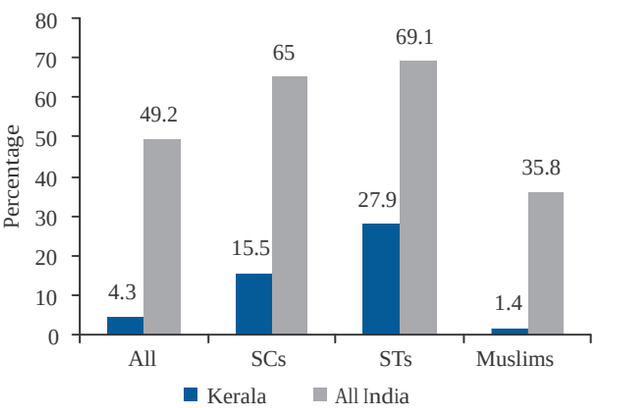

Figure 8 Percentage of Households with No Toilet Facilities, Kerala and India, 2007–8

Source: NSS 65th Round.

Human Development and Religious Communities

As described above, development has benefi ted all the communities equally. However, among the three major religious groups, namely, Hindus, Muslims, and Chris- tians, the last has performed relatively better for all the health indicators. Similarly, equality in education is clearly visible as all the communities are close to the state' s average literacy rate.

Kerala Human Development Report 2005 notes that the crucial constraints for Kerala' s further development are the lack of sufficient economic infrastructure, problems of educated unemployment and growing gender ' un- freedom' , which have been, and could continue to be, an impediment to the growth prospects of the state' s economy. According to *Kerala Human Development Report 2005*, the state now needs to deal with the second generation problems of human development, such as quality issues.

MADHYA PRADESH

Economy and Demography

Madhya Pradesh is economically one of the backward states and is lagging behind the national average growth rate (5.5 per cent) of per capita domestic product (NSDP) with 1.1 percent growth rate (Table 1). In 1999– 2000, NSDP per capita of Madhya Pradesh was around 78 per cent of the country' s per capita income, but in 2007– 8, it had come down to 55 per cent only, clearly showing its downtrend. Similarly, its NSDP growth rate (3 per cent) for the last eight years is also very low as compared to India' s NSDP growth rate (7.1 per cent) (Table 1)

Madhya Pradesh is one of the major tribal states and its ST population constitutes more than one-fi fth of the total population. The demographic pattern of Madhya Pradesh shows that close to 40 per cent of the population are SCs (18 per cent) and STs (22 per cent), which is equal to 4 per cent and 11 per cent of the total SC and ST population of the country. The share of the Muslim population in the state is around 7 per cent, which accounts for 2.4 per cent of India' s total Muslim population. More than three-fourth' s of the population of the state lives in rural areas (2007– 8). In 2008, Madhya Pradesh had the third highest TFR in India with a value of 3.3 as compared to the national TFR of 2. According to Census (2011), sex-ratio of Madhya Pradesh (930 females per 1,000 males) is lower than the national sex-ratio (940 females per 1,000 males), whereas its child sex-ratio (913) is quite close to the national average (914).

Table 1 Average Annual Growth Rate, 2000–1 to 2007–8 (*per cent*)

(at 1999–2000 constant prices)	*State*	*All India*
NSDP	3.0	7.1
Per Capita NSDP / Per Capita NNP (for India)	1.1	5.5

Source: Central Statistical Organisation.

Table 2 Distribution of Social and Religious Groups, 2007–8 (*per cent*)

Across States			*Within a State*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
11.1	3.9	2.4	22.0	17.6	7.2

Source: NSS 64th Round.

Human Development and Social Groups

Thirty eight per cent of Madhya Pradesh' s population is still living below the poverty line compared to the all India head-count ratio of poverty of 27 per cent (Figure 1). Close to half of the ST (57 per cent) and SC (48 per cent) population of the state are poor. Poverty is relatively high in the urban areas. In urban Madhya Pradesh, more than two-thirds of the SCs are poor (Figure 2). The pro- portions of poor SC and ST households in the state are quite high, vis-à-vis poor SC and ST households of the rest of India.

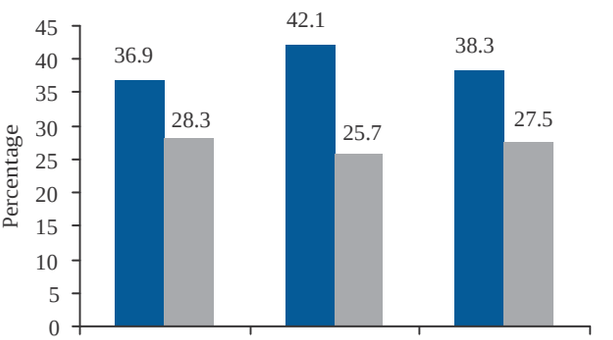

Figure 1 Incidence of Poverty, Madhya Pradesh and India, 2004–5

Source: Planning Commission (2008).

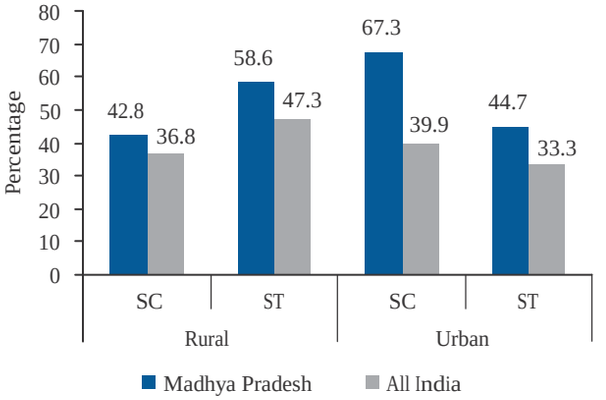

Figure 2 Incidence of Poverty by Social Groups, Madhya Pradesh and India, 2004–5

Source: Planning Commission (2008).

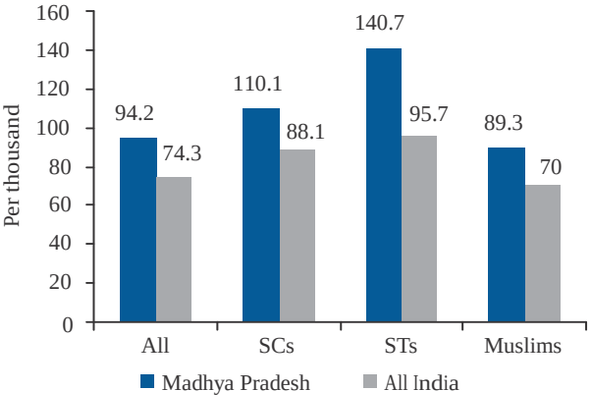

Figure 4 Under Five Mortality Rate, Madhya Pradesh and India, 2005–6

Source: *NFHS 3*.

The performance of health indicators in Madhya Pradesh is really poor in comparison to the all India aver- age. The situation is worse for SCs and STs. For instance, of U5MR for STs and SCs are 141 and 110 per 1,000, respectively, while the national average is 96 and 88 for their respective communities (Figure 4). Similarly, the women with BMI<18.5 (Figure 3) and underweight children (Figure 5) indicates the poor state of health services in Madhya Pradesh. The progress in the health indicators is relatively slow, and it is even slower in the case of SCs and STs. However, the state government has taken an initiative to strengthen the public health system by decentralizing it through the Mission for Community Health and by managing hospitals through, Rogi

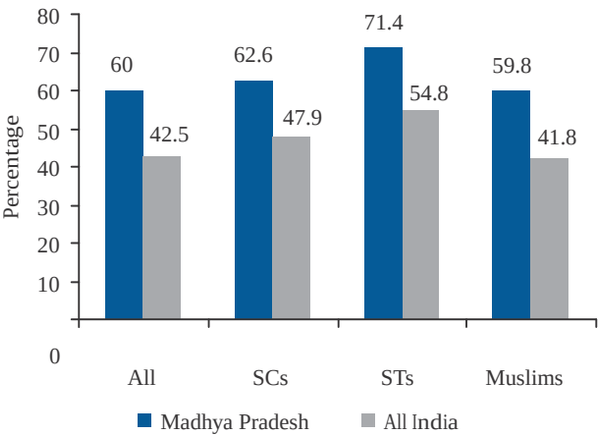

Figure 5 Percentage of Underweight Children (0–5 Years), Madhya Pradesh and India, 2005–6

Source: *NFHS 3*.

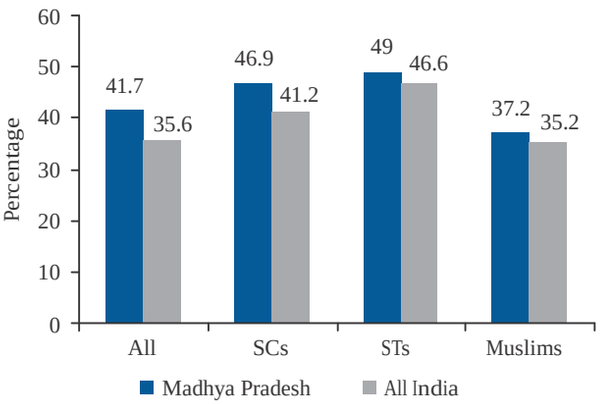

Figure 3 Percentage of Women with BMI<18.5, Madhya Pradesh and India, 2005–6

Source: *NFHS 3*.

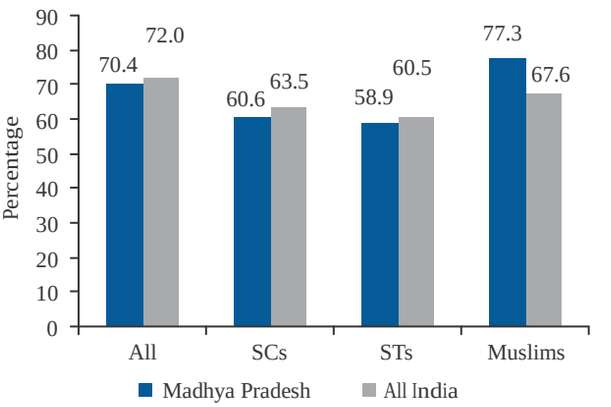

Figure 6 Literacy Rate, Madhya Pradesh and India, 2007–8

Source: NSS 64th Round.

Kalyan Samities, (*Madhya Pradesh Human Development Report 2002*).

The state has achieved a higher growth rate for literacy than the all India rate. One version was the two major schemes run by the state, that is, Education Guarantee Scheme (EGS) (1997) and a similar model for adult literacy (2000). According to NSS (2007–8), the literacy rate for SCs and STs is lower than the state average and also lower than their community's national literacy rate (Figure 6). Compared to the other backward states of India, Madhya Pradesh is well ahead in the education sector with almost universal access to elementary education (*Madhya Pradesh Human Development Report 2002*). In 2005–6, the 'Net Enrolment Ratio' was more than 94 per cent and the 'Gross Enrolment Ratio' was 132 per cent at the primary level. The success of these schemes suggests that affirmative action is effective even in adverse environments like in Madhya Pradesh. However, the latest estimates from Census (2011) show that Madhya Pradesh has lower literacy rate (70.6 per cent) than the national literacy rate (74 per cent).

Poor access to safe drinking water and inadequate sanitation facilities for SCs and STs have resulted in poor performance of health indicators in Madhya Pradesh. It was observed that only one out of the 10 ST households has access to toilet facilities in Madhya Pradesh, and for SCs this ratio is one out of six (Figure 8).

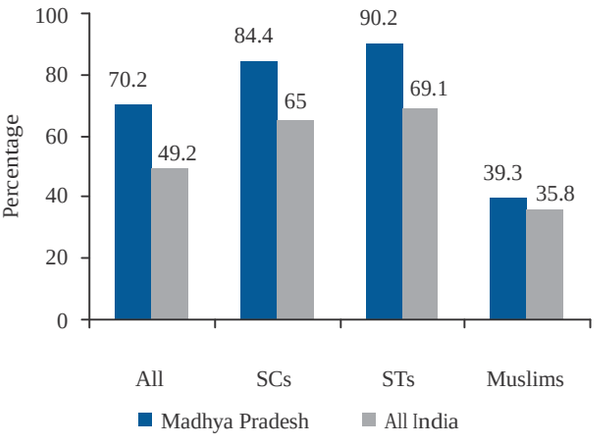

Figure 8 Percentage of Households with No Toilet Facilities, Madhya Pradesh and India, 2007–8

Source: NSS 65th Round.

Human Development and Religious Communities

Madhya Pradesh is a Hindu majority state (Hindus account for 92 per cent of the population and Muslims account for only 7 per cent). Across the human development indicators, Muslims are better off than Hindus. The progress in the health indicators is relatively slow in Madhya Pradesh, though in the case of Muslims, it is slightly better. Muslims also have a better literacy rate than other communities in the state (Figure 6) and it is also well above their national literacy rate. In the case of basic amenities, Muslims are comparatively better endowed than other communities in terms of improved sources of drinking water facilities (Figure 7) and access to toilet facilities (Figure 8), and are better off than the Muslims in India as a whole. Overall, Muslims in Madhya Pradesh are worse off for health related indicators, whereas they are better for other development indicators.

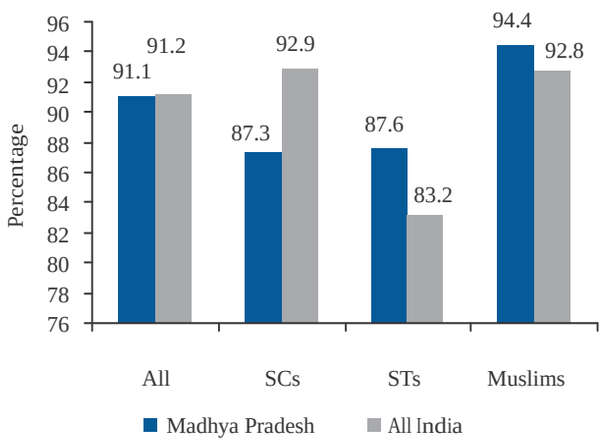

Figure 7 Percentage of Households with Improved Source of Drinking Water Facility, Madhya Pradesh and India, 2008–9

MAHARASHTRA

Economy and Demography

Maharashtra is among the more industrialized states in India. Its NSDP per capita was third among the major states in 2007–8, despite the fact that it grew at a pace somewhat slower than the national average during the period 1999–2000 to 2007–8 (Table 1). The state has huge contrasts, however. A thin geographic stretch in the west extending towards the south (Konkan/south

Source: NSS 65th Round.

Maharashtra) is highly industrialized and commercialized, and receives a large number of migrants and capital from all around the country. It is mainly due to this region that the state contributes about 13 per cent to the country' s GDP despite having just 7 per cent of its population. The centre (Marathwara) and north (Khandesh) are semi-arid,

and the economy therein largely depends on subsistence agriculture, seasonal out-migration, and state sponsored employment programmes (the EGS). Finally, the east (Vidharba, also known as the cotton belt) is an assured irrigation zone, and also has signifi cant forest cover in addition to mineral deposits. The Bhil tribal community inhabits three to fi ve districts in this zone, though the Bhil tribes also dwell in Khandesh. These STs are among the more deprived population in the state; their lands have been encroached upon for timber and minerals for a long time, and they have stayed largely excluded from the mainstream.

Maharashtra is the only state which has established statutory Regional Boards to bridge regional gaps in development. More recently, the state constituted ' The Maharashtra Human Development Mission' in 2006 for improving human development in the state' s 12 most backward districts (*Maharashtra Economic Survey 2010*).

The population composition: The share of SC, ST, and Muslim population in the state is around 13 per cent, 8.4 per cent, and 11 per cent, respectively (Table 2). Two-thirds of the state' s population lives in rural areas. Almost
70 per cent of the Muslims, however, live in urban areas. In spite of the large regional variation, the state has done well in controlling its population. The TFR was 2 in 2007– 8, which is close to the optimal replacement rate of 2.1. This is a healthy sign. In terms of sex-ratio, Maharashtra has 925 females per 1,000 males on an average, which is lower than the national average of 940 females of 1,000 males in 2011, whereas child sex-ratio is worse with only 883 females per 1,000 males, which is a matter of concern and requires immediate attention (Census 2011). In having a worse than average sex-ratio, Maharashtra is like other states of India with high per capita income (Delhi, Haryana, Punjab, and Gujarat).

Table 1 Average Annual Growth Rate, 2000–1 to 2007–8
(*per cent*)

(at 1999–2000 constant prices)	*State*	*All India*
NSDP	6.5	7.1
Per Capita NSDP/Per Capita NNP (for India)	4.8	5.5

Source: Central Statistical Organization.

Human Development and Social Groups

On the HDI scale, Maharashtra is a relatively advanced state, ranking 5th out of 29 for HDI in 2007– 8. This is also an improvement over its 2001 ranking.

Table 2 Distribution of Social and Religious Groups, 2007–8
(per cent)

Across States			*Within a State*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
7.0	4.8	6.3	8.4	13.1	11.2

Source: NSS 64th Round.

However, the Index has to be interpreted with caution in view of the extant regional disparities mentioned earlier. Maharashtra is home to 32 million poor people (that is, 30 per cent of the state' s total population—2004–5 data), which is close to 10 per cent of the total poor in India (Planning Commission 2008). Of greater concern is that the number of poor *increased* between 1993– 4 and
2004– 5, and it is only one of the four areas in the country where this happened. Is this a refl ection of increasing (intra) regional disparity, rising in-migration of the poor, the composition of growth, or a combination of these? This question requires serious examination. It especially requires examination because Maharashtra has one of the highest levels of per capita income among the states of India.

Next, contrary to the general pattern in India, in Maharashtra, the proportion of the population below the poverty line is higher in urban areas than in rural areas (Figure 1). This again suggests that the poor from all over are migrating to urban areas in search of livelihoods.

The proportion of poor SC and ST households is higher in rural areas, which is the same for other places.

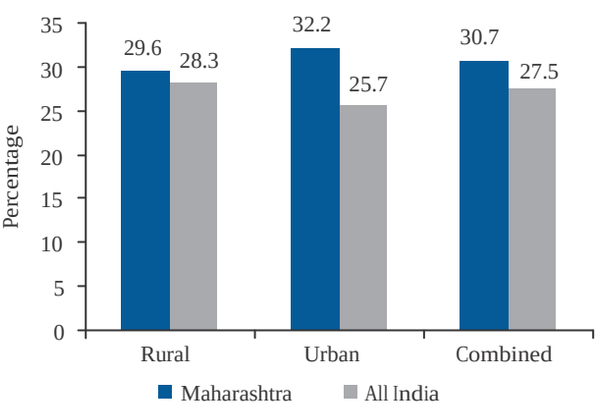

Figure 1 Incidence of Poverty, Maharashtra and India, 2004–5

Source: Planning Commission (2008).

More than half the rural ST households live below the poverty line and this proportion is *around 10 percentage points higher* than the all India fi gure for STs (Figure 2). The reason, as stated earlier, is closely related to the systematic deprivation of these communities, especially in the east and north.

The health related indicators such as BMI of women <18.5 (Figure 3), U5MR (Figure 4), and underweight children (Figure 5), point towards less than functional healthcare services in the state, in spite of the state having the third highest NSDP per capita in the country. In fact, the expenditure on health as a proportion to total government expenditure is less than that in the poorer northern states.

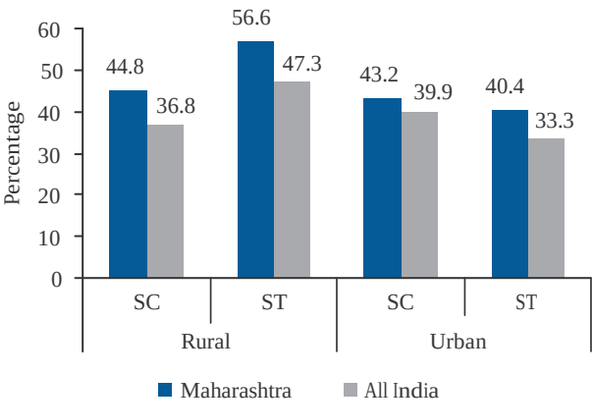

Figure 2 Incidence of Poverty by Social Groups, Maharashtra and India, 2004–5

Source: Planning Commission (2008).

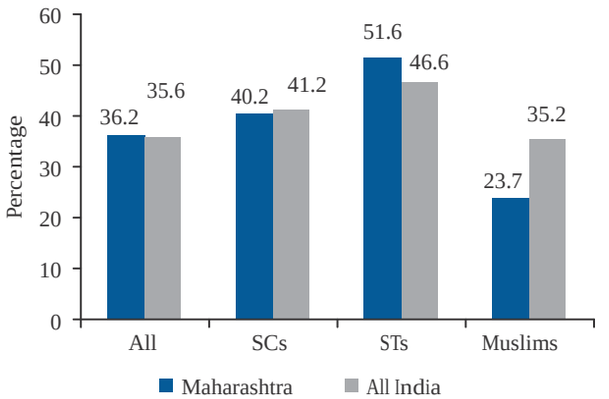

Figure 3 Percentage of Women with BMI<18.5, Maharashtra and India, 2005–6

Source: *NFHS 3.*

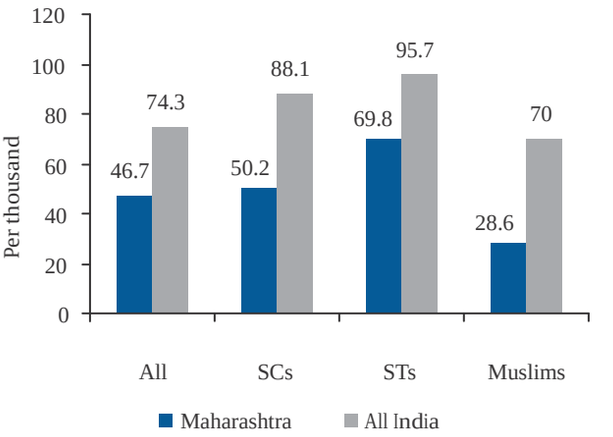

Figure 4 Under Five Mortality Rate, Maharashtra and India, 2005–6

Source: *NFHS 3.*

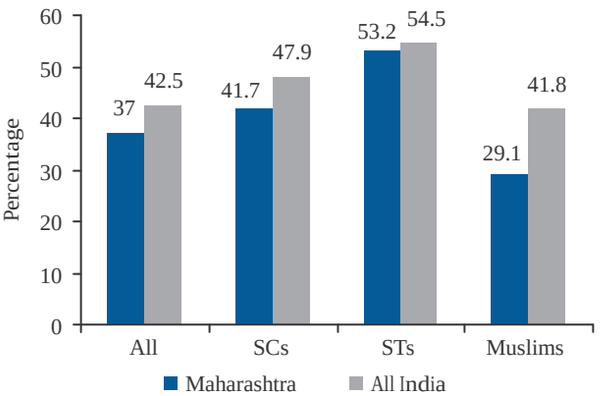

Figure 5 Percentage of Underweight Children (0–5 Years), Maharashtra and India, 2005–6

Source: *NFHS 3.*

The ST community lags behind in health as well. For instance, one in two ST women has a BMI lower than the universally defi ned standard of 18.5. A similar picture is observed for this community on other indicators as well. There is a silver lining though; on measures like U5MR and underweight children, both the SCs and STs in Maharashtra have performed better than the SCs and STs at the all India level.

Though Maharashtra is nearing universalization in education (85 per cent ' Net Enrolment Ratio' at the primary level in 2007– 8), and has achieved an impressive literacy rate (Figure 6), the ST community is at the level where the all India fi gure was a decade back. To address this issue, the state government has launched initiatives like the Ahilyabai Holkar Scheme, ' Attendance Allow-

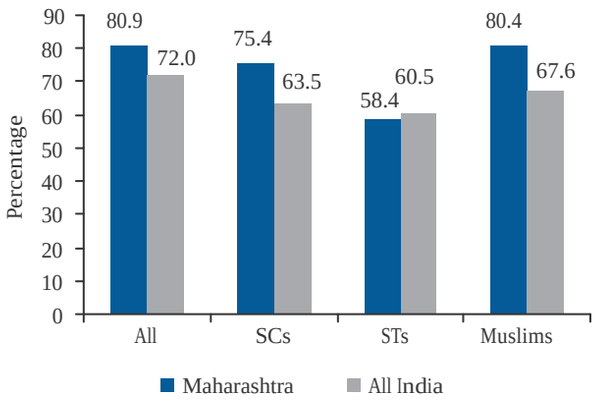

Figure 6 Literacy Rate, Maharashtra and India, 2007–8

Source: NSS 64th Round.

ance', and Shikshan Shulka Pratipurti Yojana among oth- ers, to enhance the enrolment of ST children, particularly of girls (*Maharashtra Economic Survey 2010*). According to latest estimates from Census (2011), the literacy rate of Maharashtra is 82.9 per cent as compared to national literacy rate of 74 per cent in 2011. However, as in the case of health, Maharashtra's expenditure on education in proportion to its total expenditure is lower than that in some of the poorer northern states.

For potable water SCs have poorer access than their counterparts in India (Figure 7) but for toilets/sanitation (Figure 8), better access. STs have better access to water and sanitation in Maharashtra compared to STs in India.

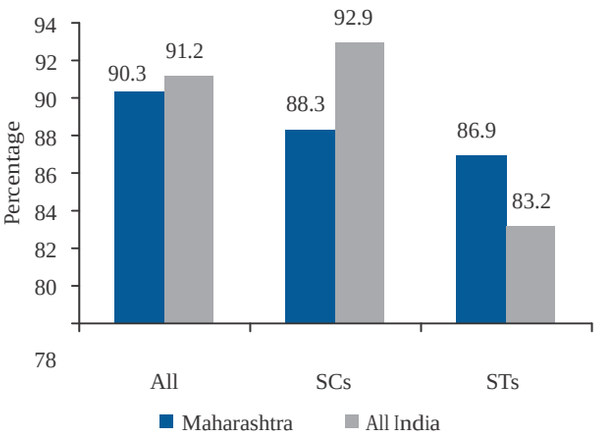

Figure 7 Proportion of Households with Improved Source of Drinking Water Facility, Maharashtra and India, 2008–9

Source: NSS 65th Round.

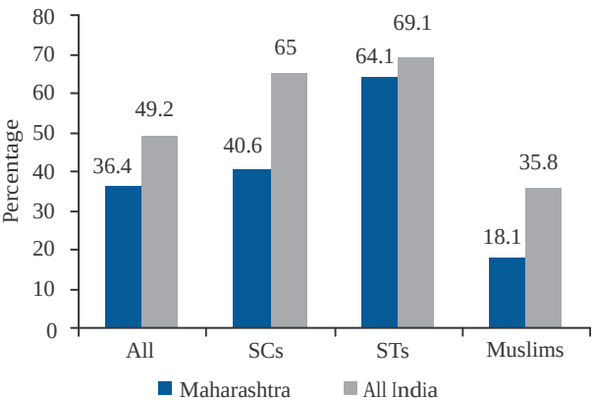

Figure 8 Proportion of Households with No Toilet Facilities, Maharashtra and India, 2007–8

Source: NSS 65th Round.

Human Development and Religious Communities

Households and persons belonging to the Muslim community are generally better off compared to other major groups on most indicators save a few. One reason is that up to 70 per cent Muslims live in urban areas where the infrastructure is superior.

The key observation here is that location matters. Rural and remote locales are difficult to service, and the easy option is to leave them out. Seen logistically as well, setting up hospitals or schools for small scattered rural communities is arduous if not unfeasible. One possible way out: a progressive development policy (in remote areas) can off er attractive livelihood options for the poor at the block/district headquarters, so that they relocate to these places where they can avail better social services and also join the mainstream. However, service delivery in the rural areas also has to improve.

ORISSA

Economy and Demography

Orissa, also known as Odisha, is one of the economically poorer states in India despite it being coastal—coastal areas otherwise have progressed well. However, Orissa's performance during the period 2002– 3 to 2007– 8 has been rather impressive in terms of economic growth, almost two percentage points above the national average (Table 1). This impressive growth performance is mainly driven by the emerging tertiary sector, which is largely confi ned to a few urban and semi-urban coastal districts. Orissa also happens to be one of the Indian states with

abundant natural resources—a fifth of India's coal, a quarter of its iron ore, a third of its bauxite reserves, and most of the chromite. However, factors like geographical barriers (predominantly mountainous and highland regions—the Eastern Ghats), poor infrastructure, and indifferent economic governance have hindered the tapping of these resources and using them for the prosperity of the state. In spite of such problems, the growth rate of the mining and quarrying sector has been impressive over the last few decades and has played a crucial role in the process of Orissa's development and growth (*Orissa Human Development Report 2004*). The state's coastal areas are relatively better off, but the hinterland, which also inhabits vast ST populations in hilly and forest terrain, is quite backward.

Table 1 Average Annual Growth Rate, 2002–3 to 2007–8

(*per cent*)

(at constant prices 1999–2000)	*State*	*All India*
NSDP/NDP (for India)	9.7	7.9
Per Capita NSDP/Per Capita NNP (for India)	8.5	6.4

Source:
CSO.

Orissa's demographic profile shows that the state has
3.6 per cent of the country's population and 4.7 per cent
of the total land area. More than 95 per cent of the population of the state is Hindu. Across social groups, the SCs and STs account for more than 40 per cent of the total population of the state, and the ST population of Orissa alone accounts for 10 per cent of the total ST population of the country (Table 2). The majority of the ST population is concentrated in the western districts of Orissa (that is, the hinterland).

Table 2 Distribution of Social and Religious Groups, 2007–8

(*per cent*)

Within a State			*Across States*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
23.6	18.9	2.2	9.7	3.4	0.6

Source: NSS 64th Round.

Against the national TFR of 2.6, Orissa had a TFR of 2.4 in 2008 against the optimal replacement rate of 2.1. This positive performance is repeated in the sex ratio, Orissa is a good performer with 978 females per 1,000 males as compared to all India 940 females per 1,000 males in 2011. Looking at the child sex-ratio, Orissa (934) is better than the national average (914) (Census 2011). It is notable that states which have a relatively high proportion of STs in their population tend to have a sex-ratio that is better than the national average.

Human Development and Social Groups

Looking at other development indicators, the incidence of poverty was much higher here than the national average, both in rural and urban areas (Figure 1). The extent of poverty is not evenly distributed in all the regions and among all social groups of Orissa. The incidence of poverty was particularly high among the ST and SC populations in the state. In rural areas, the incidence of poverty among STs was the highest in Orissa, while among SCs it had the fourth highest incidence of poverty after Bihar, Jharkhand, and Uttarakhand (2004–5). In urban areas, the incidence of poverty among SCs was the highest in Orissa, while it was second highest for STs. Overall, the SCs and STs of the state have a very high incidence of poverty as compared to the SCs and STs in the country as a whole– which partly explains their support for Naxalites (Figure 2).

In terms of health indicators, the performance of the state was well below the national average. The proportion of women with BMI<18.5 (Figure. 3) and the incidence of U5MR were higher than the national average (Figure 4). However, the proportion of underweight children was lower than the national average (Figure 5). The health conditions of SCs and STs are worse than that for the other social groups in the state.

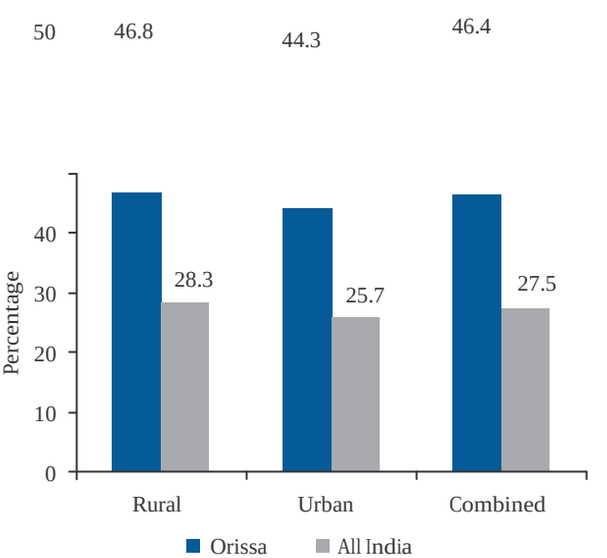

Figure 1 Incidence of Poverty, Orissa and India, 2004–5

Source: Planning Commission (2008).

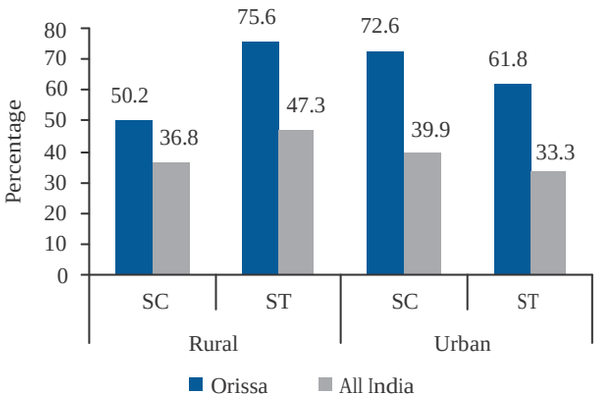

Figure 2 Incidence of Poverty by Social Groups, Orissa and India, 2004–5

Source: Planning Commission (2008).

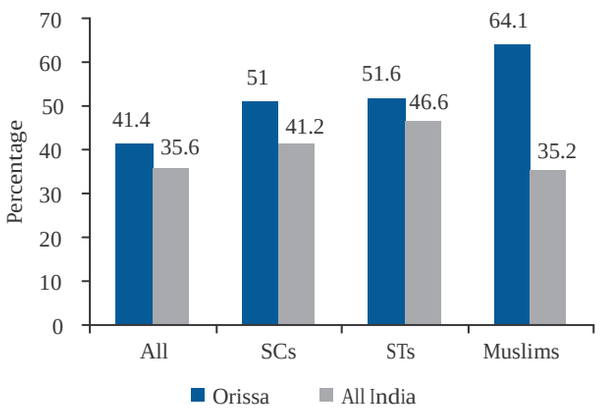

Figure 3 Percentage of Women with BMI<18.5, Orissa and India, 2005–6

Source: *NFHS 3*.

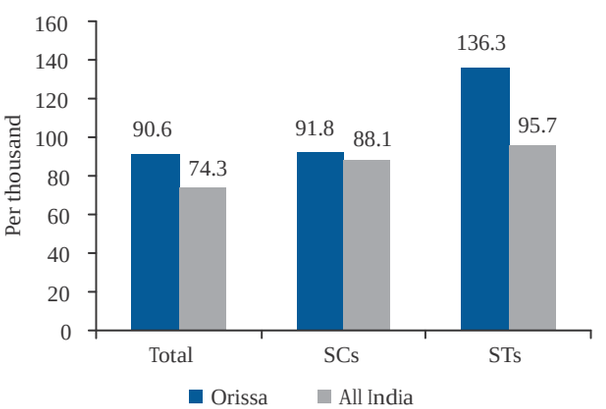

Figure 4 Under Five Mortality Rate, Orissa and India, 2005–6

Source: *NFHS 3*.

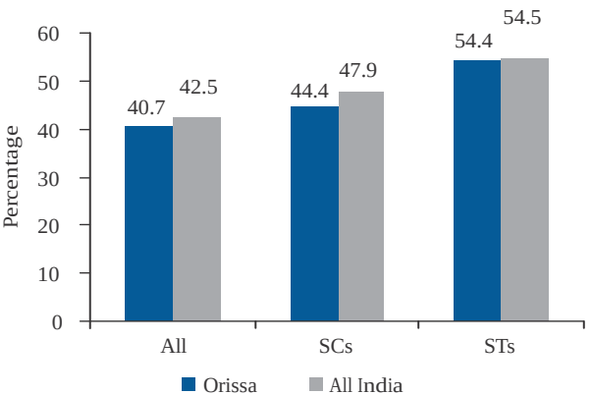

Figure 5 Percentage of Underweight Children (0–5 Years), Orissa and India, 2005–6

Source: *NFHS 3*.

Physical access to healthcare institutions was a major concern in Orissa, with only one medical institution for every 119 sq kilometres of area (*Orissa Human Development Report 2004*). The report further noted that private expenditure on healthcare was higher in the backward districts and it was proportionately higher for lower income groups. Public expenditure on health as a proportion of GSDP declined, from 1.12 per cent in 1998–9 to 0.98 per cent in 2004–5. Primary health services accounted for only around 20 per cent of even this limited budget, implying that primary healthcare and first referral services were under funded.

The performance of the state in terms of literacy was lower than the national average with about 68 per cent of the population being literate. Less than half of the STs in the state were literate (Figure 6). The SCs and STs have a lower literacy rate than the state average and the all India average for SCs and STs. Even though public expenditure on education has been rising in nominal terms, the real increase was very small (*Orissa Human Development Report 2004*). Further, there were annual fluctuations of expenditure on education as a percentage of the SDP. For the year 2007–8, public expenditure on education was 2.7 per cent of the SDP and the bulk (95 per cent) of this meagre amount was spent on salaries (*Orissa Human Development Report 2004*). However, the latest estimates from Census (2011) show that Orissa with its literacy rate of 73.5 per cent is approaching close to the national literacy rate (74 per cent).

In terms of basic household amenities, the performance of the state was slightly lower than the national average,

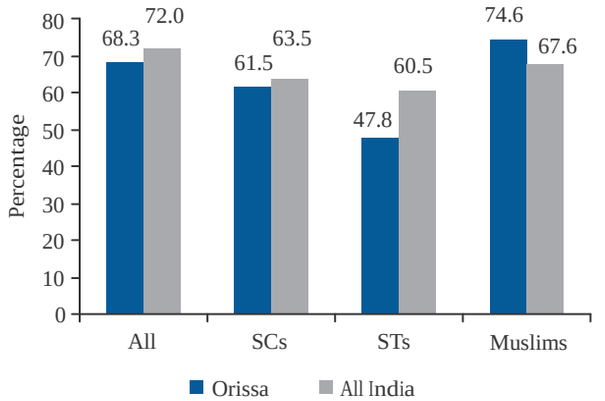

Figure 6 Literacy Rate, Orissa and India, 2007–8

Source: NSS 64th Round.

with about 85 per cent of the households having access to improved drinking water facilities. However, close to four-fifths of the households do not have access to toilet facilities (Figures 7 and 8). The condition of sanitation among STs and SCs was even worse as compared to the state average and their respective national averages. Only 8 per cent of ST households have access to toilet facilities compared to 31 per cent of ST households at the all India level. There was not much difference between SCs and STs in terms of accessing improved sources of drinking water. Sanitation and drinking water facilities are important inputs that influence health outcomes. Among the major causes of children's deaths, diarrhoea and gastroenteritis accounted for 14 per cent of deaths during 1998–2000 (*Orissa Human Development Report 2004*).

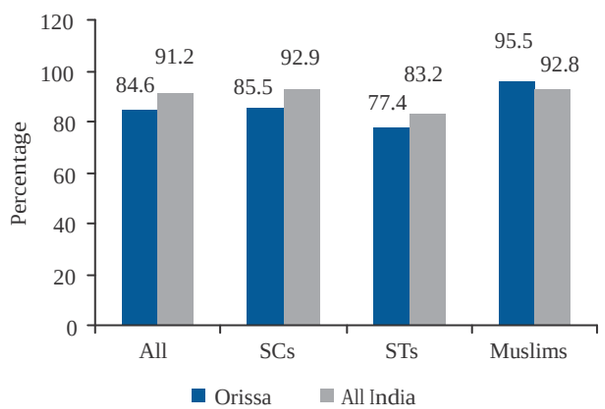

Figure 7 Percentage of Households with Improved Source of Drinking Water Facility, Orissa and India, 2008–9

Source: NSS 65th Round.

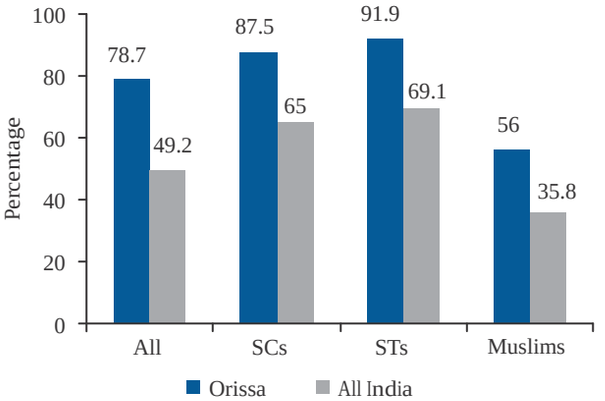

Figure 8 Percentage of Households with No Toilet Facilities, Orissa and India, 2007–8

Source: NSS 65th Round.

Human Development and Religious Communities

Orissa is a predominantly Hindu state (Hindus account for more that 95 per cent of the population and Muslims account for only 2 per cent). With regard to human development indicators, Muslims are worse off for health indicators, but better off in the education sector with a literacy rate higher than the state average and also higher than the all India average for Muslims. In terms of basic amenities, Muslims have better access to improved sources of drinking water and toilet facilities than other groups in the state. In terms of accessing improved sources of drinking water, Muslims are even better off than Muslims for India as a whole, but this is not so when it comes to access to toilet facilities. Overall, the status of Muslims is no better or worse compared to Hindus, and their status of development is a reflection of the general underdevelopment in the state.

PUNJAB

Economy and Demography

The state of Punjab occupies an important position in ensuring food security for the country, and Punjab was among the special focus states for the Green Revolution launched during the mid 1960s. The consolidation of landholdings and predominance of owner farmers provided the initial prerequisites for the Green Revolution. Additionally, irrigation facilities, which have historically been well developed in the state right from the colonial period (when investments were targeted towards construction of canals), provided the necessary infrastructure

for the Green Revolution. Post-Independence, public investment in irrigation continued, and by the year 1960–1 the net irrigated area in Punjab was already 54 per cent (*Punjab Human Development Report 2004*).

Agriculture occupies an important position in Punjab's economy, and more than three-fourths of the state's geographical area is under cultivation. Wheat is the principal crop, made possible by the availability of extensive irrigation facilities.

An important feature of Punjab's economy is the high in-migration of labourers (both annual and seasonal) from the north-western states as well as from the states of central and eastern India. During the late 1990s, there were nearly 2.2 million migrant labourers in Punjab, who worked both in the agricultural and industrial sectors. By the late 1990s, the migrant labourers constituted 11 per cent of all agricultural labourers in the state (*Punjab Human Development Report 2004*).

Punjab experienced a very high growth of NSDP till the early 1990s, after which it started declining. Inadequate investment and a sharp decline in growth of the primary sector were among the reasons for this slowdown (*Punjab Human Development Report 2004*). In recent years, the growth of the NSDP has been below the national average. During the period 2002–3 to 2007–8 the average annual growth rate of NSDP was 5.3 per cent, which was below the national average of 7.9 per cent. Similarly, during this period, the growth rate of per capita SDP was below the national average (Table 1).

Table 1 Average Annual Growth Rate, 2002–3 to 2007–8
(*per cent*)

(at constant prices 1999–2000)	*State*	*All India*
NSDP/NDP (for India)	5.3	7.9
Per Capita NSDP / Per Capita NNP (for India)	3.4	6.4

Source: CSO.

As per Punjab's demographic profile, the state accounted for 2.4 per cent of the country's population. Among social groups, SCs constitute 37 per cent of the population of the state, the majority of them (almost 60 per cent) being agricultural labourers. Among the cultivators, SCs accounted for only 4.3 per cent of the total (*Punjab Human Development Report, 2004*). Punjab has a very low TFR close to 1.9 in 2008 well below the replacement rate and well below the national TFR of 2.6.

According to Census (2011), Punjab is one of the states which has the worst sex-ratio in the country with only 893 females per 1,000 males, and even worse child sex-ratio of 845 females per 1,000 males, against 940 national sex-ratio and 914 national child sex-ratio in 2011. In this regard, we have seen that states of India with a relatively higher per capita income are also the states with worse than average sex-ratio.

Table 2 Distribution of Social and Religious Groups, 2007–8
(*per cent*)

Share of State			*Distribution within States*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
0.0	4.5	0.2	0.1	36.7	1.2

Source: NSS 64th Round.

Human Development and Social Groups

In terms of human development, the relative ranking of the state as per HDI has remained unchanged at the fifth position between 1999–2000 and 2007–8. Punjab has the third lowest incidence of poverty in the country, with only
8.4 per cent of its population living below the poverty line (Figure 1). The low incidence of poverty can be observed in the case of both SCs and STs as well, and is lower than the national average for SCs and STs respectively (Figure 2). The low incidence of poverty has been a long standing feature of the economy of Punjab. A long period of economic prosperity was one of the principal reasons for this (*Punjab Human Development Report 2004*).

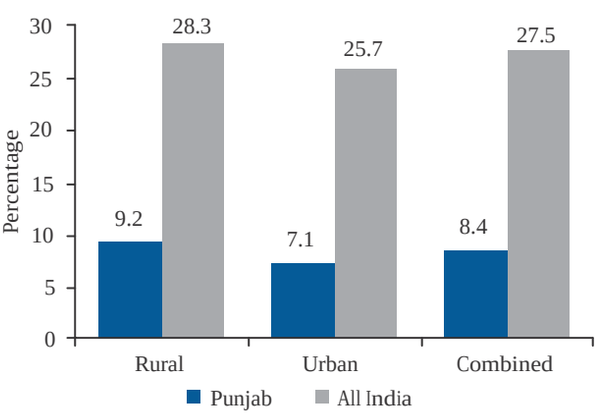

Figure 1 Incidence of Poverty, Punjab and India, 2004–5

Source: Planning Commission (2008).

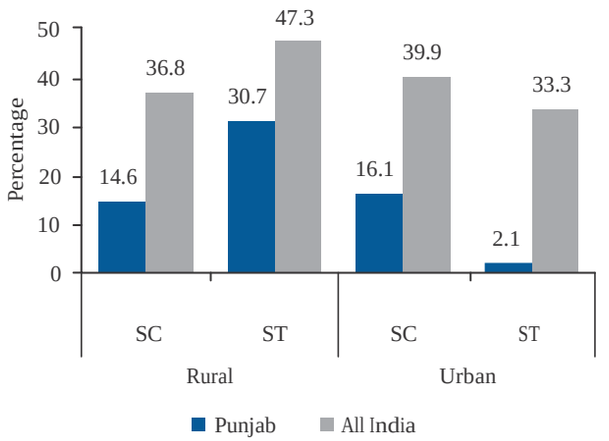

Figure 2 Incidence of Poverty by Social Groups, Punjab and India, 2004–5

Source: Planning Commission (2008).

As regards health indicators, the state's performance was much better than the national average. The proportion of women with BMI<18.5, U5MR and malnourishment of children are all lower than the national average (Figure 3, Figure 4, and Figure 5). Even though the SCs are worse off than the rest of the population in the state, the health indicators for SCs in Punjab was better than the national average for SCs. Sanitation and drinking water facilities are important inputs that influence health outcomes. Better sanitation and drinking water facilities (as compared to the national average, and as depicted in Figure 7 and Figure 8) were responsible for the above average health outcomes. Based on the data published by the state government (Department of Health and Family Welfare), the State Human Development Report noted that not only were the targets for government immunization programmes met, but for several years, immunization exceeded the targets.

There is an increasing trend towards privatization of the healthcare system in Punjab and there is a declining trend of ailments being treated in government facilities in both rural and urban areas (*Punjab Human Development Report 2004*). Even though there is an elaborate system of government healthcare facilities, the fact that it 'caters to only one out of every twenty patients that seek non-hospitalised care in Punjab' calls for a review of the system (*Punjab Human Development Report 2004*). Ineffective monitoring of PHCs leading to their under-utilization, and the absence of a good referral system were cited as

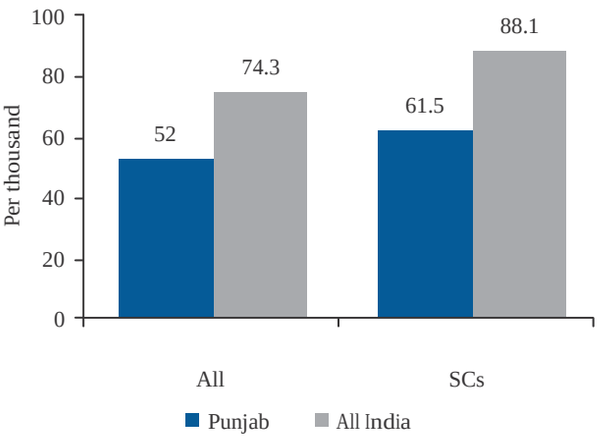

Figure 4 Under Five Mortality Rate, Punjab and India, 2005–6

Source: *NFHS 3*.

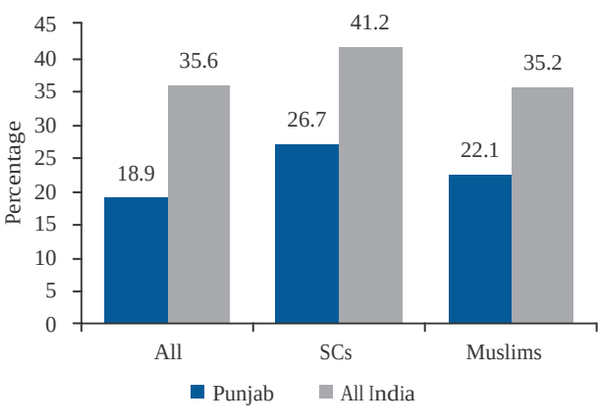

Figure 3 Percentage of Women with BMI<18.5, Punjab and India, 2005–6

Source: *NFHS 3*.

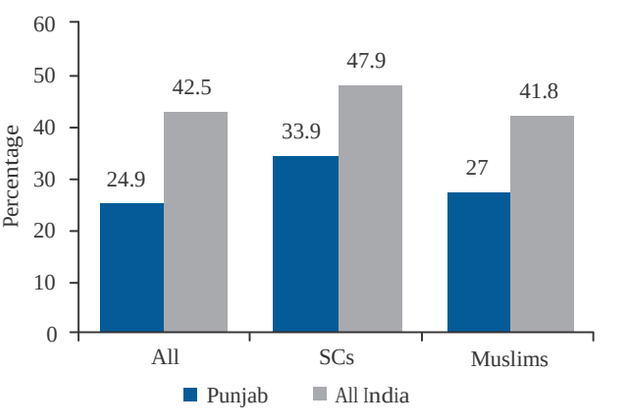

Figure 5 Percentage of Underweight Children (0–5 Years), Punjab and India, 2005–6

Source: *NFHS 3*.

signifi cant drawbacks in the healthcare system in Punjab. Although there has been an increased allocation for health-care over the years (13 per cent of the state budget was allocated during the Ninth Plan period of the state), allocation for primary and secondary healthcare services is still inadequate, and hence there is a need for ' a sensitive health investment planning which is biased towards greater distribution of resources to underprivileged areas, places and groups' (*Punjab Human Development Report 2004*).

The state' s performance in terms of literacy is better than the national average. According to Census (2011), the literacy rate of Punjab is 76.7 per cent as compared to 74 per cent national literacy rate in 2011. As per NSS (2007– 8), SCs also fare better than the national average for SCs (Figure 6). The Government of Punjab identifi ed certain backward pockets in the state, primarily inhabited by SCs, where incentives in the form of stipends, non-formal education, and free residential schools for day scholars are provided (*Punjab Human Development Report 2004*). In order to monitor the implementation of SSA, the Jan Sampark Abhiyan was started, which also tried to ensure genuine community participation. The *Punjab Human Development Report 2004* observed that one of the major achievements had been the provision of one primary school in every village, which increased the access to schools. However, school infrastructure and teaching quality were important areas of concern, as noted in the report.

With close to 99 per cent of households having access to improved drinking water facilities, and three-fourths of households having toilet facilities, the performance of the state in terms of basic household amenities is better than the national average (Figures 7 and 8). In terms of these two indicators the performance of STs and SCs in the state is also better than the national average for their respective groups.

Human Development and Religious Communities

Sikhs are the dominant religious community in the state, constituting 60 per cent of its population (NSS 64th Round) whereas Muslims account for only 1 per cent. Across religions, Muslims are marginally better off in terms of basic amenities and health indicators as compared to the Muslims in the country as a whole. However, the literacy rate for Muslims in the state is lower than both the state average and the national average for Muslims.

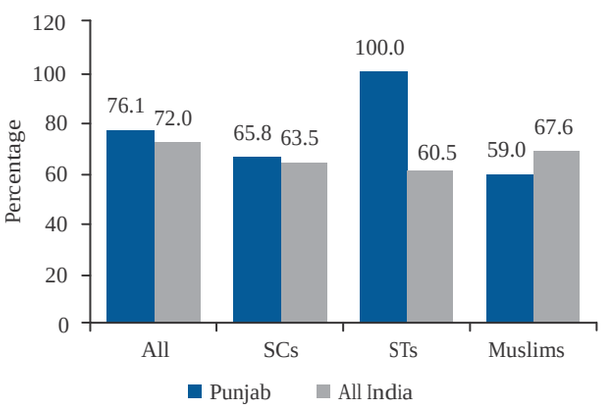

Figure 6 Literacy Rate, Punjab and India, 2007–8

Source: NSS 64th Round.

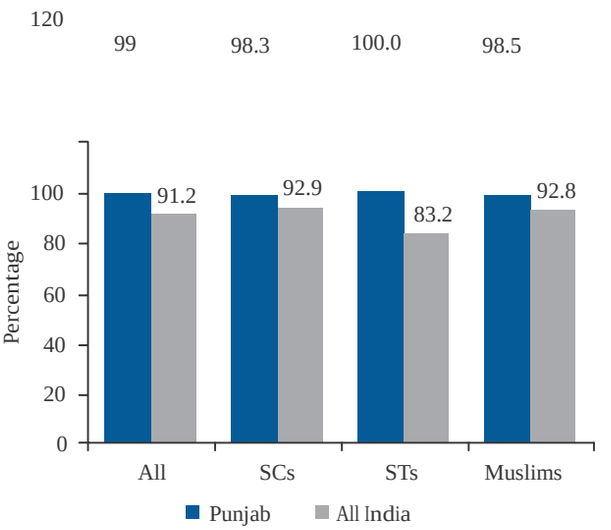

Figure 7 Proportion of Households with Improved Source of Drinking Water Facility, Punjab and India, 2008–9

Source: NSS 65th Round.

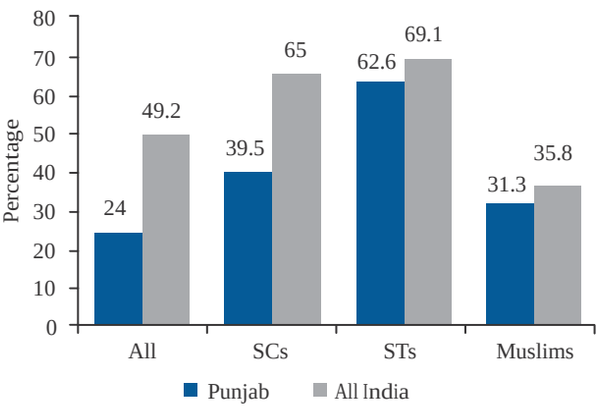

Figure 8 Proportion of Households with No Toilet Facility, Punjab and India, 2008–9

Source: NSS 65th Round.

RAJASTHAN

Economy and Demography

Rajasthan is among the more backward states of India. Though the NSDP growth rate in the recent years (2002–8) has been at par with the average national growth rate, the NSDP per capita growth has been slower owing to the rapid population growth in the state (Table 1). Rajasthan being a desert state (60 per cent area is desert, the rest is semi-arid) has historically been sparsely populated. However, in recent decades its TFR has been among the highest in the country—3.3 in 2007–8. This is worrisome since both eco-sustainability and people's well-being are at stake. Recently, many areas, particularly the prefecture of larger cities, have been declared 'grey zones' meaning water levels have touched the danger zone. The state government is now trying to get river water from Haryana, Uttar Pradesh, and Gujarat to meet the state's requirements.

The state presents a paradox: most social indicators show better values in the north, which is arid and has a harsh climate. The reason is that historically, most of northern Rajasthan has witnessed out-migration of the Marwaris, who owing to their thrift and skills have become an important business community in the country and abroad. They have regularly invested back in the state in education, health, water supply, and irrigation and this has shown results. In these areas, the TFR is also low. In the southern regions, however, where the rainfall is higher and the soil is better, have among the worst social and economic indicators in the state and country. Dungarpur (deep south) is perhaps the most underdeveloped district in India. These (southern) districts in general are forested and inhabited by people belonging to the ST (Bhil) community. The STs as a proportion of the population are among the highest in Rajasthan (13 per cent of the state's population, which accounts for 8.7 per cent of the total population of STs in India). A feudal/princely ruling class earlier and a not too sensitive administration in the post-Independence period has resulted in the ST population here facing the same fate as elsewhere. Since 84 per cent of the population resides in rural areas (NSS 2007–8), this becomes a reason for extension services not reaching far-flung areas effectively. In terms of sex-ratio, Rajasthan has only 926 females per 1,000 males on an average, whereas its child sex-ratio is very low with only 883 females per 1,000 males, which is a matter of concern and requires urgent attention of policymakers (Census 2011).

Table 1 Average Annual Growth Rate, 2002–3 to 2007–8 (*per cent*)

(at constant prices 1999–2000)	*State*	*All India*
NSDP	7.9	7.9
Per Capita NSDP/Per Capita NNP (for India)	5.9	6.4

Source: Central Statistical Organization, as on 12.04.2010.

Table 2 Distribution of Social and Religious Groups, 2007–8 (*per cent*)

Share of State			*Distribution within States*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
8.7	5.6	3.5	13.0	19.2	7.9

Source: NSS 64th Round.

Human Development and Social Groups

Rajasthan lags behind much of India on human development—it ranks 20th out of 29 states. The incidence of poverty in the state is lower than the national average, because rural poverty is much lower here than in India as a whole. This is because the population density is still low and there is extensive out-migration of the poor, who appear to belong mainly to the SC groups (see Figures 1 and 2). Consequently, urban poverty is high. As V.M. Dandekar famously stated, 'Urban poverty is a spill over of rural poverty.' The problem is compounded by the in-migration of poor workers from the eastern parts of the country who are now quite visible in the large urban centres, and a stagnant manufacturing sector. Thus, there is an abundance of urban slums. The Government of

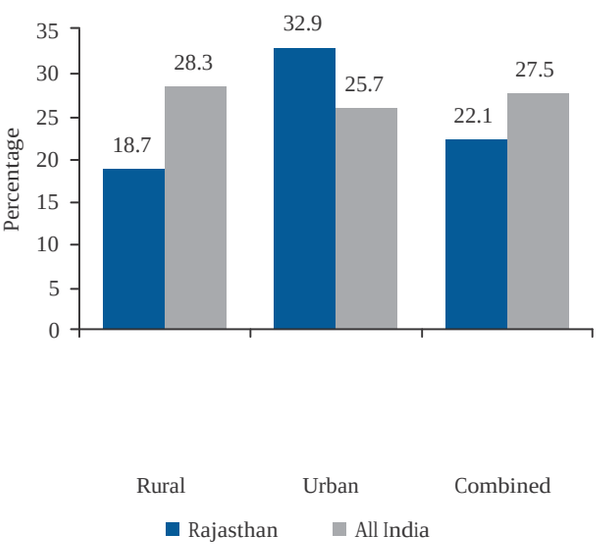

Figure 1 Incidence of Poverty, Rajasthan and India, 2004–5

Source: Planning Commission (2008).

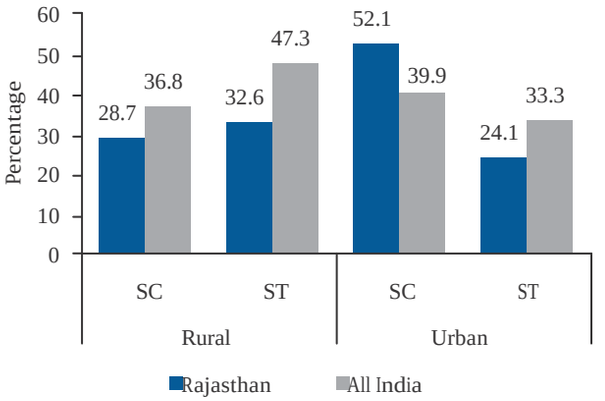

Figure 2 Incidence of Poverty by Social Groups, Rajasthan and India, 2004–5

Source: Planning Commission (2008).

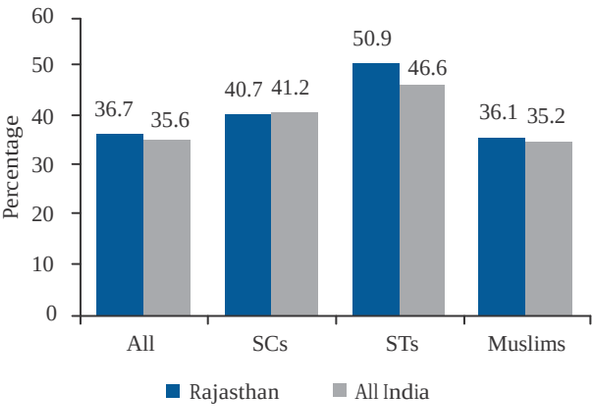

Figure 3 Percentage of Women with BMI<18.5, Rajasthan and India, 2005–6

Source: *NFHS 3*.

Rajasthan is taking initiatives to address urban poverty through some recent policies like ' Kacchi Basti' Regu- larization Policy (2005), and Aff ordable Housing Policy (2009).

On health indicators, the state' s performance is mixed. The proportion of women with BMI<18.5 and the U5MR are higher than the national average whereas the propor- tion of underweight children is slightly lower (Figures 3, 4, and 5). The healthcare system favours allopathic medicines over traditional medicines. Yet, the new system has failed to reach the weaker sections for want of funds and personnel, and a difficult terrain. Therefore, the state' s SCs and STs exhibiting health indicators below the state average, and also below the national average for SC/STs require no explanation. The government has attempted to improve health services, but with the focus mainly on achieving greater coverage. During the mid-1990s there was a shortfall of 20 per cent of doctors in the rural areas, a situation which is unlikely to have improved. The State Human Development Report further points out that more than half the curative health needs are met by the private sector, which is mainly urban based and expensive.

The state' s literacy rate is lower than the national average. The literacy rate of Rajasthan is 67.1 per cent, which is lower than the national literacy rate of 74 per cent (Census 2011). More than half the STs in Rajasthan are illiterate (NSS 2007– 8). The gap between the state' s literacy rate and the national average for the ST population is 13 percentage points. The state government has implemented several programmes to improve the formal

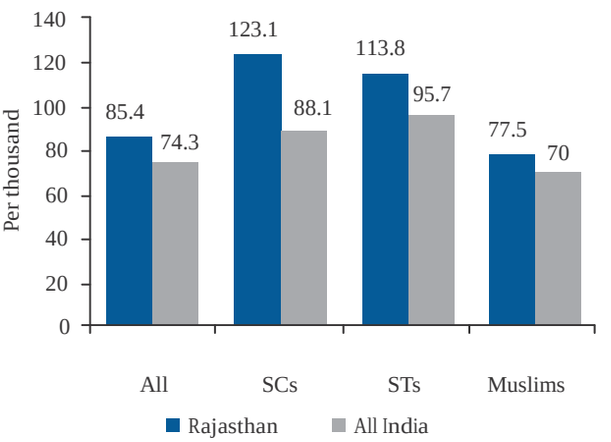

Figure 4 Under Five Mortality Rate, Rajasthan and India, 2005–6

Source: *NFHS 3*.

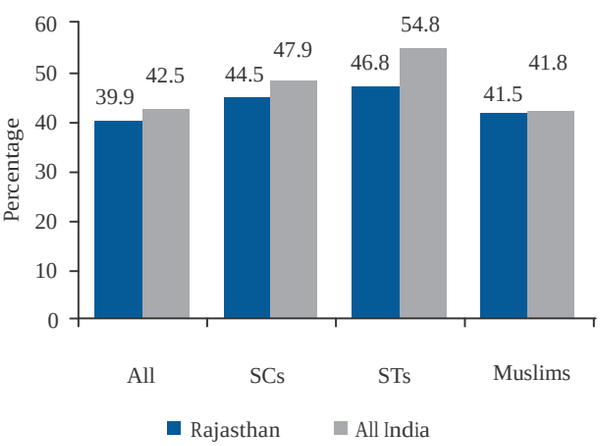

Figure 5 Percentage of Underweight Children (0–5 Years), Rajasthan and India, 2005–6

Source: *NFHS 3*.

education system. The ' Shiksha Karmi' Project—which addresses the issue of teacher absenteeism—is among the more successful programmes. As a result of this pro- gramme, the retention rate increased from an average of about 19 per cent in the earlier years to 65 per cent by the turn of the century (*Rajasthan Human Development Report 2002*). However, the set targets remain unfulfi lled.

The proportion of households with improved drinking water facilities in the state is below the national average (Figure 7). Across the social groups, the SCs are below both the state average and national average for SCs, though the same is not true for STs. Over time, Rajasthan has improved its services to supply potable drinking water. The improved water services can be attributed to the ' Water Policy of Rajasthan' which was introduced in 1999 and has been recommended for amendments. Access to sanitation/toilet facilities, however, remains a huge challenge: only a third of the households had toilet facilities in 2008– 9, with the STs and SCs scoring even lower, below the all India average for SC and ST households.

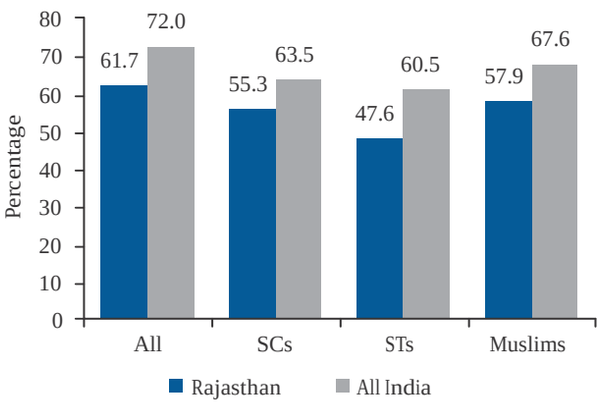

Figure 6 Literacy Rate, Rajasthan and India, 2007–8

Source: NSS 64th Round.

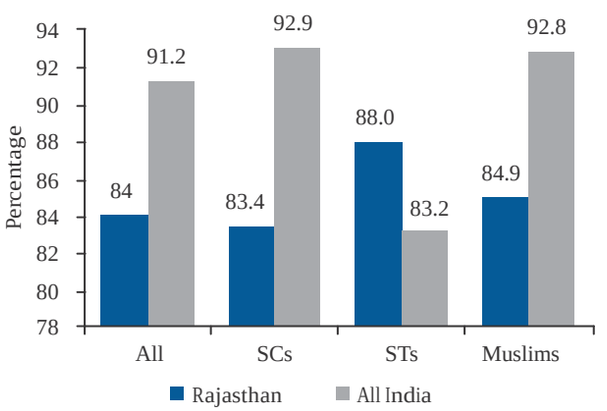

Figure 7 Percentage of Households with Improved Source of Drinking Water Facility, Rajasthan and India, 2008–9

Source: NSS 65th Round.

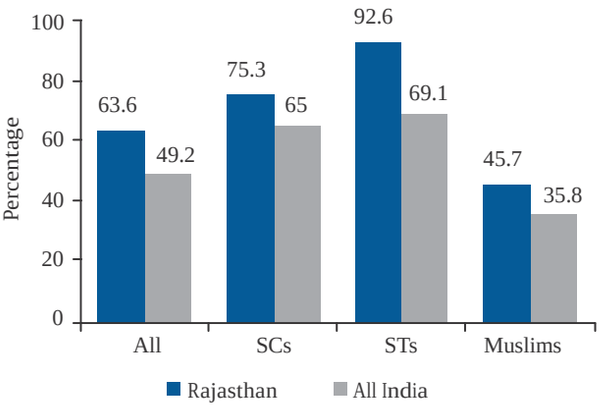

Figure 8 Percentage of Households with No Toilet Facility, Rajasthan and India, 2008–9

Source: NSS 65th Round.

Human Development and Religious Communities

The health indicators for the Muslims, who account for 8 per cent of the state' s population, are quite close to the state averages, but are slightly lower than the averages for Muslims at the all India level. In education, the Muslims of Rajasthan lag behind the state literacy rate, and also below the literacy rate for Muslims at the all India level. Among the reasons for this is their occupation. Being a rigid caste-based society, there is little occupational mobility for most Muslims, who are stuck in their traditional jobs.

Rajasthan needs to take urgent steps to reduce its TFR and other population issues, manage its water resources, and also address the issue of ST neglect.

TAMIL NADU

Economy and Demography

Tamil Nadu is one of the better-off states of India. In terms of economic growth, the state' s performance was at par with the national average during the period 2002– 3 to

2007–8. The average annual growth rate of NSDP during this period was 7.8 per cent, while the growth rate of per capita state domestic product (SDP) (7.0 per cent) was above the national average (Table 1). Tamil Nadu is one of the industrially more advanced states with automobile, cotton, textiles, rubber, food products, machinery, and transport equipment as the major industries (*Tamil Nadu Human Development Report 2003*). Madras Presidency was relatively more developed in the colonial times as well: post-independence, successive state administrations have built upon this advantage. Policies such as the roll-back of power tariff increase, free power for agriculture, a sustained positive discrimination policy, and a targeted Public Distribution System (PDS) initiated the growth process in the state.

The demographic profile of Tamil Nadu indicates that the state has 6 per cent of the country's population and 4 per cent of the total land area. Hindus constitute 90 per cent of the population of the state, whereas Muslims account for only 5 per cent (Table 2). Among the social groups, Tamil Nadu had a very high proportion of OBC population accounting for one-tenth of the OBCs in the country. In terms of fertility rate, Tamil Nadu has the lowest TFR in India with a value of 1.7, compared to the country's TFR of 2.6, which is also significantly lower than the optimal replacement rate and sums up the social progress the state has made. In terms of sex-ratio also, Tamil Nadu is performing very well with 995 females per 1,000 males as compared to 940 females per 1,000 males at the national level—but only by India's rather poor national standards. By all normal standards, there should be more women than men in the population, since biologically women live longer. Tamil Nadu's child sex-ratio (945) is not as impressive as its overall sex-ratio within the state, but still better than national child sex-ratio (Census 2011).

Table 1 Average Annual Growth Rate, 2002–3 to 2007–8 (*per cent*)

(at constant prices 1999–2000)	*State*	*All India*
NSDP/NDP (for India)	7.8	7.9
Per Capita NSDP / Per Capita NNP (for India)	7.0	6.4

Source: CSO.

Human Development and Social Groups

Tamil Nadu has shown significant advancement in human development as well. In terms of development indicators,

Table 2 Distribution of Social and Religious Groups, 2007–8 (*per cent*)

Across State			*Within the States*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
0.5	7.1	2.4	0.8	22.8	5.0

Source: NSS 64th Round.

the incidence of poverty in Tamil Nadu was lower than the national average, in both rural and urban areas (Figure 1). Among the SCs and STs the incidence of poverty was lower than the national average (Figure 2). The rate of decline in the incidence of poverty accelerated post-1983. Between 1993–4 and 2004–5, there was a 27 per cent decline in the absolute number of poor in the state. Achievements in the social sector including the broadened implementation of Integrated Child Development Services (ICDS) and the old age pension scheme have been cited as important factors towards poverty reduction in the state (*Tamil Nadu Human Development Report 2003*).

In terms of health indicators, the performance of the state was much better than the national average. Combating child hunger and malnutrition became governing priorities in Tamil Nadu well before judicial intervention triggered responses from their counterparts. They are the pioneers of the midday meal programme with a focus on rural rather than urban areas and, among the vulnerable, focusing on girl children. The proportion of women with BMI<18.5, U5MR, and malnourished children were all lower than the respective national averages (Figures 3, 4, and 5). Even though the health indicators for SCs and STs are not as good as the overall state average, but they are still

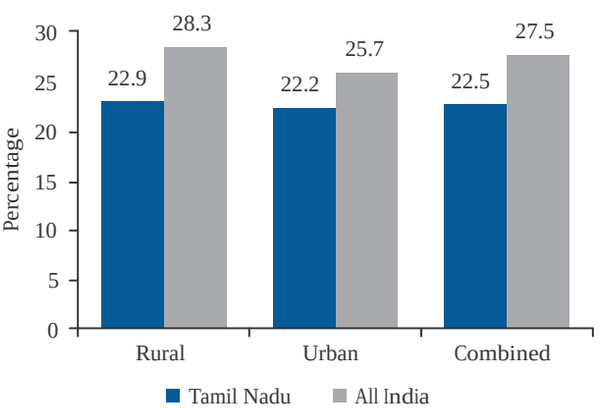

Figure 1 Incidence of Poverty, Tamil Nadu and India, 2004–5

Source: Planning Commission (2008).

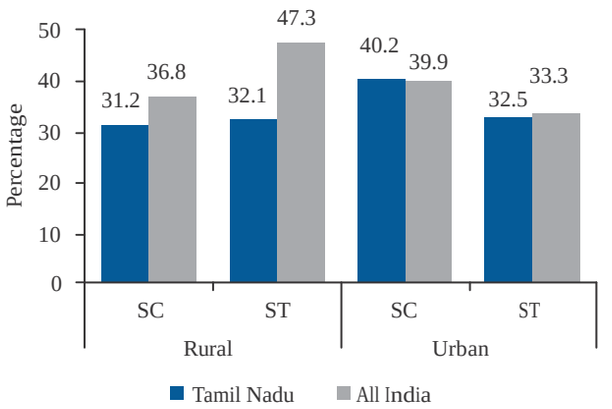

Figure 2 Incidence of Poverty by Social Groups, Tamil Nadu and India, 2004–5

Source: Planning Commission (2008).

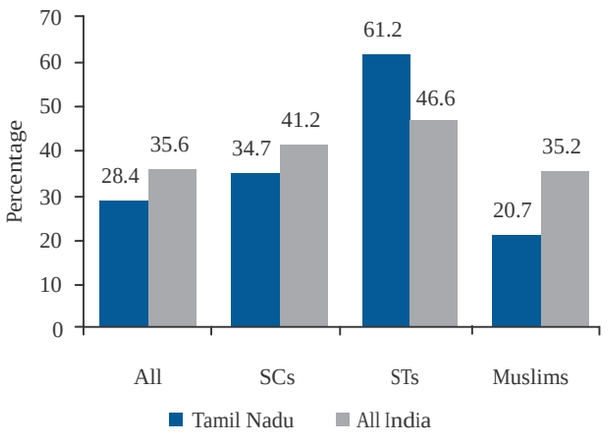

Figure 3 Percentage of Women with BMI<18.5, Tamil Nadu and India, 2005–6

Source: *NFHS 3*.

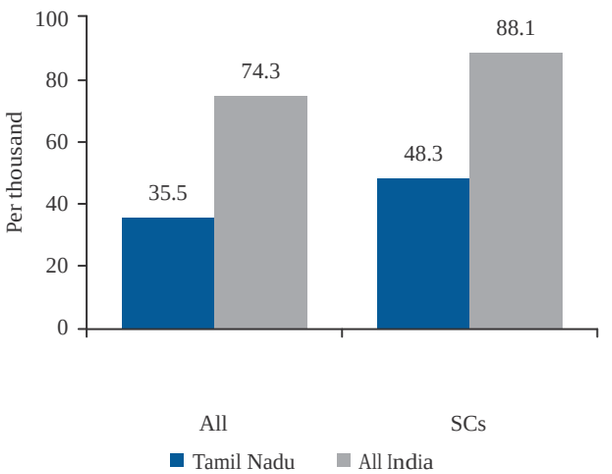

Figure 4 Under Five Mortality Rate, Tamil Nadu and India, 2005–6

Source: *NFHS 3*.

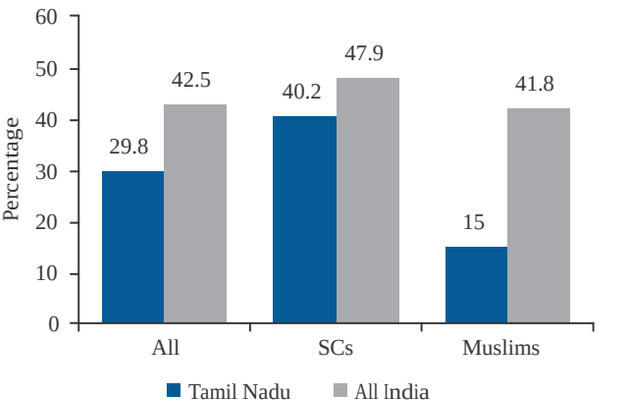

Figure 5 Percentage of Underweight Children (0–5 Years), Tamil Nadu and India, 2005–6

Source: *NFHS 3*.

better than their respective national averages. Among the factors contributing to better health outcomes, the Noon Meal Programme, women's empowerment through SHGs (that enabled women to take responsible decisions about their children), and a large network of well functioning PDS outlets were the most important ones (*Tamil Nadu Human Development Report 2003*).

With the private sector's increasing influence in healthcare services, inequality in access to healthcare has increased, even though there is an overall improvement in the quality of services. The source of inequality was the prohibitive costs, which prevented a large section of the society from accessing healthcare services (*Tamil Nadu Human Development Report 2003*).

The performance of the state in terms of literacy was better than the national average. Moreover, the state's SCs are also doing better than the national literacy rate and also better than the all India average for SCs (NSS 2007–8). However, the STs lag behind the state average and also the national literacy rate for STs (Figure 6). The state's improved performance in terms of literacy is the result of programmes like the 'Special Literacy Programme for Women' (fully funded by the state government) and 'Project for Residual Illiteracy' (PRI) for excluded women (State–Centre partnership), which especially targets the districts with below average literacy rate, along with the effective implementation of the Continuing Education Programme (Department of School Education, Government of Tamil Nadu). The District Primary Education Programme (DPEP), implemented in the backward districts (with external aid) included several innovative

measures such as alternative schools for dropouts, which contributed towards better educational attainments in the state. On the legislative front, the Tamil Nadu Elementary Education Act, 1994, made it mandatory for the government to provide the necessary infrastructure for ensuring elementary education. Among all the Indian states, the proportion of SDP on education was the highest (10.2 per cent) in Tamil Nadu. The latest estimates from Census (2011) also show that literacy rate of Tamil Nadu (80.3 per cent) is higher than the national literacy rate (74 per cent).

In the case of basic household amenities, the performance of the state is better than the national average in terms of access to improved drinking water facilities (Figure 7) and access to toilet facilities (Figure 8). The

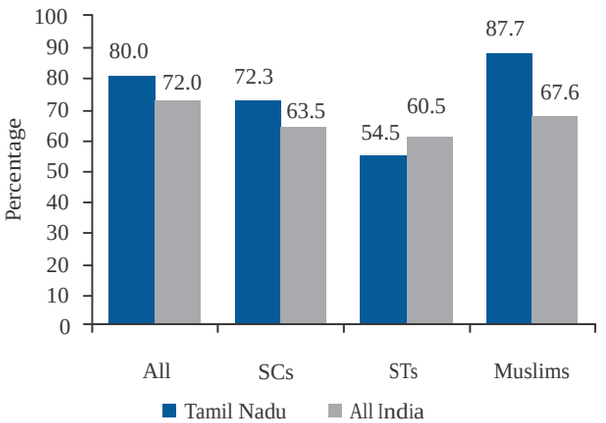

Figure 6 Literacy Rate, Tamil Nadu and India, 2007–8

Source: NSS 64th Round.

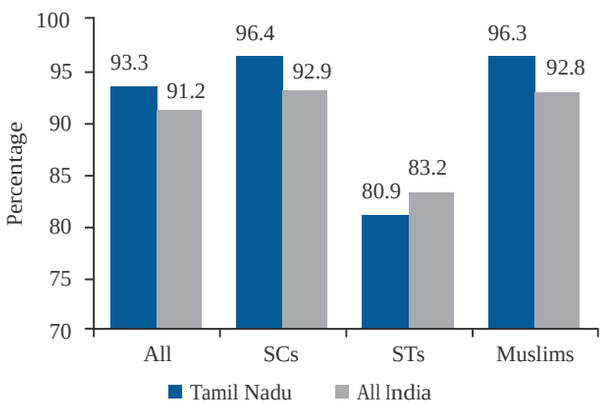

Figure 7 Percentage of Households with Improved Source of Drinking Water Facility, Tamil Nadu and India, 2008–9

Source: NSS 65th Round.

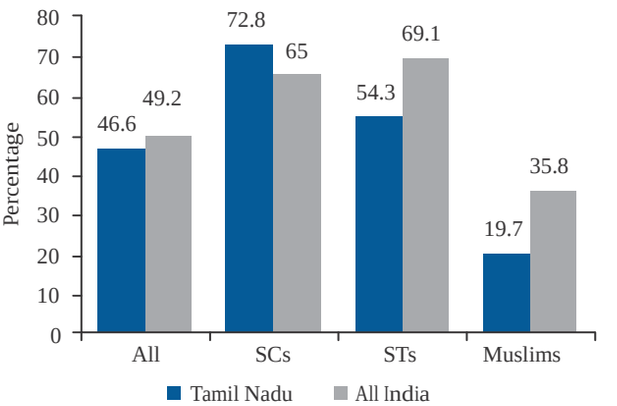

Figure 8 Percentage of Households with No Toilet Facility, Tamil Nadu and India, 2008–9

Source: NSS 65th Round.

performance of STs and SCs in the state is better than the national average for their groups in terms of access to toilet facilities and access to improved sources of drinking water respectively. The positive discrimination policy has played a key role here.

Human Development and Religious Communities

Like most of the other states, Tamil Nadu is a Hindu majority state with only five per cent of Muslims. Looking at the human development across the religious groups, Muslims are well ahead of the other religious groups in terms of health indicators and the literacy rate. Similarly, in terms of accessing improved sources of drinking water or access to toilet facilities, Muslims are better off than the other groups in the state and also better than the all India average for Muslims. Tamil Nadu's success story emphasizes the fact that effective state government intervention can make social inclusion possible.

UTTARAKHAND

Economy and Demography

Uttarakhand, a new hilly state in the Himalayas, was earlier a part of Uttar Pradesh. It shares its border with the Tibet Autonomous Region of China, Nepal, Uttar Pradesh, Haryana, and Himachal Pradesh. In terms of economic growth, the state's performance has been above the national average (2002–3 to 2007–8). This could be partly due to the new industrial policy of 2003, which gave hefty tax benefits to investors thereby encouraging industrial investment and employment generation. The

state is also ahead in terms of national per capita income growth during the same period (Table 1).

The demographic profi le of Uttarakhand shows that around 63 per cent of the population resides in rural areas. The growing migration from rural to urban areas (and to other parts of India) is very evident in this region. Among the reasons is the uneven distribution of resources across the state. The key challenge facing the state is increasing employment generation for sustained growth, as out-migration of the youth remains a major concern. Among social groups, the STs and SCs together account for 23 per cent of the population in the state while Muslims account for 19 per cent (Table 2). In terms of sex-ratio, Uttarakhand has a sex-ratio of 963 females per 1,000 males, which is higher than national sex-ratio in 2011. But its child sex-ratio is only 886, which is lower than both the overall sex-ratio and the national child sex-ratio (Census 2011).

The services sector contributes the majority of the state's share of income, followed by agriculture and the mining sectors. The tertiary sector remains the principal driving force of the state's economy with tourism as one of the key components owing to Uttarakhand's natural scenic beauty, thereby promoting the hospitality industry.

The majority of the state's population is engaged in agriculture, which continues to be the main income generating activity because of the favourable weather conditions.

Table 1 Average Annual Growth Rate, 2002–3 to 2007–8 (*per cent*)

(at constant prices 1999–2000)	*State*	*All India*
NSDP/NDP (for India)	9.1	7.9
Per Capita NSDP/Per Capita NNP (for India)	7.3	6.4

Source: CSO.

Table 2 Distribution of Social and Religious Groups, 2007–8 (*per cent*)

Across State			*Within the States*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
0.2	0.9	1.2	2.5	20.7	18.8

Source: NSS 64th Round.

Human Development and Social Groups

Looking at the other development indicators, though the per capita NSDP figures are indicative of fast-paced growth, the truth is that the incidence of poverty in Uttarakhand is higher than the national average. In general SCs and STs have a higher incidence of poverty than the overall state average. Forestry and mining are major activities in the state.

In terms of health indicators, the performance of the state was better than the national average. NRHM has changed health service delivery in Uttarakhand. The continual process of reorganization according to local needs has helped the state to provide health services at the grass root level. The Accredited Social Health Activist (ASHA) programme has also been a major health revolution in the state. Within the state, the health indicators for the STs were the worst across all social groups. In terms of education indicators, Uttarakhand is slightly better than

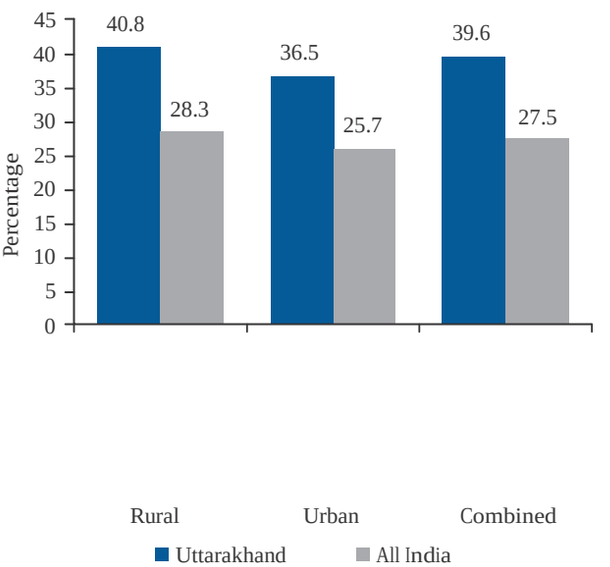

Figure 1 Incidence of Poverty, Uttarakhand and India, 2004–5

Source: Planning Commission (2008).

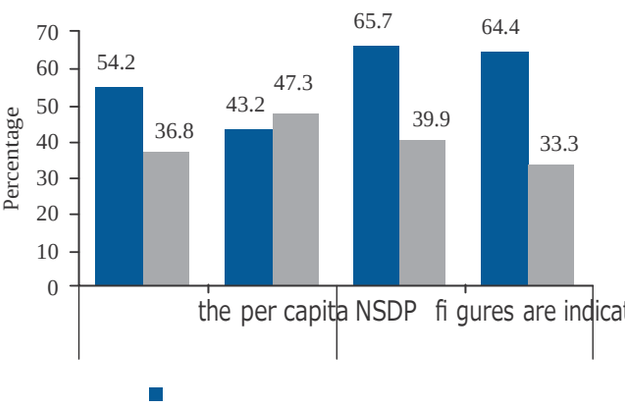

Figure 2 Incidence of Poverty by Social Groups, Uttarakhand and India, 2004–5

Source: Planning Commission (2008).

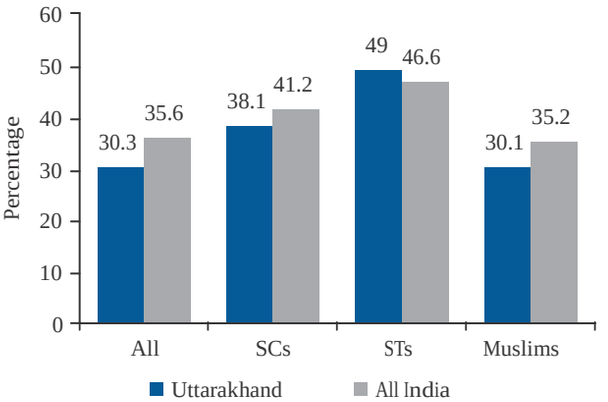

Figure 3 Percentage of Women with BMI<18.5, Uttarakhand and India, 2005–6

Source: *NFHS 3.*

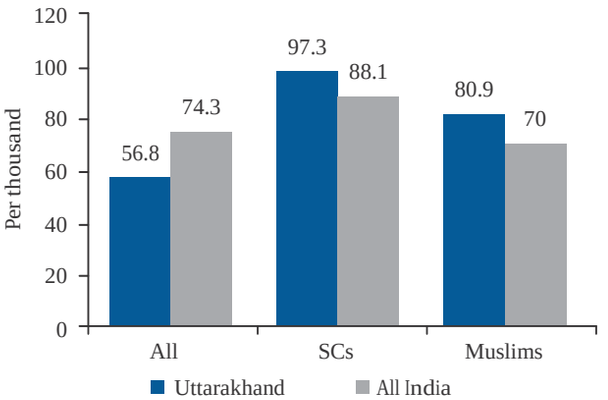

Figure 4 Under Five Mortality Rate, Uttarakhand and India, 2005–6

Source: *NFHS 3.*

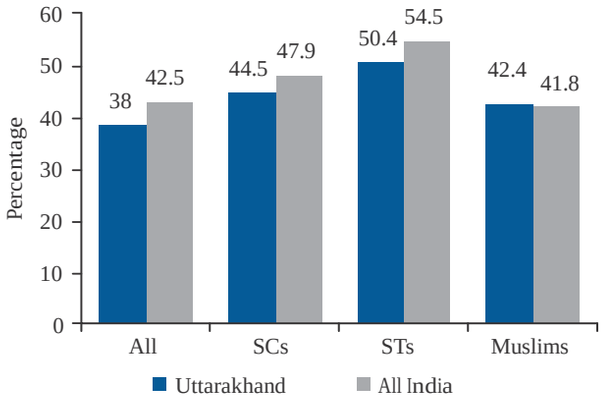

Figure 5 Percentage of Underweight Children (0–5 Years), Uttarakhand and India, 2005–6

Source: *NFHS 3.*

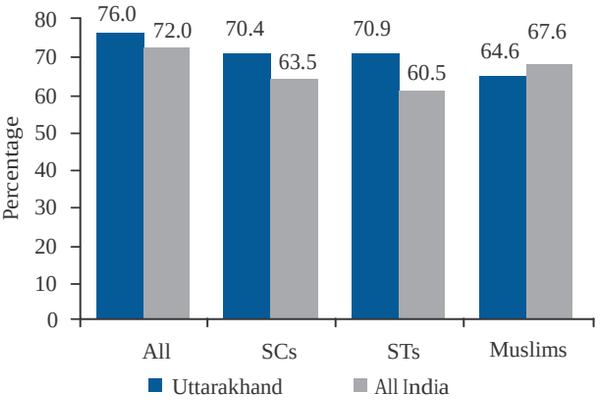

Figure 6 Literacy Rate, Uttarakhand and India, 2007–8

Source: NSS 64th Round.

the national average. Uttarakhand has literacy rate of 79.6 per cent, which is higher than the national literacy rate of 74 per cent in 2011 (Census 2011).

In terms of basic household amenities, the performance of the state was better than the national average, with 97 per cent of the households having access to improved sources of drinking water as against the national average of 91 per cent (Figure 7). Part of the reason is the ample availability of river waters from the mountains. However, the proportion of SC households accessing drinking water from improved sources is lower than both the state average and the national average for SCs. Scheduled tribes have better access to potable water and toilet facilities, the state average for STs being better than the national average in both cases (Figures 7 and 8).

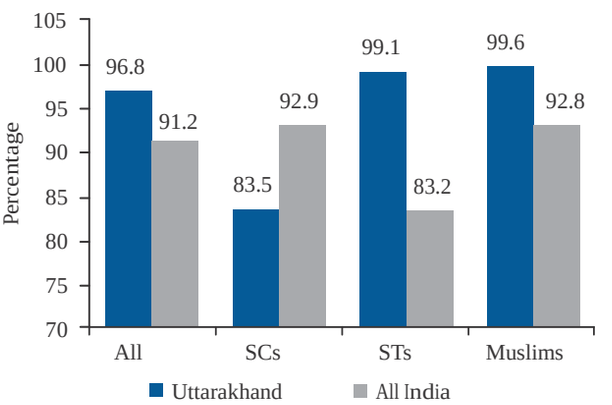

Figure 7 Percentage of Households with Improved Source of Drinking Water Facility, Uttarakhand and India, 2008–9

Source: NSS 65th Round.

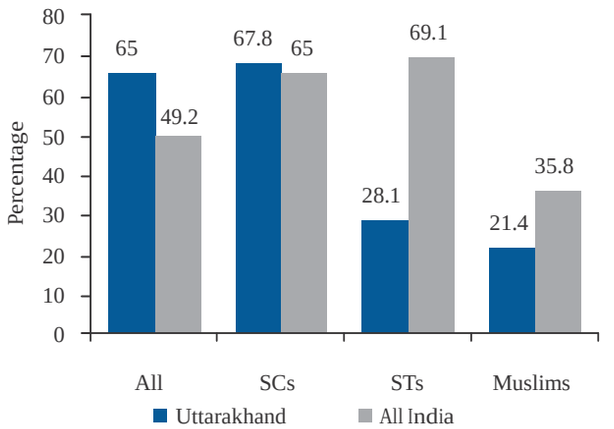

Figure 8 Proportion of Households with No Toilet Facility, Uttarakhand and India, 2008–9

Source: NSS 65th Round.

Human Development and Religious Communities

Looking at human development across religious groups, Muslims enjoy parity with the state (average) and also with the all India average on health indicators. Although the state's performance in terms of literacy was higher than the national average, the literacy rate among Muslims was lower than the national average. In terms of basic amenities, it is notable that Muslims have better access to improved sources of drinking water and access to toilet facilities. Almost every Muslim household in Uttarakhand has access to drinking water from improved sources.

UTTAR PRADESH

Economy and Demography

The population density in Uttar Pradesh, a predominantly agricultural state, is one of the highest in the country (689 persons per sq. km), and the per capita availability of land was only 0.1 ha in 2001–2. There is large out-migration of workers from this state to other states. Seen across its four regions, the average size of landholding was the highest in the southern region (an arid, rocky region), followed by the western region (fertile, irrigated), and lowest in the eastern region, the most fertile zone.

The highly productive western region is the most developed and has the highest per capita income. In contrast, eastern Uttar Pradesh has the lowest per capita income despite its fertile plains. This is due to the very high population density, low occupational diversification, and high land atomization.

The roots of regional variations in agricultural productivity between the western and eastern regions can be traced back to the difference in the revenue settlement system and the development of canal irrigation during the colonial period. The colonial rulers enforced the permanent Zamindari settlement in the eastern region, which was characterized by high and inflexible revenue levies, stratification of rural society, and near complete alienation of the cultivators from the land. In the western region it was the 'Bhaichara' system, which was really a kind of owner-cultivator operation. This system provided tenure security for cultivators and witnessed the rise of a class of rich occupancy tenants. This class of independent tenants had a much higher incentive to invest in land and improve productivity, which was denied in the eastern parts. The western region received a large amount of public investment in canal irrigation, while the eastern region hardly had any. It was primarily because of the availability of irrigation facilities that the Green Revolution flourished in western Uttar Pradesh and it witnessed large scale agricultural development.

Over the years, the gap between the per capita income of the state and the national average has grown considerably. In 1950–1, the per capita income of Uttar Pradesh was 7 per cent lower than the national average. This difference had grown to 40 per cent in 2000–1 (*Uttar Pradesh Human Development Report 2003*). In recent years (2002–3 to 2007–8), the average annual growth rate of NSDP was 5.6 per cent as against the national average of 7.9 per cent, while the growth rate of the per capita SDP was 3.6 per cent compared to the national average of 6.4 per cent (Table 1).

Table 1 Average Annual Growth Rate, 2002–3 to 2007–8

(*per cent*)

(at constant prices 1999–2000)	*State*	*All India*
NSDP/NDP (for India)	5.6	7.9
Per Capita NSDP/Per Capita NNP (for India)	3.6	6.4

Source: CSO.

Uttar Pradesh has the highest population among Indian states and it is the fifth largest state in India. Uttar Pradesh has the second highest TFR of 3.8 as compared to the all India average of 2.6. With this rate of fertility, the pressure of population on the land would be unsustainable unless immediate steps are taken. Uttar Pradesh has very low sex-ratio of 908 females per 1,000 males, as compared to 940

females per 1,000 males in India in 2011. Similarly, its child sex-ratio (899) is also lower than the national child sex-ratio (914) (Census 2011).

Table 2 Distribution of Social and Religious Groups, 2007–8 (*per cent*)

Share of State			*Distribution within State*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
1.2	17.0	19.2	0.8	25.8	18.8

Source: NSS 64th Round.

Human Development and Social Groups

Uttar Pradesh accounts for 17 per cent of the SCs and 19 per cent of Muslims in India. The population of STs was negligible (less than 1 per cent) (Table 2).

On the HDI scale, among the states in India, Uttar Pradesh has a HDI ranking of 18, which has remained unchanged since 2001. The poor HDI ranking of the state was reflected in the high incidence of poverty, which was higher than the national average. In fact, the absolute number of poor increased in urban areas in 2004–5 compared to 1993–4. Among the four regions, the incidence of poverty was the lowest in the western region, while it was highest in the central region (*Uttar Pradesh Human Development Report 2003*).

In the case of the SCs and STs, the incidence of poverty in both rural and urban areas was higher than the corresponding national averages (Figures 1 and 2). Since 1973, the decline in poverty in the state was at the same pace as the national average. Despite the allocation of large funds for various poverty alleviation programmes (Integrated Rural Poverty Alleviation Programme, Swarnajayanti Gram Swarozgar Yojana, Training of Rural Youth for Self Employment, Development of Women and Children in Rural Areas) there has been little impact on poverty alleviation (*Uttar Pradesh Human Development Report 2003*). Citing various official and non-official studies, the report further noted that the incorrect identification of beneficiaries, and leakages and irregularities in the distribution of funds, were some of the factors limiting the scope and coverage of the poverty alleviation pro- grammes.

In terms of health indicators, the state's performance was worse than the national average (Figures 3, 4, and 5). The proportion of women with BMI<18.5, underweight children and the U5MR are higher in the state as compared to the national average. The SCs and STs

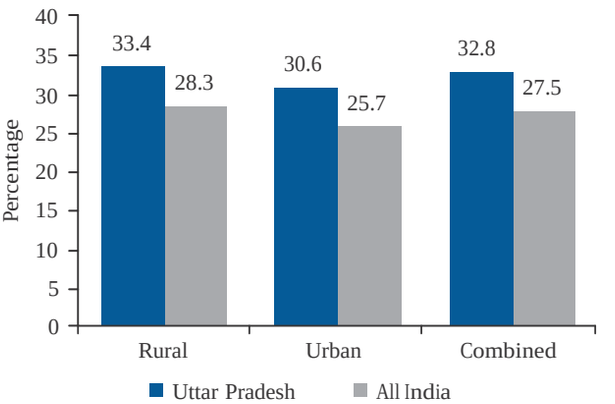

Figure 1 Incidence of Poverty, Uttar Pradesh and India, 2004–5

Source: Planning Commission (2008).

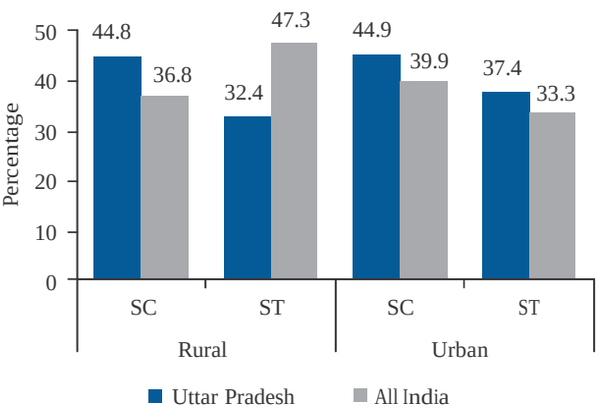

Figure 2 Incidence of Poverty by Social Groups, Uttar Pradesh and India , 2004–5

Source: Planning Commission (2008).

are worse off compared to the state average and their community's respective national averages for all the health indicators.

Although the state made significant efforts in building healthcare infrastructure, it has failed to keep pace with the increasing demand. The state's performance in providing health infrastructure was lower than the national average. The shortage of medical personnel and their absenteeism, particularly in the rural areas, the shortage of medicines, and lack of accountability in the public health system have seriously affected the healthcare system. There was a vast network of private health providers, who were expensive and often beyond the reach of the poor. The State Human Development Report further noted that the

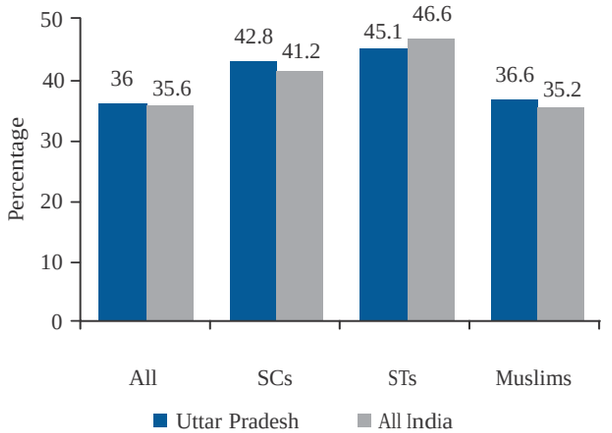

Figure 3 Percentage of Women with BMI<18.5, Uttar Pradesh and India, 2005–6

Source: *NFHS 3.*

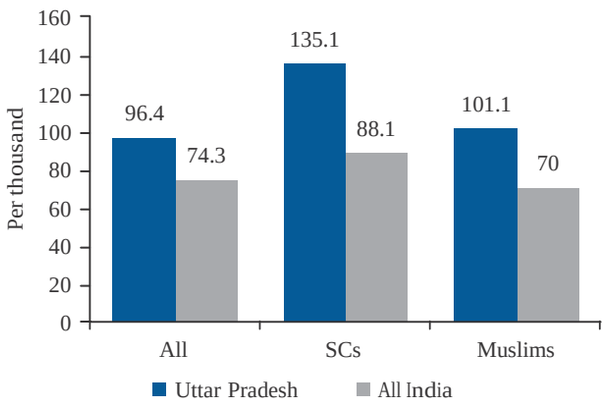

Figure 4 Under Five Mortality Rate, Uttar Pradesh and India, 2005–6

Source: *NFHS 3.*

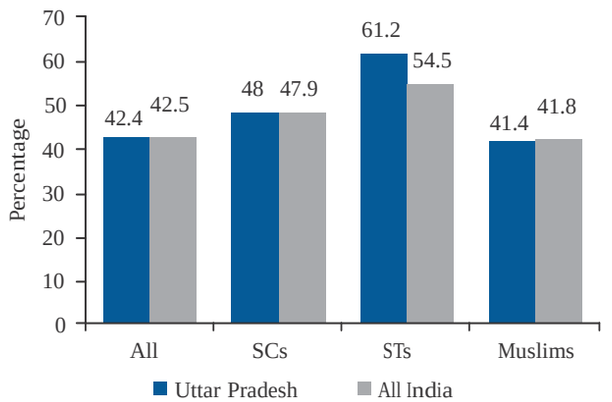

Figure 5 Percentage of Underweight Children (0–5 Years), Uttar Pradesh and India, 2005–6

Source: *NFHS 3.*

state had one of the lowest health expenditures in India by both Indian and international standards. Despite that, the bulk of the expenditure was allocated for the payment of salaries.

The literacy rate in Uttar Pradesh was lower than the national average. According to latest estimates of Census (2011), Uttar Pradesh has a literacy rate of 70 per cent as compared to the 74 per cent national literacy rate in 2011. As per NSS (2007–8), all the social groups includ- ing SCs and STs have a literacy rate lower than the state

average and also lower than the literacy rate of their communities at the national level (Figure 6). Among the various programmes undertaken, Uttar Pradesh Basic Education Project (UPBEP 1 and 2) initiated in select districts of the state in 1993 and 2000, respectively, and DPEP (Centrally sponsored) resulted in a notable improvement in enrolment and a decline in dropout rates in the districts where these programmes were implement- ed. During the period 1996–7 to 1999–2000, enrolment in UPBEP districts increased by 68 per cent as against 37 per cent in non-UPBEP districts (*Uttar Pradesh Human Development Report 2003*). Poor infrastructure along with inadequate fi nancial allocation were the major hindrances in achieving higher educational targets. The state allocation on education increased from 0.5 per cent of the SDP in 1950–1 to 3.2 per cent in 2007–8, but it is still very low compared to the demand.

In terms of basic household amenities, the performance of the state is marginally below the national average in terms of improved drinking water facilities. However, it is one of the rare states where the average for the SC and

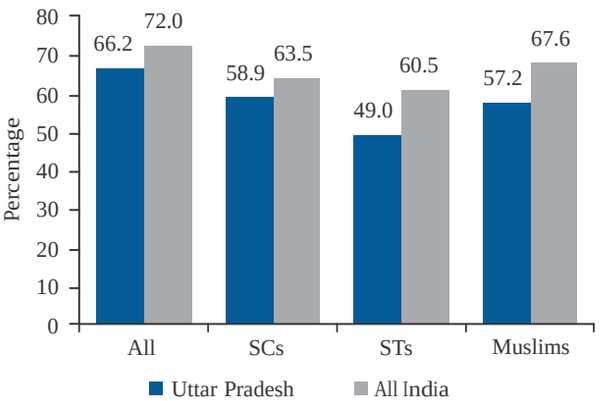

Figure 6 Literacy Rate, Uttar Pradesh and India, 2007–8

Source: NSS 64th Round.

ST households was better than the state average and also than the national average for their respective communities in terms of access to improved sources of drinking water (Figure 7). In the case of sanitation, the state average is slightly better than the all India average (Figure 8). However, only 16 per cent of SC households have access to toilet facilities vis-à-vis 35 per cent of SC households at the all India level.

Human Development and Religious Communities

Across religious groups, it was observed that Muslims were fairly close to state averages for health indicators, but were still lower than the average for Muslims at the national level. However, in the case of education, Muslims have a lower literacy rate, even lower than the national average for Muslims. In terms of basic amenities, the picture is mixed.

Growth in Uttar Pradesh is hampered on multiple counts. For one, the population policy will require a radical re-look. Next, the agricultural and social development programmes have to be considerably beefed-up to bridge the inter- and intra-regional development gaps.

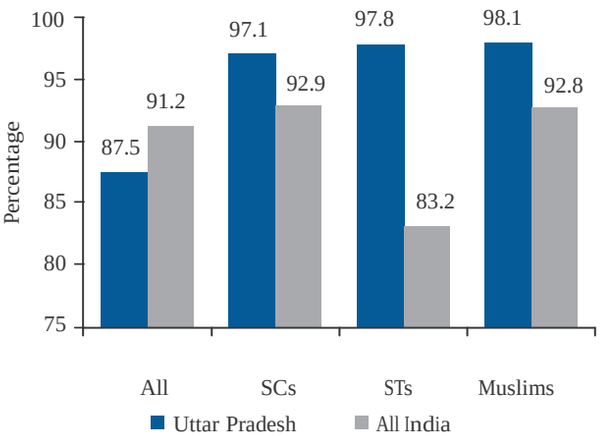

Figure 7 Percentage of Households with Improved Source of Drinking Water Facility, Uttar Pradesh and India, 2008–9

Source: NSS 65th Round.

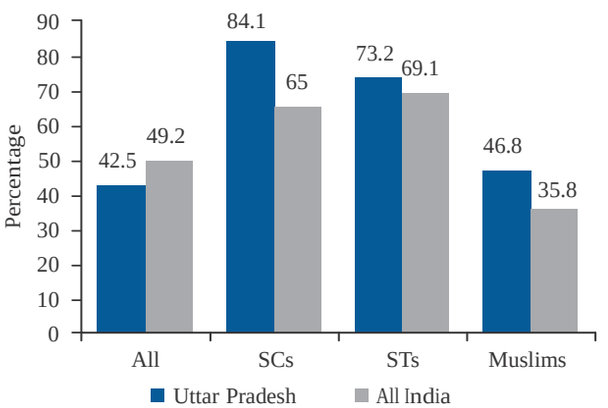

Figure 8 Percentage of Households with No Toilet Facility, Uttar Pradesh and India, 2008-9

Source: NSS 65th Round.

WEST BENGAL

Economy and Demography

West Bengal is one of the most populous and historically it also has been among the more industrialized states in the country. In the recent decades, though, the state suff ered degrees of de-industrialization owing to the political climate there. As a result, West Bengal' s performance has been below the national average during the period
2002– 3 to 2007– 8. In the services sector, however, it has performed well (Table 1).

Geographically, West Bengal is situated in the extreme east stretching from the Himalayas to the Bay of Bengal. It is bordered by Bangladesh on its east. Due to socio-economic factors, the population is concentrated mainly in the Gangetic plains and the majority of the population (61 per cent) resides in rural areas (NSS, 64th round; 2007– 8). The rural economy of West Bengal relies mainly on agriculture. Rice is the principal food crop and tea is an important cash crop. A very low proportion of the land is irrigated, which in turn stunts agricultural productivity.

A considerable part of the state is economically underdeveloped, notably large parts of the northern districts and a few western districts. A careful observation of the demographic profi le shows that West Bengal has been home to one of the largest proportions of SCs (9.2 per cent of total SCs in India) and Muslims (14.8 per cent of total Muslims in India) in the country. These fi gures are higher within the state (Table 2) and these groups have also been observed to be the poorest (*West Bengal Human Development Report 2004*). Apart from Bangladesh, West Bengal also gets migrants from Bihar, Orissa, and Uttar Pradesh. According to Census (2011), West Bengal has 947 females per 1,000 males, against the national sex ratio of 940 in 2011, whereas its child sex-ratio is 950, which is good sign for future.

Table 1 Average Annual Growth Rate 2002–3 to 2007–8
(*per cent*)

(at constant prices 1999–2000)	*State*	*All India*
NSDP / NDP (for India)	6.5	7.9
Per Capita NSDP / Per Capita NNP (for India)	5.3	6.4

Source: CSO.

Table 2 Distribution of Social and Religious Groups

Across State			*Within the State*		
ST	*SC*	*Muslim*	*ST*	*SC*	*Muslim*
3.8	9.2	14.8	5.2	29.2	30.6

Source: NSS 64th Round.

Human Development and Social Groups

West Bengal ranks fourth in terms of population and has the highest population density. In terms of fertility, West Bengal has been performing better than the national average. In 2008, the TFR in West Bengal was 1.9 as compared to the national average of 2.6. The incidence of poverty in rural West Bengal was marginally higher than the national average, while in the urban areas it was considerably lower than the national average. In the case of STs and SCs, the incidence of poverty in both rural and urban areas was lower than the corresponding national averages (Figures 1 and 2). It may be noted that the incidence of poverty in rural West Bengal was the highest (73.2 per cent) in 1973–4. In a span of 40 years, the incidence of poverty in rural West Bengal was reduced to 40 per cent of what it was in 1973. For rural India, the incidence of poverty was reduced to half during this period. The estimates of poverty for the year 1999–2000 revealed that poverty in West Bengal was more concentrated in the rural areas with 86 per cent of the poor residing in rural areas, as against 74 per cent for the country as a whole (*West Bengal Human Development Report 2004*).

In terms of health indicators, the state's performance was mixed. While the U5MR and malnourishment of children are lower than the national average, women's health was an area of concern (Figures 3, 4, and 5). Sanitation and drinking water facilities are important inputs that influence health outcomes. Better sanitation and drinking water facilities (compared to the national average, and as depicted in Figures 7 and 8) partly explain the lower U5MR and the lower number of underweight children in the state. The health system in West Bengal is largely in public hands with 76 per cent of health institutes under the state government (as against 40 per cent elsewhere in India). The State Human Development Report has pointed to the massive shortage of funds and the inadequate number of staff as the two major shortcomings of health service delivery in the state (*West Bengal Human Development Report 2004*).

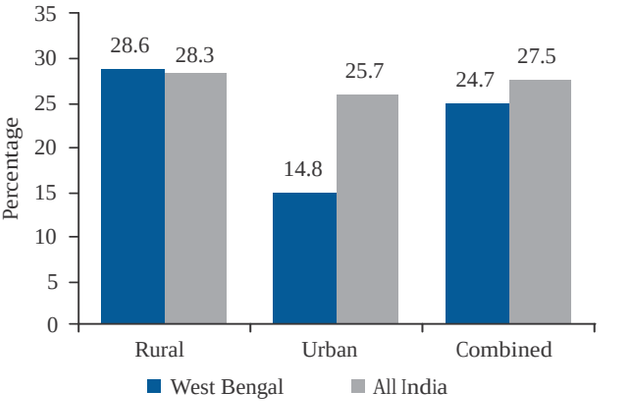

Figure 1 Incidence of Poverty, West Bengal and India, 2004–5

Source: Planning Commission (2008).

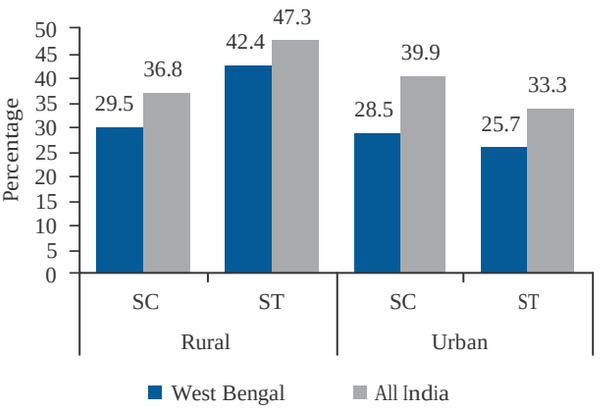

Figure 2 Incidence of Poverty: Social Groups, West Bengal and India, 2004–5

Source: Planning Commission (2008).

The state's performance in terms of literacy was better than the national average. According to the latest estimates from Census (2011), the literacy rate of West Bengal is 77 per cent as compared to 74 per cent national literacy rate (Census 2011). The state government prioritized the opening of new colleges in rural areas. This catered to the SCs, STs, and minorities who reside in these areas. With access to higher education they performed better than the national average for their groups. Another important

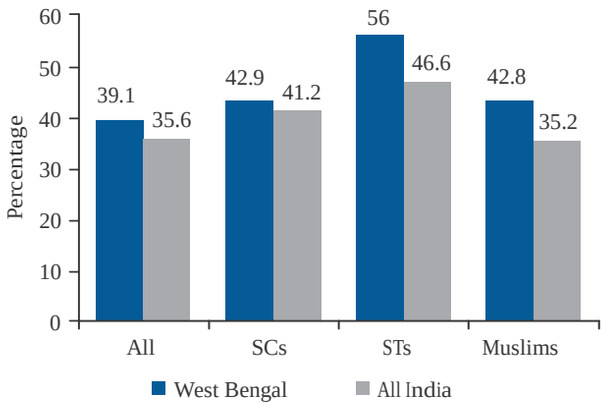

Figure 3 Percentage of Women with BMI<18.5, West Bengal and India, 2005–6

Source: *NFHS 3*.

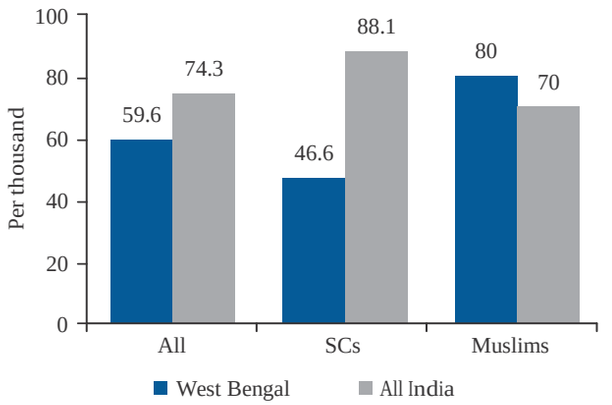

Figure 4 Under Five Mortality Rate, West Bengal and India, 2005–6

Source: *NFHS 3*.

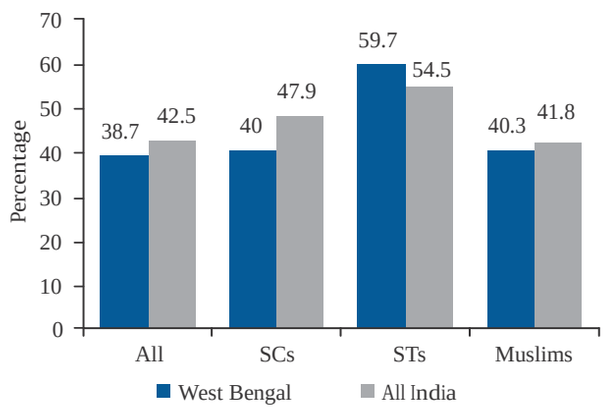

Figure 5 Percentage of Underweight Children (0–5 Years), West Bengal and India, 2005–6

Source: *NFHS 3*.

reason for the better performance of the state as compared to the national average was that the per capita real expenditure on general education more than doubled during the period 1980–1 to 1997–8. The state government has introduced an alternate school education system (Sishu Siksha Karmasuchi) with the objective of providing basic education to children aged 5–9 years who were unable to get enrolled in formal primary schools.

With the objective of increasing the involvement of the local government and community in public health services, it was proposed that one-third of the PHCs be upgraded to referral units. Further, in order to spread basic health information, it was proposed that Community Health Workers be introduced (*West Bengal Human Development Report 2004*). To encourage institutional

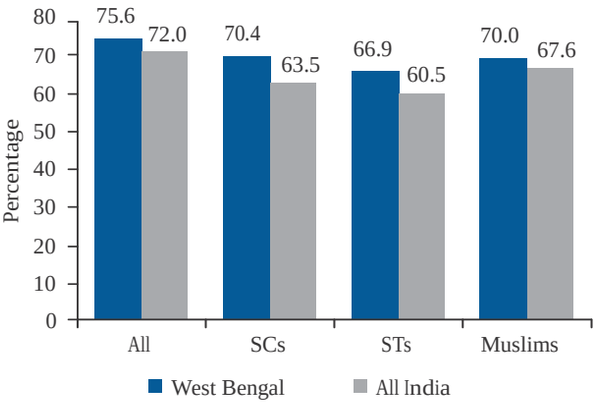

Figure 6 Literacy Rate, West Bengal and India, 2007–8

Source: NSS 64th Round.

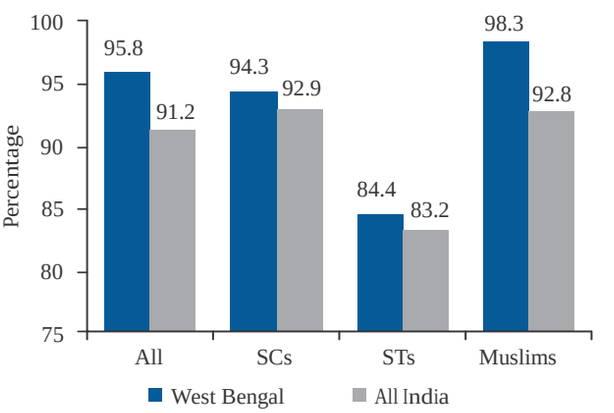

Figure 7 Percentage of Households with Improved Source of Drinking Water Facility, West Bengal and India, 2008–9

Source: NSS 65th Round.

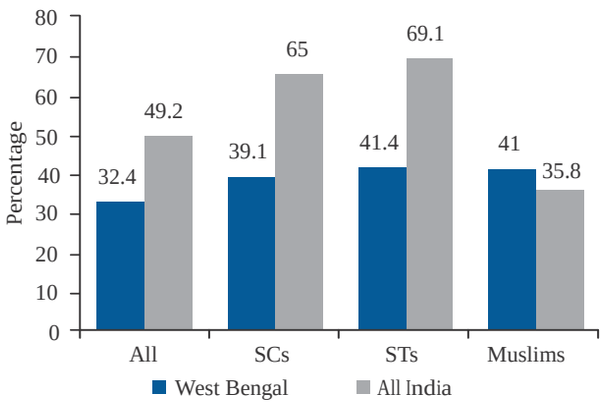

Figure 8 Percentage of Households with No Toilet Facility, West Bengal and India, 2008–9

Source: NSS 65th Round.

deliveries, a new scheme called ' Ayushmati' Scheme has been designed, which aims at augmenting the availability of institutions for safe delivery by partnering with private sector facilities. The scheme has already been launched in 11 districts. Similarly, another scheme, ' School Health Programme' has been launched in 147 blocks selected on the basis of the low female literacy rate. It aims to improve the health of school going children (Health and Welfare Department, Government of West Bengal).

Human Development and Religious Communities

Muslims of Bengal, who had notable role before Independence, are now facing economic deprivation. Across the religious groups, Muslims have not been performing as well as other religious communities in West Bengal for health indicators. In the case of health indicators the state average for Muslims is even worse than the national average for the community. In terms of literacy rate, Muslims lag behind the state average, but doing better than the national average for Muslims.

3

Employment, Asset Ownership, and Poverty

INTRODUCTION

Economic attainment refers to access to or command over resources by households and individuals, which enhances their capabilities. At the most elementary level, the status of employment of household members and ownership of assets determine a household's income, which to a very large extent determines the individual's command over resources. This chapter focuses on these two aspects of economic attainment namely, employment and ownership of assets.

The most important indicator reflecting lack of economic attainment is the incidence of poverty. In addition to analysing the status of employment and ownership of assets in both rural and urban India, this chapter also analyses the incidence of, and trends in, poverty.

The GDP growth rate was 5.5 per cent per annum during the period 1997–8 to 2001–2, which accelerated to an average of 7.7 per cent per annum during the period 2002–3 to 2006–7 (Planning Commission 2008). However, the non-inclusive character of the growth process has been a major concern for Indian policymakers, including the Planning Commission. It stated that 'a major weakness in the economy is that the growth is not perceived as being sufficiently inclusive for many groups, especially the Scheduled Castes (SCs), Scheduled Tribes (STs), and minorities. Gender inequality also remains a pervasive problem, and some of the structural changes taking place has an adverse effect on women' (Planning Commission 2008: 1). In particular, the current phenomenon of extraordinary growth has, to a very large extent, excluded the 300 million poor of this country who are subsisting below the poverty line.

Economic growth, though an essential condition for poverty reduction, is by no means a sufficient condition. Mehrotra and Delamonica (2007) have shown that an economy can grow without a reduction in income poverty and vice-versa. The interlinkage between economic growth and poverty reduction works through various social sector outcomes which complement each other. For instance, higher educational attainment has a positive impact on the status of health. In turn, health is an input for educational attainment. The synergies in the social sector work through various feedback loops, involving factors which lead to enhancement of capabilities among individuals. For economic growth to effectively reduce poverty on a sustainable basis, policy interventions for the enhancement of health and educational status are required (see discussion in Chapter 1, section on 'Introduction'). Contrary to the orthodox paradigm where economic growth occupies a predominant position, Mehrotra and Delamonica (2007) argue that a synergy that exists at the macro level between poverty reduction, enhancement of 'functionings', and economic growth. Increasing the growth rate in this framework is not more important than the other two variables. Instead, it highlights the necessity for the integration of social and economic policies. The two-way synergy between the three variables can be explained in a simple diagram (Figure 3.1).[1]

[1] For a detailed explanation on feedback loops, refer to the 'Overview' of this report.

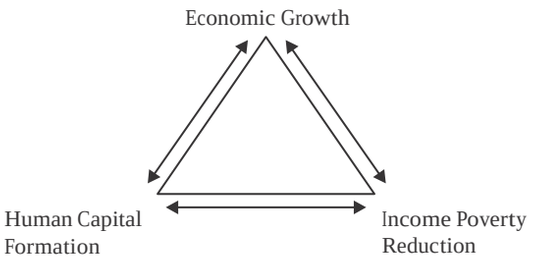

Figure 3.1 Feedback Loops at the Macroeconomic Level

Social exclusion creates barriers to income poverty reduction. Indian society has historically been stratifi ed into diff erent social groups, and there are certain groups (SCs and STs), which have primarily remained outside the mainstream of society and are characterized by socio-economic backwardness. Economic deprivation has historically been much more pronounced among these social groups which is examined in this chapter.

The disparity in economic attainment was observed not only across social groups, but also across religious communities. While the perception of deprivation among the minorities is fairly well established, there is a dearth of empirical research on the socio-economic conditions of diff erent religious groups in this country. The analysis in this chapter also brings out the disparities of economic attainment across religious communities.

Among the diff erent dimensions of deprivation, this chapter will specifi cally focus on employment opportunities and ownership of assets, and on income poverty outcomes. Analyses of the other dimensions of the feedback loop like nutritional status, health, and educational attainment are dealt with in Chapter 4, Chapter 5, and Chapter 6 of this Report, respectively. This chapter at- tempts to determine whether the high economic growth rate has really percolated to the deprived sections of the society in terms of higher employment opportunities and improvement in their material conditions, and exam- ine its impact on the incidence of poverty which could undermine the feedback loop.

The major fi ndings that emerge from this analysis are as follows:

Employment

This section deals with the key issues of labour force and workforce participation rates, unemployment rates, wages, and skills of the workforce. All analysis is disaggregated by gender, social groups, and religious communities.

- The high female labour force participation rate (LFPR) in rural areas highlighted the fact that girls of earlier generations had poorer access to education. Moreover, the participation of rural females in agricultural tasks, despite lower wages, is responsible for the higher female LFPR in rural areas.
- The high LFPR among STs was due to poorer access to education.
- Rural Muslim participation in education and the labour force were inversely correlated.
- There was a marginal decline in the workforce participation rate (WFPR) for all, while gender disparity continued and was sharper in urban areas. Greater participation of young women in education in urban areas, compared to their rural counterparts was one of the factors responsible for this. Also, this could be because a signifi cant proportion of middle-class women in urban areas prefer not to work outside the home, and are full-time housewives.
- The WFPR for SCs/STs declined marginally as their access to education improved slightly.
- In terms of occupational diversifi cation, the rural non-farm sector was of increasing importance. Unem- ployment rate was increasing in rural India, while it marginally declined in urban India.
- The open unemployment rate (current daily status) was increasing for Muslims, and remained stable for SCs and STs.
- Wages for casual labour were insufficient for a decent living.
- Skill development was necessary for realizing the benefi ts of the demographic dividend.

Asset Ownership

This section examines the distribution of assets among households, and again the analysis is disaggregated by social groups and religious communities.

- High asset inequality persisted with distribution of assets across wealth deciles remaining almost unchanged.
- Unclear land titles along with tenancy legislations were important factors for land being a non-remunerative asset.
- Regular wage/salary earnings were only important in urban areas.
- SC and ST households were characterized by the lack of ownership of assets, while the bulk of asset ownership was concentrated within other (upper caste) households.

- Among major religions, the value of the Assets Access Index was the lowest in the case of Muslims.

Poverty

The situation in regard to both employment and asset distribution (described above) has contributed to a less than satisfactory outcome in respect to poverty reduction.

- Though the incidence of poverty has declined over the years, the absolute number of poor was still very high at 300 million in 2004–5. Almost 60 per cent of the poor were concentrated in the states of Bihar (including Jharkhand), Orissa, Madhya Pradesh (in- cluding Chhattisgarh), and Uttar Pradesh (including Uttarakhand). These states accounted for 42 per cent of SCs and 43 per cent of STs in the country.
- However, using the mixed recall period method of estimating the consumption expenditure, the incidence of poverty declined from 22 per cent in 2004–5 to 15 per cent in 2007–8, assuming a rural poverty line of Rs 429 per capita per month and an urban poverty line of Rs 639 per capita per month.
- The incidence of poverty was high among agricultural labourers and casual labourers.
- High incidence of poverty persisted among SCs and STs across social groups, and Muslims among religious communities. One-third of the Muslims in the country were living below the poverty line.
- In addition to the high incidence of poverty, the severity of poverty was higher among SCs and STs.
- Interstate disparity in consumption expenditure has declined over time, along with rising inequality in both rural and urban India.
- The average monthly per capita consumption expenditure (MPCE) was lower for SCs and STs than for other social groups.
- A more inclusive growth strategy was necessary for poverty eradication.

The analysis presented in this chapter clearly shows that SCs and STs were worse off in terms of employment, and were characterized by a lack of ownership of assets. Lack of employment opportunities and material deprivation of SCs and STs culminated in a higher incidence of poverty, with a much higher proportion of consumption expenditure being spent on food items.

The analysis in this chapter is based on data from several rounds of the National Sample Survey (NSS), which were conducted by the National Sample Survey Organization (NSSO). The section on 'Employment' analyses the employment and unemployment situation in India based on the Employment and Unemployment Surveys—50th, 61st, and 64th rounds). An analysis of the pattern of ownership of assets is done in the section on 'Asset Ownership' and is based on data collected through the All India Debt and Investment Survey conducted by the NSSO (48th and 59th rounds). The incidence of poverty and trends in poverty are analysed in the section 'Poverty', based on data from the Consumer Expenditure Survey (primarily 50th, 61st, and 64th rounds). The last section provides some concluding remarks. In each of the sections, the analysis is done on the basis of the categorization of households into socio-economic groups and religious communities.

EMPLOYMENT

Employment has a very important role to play in enhancing human capabilities. It not only ensures economic security, but also promotes general participation in society and the economy. Employment is necessary for promoting better health and education not only for those who are employed, but also for those who are dependent on them. In addition, it provides a sense of dignity to the individual. One of the biggest challenges facing the country today is to productively and gainfully employ its growing labour force, which is necessary for attaining the objective of inclusive growth.[2]

After a decline in the annual growth rate of employment from 2.6 per cent between 1983–4 and 1993–4 to 1.25 per cent between 1993–4 and 1999–2000, it grew again at 2.6 per cent between 1999–2000 and 2004–5. However, since the annual growth rate of the labour force between 1999–2000 and 2004–5 was higher than the an- nual growth rate of the workforce, there was an increase in the unemployment rate.[3] The unemployment rate (cur- rent daily status) increased from 7.3 per cent in 1999–2000

[2] Labour force is the economically active part of the population, which supplies (when employed) or does not supply but seeks to supply (when unemployed) labour for economic activities.

[3] Workforce participation rate is the rate of participation among the labour force in some kind of employment (whether principal or subsidiary). Unemployment rate is the proportion of labour force that is unemployed.

to 8.3 per cent in 2004– 5 (Planning Commission 2008). According to the usual principal status, the unemployment rate in 2004– 5 was 5.3 per cent.[4] The difference in unemployment rate by these two definitions (current daily status and usual principal status) indicates the existence of intermittent unemployment.

The growth rate of employment has clearly not been commensurate with GDP growth. There was hardly any increase in the annual rate of employment growth during the period 1999– 2000 to 2007– 8 (the period which experienced acceleration in GDP growth) as compared to 1993– 4 to 1999– 2000. Growth rate of employment in urban areas increased from 2.3 per cent during the period
1993– 4 to 1999– 2000 to only 2.6 per cent during the period 1999– 2000 to 2007– 8. In rural India, the annual growth rate of employment was only 1.27 per cent during the period 1999– 2000 to 2007– 8 as compared to 0.66 per cent during the period 1993– 4 to 1999– 2000. The fact that there has not been any significant growth in employment despite considerable acceleration in GDP growth ' points to a significant fall in the elasticity of employment with respect to output' (Chandrasekhar and Ghosh 2010). Employment elasticity of growth is vital for poverty reduction (Shepherd 2010).

Labour Force Participation Rate (LFPR): *Higher female LFPR in rural areas highlights poorer access to education for earlier generations*

Various studies (for example, Agarwal 1994) have established that inequities that depress the well-being of women can be removed if women

1. have ownership rights
2. are literate and educated participants in the decisions within and outside the family
3. find employment outside the home, and
4. have an independent source of income.

Sen (2005) further argued that ' even the survival disadvantage of women compared with men in developing countries seem to decrease sharply—and may even be eliminated—as progress is made in these agency aspects' .

In India, the educational attainment of females was much lower than that of males (Chapter 6). Further, gender disparity in educational attainment increased at higher levels of education, implying greater discontinuation among females at higher levels of education. This has adversely affected qualitatively better employment opportunities for females.

The estimate of the labour force according to the usual principal status gives the number of persons who either worked or were looking for work for a relatively greater part of the 365 days preceding the date of survey. In both rural and urban India, LFPR had marginally declined in 2009– 10 as compared to 1993– 4 (Table 3.1).[5] There was considerable gender disparity in both rural and urban India which has remained unchanged during the period
1993– 4 to 2009– 10. In rural India, the LFPR for males was almost twice that of females, while in urban India it was more than thrice. This is on account of the fact that females have much greater domestic responsibilities, which are not counted as economic activity by the NSSO Employment and Unemployment Surveys. As such, females who are only attending to domestic activities are not considered to be a part of the labour force, which brings down the female LFPR.

Table 3.1 Labour Force Participation Rate by Usual Principal and Subsidiary Status, 1993–4 and 2009–10 (*per cent*)

Sector	*Males*		*Females*		*Persons*	
	1993–4	*2009–10*	*1993–4*	*2009–10*	*1993–4*	*2009–10*
Rural	87.6	82.5	49.0	37.8	68.6	60.4
Urban	80.1	76.2	23.8	19.4	53.3	48.8

Source: NSS, Report Nos 409 and 515.
Note: For population aged 15 years and above.

Poor access to education was one of the reasons for higher LFPR in rural areas, particularly for females. In the chapter on Education (Chapter 6) of this Report, it has been shown that the gender disparity in net attendance ratio (NAR) was much greater in rural areas than in urban areas, and the rural– urban difference increased at higher levels of education. One of the reasons that could possibly explain the relatively higher LFPR for rural females as compared to their urban counterparts was their poor access to education.[6] Moreover, the participation of

[4] The NSS 66th Round (2009– 10) indicates that CDS unemployment rate has dipped from 8.2 per cent in 2004– 5 to 6.6 per cent in 2009– 10. Similarly unemployment measured by UPS declined from 3.1 per cent to 2.5 per cent for all age groups.

[5] Similar trend was observed during 2004– 5 to 2009– 10, in the LFPR. Rural LFPR for 2004– 5 was 40.1 per cent and it fell to 38.2 per cent by 2009– 10, and urban from 36.6 per cent to 35.2 per cent for all age groups.

[6] The LFPR in 2009– 10 (NSS 66th Round) for urban females is 12.8 per cent compared to 20.8 per cent in 2004– 5 for all age groups.

rural females in agricultural tasks, despite lower wages, is responsible for the higher female LFPR in rural areas.

LFPR across Social Groups: High LFPR among STs due to poorer access to education

Further, LFPR for both SCs and STs was higher than for All Groups. This is not surprising since they tend to be poorer, and hence must work in order to live. In fact, LFPR was higher for STs than for SCs, suggesting their more vulnerable status.

In both rural and urban India, the LFPR declined in 2009–10 as compared to 1993–4 in the case of both SCs and STs (Table 3.2).[7] That is probably happening because access to education in both rural and urban areas has been improving over this period. However, the more interesting fact is that the urban LFPR for All Groups, including SCs and STs, is much lower than for rural areas—which is probably again explained by the easier access to education in urban, in contrast to rural, areas. In fact, Chapter 6 points out that the mean years of schooling of all sections of society in urban areas is much higher than in rural areas (refer to Table 6.17 in Chapter 6).

Table 3.2 Labour Force Participation Rate by Usual Principal and Subsidiary Status, by Social Groups, 1993–4 and 2009–10 (per cent)

Sector	SCs		STs		All	
	1993–4	2009–10	1993–4	2009–10	1993–4	2009–10
Rural	71.8	62.4	81.9	69.9	68.6	60.4
Urban	59.4	53.5	59.3	51.5	53.3	48.8

Source: NSS, Report Nos 425 and 516.
Note: For population aged 15 years and above.

Across states, LFPR among STs in rural areas was comparatively lower in the north-eastern states where they constitute a dominant share of the population as compared to states like Rajasthan, Jharkhand, Orissa, Chhattisgarh, Madhya Pradesh, and Gujarat which accounted for more than 60 per cent of the country's ST population (Table 3A.1). It is not coincidental that in terms of educational attainment, the north eastern states fare better than the states mentioned above. For instance, literacy rates among the STs in the north eastern states are in the range of 85 to 90 per cent in 2007–8, while for these six states the range is 50 to 60 per cent.

In urban India, the decline in LFPR could be observed in majority of the states in 2004–5 as compared to that in 1993–4 (Table 3A.2).

LFPR across Religious Communities: Rural Muslim participation in education and labour force are inversely correlated

Across religious communities, LFPR remained almost unchanged between 1993–4 and 2004–5 in both rural and urban India but declined by 2009–10 (Table 3.3). Further, as was observed in the case of social groups, here also, LFPR in rural India was higher than that in urban India.

Among Muslims, the literacy rate and attendance at higher levels of education was much lower in rural areas as compared to urban areas (Chapter 6). The much lower LFPR for Muslims, as against all other religious communities, is explained not merely by lower levels of education prevailing among them, but also by the fact that Muslim women do not access schooling on the same scale as the other communities do.

The poor access of Muslims to all levels of education, including higher education (see Chapter 6 on this subject), has adversely affected employment opportunities for women. Clearly, the low level of participation in the labour market, and lower educational attainment are significant indicators of gender discrimination in the course of a woman's life.

Table 3.3 Labour Force Participation Rate by Usual Principal and Subsidiary Status, by Religious Communities, 1993–4, 2004–5, and 2009–10 (*per cent*)

Sector	Hindus			Muslims			Christians		Sikhs		
	1993–4	2004–5	2009–10	1993–4	2004–5	2009–10	1993–4	2004–5	1993–4	2004–5	2009–10
Rural	69.8	68.9	61.4	58.0	57.1	52.8	67.8	67.8	61.0	67.7	56.3
Urban	53.5	53.3	49.0	52.8	51.6	47.4	55.6	54.9	47.9	49.6	48.3

Source: Calculated from NSS Database, 50th and 61st Rounds.
Note: For population aged 15 years and above.

[7] In the 1993–4 survey, the social group, Other Backward Classes (OBCs), was not considered as a separate category and was included as part of the 'Other' social group. Only SCs and STs were considered along with all social groups.

Worker Population Ratio: *Marginal decline for all while women's participation remains low*

The worker population ratio (WPR), according to the usual principal status, gives the proportion of the total population which worked for a relatively greater part of the 365 days preceding the date of survey. WPR as per usual principal and subsidiary status in both rural and urban areas marginally declined in 2009–10 as compared to 1993–4 (Table 3.4).[8] Further, the huge gender disparity that existed in 1993–4 continued in 2009–10 in both rural and urban India—with women's workforce participation rates being almost half of that for men in rural areas, and less than a third in urban areas, with almost no change taking place over this decade of relatively rapid GDP growth.[9]

An equally important observation that can be made is that there is a remarkable difference for women's WPR depending on whether they are living in rural or in urban areas, with the latter rate for women being less than half that for rural women. This is most probably due to the much higher participation of young women in education in urban areas, compared to their rural counterparts. Also, this could be because a significant proportion of middle-class women in urban areas prefer not to work outside the home, and are full-time housewives.

Table 3.4 Worker Population Ratio by Usual Principal and Subsidiary Status, 1993–4 and 2009–10 (*per cent*)

Sector	*Males*		*Females*		*Persons*	
	1993–4	*2009–10*	*1993–4*	*2009–10*	*1993–4*	*2009–10*
Rural	86.4	81.2	48.7	37.2	67.8	59.5
Urban	76.8	74.0	22.3	18.3	50.9	47.2

Source: NSS, Report Nos 409 and 515.
Note: For population aged 15 years and above.

WPR across Social Groups: *WPR among SCs/STs declined while their access to education improved slightly*

Across social groups in both rural and urban India, WPR was highest in the case of STs (Table 3.5). There was a decline in WPR for both the STs and SCs in 2004–5. This was true across social groups in both rural and urban India. What is most remarkable is the fact that, as compared to the entire population ('All'), the WPR is much higher for both SCs and STs, which is hardly surprising, since the latter are poorer and must work in order to survive.

Table 3.5 Worker Population Ratio by Usual Principal and Subsidiary Status, by Social Groups, 1993–4 and 2009–10 (*per cent*)

Sector	*SCs*		*STs*		*All Groups*	
	1993–4	*2009–10*	*1993–4*	*2009–10*	*1993–4*	*2009–10*
Rural	71.1	61.4	81.4	68.9	67.8	59.5
Urban	56.8	51.8	57.0	49.2	50.9	47.2

Source: NSS, Report Nos 425 and 516.
Note: For population aged 15 years and above.

One reason for the decline in WPR for SCs and STs that is observable between the two points of time could well be the greater participation in education of young SCs and STs. In fact, there has been an improvement in the literacy rates among SCs and STs between 1999–2000 and 2007–8 in both rural and urban areas (Chapter 6). The improvement in literacy rate was greater in rural areas as compared to urban areas.

WPR across Religious Communities: *Lower for Muslims*

Among the major religions, WPR was comparable among Hindus, Christians, and Sikhs. However, it was much lower in the case of Muslims (Table 3.6). The Sachar Committee (Government of India 2006) pointed out that the lower workforce participation rate (WFPR) among Muslims was essentially due to the lower participation of women in economic activities. For the prime age group of 15–64 years (rural and urban India considered together), rural WFPR for Muslim women was only 25 per cent, which was much lower than the WPR for Hindu women (70 per cent) (Government of India 2006). The Sachar Committee further noted that a higher dependency rate among Muslims due to a higher share of younger population was one of the reasons for lower WFPR among Muslim women.

[8] Initial estimates of NSS 66th Round reported similar result.

[9] WFPR (NSS 66th Round) UPS for rural female is 20.2 per cent compared to rural male WPR of 53.7 per cent. Similarly for urban area, WPR female is 11.9 per cent against WPR male 53.9 per cent.

Table 3.6 Worker Population Ratio by Usual Principal and Subsidiary Status, by Major Religious Community, 1993–4, 2004–5, and 2009–10 (*per cent*)

Sector	*Hindus*			*Muslims*			*Christians*			*Sikhs*		
	1993–4	*2004–5*	*2009–10*	*1993–4*	*2004–5*	*2009–10*	*1993–4*	*2004–5*	*2009–10*	*1993–4*	*2004–5*	*2009–10*
Rural	69.0	67.9	60.5	56.8	55.7	51.8	65.2	64.9	59.9	60.6	65.5	54.9
Urban	51.0	0.9	47.4	50.9	49.5	45.9	50.8	50.2	49.6	45.7	47.3	45.5

Source: Calculated from NSS Database (50th and 61st Rounds).
Note: For population aged 15 years and above.

Occupational Diversification of the Workforce: *Increasing importance of rural non-farm sector*

In the employment and unemployment surveys conducted by the NSSO, households in both rural and urban areas have been categorized into diff erent household types depending upon the economic activity that was the source of their major income.[10] A trend analysis of the major sources of income from which households earned their livelihood is important to capture the occupational shifts that are taking place.

In rural India, there was a clear decline in the proportion of the population whose major source of income was agricultural self-employment. This underlines the increasing importance of the non-agricultural sector in rural India, where the proportion of the self-employed population increased from 13.1 per cent in 1993–4 to 15.5 per cent in 2009–10 (Table 3.7). In fact, even those whose major source of income was self-employment were also involved in casual labour. During 2004–5, ' more than
11 per cent of the rural self-employed persons resort also to casual labour work in order to supplement household income' (Government of India 2010b).

The declining trend in workforce in agriculture was particularly noticeable in the year 2009–10, for which the proportion of persons employed in agriculture was reduced to 45.5 per cent as compared to 55 per cent during 2007–8.[11] In spite of some data related problems (Government of India 2010c), there is no denying the fact that there has been a growing importance of the non-farm sector in India' s emerging economy.

Box 3.1 Occupational Diversification

The considerable occupational diversifi cation that has been taking place in India has really highlighted the growing importance of the non-farm sector, particularly in the rural areas. One of the high growing sectors in India has been the construction sector. The growth rate of the construction sector has been 12.8 per cent (2005–6), 10.3 per cent (2006–7), 10.7 per cent (2007–8), 5.4 per cent (2008–9), and 7 per cent (2009–10) (Government of India 2011). Construction sector is a highly labour absorbing sector, and therefore it would not be implausible to argue that high growth rate in the construction sector had contributed to an occupational shift away from the agricultural sector.

An increasing trend towards self-employment was evident in urban India followed by a sharp decline at the end of the 2005, and a slight decline in regular wage/salaried employment. (Table 3.7).

Unemployment Rate: *Increasing in rural India, while marginally declining in urban India*

The unemployment rate is the proportion of persons in the labour force who are unemployed. As per the usual principal and subsidiary status, unemployment rates for rural and urban areas showed opposite trends. While rural India experienced an increase in the unemployment rate, urban India experienced a slow decline (Table 3.8). Further, gender disparity in terms of employment opportunities was very stark in urban India where female

[10] Rural and urban households were classifi ed into diff erent occupational categories based on the NSS 61st Round of Employment and Unemployment Survey. Rural households were classifi ed into fi ve occupational categories (self-employed in non-agriculture, agricultural labour, other labour, self-employed in agriculture, others), while urban households were classifi ed into four occupational categories (self-employed, regular wage/salary earning, casual labour, others).

[11] Part of the sharp decline in workforce in agriculture was attributed to ' lack of adequate probing skills of the Contract Investigators' (Government of India 2010c).

Table 3.7 Distribution of Households in Rural and Urban India, by Employment Type, 1993–4, 2004–5, 2007–8, and 2009–10 (*per cent*)

Sector	Household Type	1993–4	2004–5	2007–8	2009–10
Rural					
	Self-employed in non-agriculture	13.1	16.7	15.2	15.5
	Self-employed in	42.4	39.8	39.0	31.9
	Agricultural labour	27.5	24.1	25.1	25.6
	Other labour	7.5	10.6	11.3	14.8
	Others	9.5	8.8	9.4	12.2
Urban					
	Self-employed	38.8	43.3	42.6	34.7
	Regular wage/salaried	42.8	39.6	39.0	39.7
	Casual labour	12.9	11.8	13.1	12.2
	Others	5.5	5.2	5.3	–

Source: NSS, Report No. 531.

unemployment rate increased in 2004–5, while male unemployment rate declined.[12]

Table 3.8 Unemployment Rate by Usual Principal and Subsidiary Status, 1993–4 and 2009–10 (*per cent*)

Sector	Males		Females		Persons	
	1993–4	2009–10	1993–4	2009–10	1993–4	2009–10
Rural	1.4	1.6	0.6	1.6	1.2	1.6
Urban	4.1	2.8	6.3	5.7	4.5	3.4

Source: NSS, Report Nos 409 and 515.
Note: For population aged 15 years and above.

The estimate of the unemployed in 2004–5 varied from 10.8 million (as per usual principal status) to 35 million (as per current daily status) (Government of India 2010b). As already mentioned, the unemployment rate defined according to current daily status gives a very different estimate as compared to unemployment rate defined according to usual principal status. The difference in unemployment rates by these two definitions (current daily status and usual principal status) indicates the existence of intermittent unemployment. The unemployment rate by current daily status in India is much higher than that measured by usual principal status, because the former are those who are unable to find employment for significant periods of the year. According to current daily status, the unemployment rate for males increased from 5.6 per cent in 1993–4 to 8.5 per cent in 2007–8. For females, it increased from 5.6 per cent to 8.1 per cent during the same period.[13] This unemployment rate captures not only unemployment, which in an economy like India where the vast majority of the labour force toils in the informal sector (93 per cent of it, including those in agriculture), but it also captures underemployment which is a far more serious problem than open unemployment. The poor are much too poor to be openly unemployed for a large part of the year; otherwise, they could not survive.

Across major states in both rural and urban India, increase in unemployment rate (by usual principal and subsidiary status) between 1993–4 and 2004–5 was higher in Kerala and Orissa as compared to other major states (Tables 3A.3 and 3A.4).

Unemployment Rate across Social Groups: Higher for SCs in rural India and STs in urban India (by current daily status)

Between 1993–4 and 2004–5, the unemployment rate (by usual principal and subsidiary status) increased for SCs in both rural and urban India (Table 3.9).

Table 3.9 Unemployment Rate by Usual Principal and Subsidiary Status, by Social Groups, 1993–4 and 2009–10 (*per cent*)

Sector	SCs		STs		All Groups	
	1993–4	2009–10	1993–4	2009–10	1993–4	2009–10
Rural	1.0	1.6	0.6	1.4	1.2	1.6
Urban	4.4	3.2	3.9	4.4	4.5	3.4

Source: NSS, Report Nos 425 and 516.
Note: For population aged 15 years and above.

As per current daily status for the country as a whole, there was a decline in the unemployment rate between

[12] The unemployment rate of 1.7 per cent by usual principal and subsidiary status in 2004–5 implies that 1.7 per cent of the labour force did not obtain any employment according to major time criterion. Employment and unemployment by the current daily status is determined by the activity status of the person on each day of the reference week using a priority-cum-major time criterion. Low unemployment rate by usual principal and subsidiary status merely drives home the point that a very small fraction (1.7 per cent) of the labour force remains openly unemployed for a considerable period of time (more than six months in a year). Unemployment measured as per current daily status captures both open unemployment as well as underemployment.

[13] NSS 64th Round, Employment and Unemployment Situation in India, 2007–8. Early estimates for 2009–10 shows that unemployment in rural India declined to 6.8 per cent and in urban India to 6.6 per cent.

2004–5 (8.3 per cent) and 2007–8 (8.1 per cent). However, rural and urban India showed opposite trends. While urban India experienced a decline in unemployment rate, rural India experienced a marginal increase (Table 3.10).

Across social groups, the unemployment rate by current daily status was the highest for SCs in both rural (12 per cent) and urban (7 per cent) India. As against this, the unemployment rates for 'Others' in rural and urban India were 5.3 per cent and 4.6 per cent, respectively. Further, the unemployment rate for STs increased in both rural and urban India (Table 3.10). In fact, in urban India, the unemployment rate increased only for STs. However, for all other social groups it declined, thereby causing an overall decline in unemployment rate in urban India during this period.

Since urban India is at the centre of the ongoing growth phenomenon, the fact that the unemployment rate is increasing only for STs at the centre of economic growth, further highlights the fact that economic growth has not been inclusive enough. At the policy level, this calls for improving the employability of STs through capability enhancement. In this Report, differential attainment in terms of various socio-economic indicators across social groups and religious communities has been discussed in detail in the relevant chapters, and therefore, they are not being repeated here. In a nutshell, it can be pointed out that achievements in various socio-economic indicators have not been uniform across socio-religious groups, which influenced the non-inclusive character of the growth process.

Four states—Andhra Pradesh, Chhattisgarh, Jharkhand, and Madhya Pradesh—together accounted for a significant proportion of the ST population in the country (38 per cent in 2007–8). It was notable that unemployment rates (by current daily status) were much higher than the national average in these states in both rural and urban areas (Table 3A.5 and Table 3A.6).

Table 3.10 Unemployment Rate by Current Daily Status, by Social Groups, 2004–5, 2007–8, and 2009–10 (*per cent*)

Social Group	*Rural*			*Urban*		
	2004–5	*2007–8*	*2009–10*	*2004–5*	*2007–8*	*2009–10*
SCs	12.0	12.0	9.4	11.4	10.1	7.0
STs	6.5	7.5	6.3	7.5	10.0	7.8
OBCs	7.7	7.9	6.5	8.5	7.7	6.2
Others	6.6	6.4	5.3	7.1	6.0	4.6
All	8.2	8.4	6.8	8.3	7.4	5.8

Source: Calculated from NSS Database, 61st and 64th Rounds.

Similarly, among SCs, the unemployment rate (by current daily status) was one of the highest in Tamil Nadu in both rural and urban areas (Table 3A.5 and Table 3A.6). This is of significance because in 2007–8, 7 per cent of the SC population in the country resided in Tamil Nadu.

Unemployment Rate across Religious Communities: Open unemployment rate was increasing for Muslims

In rural India, the unemployment rate (by usual principal and subsidiary status) increased for all major religious communities in 2004–5 as compared to 1993–4. In urban India, the unemployment rate increased only in the case of Muslims (before falling) while for all other religious communities there was a marginal decline (Table 3.11).

The unemployment rate according to the current daily status, a far more sensitive indicator of the state of the labour market in India than the usual principal status indicator, increased for the two largest religious communities (Hindus and Muslims) in rural India in 2007–8 as compared to 2004–5, before falling. For all other religious communities there was a decline in the unemployment rate (Table 3.12). In urban India, however, the

Table 3.11 Unemployment Rate by Usual Principal and Subsidiary Status, by Major Religious Communities, 1993–4, 2004–5, and 2009–10 (*per cent*)

Sector	*Hindus*			*Muslims*			*Christians*			*Sikhs*		
	1993–4	*2004–5*	*2009–10*	*1993–4*	*2004–5*	*2009–10*	*1993–4*	*2004–5*	*2009–10*	*1993–4*	*2004–5*	*2009–10*
Rural	1.1	1.5	1.5	2.1	2.3	1.9	3.8	4.3	3.9	0.7	3.3	2.4
Urban	4.7	4.4	3.4	3.6	4.0	3.1	8.6	8.5	2.9	4.6	4.5	5.9

Source: Calculated from NSS Database, 50th and 61st Rounds.
Note: For population aged 15 years and above.

Table 3.12 Unemployment Rate by Current Daily Status, by Major Religious Communities, 2004–5, 2007–8, and 2009–10

(*per cent*)

Religious	*Rural*			*Urban*		
Community	*2004–5*	*2007–8*	*2009–10*	*2004–5*	*2007–8*	*2009–10*
Hindus	8.0	8.3	6.8	8.1	7.3	7.0
Muslims	8.4	8.8	6.4	8.1	7.3	7.8
Christians	12.0	9.8	9.2	12.6	10.2	6.2
Sikhs	10.3	6.9	5.1	8.7	5.1	4.6

Source: Calculated from NSS Database, 61st and 64th Round.

decline in unemployment rate was observed even in the case of Hindus and Muslims.

Among the major states, West Bengal and Kerala together accounted for one-fifth of the Muslims in India. The unemployment rate (by current daily status) was higher than the national average in the rural and urban areas of both these states in 2007–8 (Table 3A.7 and Table 3A.8). The unemployment rate among Muslims was particularly high in Kerala—18 per cent in rural Kerala (as against an all India rural average of 9 per cent), and 25 per cent in urban Kerala (as against an all India urban average of 7 per cent).

Wages: *Casual labour wage is insufficient for decent livelihood*

In addition to employment, a decent wage is essential for maintaining a minimum standard of living. The predominance of the unorganized sector is an important feature of employment in India. Job security and decent earnings are characteristics of employment in the formal sector which constituted only 6 per cent of employment in 2004–5. Almost 96 per cent of female employment is in the unorganized sector as against 91 per cent for males (Government of India 2011).

There were considerable differences in wages and other work conditions across different types of employment. The average daily wage in salaried employment was much higher than other types of wage employment. Even within salaried employment, there was considerable difference between urban and rural areas (Table 3.13). Wages in urban areas were higher than those in rural areas.

Within the unorganized sector, casual labourers were the most vulnerable, and here too, the average wages for females were considerably lower than for males, except in the case of casual labour in public works under MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act). A vast majority of casual labourers in the unorganized sector were paid much lower wages than the stipulated minimum wages. It was estimated that 85 per cent of all casual workers in rural areas and 57 per cent in urban areas got wages below the minimum wages. Further, the physical conditions of work in the unorganized sector were quite deplorable (NCEUS 2007).

Since many casual workers earned much less than the minimum wages, a significant chunk of them were living below the poverty line. Approximately 22 per cent of casual workers were below the poverty line in 2004–5. It was further noted that the incidence of poverty among urban casual workers was higher than rural casual workers, rural–urban migration being an important contributory factor (Government of India 2010b).

Across major states, the proportion of regular employment to total employment in 2004–5 was less than 10 per cent in Bihar, Jharkhand, Chhattisgarh, Orissa, and Uttar Pradesh. The incidence of poverty in these states was much higher than the national average and these states also had a very high concentration of poor in the country.

Employment for a longer period of time in the informal sector was positively correlated with poverty and might also have inter-generational consequences because

Table 3.13 Average Daily Wage, 2007–8

(*Rs*)

Type of Employment	*Rural*		*Urban*	
	Males	*Females*	*Males*	*Females*
Salary / Regular Wage	175	108	276	213
Casual Labour in Public Works under MGNREGA	79	79	NA	NA
Casual Labour in PublicWorks other than under MGNREGA	76	71	NA	NA
Casual Labour in Other Types of Works	67	48	87	51

Source: NSS, Report No. 531.
Note: 'NA' implies Not Applicable.

the children were more likely to inherit their parents' poverty due to low educational achievement. Moreover, with hardly any social protection in the informal sector, the chances of old-age poverty rise with informal employment (Shepherd 2010).

Skill Development: *A necessity to realize the benefits of demographic dividend*

In order to fully utilize the demographic dividend (increasing share of the working age population) it is important that the population in the working age group is productively employed. This is possible only if the working population is educated and acquires the requisite skills. At present, only 10 per cent of the workforce in the country has some form of skill training (2 per cent with formal training and 8 per cent with informal training). This is extremely low when compared with countries like Korea (96 per cent), Germany (75 per cent), Japan (80 per cent), and the United Kingdom (68 per cent). What is more, 80 per cent of the new entrants into the workforce do not have any opportunity for skill training (Planning Commission 2008).

Lack of educational attainment is one of the important reasons for inadequate skill training in the country. In 2007–8, mean years of schooling in India was 4.2 years (see Chapter 6 for further discussion). One-third of the workforce of 395 million in the unorganized sector in the country is illiterate. Moreover, high training costs often prevent workers in the informal sector from participating successfully in training programmes.

In addition, there are a number of structural deficiencies and constraints, which have adversely affected skill development in India. Some of these are

- Absence of interaction between industry and training institutes
- Obsolete curricula and infrastructure
- Mismatch between training and employment requirements. This is because many trades have lost their relevance due to technological advancement. Their continuation in the curricula of industrial training institutes (ITIs) and industrial training centres (ITCs) have resulted in a huge mismatch between training and employment requirements.

In order to give concrete shape to the policy structure of skill development, the Government of India set up the Skill Development Mission in 2007 with a three-tier structure, namely, (a) the Prime Minister's National Council on Skill Development, (b) the National Skill Development Coordination Board, and (c) the National Skill Development Corporation.

As an integral part of the National Skill Development Mission, the Prime Minister of India announced a four-fold increase in the skilled manpower training capacity of the country on 15 August 2007. The Government of India has taken a number of initiatives for financing the training, for example,

1. Upgradation of 500 ITIs into Centres of Excellence with domestic as well as World Bank funding to the tune of Rs 20 billion.
2. Upgradation of 1396 government ITIs through the Public–Private Partnership model with Rs 35.5 billion.
3. Establishment of Skill Development Centres through the Public-Private Partnership model at a cost of Rs 1,115 billion.

In order to increase employment opportunities and enhance the quality of employment for the growing working age population, adequate training of the youth, and skill formation are essential. Revitalising the vocational and technical education system in the country, therefore, is crucial in realizing the demographic dividend. This will not only improve employability and help in poverty reduction particularly for those who had to withdraw from the formal education system due to various reasons, but can also contribute substantially to the sustained economic success of the country. The experience of various East Asian countries which began from a very low base of training and skill acquisition and made spectacular progress over the years in human capital formation, bears testimony to this (NCEUS 2007).

ASSET OWNERSHIP

Occupational patterns and employment opportunities are determined to a very large extent by the ownership of physical assets and human capital. Members of the household end up in low-paying jobs as a result of lack of access to these assets. The analysis of human capital, in particular educational attainment, has been done elsewhere in this report (Chapter 6). This section will focus on the ownership of physical assets only.

Assets are the most important indicators of a household's material well-being, particularly in rural areas.

In addition to their productive potential, assets also have collateral value and can be sold in the market. Thus, ownership of assets also provides a certain degree of security against adverse economic shocks. In other words, assets act as a cushion against income vulnerability, and households can fall back on them in times of income shortfalls, either by selling them or by using them as collateral to obtain credit. Asset ownership is critical to both resilience and escaping poverty (Shepherd 2010).

Asset Inequality: *High asset inequality with almost unchanged distribution*

In both rural and urban India there was hardly any change in the extent of inequality in the ownership of assets between 1991–2 and 2002–3 (the most recent point of time for which asset data is available) (Table 3.14).[14] In India, the distribution of assets is extremely unequal, with the top 5 per cent of households owning 38 per cent of the total assets, and the bottom 60 per cent of households own only 13 per cent of the total assets (Figure 3.2).

Table 3.14 Gini Coefficient of Asset Ownership in Rural and Urban India, 1991–2 and 2002–3

Sector	*1991–2*	*2002–3*
Rural	0.64	0.64
Urban	0.72	0.70

Source: Calculated from NSS Database, AIDIS, 48th and 59th rounds.

Clearly, asset ownership in both rural and urban India continued to be extremely unequal and was characterized by the high concentration of assets among the households belonging to the higher wealth deciles and lack of owner- ship of assets at the lower wealth deciles. In rural India, the top 5 per cent of households owned 36 per cent of total value of assets, while the bottom 60 per cent of house- holds owned only 15 per cent of the total value of assets. In urban India, ownership distribution of assets was even more unequal with the bottom 60 per cent of households owning only 10 per cent of total value of assets (Table 3.15).

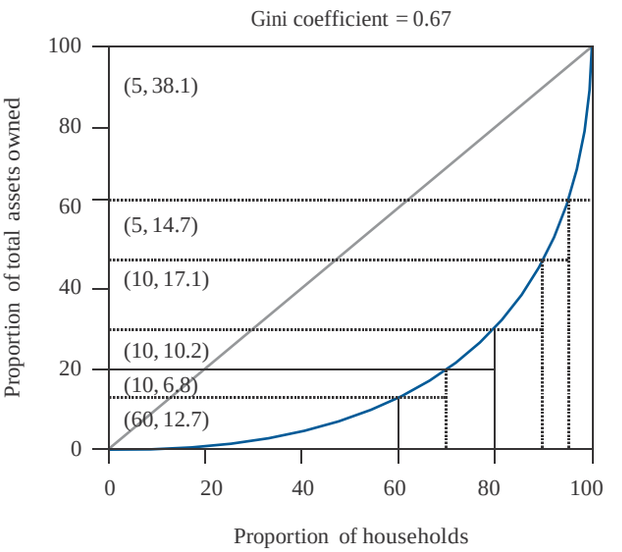

Figure 3.2 Lorenz Curve for Total Assets, All India, 2002–3

Table 3.15 Distribution of Assets among Rural and Urban Households, 1991–2 and 2002–3 (*per cent*)

Proportion of Households	*Rural*		*Urban*	
	1991–2	*2002–3*	*1991–2*	*2002–3*
Top 5% of Households	35.7	36.1	42.0	38.3
Middle 35% of Households	49.5	49.1	48.7	51.5
Bottom 60% of Households	14.8	14.8	9.3	10.2

Source: Calculated from NSS Database, AIDIS, 48th and 59th Rounds.

Composition of Assets: *Land as a source of rural livelihood?*

In terms of composition, land was by far the most important asset owned by rural households. Land along with buildings constituted more than 85 per cent of the total value of assets in rural India (Table 3.16). In urban India, the share of land in total value of assets was much lower than in rural India. In terms of composition of assets, land and buildings had very similar shares in urban India, and together they constituted 75 per cent of the total value of assets.

[14] According to AIDIS, household assets represented everything that was owned by the household and had money value. Assets were broadly categorized as land, buildings, livestock, agricultural machinery and hand implements, non-farm business equipment, transport equipment, durable household goods, and fi nancial assets (shares, dues receivable, deposits, and the like). Assets were valued at the current market prices in their existing conditions prevailing in the locality.

Table 3.16 Composition of Assets in Rural and Urban India, 1991–2 and 2002–3 (*per cent*)

Type of Asset	*Rural*		*Urban*	
	1991–2	*2002–3*	*1991–2*	*2002–3*
Land	64.2	63.2	35.5	38.5
Buildings	21.4	23.5	39.3	37.8
Livestock	3.4	2.1	0.4	0.2
Agricultural Machinery and Hand Implements	2.2	2.0	0.2	0.2
Non-Farm Business Equipment	0.3	0.3	1.5	1.4
Transport Equipment	1.2	1.4	3.0	3.8
Household Durables	5.9	5.1	11.6	8.4
Financial Assets	1.3	2.3	8.4	9.6
All Assets	100.0	100.0	100.0	100.0

Source: Calculated from NSS Database, AIDIS, 48th and 59th Rounds.

Even though land was the most important asset owned by rural households, problems related to land administration have adversely affected agricultural productivity and employment generation. Unclear land titles have resulted in large number of land disputes, which in turn have adversely affected the possibility of land being used as collateral in obtaining agricultural credit from formal sources of credit. This is one of the reasons for the declining investment in agriculture (Planning Commission 2008). Reforming the land record system to improve titling and only then computerization of land records is vital, given the dominance of land in the composition of rural assets.

In addition to unclear land titles, tenancy legislations have also resulted in declining agricultural investment. It may be noted that agricultural tenancies are banned in a large number of states, even though various forms of tenancy contracts exist orally. Since such tenancy contracts are not registered, the condition of the poor tenants (the majority of whom are either landless or have very little land) is precarious and they are often at the mercy of the landowners (Planning Commission 2008). Tenurial insecurity associated with the informal nature of tenancy contracts has deterred tenants from making any substan- tial investment in agriculture, which can be sustainable for a longer period of time. Tenancy reforms aimed at the security of tenants are important for bringing in fresh investment into agriculture.

An important distinction in terms of asset composition between rural and urban India was with regard to ownership of financial assets. In rural India, financial assets formed a very insignificant part of a household's asset portfolio, while it constituted the third most important item in the assets owned by the urban households (Table 3.16).

Asset Ownership across Occupational Categories: Regular wage/salary earnings only important in urban areas

The largest proportion of households in rural India belonged to the category of self-employed in agriculture, followed by the category of agricultural labour. However, the proportion of households belonging to these two categories declined in 2002–3 as compared to 1991–2. This is a clear indication of the growing importance of the non-farm sector in rural India. In urban India, the pro- portion of casual labour households declined in 2002–3 as compared to 1991–2.

The declining proportion of households depending primarily on agriculture and the growing importance of the non-farm sector in the rural economy is largely due to the fact that agriculture is not remunerative enough. Legal problems with land titles, tenancy legislations, and the associated problem of access to credit have all resulted in agriculture becoming non-remunerative.

The majority of the assets in rural India were owned by households which were categorized as self-employed in agriculture (Table 3.17). On the other hand, agricultural labour households owned a much smaller share of assets compared to their numerical strength. In urban India, the proportion of assets owned by the self-employed was

larger than the proportion of self-employed households. For all other occupational categories, the share of assets owned was lower than their respective shares among all households (Table 3.17).

The pattern of asset distribution across occupational categories clearly indicated an asset concentration within the self-employed in agriculture households in rural areas, and self-employed households in urban areas. This can be more clearly captured by the use of the Access Index which is defined as the ratio of the proportion of assets owned by a specific group to the proportion of households belonging to that specific group.[15] In this sub-section, the specific groups are defined in terms of the occupational categories. In rural India, the value of the Access Index was greater than 1 for the households which were self-employed in agriculture. For all other occupational categories in rural India, the value of the Access Index was less than 1. The lack of ownership of assets was most pronounced in the case of agricultural labour households (the value of Access Index was 0.29) in rural India. In urban India, the casual labour households were characterized by the lack of ownership of assets (the value of the Access Index was the lowest), while the self- employed households had a very favourable distribution of assets (Table 3.18).

Asset Ownership across Social Groups: Lower value of Access Index for SCs and STs

In this section, the ownership of assets across social groups is analysed only for the 59th round of AIDIS (2002– 3). In the 48th round of AIDIS (1991–2), OBCs

Table 3.17 Distribution of Households and Assets, by Occupational Categories, 1991–2 and 2002–3 (*per cent*)

Sector	*Occupational Category*	*1991–2*		*2002–3*	
		Per cent of Households	*Per cent of Assets Owned*	*Per cent of Households*	*Per cent of Assets Owned*
Rural					
	Self-employed in non-agriculture	13.0	8.4	14.4	11.2
	Agricultural labour	28.4	4.8	26.1	7.7
	Other labour	7.8	2.5	10.8	5.0
	Self-employed in agriculture	41.5	76.6	37.3	65.1
	Others	9.1	7.5	11.3	10.9
	All rural households	100.0	100.0	100.0	100.0
Urban					
	Self-employed	34.0	48.8	36.1	48.7
	Regular wage / salary earnings	41.0	37.5	41.9	38.3
	Casual labour	14.5	3.5	12.0	3.2
	Others	10.4	9.9	9.8	10.3
	All urban households	100.0	100.0	100.0	100.0

Source: Calculated from NSS Database, AIDIS, 48th and 59th Rounds.

[15] Access Index = $\frac{\text{per cent of assets}}{\text{owned per cent of households}}$ (can be calculated for each social group and religious community)

This Index was defined by K. Nagaraj, as cited in Ramachandran (1990). If the value of the Access Index is less than 1 for any particular group then it implies that the proportion of assets owned by that group is less than the proportion of households belonging to that specific group. In other words, the value of Access Index less than 1 implies that the distribution of assets is unfavourable for that specific group. If the value of the Access Index is greater than 1 it implies that the assets are distributed favourably for that specific group.

Table 3.18 Access Index of Asset Ownership, by Occupational Categories, 1991–2 and 2002–3

Sector	*Occupational Category*	*1991–2*	*2002–3*
Rural			
	Self-employed in non-agriculture	0.64	0.78
	Agricultural labour	0.17	0.29
	Other labour	0.32	0.47
	Self-employed in agriculture	1.85	1.74
	Others	0.82	0.96
Urban			
	Self-employed	1.44	1.30
	Regular wage/salary earnings	0.91	0.90
	Casual labour	0.24	0.27
	Others	0.96	1.04

Source: Calculated from NSS Database, AIDIS, 48th and 59th Rounds.
Note: For definition of Access Index see footnote 15.

were clubbed together with 'Other' social groups and were not considered as a separate entity. Hence, comparison between the 48th round and 59th rounds of AIDIS is not possible for all the social groups.

In both rural and urban India, SC households were the most disadvantaged in terms of ownership of assets. The average value of assets owned by the SC households was the lowest, both in rural and urban India (Table 3.19). The average value of assets was the highest for the 'Others' social group, with a value more than thrice that of SC households, in both rural and urban India.

Table 3.19 Average Value of Assets, by Social Groups, 2002–3 (*Rs 000*)

Social Group	*Rural*	*Urban*
Scheduled Castes	126	182.3
Scheduled Tribes	136.6	240.3
Other Backward Classes	266	334.2
Others	429.6	560.5
All Social Groups	265.6	417.2

Source: Calculated from NSS Database (AIDIS, 59th round).

The lack of ownership of assets among SC and ST households was reflected in the values of their Access Indices. Among all the social groups in rural and urban India, the value of the Access Index was the lowest for SC households followed by ST households (Table 3.20).

Asset Ownership across Religious Communities: Muslims are the most disadvantaged

As in the previous sub-section, the analysis of asset ownership across religious communities is based on the 59th round of AIDIS.

In 2002–3, Hindus were by far the largest religious group in the country constituting 83.6 per cent of all households. Muslims came second (11 per cent of

Table 3.20 Distribution of Households and of Assets, by Social Groups, 2002–3 (*per cent*)

Sector	*Social Group*	*Per cent of Households*	*Per cent of Assets Owned*	*Access Index*
Rural				
	Scheduled Castes	22.0	10.4	0.47
	Scheduled Tribes	10.2	5.2	0.51
	Other Backward Classes	41.0	41.1	1.00
	Others	26.7	43.1	1.60
Urban				
	Scheduled Castes	14.6	6.4	0.44
	Scheduled Tribes	2.9	1.7	0.57
	Other Backward Classes	34.7	27.8	0.80
	Others	47.7	64.1	1.34

Source: Calculated from NSS Database, AIDIS, 59th Round.

households) followed by Christians and Sikhs. The value of Access Indices for Hindus and Muslims was less than 1, while in the case of Christians, Sikhs, and Others it was greater than 1 (Table 3.21).

Table 3.21 Distribution of Households and Assets, by Major Religious Communities, 2002–3 (*per cent*)

Religious Community	*Per cent of Households*	*Per cent of Assets Owned*	*Access Index*
Hindus	83.6	81.3	0.9
Muslims	11.0	8.2	0.7
Christians	2.6	3.5	1.3
Sikhs	1.6	5.5	3.4
Others	1.2	1.5	1.2

Source: Calculated from NSS Database, AIDIS, 59th Round.

When households were classified simultaneously into religious communities and social groups, it was observed that the value of the Access Index varied considerably across social groups within Hindus. Within Hindus, the value of Access Index was the lowest for ST households followed by SC households (Table 3.22).

Table 3.22 Access Index of Households, by Social Groups among Hindus, 2002–3

	Scheduled Tribes	*Scheduled Castes*	*Other Backward Classes*	*Others*
Hindus	0.43	0.45	0.95	1.68

Source: Calculated from NSS Database, AIDIS, 59th Round.

POVERTY

Poverty reduction has been a major concern among policymakers in India and it has been reflected in various policy documents including the Eleventh Five Year Plan (2007–12), which clearly stated that 'the persistence of poverty on the scale at which it still exists is not acceptable' (Planning Commission 2008: 2).

In India, the Planning Commission is the nodal agency for the estimation of the number and proportion of people living below the poverty line at the national and state levels, in both rural and urban areas. The estimates are based on a large sample survey of consumer expenditure conducted by the NSSO. The NSS 28th Round (1973–4) consumer expenditure data was used and the poverty lines for rural (Rs 49.09 per capita per month at 1973–4 prices) and urban (Rs 56.64 per capita per month at 1973–4 prices) India were obtained. Since then, the methodology as formulated by the Task Force has been used in estimating the incidence of poverty by the Planning Commission. The focus of this methodology was on the purchasing power needed to meet the specific calorie norms with some margin for non-food consumption needs. The state specific rural and urban poverty lines are updated by using the Consumer Price Index of Agricultural Labourers for rural areas and Consumer Price Index for Industrial Workers in the case of urban areas.

Consumption Expenditure: *Rising inequality in both rural and urban India with declining interstate disparity*

Consumer expenditure is an important indicator of the standard of living, and the estimates of consumer expenditure are obtained from NSS surveys on consumer expenditure. During the period from 1993–4 to 2004–5, there was an increase in consumption inequality in both rural and urban India, both in terms of the uniform reference period (URP) as well as the mixed reference period (MRP) (Tables 3.23 and 3.24). The difference in the consumption expenditure between the households concentrated at the top and those located at the bottom increased in both rural and urban India. Studies have indicated that in rural India, the gap between the rural elite (moneylenders, absentee landlords) and rural poor (marginal farmers and agricultural labourers) had increased in 2004–5 as compared to 1993–4. Similarly in urban India, the distance between the elite (represented by the owners, managers, and professionals) and the poor (mostly unskilled manual workers) had increased during the same period (Vakulabharanam 2010).

Table 3.23 Inequality in MPCE in Rural and Urban Areas (Gini Coefficient), by URP, 1993–4 and 2004–5

Year	*Rural*	*Urban*
1993–4	0.28	0.34
2004–5	0.30	0.37

Source: Planning Commission, Government of India.
Note: Refer to Box 3.2 regarding URP.

A comparison of MPCE across states during different survey periods (1993–4, 2004–5) revealed that the average MPCE (by URP) in Bihar, Orissa, and Madhya Pradesh

Table 3.24 Inequality in MPCE in Rural and Urban Areas (Gini Coefficient), by MRP, 2004–5 and 2007–8

Year	*Rural*	*Urban*
2004–5	0.25	0.35
2007–8	0.28	0.36

Source: For 2004–5, Planning Commission, Government of India. For 2007–8 calculated form NSS Database (64th Round, Consumer Expenditure Survey).
Note: Refer to Box 3.2 regarding MRP.

Table 3.25 Share of Expenditure on Food in Rural and Urban, 1983, 1993–4 and 2004–5

(*per cent*)

Year	*Rural*	*Urban*
1983	66	59
1993–4	63	55
2004–5	55	42

Source: NSS, Report Nos 402 and 508.

have been the lowest as compared to other states, while Kerala and Punjab have consistently been on the higher end. In 2004–5, Kerala had the highest average MPCE for rural areas, which was 2.5 times that of Orissa (the state with the lowest average MPCE). In urban areas, among the major states, Punjab had the highest average MPCE which was 1.9 times the average MPCE for Bihar (the state with the lowest average MPCE) in 2004–5.[16]

The pattern of disparity across states can be gauged by looking at the estimates of coefficient of variation. Coefficient of variation of combined rural and urban MPCE across states fell from 37 per cent in 1993–4 to 31 per cent in 2004–5. It further declined to 28 per cent in 2007–8. Thus, across states there was a decline in coefficient of variation by about 10 percentage points from 1993–4 to 2007–8.[17] Bihar remained the state with the lowest MPCE during the period 1983 to 2004–5, despite a four-and-a-half fold increase in average MPCE from Rs 100 to Rs 450 (Table 3A.9).

In terms of the composition of consumption expenditure in both rural and urban India, the proportion of consumption expenditure on food has consistently declined over time (Table 3.25).

Further, it was observed that the states with a lower average MPCE had a higher proportion of consumption expenditure on food items compared to states with a higher average MPCE. In rural India (2004–5), in states with the lowest average MPCE (Orissa, Bihar, and Jharkhand) food items accounted for more than 60 per cent of the consumption expenditure. In states with the highest average MPCE (Kerala, Haryana, and Punjab), less than 50 per cent of consumption expenditure was on food.

Declining share of food in overall consumption expenditure for all occupational categories

The most important good news that emerges is that the share of food in total MPCE has declined for all occupational groups between 1993–4 and 2004–5. Systematically this is true in both rural and urban areas. This suggests that the increases in income consequent upon faster economic growth in the 1990s and the first half of the 2000s (as compared to the 1980s) did show up on all sections of society diversifying their consumption expenditure—away from food.

At the same time, it is clear from both the Tables 3.26 and 3.27 that the occupational group which had the lowest average MPCE spent the highest proportion on food items. Across occupational categories, the condition of labourers was the worst among all occupational categories both in rural and urban India. In rural India (2004–5), the lowest average MPCE (by URP) was for agricultural labourers followed by other labourers. In urban India, casual labourers had the lowest average MPCE.[18] Moreover, in rural India, the highest proportion of MPCE on food items was by the agricultural labour households (Table 3.26). In urban India, this was true for casual labour households (Table 3.27).

Further, the relative gaps in consumption levels between the rich and the poor widened in both rural and urban India during the post-reform period. In rural India, the average MPCE for 'Others' was 1.5 times that of agricultural labourers in 1993–4, and it increased to twice in 2004–5. In urban India, the average MPCE for regular salary earners was 2.1 times that of casual labourers in 2004–5, while it was 1.9 times in 1993–4.

[16] The state-wise MPCE figures were obtained from NSS Reports (Nos 402 and 508).
[17] MPCE for the year 2007–8 was based on MRP.
[18] Source is the NSS Report No. 514. Occupational categories were defined according to the NSS 61st Round, Consumer Expenditure Survey.

Box 3.2 Reference Period

MPCE estimates based on the uniform 30 days reference period (URP) are lower than MPCE estimates based on the mixed reference period (MRP) where the reference period is 365 days for the five infrequently purchased items while for all other items including food items the reference period is 30 days. The difference primarily arises because of the following two reasons.

1. It is possible that the household did not incur any expenditure on the five non-food items (clothing, footwear, education, medical expenses, and durable goods) during the last 30 days prior to the date of survey, while expenditures on such items might be incurred by the household during the last 365 days prior to the date of survey.
2. Expenditure reported for the 30 days reference period gets automatically reported in the 365 days reference period.

Lately, a lot of debate has been generated regarding the comparability of consumer expenditure data across the NSS Consumer Expenditure survey rounds. The 55th round of the NSS data which was used by the Planning Commission to estimate the incidence of poverty in 1999–2000, was subject to intense debate because of lack of comparability with data of earlier years. The non-comparability was the result of differences in recall period for items of consumption across the survey rounds. For instance, in the 55th round, the consumption data for the five non-food items (clothing, footwear, durable goods, education and institutional medical expenses) were collected from the 365-day recall period, while in the 50th round (1993–4) it was from 30-day recall period. Deaton (2003) observed that most people would have reported no such purchases over 30 days but reported some purchases over 365 days. Therefore, it was possible that the poverty estimates based on the 365-day recall period for the five non-food items would be lower than the poverty estimates based on the 30-day recall period.

Attempts were made by several authors to adjust the 55th round data so that the incidence of poverty arrived at by using the 55th round data could be made comparable with the poverty estimates based on the earlier rounds. Sen and Himanshu (2004) made NSS consumption expenditure data across different rounds comparable by generating comparable NSS consumer expenditure data of the large surveys of the 43rd round and 50th round with the mixed recall period (30-day for food and 365-day for the five non-food items) as was done in the 55th round rather than the uniform 30-day recall period. The decline in poverty between the 50th round and the 55th round was only 2.8 percentage points. The authors further pointed out that this magnitude of poverty reduction was lower than that between the 43rd round and 50th round, and this coupled with the fact that the absolute number of poor did not decline in 1999–2000, meant that the 1990s could be termed as a 'relatively lost decade for poverty reduction'.

Table 3.26 Average MPCE (*Rs*) and Proportion of MPCE Spent on Food, by Occupational Groups (Rural), 1993–4 and 2004–5

Social Group	*1993–4*		*2004–5*	
	Average MPCE	*Per cent Spent on Food*	*Average MPCE*	*Per cent Spent on Food*
Self-employed in non-agriculture	295	62.7	604	53.6
Agricultural labour	217	66.4	416	59.1
Other labour	266	63.2	520	55.2
Self-employed in agriculture	309	61.5	583	55.9
Others	331	64.0	818	48.0
All Occupational Groups	282	63.1	559	55.1

Source: NSS, Report Nos 422 and 514.
Note: MPCE based on URP.

Table 3.27 Average MPCE (*Rs*) and Proportion of MPCE Spent on Food, by Occupational Groups (Urban), 1993–4 and 2004–5

Social Group	*1993–4*		*2004–5*	
	Average MPCE	*Per cent Spent on Food*	*Average MPCE*	*Per cent Spent on Food*
Self-employed	435	56.3	982	43.9
Regular wage / salary earnings	534	52.1	1213	40.4
Casual labour	279	63.4	580	53.1
Others	510	53.9	1445	38.6
All Occupational Groups	458	54.6	1052	42.5

Source: NSS, Report Nos 422 and 514.
Note: MPCE based on URP.

MPCE across Social Groups: MPCE lower for STs and SCs than for other social groups

Across social groups in 2004–5, STs had the lowest average MPCE (by URP) in rural India, while in urban India SCs had the lowest average MPCE (relatively fewer STs reside in urban areas, while SCs are more numerous in urban areas). As expected, in both rural and urban India, the average MPCE was the highest for 'Others' (in rural India it was 1.6 times that of STs, while in urban India it was 1.7 times that of SCs).[19] It was observed that in rural India, the proportion of MPCE on food items was more or less similar. In urban India, the proportion of MPCE on food items was the highest for SCs, while it was the lowest for 'Others' (Table 3.28).

In addition to differences across social groups, an important point to note from Table 3.28 is the huge rural–urban differences in average MPCE in the case of all social groups taken together. The average MPCE in urban India was almost twice that in rural India. This rural–urban disparity was the highest in the case of STs (average MPCE in urban India being twice that in rural India), and lowest in case of SCs and OBCs (average MPCE in urban India being 1.6 times that in rural India for both social groups). This (and the fact that STs' MPCE in rural areas was lowest of all (only Rs 426)) suggests that the STs in rural areas remain the poorest of the poor, with nearly three-fifths of their total consumption expenditure going to food—the only group for which this is true.

In fact, the rural–urban difference in MPCE persisted, and in fact increased, by 2007–8. The average MPCE in urban India was 1.9 times that in rural India. The rural–urban disparity was the highest in case of STs in 2007–8 (Table 3.29).

Table 3.28 Average MPCE (*Rs*) and Proportion Spent on Food, by Social Groups, 2004–5

Social Group	*Rural India*		*Urban India*	
	Average MPCE	*Per cent Spent on Food*	*Average MPCE*	*Per cent Spent on Food*
Scheduled Castes	475	57.3	758	48.0
Scheduled Tribes	426	58.9	857	46.6
Other Backward Classes	557	54.9	871	45.9
Others	685	53.0	1306	39.4
All Social Groups	559	55.1	1052	42.5

Source: NSS, Report No. 514.
Note: MPCE based on URP.

[19] Comparison of MPCE across social groups is not possible between different survey periods because in the 1993–4 survey OBCs were included as a part of 'Others', while in the 2004–5 survey OBCs were considered a separate social group.

Table 3.29 Average MPCE, by Social Groups, 2007–8 (*Rs*)

Social Group	*Rural*	*Urban*
Scheduled Castes	652	1100
Scheduled Tribes	617	1221
Other Backward Classes	765	1231
Others	964	1817
All Social Groups	772	1472

Source: Calculated from NSS Database, 64th Round Consumer Expenditure Survey.
Note: MPCE based on MRP.

As expected, across social groups in both rural and urban India, the average value of MPCE was the highest for the 'Others' in 2007–8. In rural India, the average MPCE for the SCs, STs, and OBCs was respectively
30 per cent, 40 per cent, and 20 per cent lower than that of 'Others'. A similar disparity could be observed in the case of urban India (Table 3.30).

Table 3.30 Ratio of Average MPCE for SCs, STs, OBCs as compared to 'Others', 2007–8

Social Group	*Rural*	*Urban*
Scheduled Castes	0.7	0.6
Scheduled Tribes	0.6	0.7
Other Backward Classes	0.8	0.7

Source: Calculated from, 64th Round Consumer Expenditure Survey.
Note: MPCE based on MRP. 'Others' refers to the upper-castes, otherwise also referred to Forward Castes.

It may be pointed out here that better health and educational attainments in urban India as compared to rural India (discussed in Chapters 5 and 6) resulted in the enhancement of human capabilities in urban India, thereby leading to higher incomes, which in turn contributed towards a higher MPCE for those residing in urban areas. The incidence of poverty in urban India (as will be seen in the following sub-section), was therefore lower than that in rural India.

Overall, it was observed that the social groups/occupational categories which had the lowest value of average MPCE spent the highest proportion on food items. In rural India, it was agricultural labour households which had the lowest value of average MPCE, and in urban India it was the casual labour households. Across social groups, SCs and STs had the lowest average MPCE in rural and urban areas, respectively. Among the states, the average MPCE for Bihar and Orissa has consistently been on the lower end. An analysis of the pattern of consumption expenditure during the post liberalization period (between 1993–4 and 2004–5) clearly suggested that the biggest gainers were the urban elite belonging to the upper castes.

Trends in Poverty: *Declining but absolute number of poor still high*

Reducing the poverty headcount ratio to half of the 1990 level by the year 2015 is the foremost Millennium Development Goal enshrined in the Millennium Declaration of the United Nations. In the case of India this implies that the poverty headcount ratio should come down to 18.6 per cent by the year 2015. Given the fact that the historical rate of decline in poverty during the period 1990 to 2005 was 0.8 per cent per annum, the target set for poverty reduction seems achievable (Planning Commission 2008).

The incidence of poverty in India came down from 55 per cent in 1973–4 to 27.5 per cent (as per URP)
in 2004–5 (Planning Commission 2008). During this period, the absolute number of people living below the poverty line declined from 320 million to 300 million.
In addition, the rural-urban diff erence in the incidence of poverty declined between the years 1983 and 2004–5 (Table 3.31).

However, these numbers discussed above use the URP method of estimating the headcount ratio of the poor. We have also used the MRP method for two points of time: 2004–5 and 2007–8. Between 2004–5 and 2007–8, there
was a considerable decline in the proportion of people living below the poverty line.[20] The proportion of people

[20] Comparison of incidence of poverty between 2004–5 and 2007–8 is done according to consumption expenditure measured by MRP. Poverty lines for rural and urban India in 2007–8 are calculated by defl ating the 2004–5 poverty lines using consumer price index for agricultural labourers in case of rural areas and consumer price index for industrial workers in case of urban areas. The poverty lines thus arrived at for 2007–8 are Rs 429 per capita per month for rural areas and Rs 639 per capita per month for urban areas.

Table 3.31 Incidence of Poverty in Rural and Urban Areas, 1983, 1993–94 and 2004–5

Year	Rural		Urban	
	Per cent of Poor	Number of Poor (Million)	Per cent of Poor	Number of Poor (Million)
1983	45.7	252	40.8	71
1993–4	37.3	244	32.4	76
2004–5	28.3	221	25.7	81

Source: 11th Five Year Plan, Planning Commission, Government of India, Early calculation from NSS 64th Round, Consumer Expenditure Survey Data.
Note: Poverty based on URP.

living below the poverty line (as per MRP) declined from 22 per cent in 2004–5 to 15 per cent in 2007–8.[21] These numbers are obviously not comparable to the URP figures in the previous paragraph.

There were considerable interstate variations in the incidence of poverty, characterized by a very high concentration in the states of Bihar (including Jharkhand), Orissa, Madhya Pradesh (including Chhattisgarh), and Uttar Pradesh (including Uttarakhand). In 2004–5, 60 per cent of the poor in rural India belonged to these states. These are the states where the bulk of the SCs, STs, and Muslims reside. Thus, Jharkhand, Orissa, Chhattisgarh, and Madhya Pradesh together account for 40 per cent of the STs in India. Similarly, close to 30 per cent of the SCs are located in the states of Uttar Pradesh and Bihar, which also account for one-third of the Muslim population in the country.[22] Even though the incidence of poverty has come down in these states (following the national trend), the proportion of people living below the poverty line was much higher than the national average (Table 3A.10). The relative ranks of these four states in terms of the incidence of poverty deteriorated between 1993–4 and 2004–5, implying that the performance of these states has been much worse than the others in terms poverty reduction.

Among the major states, there has been significant reduction in poverty (in 2004–5 as compared to 1983) in the states of Gujarat, Kerala, Punjab, and West Bengal (Table 3A.10). Even though the divergence in the incidence of poverty has declined over the years across states, some states, particularly Bihar, Orissa, and Madhya Pradesh, have performed much worse than others in terms of poverty reduction.

Further, despite a decline in the poverty headcount ratio in the country, the incidence of poverty was still quite high when compared to international figures. In 2005, the incidence of poverty was 25 per cent for the developing countries as a whole based on the international poverty line of US $ 1.25 per person per day (Table 3.32). Applying the same standard, the incidence of poverty in India was 42 per cent higher than that for the South Asian region as a whole.

Table 3.32 Population Below International Poverty Line of US $ 1.25 Per Day, 2005 (*per cent*)

Region / Countries	Incidence of Poverty (per cent)
West and Central Africa	53
Sub-Saharan Africa	51
Eastern and Southern Africa	49
Developing Countries	25
India	42

Source: The State of the World's Children 2009, UNICEF.

Poverty across Occupational Categories: High incidence of poverty among agricultural labourers and casual labourers

Among occupational categories, the incidence of poverty was the highest among labour households, in both rural and urban India. In rural India, the incidence of poverty was the highest among agricultural labour households followed by other labour households, while in urban

[21] Please refer to http://pib.nic.in/newsite/erelease.aspx?relid=26316 for incidence of poverty by MRP for the year 2004–5. For the year 2007–8, the incidence of poverty by MRP is calculated from the NSS database (64th round, consumer expenditure survey)

[22] Distribution of social groups and religious communities across states were calculated from NSS Database, 64th Round.

India, it was the highest among casual labour households (Tables 3.33 and 3.34).

Table 3.33 Incidence of Poverty, by Occupational Categories (Rural), 1993–4 and 2004–5 (*per cent*)

Occupational Category	*1993–4*	*2004–5*
Self-employed in non-agriculture	32.2	23.5
Agricultural labour	56.8	46.4
Other labour	39.7	30.4
Self-employed in agriculture	29.2	21.5
Others	22.7	14.0
All occupational categories	37.2	28.3

Source: Calculated from NSSO database.
Note: Poverty based on URP.

Table 3.34 Incidence of Poverty. by Occupational Categories (Urban), 1993–4 and 2004–5 (*per cent*)

Occupational Category	*1993–4*	*2004–5*
Self-employed	35.0	27.9
Regular wage/salary earnings	20.7	15.3
Casual labour	62.1	57.0
Others	28.7	16.1
All occupational categories	31.9	25.6

Source: Calculated from NSSO database.
Note: Poverty based on URP.

The high incidence of poverty among agricultural labour and other labour households in rural India is a matter of great concern given the fact that more than one- third of the population belongs to these two categories of households.[23]

As compared to 1993– 4 the incidence of poverty across all occupational categories declined in 2004– 5. The sources of this observed reduction in aggregate poverty across occupational categories can be analysed by using a decomposition rule as proposed by Huppi and Ravallion (1990). According to this rule, decline in poverty can be decomposed into the intra-occupational category effect, the population shift effect, and the interaction effect.[24]

This decomposition exercise was carried out separately for both rural and urban India.[25] For rural India, all summations were over five occupational categories (self-employed in non-agriculture, agricultural labour, other labour, self-employed in agriculture, and others). In the case of urban India, all summations were over four occupational categories (self-employed, regular wage/ salary earnings, casual labour, and others). The percentage contribution of each of the occupation groups to aggregate reduction in poverty was calculated for both rural and urban India.

In rural India, the drop in poverty among the self-employed in agriculture had the largest influence on aggregate poverty reduction (36 per cent). The next important contributor to overall poverty reduction came from the reduction in poverty within agricultural labour households (32 per cent). Given the fact that the incidence of poverty was the highest among agricultural labour households which constituted a significant proportion of rural population, poverty alleviation among this occupational category will have a major impact on overall poverty reduction. In the case of urban India, the decline in poverty within the self-employed households made the largest contribution to overall poverty reduction (42 per cent).

Poverty across Social Groups: Concentration of poverty among SCs and STs in certain States

Across social groups, the incidence of poverty was much more pronounced among the SCs and STs. Even though the incidence of poverty among the SCs and STs declined in 2004– 5 as compared to 1993– 4, it was much higher than the national average (Table 3.35).

[23] These two categories of households together constituted 35 per cent of the rural population in both 1993– 4 and 2004– 5.

[24] In the case of intra-occupational category, effect base period population share is controlled, and it explains the contribution of poverty change within the occupational category. The population shift effect measures the reduction in poverty as a result of the shift in population share. For further details, refer to Huppi and Ravallion, 1990.

[25] Let $P_{i(t)}$ denote the incidence of poverty for the *i-th* occupational category at time period *t*.
Let the population share for the *i-th* occupational category be N_i.
Then, according to the decomposition rule

$$P_{2004-05} - P_{1993-94} = \underbrace{[(P_{i(2)} - P_{i(1)})N_{i(1)}]}_{\text{Intra-sectoral effects}} + \underbrace{[(N_{i(2)} - N_{i(1)})P_{i(1)}]}_{\text{Population shift effects}} + \underbrace{[(P_{i(2)} - P_{i(1)})(N_{i(2)} - N_{i(1)})]}_{\text{Interaction effects}}$$

Time period 2 refers to 2004– 5, and time period 1 refers to 1993– 4.

Table 3.35 Incidence of Poverty, by Social Groups, 1993–4 and 2004–5 (*per cent*)

Year	Rural			Urban		
	SC	ST	All	SC	ST	All
1993–4	48.3	52.0	37.3	48.8	40.1	32.4
2004–5	36.8	47.7	28.3	39.8	33.9	25.7

Source: For 1993–4 calculated from NSS Database, 50th Round. For 2004–5, the figures are obtained from the 11th Five Year Plan, Planning Commission, Government of India.
Note: Poverty based on URP.

The high incidence of poverty among SCs and STs could be observed in 2007–8 as well, the estimates of which are based on MRP (Table 3.36).[26]

Table 3.36 Incidence of Poverty , by Social Groups, 2007–8 (*per cent*)

Social Group	*Rural*	*Urban*
Scheduled Castes	20.6	22.8
Scheduled Tribes	25.3	20.6
Other Backward Classes	12.0	19.0
Others	6.3	7.3
All Social Groups	14.9	14.5

Source: Calculated from NSS Database, 64th Round Consumer Expenditure Survey.
Note: Poverty based on mixed recall period. These figures are not comparable with those in Table 3.35, since those are based on uniform recall period (see Box 3.1 for details).

In rural India (2004–5), among SCs, the incidence of poverty was the highest in Bihar (64 per cent) followed by Jharkhand (58 per cent), Uttarakhand (54 per cent), and Orissa (50 per cent). Among STs, the incidence of poverty was the highest in Orissa (76 per cent) followed by Madhya Pradesh (58.6 per cent) (Government of India 2008).

In urban India (2004–5), among SCs, the incidence of poverty was the highest in Orissa (73 per cent) followed by Madhya Pradesh and Bihar (both 67 per cent). Among STs, the incidence of poverty was the highest in Uttarakhand (64 per cent) followed by Orissa (62 per cent).

The above analysis of poverty across social groups clearly highlighted the extreme poverty levels among STs followed by SCs, both of which were much higher than those for other groups. State level disaggregation revealed that the incidence of poverty among SCs and STs was particularly high in the states of Bihar, Orissa, and Madhya Pradesh.

Poverty across Religious Communities: One-third of the Muslims in India were below the poverty line

Hindus are the dominant religious group in India, followed by Muslims. According to Census 2001, Hindus and Muslims together constituted 94 per cent of the total population in the country. For the country as a whole, the incidence of poverty (as per URP) among Muslims was higher than Hindus (Figure 3.3). Close to 32 per cent of Muslims in the country were below the poverty line, implying that one in every three Muslims was below the poverty line. The incidence of poverty among Hindus was close to 29 per cent. In rural India, the incidence of poverty among Hindus and Muslims was more or less similar to their respective population shares. However, in urban India, the incidence of poverty among Muslims was much higher than their population share (Table 3A.11). In other words, the relative deprivation of Muslims was much higher in urban areas. Less than one-fifth of urban Muslims had a spending capacity equivalent to or higher than the national average of Rs 1,050 per month (Government of India 2006).

Even though there was not much of difference in the incidence of poverty between Hindus and Muslims in the year 2004–5, the disparity between different social groups among the Hindus was quite significant. Among the Hindus, the incidence of poverty for SCs, STs, and OBCs was 39 per cent, 52 per cent, and 28 per cent, respectively. Among—upper castes Hindus—the incidence of poverty was only 14 per cent.

The relative deprivation of the Muslims in urban areas continued in 2007–8, with close to one-fourth of the Muslims living below the poverty line (Table 3.37).

There is a strong link between poverty and educational attainment. In Chapter 6, it has been shown that in several educational parameters, the SCs, STs, and Muslims lag behind the rest of the population. For instance, the

[26] It has already been pointed out in Box 3.1 that MPCE values based on MRP are higher than MPCE values based on URP, and accordingly, the incidence of poverty based on MRP is lower as compared to poverty estimates based on URP.

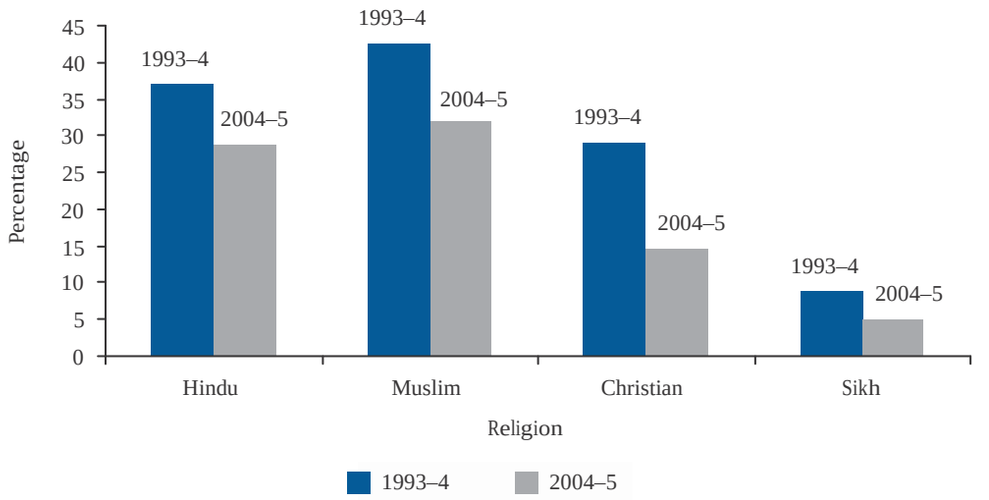

Figure 3.3 Incidence of Poverty by Major Religious Communities, 1993–4 and 2004–5

Table 3.37 Incidence of Poverty, by Major Religious Communities, 2007–8 (*per cent*)

Religious Community	*Rural*	*Urban*
Hindus	14.3	13.0
Muslims	13.3	23.7
Christians	8.5	6.6
Sikhs	2.1	3.6

Source: Calculated from NSS Database, 64th Round Consumer Expenditure Survey.
Note: Poverty based on MRP.

incidence of illiteracy in both rural and urban India was higher among these three socio-religious groups as compared to the rest of the population. Lack of educational attainment is an important factor underlying the high incidence of poverty among these groups. Higher levels of educational attainment lead to the lowering of the incidence of poverty. The incidence of poverty for STs (only Hindus) declined from 57 per cent among illiterates to 20 per cent for those completing primary education, and to 6 per cent for those graduating from universities (Thorat 2010). It has been observed that the mean years of schooling in India was below the primary level in 2007–8 (see Chapter 6 on 'Education'). One of the important measures for poverty reduction would therefore be to ensure that poor children get access to several years of post-primary education.

Poverty Gap: Severity of poverty higher among SCs and STs

The poverty gap is a measure of the extent of poverty and is defined as the distance between the poverty line and income of the poor individual. In other words, the poverty gap in consumption expenditure indicates to what extent the consumption of the poor falls short of the poverty line. During 2007–8, the poverty gap in both rural and urban India was higher among SCs and STs across social groups (Table 3.38). This implies that on an average, the consumption expenditure of the poor belonging to the SCs and STs was farther below the poverty line as compared to other social groups. Among religious communities, the poverty gap was higher among Hindus and Muslims in both rural and urban India (Table 3.38).

The poverty gap was higher in urban India than rural India. For urban India, the poverty gap in 2007–8 was 19, which implied that the average income of the urban poor was 19 per cent lower than the poverty line.

An analysis of poverty (in 2007–8, based on MRP) revealed the differences in the nature of poverty between rural and urban India. While the incidence of poverty was marginally lower in urban India, the poverty gap (which signifies extent of poverty) was higher. This clearly points to higher consumption inequalities in urban India, which were reflected in the higher value of the Gini coefficient, as compared to rural India.

Table 3.38 Poverty Gap, 2007–8 (*per cent*)

	Rural	*Urban*
By Social Group		
Scheduled Castes	16	21
Scheduled Tribes	18	21
Other Backward Classes	14	19
Others	12	19
All Social Groups	15	19
By Religious Community		
Hindus	15	20
Muslims	14	19
Christians	16	10
Sikhs	12	10

Source: Calculated from NSS Database, 64th Round Consumer Expenditure Survey.
Note: Poverty based on MRP.

Table 3.39 Rate of Growth of Gross Domestic Product (at Factor Cost) (at 1999–2000) Prices, 2003–4 to 2009–10

Year	*Growth Rate of GDP (per cent)*
2003–4	8.5
2004–5	7.5
2005–6	9.5
2006–7	9.7
2007–8	9.0
2008–9	6.7
2009–2010	7.2

Source: *Economic Survey*, Various Issues.

Growth and Poverty: *Need for more inclusive growth*

The slow pace of economic growth during the initial years after Independence was one of the reasons for the insignifi cant change in poverty reduction. The GDP per capita grew at an annual rate of 1 per cent during the 1960s and 1970s, and it increased to 3 per cent during the 1980s (Datt and Ravallion 2010). During the last fi ve to six years, the country has achieved an impressive GDP growth rate (Table 3.39). However, the absolute number of poor in the country still remains quite high at 300 million (in 2004– 5), and the incidence of poverty was much more pronounced among SCs, STs, and Muslims. The Eleventh Five Year Plan noted that ' the rate of decline in poverty has not accelerated along with the growth in GDP, and the incidence of poverty among certain marginalized groups, for example the STs, has hardly declined at all' (Planning Commission 2008: 1).

High growth, though essential, is not sufficient for poverty reduction on a sustainable basis. Datt and Ravallion (2010) observed that the interaction between the growth process and the non-income dimensions, particularly human capital (education and health), are important for sustainable poverty reduction. India' s persistent inequalities in human development were a major hindrance to more rapid poverty reduction. Therefore, despite the high rate of economic growth, poverty remains a huge problem in India.

Mehrotra and Delamonica (2007) argued that poverty reduction and economic growth work in a synergistic way through several feedback loops, which involves other variables like health and education. Although economic growth is essential to generate resources for supporting health/education for the poor, ' translating growth into
better quality of life for all citizens requires improvements in outcome indicators pertaining to these dimensions of human development for all socio-economic groups'
(Mehta *et al.* 2011). Policy intervention targeted exclusively at achieving higher economic growth is unlikely to result in signifi cant poverty reduction on a sustainable
basis. Instead, policies aimed at achieving higher levels of human capital and direct action to reduce poverty is required, in addition to rapid economic growth. (Mehrotra and Delamonica 2007).[27]

CONCLUDING REMARKS

Economic attainment and the well-being of individuals is crucially dependent on the status of employment and access to assets. This chapter focuses on employment and asset ownership in both rural and urban India, and also analyses of trends and incidence of poverty. The analysis is done across households belonging to diff erent occupational categories, social groups, and religious communities.

[27] For a detailed discussion on synergies and feedback loops, refer to Chapter 2 of this report, along with Mehrotra and Delamonica (2007).

Box 3.3 Poverty Estimates

In India, the official estimates of poverty are provided by the Planning Commission on the basis of consumption expenditure data collected by the NSSO. The latest poverty estimates are available for the year 2004–5, which are based on 61st Round consumption expenditure data. Apart from the Planning Commission's estimate, various other poverty estimates are available. These are:

1. Planning Commission: 27.5 per cent (based on MPCE of Rs 356 for rural India, and Rs 539 for urban India)
   - NSS 61st Round consumption expenditure data (2004–5)
   - Uniform reference period of 30 days for all items of current household consumption in NSS
   - Diff erent poverty line basket for rural and urban India
2. Tendulkar Committee: 37.2 per cent (based on MPCE of Rs 447 for rural India, and Rs 579 for urban India)
   - NSS 61st Round consumption expenditure data (2004–5)
   - Mixed reference period (365 days for low frequency items, and 30 days for remaining items)
   - Mixed reference period equivalent of urban poverty line basket was used as the poverty line basket for both rural and urban areas.

Based on Tendulkar Committee methodology after adjusting for infl ation, the incidence of poverty for the year 2009–10 was estimated to be 32 per cent (Abhijit Sen 2000).

3. National Commission for Enterprises in the Unorganized Sector: 77 per cent of the population was surviving with a per capita daily consumption expenditure of Rs. 20 or less and were termed as poor and vulnerable.
   - NSS 61st Round (2004–5)
4. Surjit Bhalla: Poverty estimates were based on NSS 64th Round, 2007–8
   - 14 per cent based on Planning Commission poverty line
   - 27 per cent based on Tendulkar Committee poverty line
   - Mixed reference period (365 days for low frequency items, and 30 days for remaining items).

The Expert Group on Estimation of Proportion and Number of Poor, 1993, in its report pointed out several issues in the estimation of poverty which were questionable. It has been pointed out that because of climatic and topographical considerations, population structures, activity status and many other reasons, the poverty level calorie requirement varied across states. So, the poverty line calorie requirement should also be diff erent across states.

The rate of unemployment in India was higher in 2004–5 as compared to 1999–2000. This was primarily the result of higher growth in the labour force as compared to the workforce. A higher LFPR and WFPR for males as compared to females was a common feature in both rural and urban India. Further, the higher female LFPR in rural areas highlighted poorer access to education for earlier generations. Among the Muslims, participation in education and labour force were inversely correlated in rural areas.

The unemployment rate as measured by both usual principal and subsidiary status, and current daily status increased in rural India, which underlines the importance of public works schemes like MGNREGA, which started in 2006. There was a decline in the unemployment rate in urban India, since economic growth has been urban-driven. Across social groups and religious communities, the problem of unemployment was most acute among STs, SCs, and the Muslim population, in that order.

The problem of economic deprivation and vulnerability among STs, SCs, and Muslims was further aggravated by their lack of ownership of physical assets, which could have acted as a cushion in times of economic distress. The ownership of assets in both rural and urban India was characterized by the lack of ownership among SCs, STs, and Muslims, and the concentration of assets amongst other socio-religious groups. The value of the Access Index was lower among SCs, STs, and Muslims. The degree of concentration of assets was higher in urban India than in rural India, which was depicted by the higher value of the Gini coefficient of asset ownership in urban India as compared to rural India.

The acute problem of deprivation and vulnerability amongst SCs, STs, and Muslims was translated into

lower MPCE for these socio-religious groups, along with a higher proportion of MPCE on food items. As a result, the incidence of poverty was higher among these socio-religious groups. Almost one-third of Muslims in the country were living below the poverty line.

Overall, although the incidence of poverty has come down signifi cantly since Independence, the absolute number of people living below the poverty line was still quite high at 300 million in 2004– 5. There were considerable interstate variations in the incidence of poverty, characterized by very high concentrations in the states of Bihar (including Jharkhand), Orissa, Madhya Pradesh (including Chhattisgarh), and Uttar Pradesh (including Uttarakhand). Among the major states, there had been signifi cant reduction in poverty (in 2004– 5 as compared to 1983) in the states of Gujarat, Kerala, Punjab, and West Bengal.

The incidence of poverty using the mixed recall period method of estimating consumption expenditure declined from 22 per cent in 2004– 5 to 15 per cent in 2007– 8. For the year 2007– 8, the poverty estimates were based on the poverty line of Rs 429 per month for rural areas and Rs 639 per month for urban areas. The incidence of pov- erty is much higher in case of SCs and STs in both rural and urban areas. The incidence of poverty among SCs and STs was at least thrice as compared to ' Others' in both rural and urban India.

Interstate disparity in consumption expenditure has declined over time, along with rising inequality in both rural and urban India. Almost 60 per cent of the poor are concentrated in the states of Bihar (including Jharkhand), Orissa, Madhya Pradesh (including Chhattisgarh), and Uttar Pradesh (including Uttarakhand). These states accounted for 43 per cent of STs and 42 per cent of SCs in the country.

In addition to high incidence, poverty was much more severe in the case of the SCs and STs. In rural India, the average MPCE for a poor ST was 18 per cent lower than the poverty line. For other social groups it was 12 per cent.

Given the high levels of unemployment and low level of MPCE (especially among SCs, STs, and Muslims) skill training for the workforce is essential to fully utilize the demographic dividend. Given the fact that hardly 10 per cent of the workforce has some form of skill training, revitalizing the vocational and technical education system in the country becomes crucial for realizing the demographic dividend. This will not only improve employability and help in poverty reduction particularly for those who had to withdraw from the formal education system due to various reasons, but can also contribute substantially to the sustained economic success of the country.

The benefi ts of high growth are yet to reach a very large section of the Indian population, particularly those belonging to SC, ST, and Muslim communities. Clearly, more inclusive economic growth calls for greater integra- tion of social and economic policies. This would, in turn, ensure that the synergies which operate in the social sector through various feedback loops lead to further enhance- ment of capabilities among individuals.

4

The Right to Food and Nutrition

INTRODUCTION

The right to food is a human right. The right to food is to ensure that all people have the capacity to feed themselves in dignity. In other words, ' The right to adequate food is realized when every man, woman and child, alone and in community with others, has physical and economic access at all times to adequate food or means for its procure- ment' .[1] Inspired by this defi nition, the Special Rapporteur has concluded that the right to food entails.

⋯ the right to have regular, permanent and unrestricted access, either directly or by means of fi nancial purchases, to quanti- tatively and qualitatively adequate and sufficient food corre- sponding to the cultural traditions of the people to which the consumer belongs, and which ensures a physical and mental, individual and collective, fulfi lling and dignifi ed life free of fear.' (A/HRC/7/5, para 17)

The above defi nition indicated that the right to food means that governments must not take actions that result in increasing levels of hunger, food insecurity, and malnutrition. Addressing the problems of hunger, food insecurity, and malnutrition has far-reaching implications for enhancing individual capabilities. Hunger is defi ned by the Hunger Task Force (2003) as ' A condition, in which people lack the basic food intake to provide them with the energy and nutrients for fully productive lives' (ibid., 33). The Food and Agriculture Organization (FAO) has defi ned the absence of hunger as ' access by all people at all times to enough nutritionally adequate and safe food for an active and healthy life' (FAO 2000: 1). Access to or intake of calories and nutrients (includes micronutri- ents) relative to requirements that vary largely by age, sex, and activities are critical for measuring hunger. Hunger is most directly apparent in inadequate food intake and a poor diet and is directly related to malnutrition. Over time, the combination of low birth weight and high rates of infection can result in the stunted growth of children. The most extreme manifestation of continued hunger and malnutrition is mortality.

In a wider context, malnutrition emanates from eating too much or eating too little, or eating an unbalanced diet that lacks necessary nutrients. Since the last two are major nutritional problems in India, this chapter focuses pri- marily on them. Eating too little or eating an unbalanced diet leads to undernutrition, which is defi ned as the failure to consume adequate energy, protein, and micronutrients to meet the basic requirements for body maintenance, growth, and development. This in turn leads to nutri- tion related problems characterized by low height for age (stunting), and/or low weight for height (wasting), and/or low weight for age (underweight).

There are three major dimensions of hunger namely, (a) chronic or endemic hunger, (b) latent hunger, and (c) transient hunger.[2] Hunger Index of India, measured by the equally weighted average of three indicators namely,

[1] http://www.unhchr.ch/tbs/doc.nsf/0/3d02758c707031d58025677f003b73b9 General Comment 12, 1999, para 6

[2] Chronic or endemic hunger is due to poverty-induced undernutrition, transient hunger is caused by seasonal fl uctuations in food availability and disruptions in communication and transport arising from natural or manmade disasters, and latent hunger, arising from micro-nutrient malnutrition, is caused by the defi ciency of iron, iodine, zinc, and vitamins in the diet.

percentage of undernourished population, percentage of underweight children, and mortality rate of children under the age of five, stood at 31.7 in 1990 and came down to 24.1 by 2010, which is still alarming.[3] This indicates that the reduction in hunger is very slow and achieving the first Millennium Development Goal (MDG)—'the eradication of extreme poverty and hunger'[4]—appears to be difficult, at least in the near future.

A comparison of India's hunger indicators with international indicators presents a dismal picture. As compared to Brazil, Russia, and China (BRC) of the Brazil, Russia, India, and China (BRIC) nations and other South Asian Association for Regional Cooperation (SAARC) countries, India's performance is the worst in terms of low birth weight,[5] underweight children,[6] and wasting.[7] For instance, 43 per cent of under-five children in India were underweight during the period 2000–7, which is the worst in South Asia and worse than the worst performer in the Sub-Saharan African region. Even the least developed countries were found to have performed better than India. In stark contrast, China had only 6 per cent under-five children who were underweight during this period and Brazil had only 4 per cent. Similarly, among SAARC countries India trails behind Sri Lanka, Nepal, and Pakistan (Table 4.1) (UNICEF 2009).

As per the *Nutrition Report* (2009) of the *National Family and Health Survey 3* (*NFHS 3*), the average of 26 Sub-Saharan African countries in terms of undernourished children under five years was only 25 per cent, almost half the Indian average of 48 per cent. In fact, except for Kerala, Himachal Pradesh, Punjab, Sikkim, Manipur, and Mizoram, all other Indian states were either at par or below the average of Sub-Saharan African countries.

Table 4.1 Nutritional Status of Children: SAARC and BRIC Countries, 2000–7

	Low Birth Weight	*Under Five Underweight Children (WHO Reference Population)*	*Wasting (Moderate & Severe)*	*Stunting (Moderate & Severe)(NCHS/WHO)*
BRIC				
India*	28	43	19	38
Brazil	8	4	–	–
China	2	6	–	11
Russia	6	–	1	4
SAARC				
Afghanistan	–	33	7	54
Bangladesh	22	41	16	36
Bhutan	15	14	3	40
Maldives	22	–	13	25
Nepal	21	39	12	43
Pakistan	19	31	13	37
Sri Lanka	22	23	14	14

Source: *The State of the World's Children Report,* UNICEF 2009.
Note: * Data reported in this table for India is not strictly comparable with data reported by NFHS—Data not available.

[3] If the index lies in the range 20.0–29.9, then it is said to be alarming. For details of measurement, see IFPRI (2010) 'Global Hunger Index—the Challenge of Hunger: Focus on the Crisis of Child Undernutrition'.

[4] For further details, see Chapter 5 on 'Health' and Demography.

[5] Percentage of infants weighing less than 2,500 grams at birth.

[6] Percentage of children aged 0–59 months who are below minus two standard deviations from median weight for age of the WHO Child Growth Standards published in 2006.

[7] Percentage of children aged 0–59 months who are below minus two standard deviations from median weight for height of the NCHS/WHO reference population.

Some of the major findings of this chapter are given below.

Overall Performance

- India is the worst performer in terms of low birth weight, underweight, and wasting among children in BRIC and SAARC countries;
- Nearly half of India's children under three are mal- nourished;
- There are wide gaps between states and rural and urban areas with respect to cereal consumption;
- A very high percentage (21.5 per cent) of babies in India are born with low birth weight;
- Child malnutrition is higher in rural areas than in urban areas;
- There has been a significant decline in stunted children in India (from 52 per cent in 1992–3 to 38.4 per cent in 2005–6);
- The prevalence of anaemia among adolescent girls is very high with severe anaemia being more prevalent among them than among pre-school children;
- Anaemia among children has increased over the years with rising rural–urban disparity;
- Among the industrial high per capita income states, Gujarat fares the worst in terms of overall hunger and malnutrition.

With Respect to Interstate Disparities

- There are high interstate disparities with respect to overall hunger in India, with the poor states at the bottom;
- There is high concentration of adult malnutrition (BMI<18.5)[8] among the poor states;
- There is an increasing trend of malnutrition among adult women in the low income states;[9]
- Interstate disparity has been increasing for malnutrition in adult women belonging to SCs and STs;[10]
- Severely underweight children are concentrated in the low per capita income states;[11]
- There has been a marginal increase in interstate disparities with respect to any anaemia among women; and
- A higher percentage of children suffer from anaemia in states with low per capita incomes compared to rich states.

With Respect to Social Groups

- SCs and STs have a higher percentage of women with BMI<18.5;
- SCs and STs are diverging from the national average in terms of female malnutrition;
- There are 13 states[12] for which malnutrition among SC women is diverging overtime from the national average, but there are 10 states[13] for which it is converging;
- There are 14 states[14] for which malnutrition among ST women is diverging overtime from national average; but there are only three states[15] for which it is converging;
- Among the industrial states, Gujarat has a very high incidence of malnutrition among SC and ST women;
- More than 50 per cent of ST children are underweight and stunted;
- More than 75 per cent of ST children have anaemia; and
- There is an increasing trend of anaemia among women for all caste groups.

[8] BMI (Body Mass Index) is defined as weight in kilograms divided by height in metres squared and reflects the nutritional status of adults. A cut-off point of 18.5 is used to define thinness or undernutrition. The percentage of persons with BMI below 18.5 kg/m^2 indicates the severity of malnutrition among adults.

[9] Assam, Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh.

[10] In 2005–6, Bihar, Orissa Madhya Pradesh, Assam, West Bengal, Uttar Pradesh, and Gujarat had high female malnutrition for SCs; and Bihar, Tamil Nadu, Gujarat, West Bengal, Orissa, Maharashtra, Rajasthan, Chhattisgarh, Uttarakhand, Madhya Pradesh, Jharkhand, Haryana, and Karnataka have female malnutrition (above the national average) among STs.

[11] Example: Madhya Pradesh, Jharkhand, Bihar, Chhattisgarh, Orissa, and Uttar Pradesh have over 40 per cent of underweight children.

[12] Assam, Bihar, Delhi, Goa, Haryana, Gujarat, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Uttarakhand, and Uttar Pradesh.

[13] Chhattisgarh, Himachal Pradesh, Jharkhand, Jammu and Kashmir, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Sikkim, and West Bengal.

[14] Andhra Pradesh, Assam, Bihar, Delhi, Goa, Gujarat, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Karnataka, Kerala, Tamil Nadu, and Uttar Pradesh.

[15] Chhattisgarh, Jammu and Kashmir, and West Bengal.

With Respect to Religious Communities

- There is no difference between Hindus and Muslims in terms of malnutrition among women;
- Both Hindus and Muslims are diverging from the national average overtime in terms of malnutrition among women;
- There is no difference between Hindu and Muslim women with respect to anaemia;
- Hindus recorded the highest percentage of underweight and stunted children; and
- States with a high concentration of Muslim population have a higher percentage of children suffering from anaemia.

Given the current situation, the Government has universalized the Integrated Child Development Scheme (ICDS) programme in India to provide adequate nutrition to children below the age of five years during the Eleventh Five Year Plan. Further, in some states it has introduced snacks in the morning and hot cooked meals at lunch time for children under five years of age. In the 2011–12 budget the Government has proposed to increase the salary of Anganwadi workers and helpers in an effort to motivate ground level ICDS workers. Whether the universalization of ICDS will have the desired effect remains to be seen—since the quality of the programme must improve to ensure its effectiveness.

The following sections discuss conceptual and empirical dimensions of malnutrition, the Hunger Index across major Indian states, and the anthropometric indicators of malnutrition, including adult and child malnutrition in the context of anaemia, micronutrients, iodine deficiency, and Vitamin A deficiency. This is followed by a summary of the situation analysis and a description of some of the major government programmes that have been introduced to address the problem of malnutrition in India. The last section presents the conclusions reached.

MALNUTRITION: A CONCEPTUAL AND EMPIRICAL ANALYSIS

Conceptual Issues

Conceptual issues on malnutrition can be better understood through the feedback loops in the Human Development process—at the micro-economic level (Table 1.1 of Chapter 1) that shows how various parameters can act both as inputs as well as outcomes in the human development process (Mehrotra and Delamonica 2007). For instance, better educated people, particularly mothers, practice better sanitation and provide good nutrients to children that helps in development of the child's brain during early childhood, and hence improves his/her learning ability. Similarly, access to safe drinking water and adequate sanitation facilities reduce morbidity from infectious diseases and increase nutritional status of children.

Malnutrition reflects an imbalance of both macro- and micro-nutrients that may be due to inappropriate intake and/or inefficient biological utilization due to the internal and external environment. Poor feeding practices during infancy and early childhood, resulting in malnutrition, contribute to impaired cognitive and social development, poor school performance, and reduced productivity in later life. Malnutrition, therefore, is a major threat to social and economic development as it is among the most serious obstacles to attaining and maintaining the health of this important age group.[16] There is a critical link between health and good nutrition. Interventions in health promote good nutrition, and interventions in nutrition promote good health.

When poor nutrition starts *in utero*, it extends throughout the life cycle, particularly in girls and women. This not only amplifies the risks to the individual's health, but also increases the likelihood of damage to future generations, through further foetal retardation. Poor nutrition of the mother during pregnancy leads to low birth weight (LBW) of the baby. LBW increases the risk of infant and child mortality and those infants who survive are usually undernourished, fall ill frequently, and fail to develop optimally, both physically and mentally. Further, undernourished adults are functionally impaired and unable to sustain productive physical activity throughout the day. The lack of nutritional requirements leads to sluggish recovery from illness. Malnutrition can also be linked to the growing HIV/AIDS pandemic as malnutrition makes adults more susceptible to the virus. The conceptual framework for the causes of malnutrition is presented in Figure 4.1.

[16] Scientific evidence suggests that mental damage due to malnutrition in early childhood is irretrievable. For a detailed discussion see A.D. Berg (1968), 'Malnutrion and National Development', *The Journal of Tropical Pediatrics*, September, pp. 116–24; and UNICEF (1981), 'The Impact of Malnutrition on the Learning Situation', May.

In the light of Figure 4.1, this chapter discusses the challenges with regard to hunger removal that still remain, including, high levels of adult malnutrition affecting a third of the country's adults, inappropriate infant feeding and caring practices, high levels of undernutrition, particularly in women and children, micronutrient undernutrition, emerging diet-related diseases, and inadequate access to healthcare.

This graph suggests not only the underlying and proximate causes of malnutrition, and can explain why malnutrition is so high in India, but also within it lies the policy implications to ensure the elimination of malnutrition and adult chronic hunger. That malnutrition begins in utero suggests that in order to deal with the problem, the focus of policy must be on (a) pregnancy; and (b) the first year after birth (since most child deaths occur during the first year). The graph also suggests that during pregnancy and the first year after childbirth, government policy must ensure that adequate food (and ante-natal care) is reaching (a) the pregnant woman, and (b) post-natal care for the mother and baby in the first year at least.

Since malnutrition that sets in utero can either get exacerbated or improve during the first two years after birth, it is critical that caring practices for mothers (just before and after childbirth) and children are optimal. This is because, if caring practices are sub-optimal, the nutritional damage will become irreversible after age three—and can never be corrected again in the life of the child as she grows into an adult. As we will argue in this chapter and the next, prevention of this damage is contingent upon having a functional primary health system. In practical terms, this requires that (a) child birth takes place under the supervision of a professionally-trained health provider or at a medical institution; (b) the new born baby is fed colustrum within the first hour after birth, so that the infant develops the immunities that only the mother's first breast milk (colustrum) can provide; (c) the mother and baby receive very careful post-natal care during the first 28 days after birth, since that is the period during which infections lead to most of the infant deaths during the first year after birth; (d) for the first six months, the mother exclusively breastfeeds the baby, and the baby is absolutely not fed anything else; (e) after six months the mother introduces

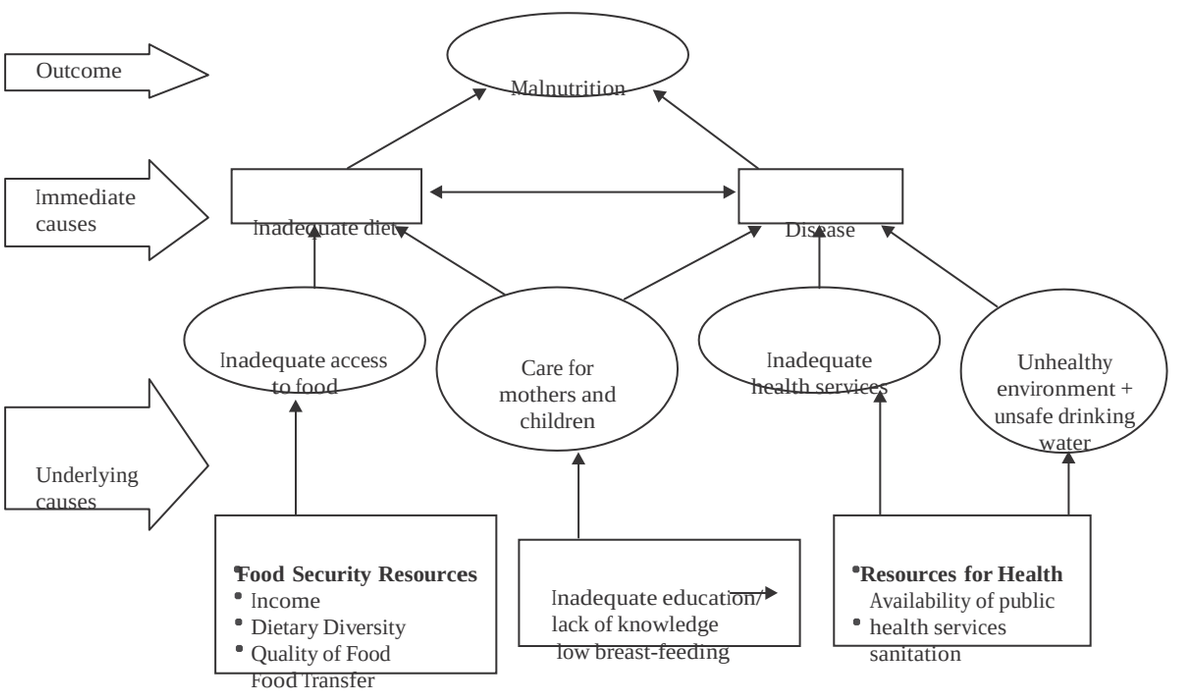

Figure 4.1 Conceptual Framework: Determinants of Malnutrition

Source: Adapted from UNICEF (1990); Jonsson (1993); Smith and Haddad (2000); and Mehrotra (2003).

solid-mushy food, alongside breastfeeds, in adequate quantity and at appropriately short timely intervals; and (f) full immunization of the baby is ensured.

As we will argue in this chapter and the next, most of these conditions are not met in the case of a shockingly high proportion of the population.

Gender Discrimination and Child Malnutrition

A fundamental reason why these conditions are not met in most of India (and much of South Asia) is that gender discrimination in India (and South Asia) is among the worst in the world. Even in 2011, adult female literacy is barely 65 per cent, or nearly 10 percentage points behind male literacy. Moreover, female labour force participation rates are among the lowest in any developing region—so outside of agriculture the labour participation rates of women remains low. Although this situation is changing among adolescent girls (see Chapter 6), but for women in the reproductive age this combination of poor education and low labour force participation outside of agriculture translates into low autonomy in the household. Worst still, married women are unlikely to have any decision- making authority in the presence of the mother-in-law, who normally is a member of the household, and who may herself be illiterate in rural areas and lacking in mother and child-care relevant knowledge.

Thus, in the northern states of India, where literacy levels are the lowest, and child malnutrition rates the highest, systematic gender discrimination over the life-cycle has a number of eff ects. These are also the states with the most dysfunctional public health systems, so inadequate health services lead to greater incidence of disease for women and food absorption problems. A higher incidence of income-poverty leads to inadequate access to food, especially in poor households, where the intra-household allocation of resources is biased against women. Finally, low literacy among reproductive-age women makes for low levels of knowledge, and hence worse care for children. All combine to produce a high child malnutrition rate.

Empirical Analysis

Availability of cereals and calorie consumption has been declining

It is evident from Table 4.2 that the overall per capita intake of calories and protein has declined consistently over a 20-year period from 1983 to 2004– 5, according to NSS data. Rural calorie consumption per day fell from 2,221 to 2,047, a decline of 8 per cent. Similarly, the urban calorie consumption fell by 3.3 per cent, from 2,080 to 2,020. Rural protein consumption fell by 8 per cent over the same period while urban protein consumption remained unchanged. Since this data is for households, they do not capture the impact of unequal intra-household food distribution. It is well known that the women and girls in poor households receive poorer quality food and less food in a normal patriarchal household.

Further, there may well be a problem for signifi cant sections of the population who may be feeling the distress caused by falling per capita cereal availability, and who also do not have the purchasing power to diversify their food consumption away from cereals.

The poor are consuming calories way below the recommended norm

So, taken together, there are a set of overlapping problems in the country. First, the average calorie consumption in rural areas has fallen way below the calorie norm for the rural poverty line (2,400 calories). It was lower than the norm 20 years ago and it has fallen further since then. Similarly, urban consumption which was also much lower on average than the poverty line threshold of

Table 4.2 Per Capita Intake of Calories and Protein, 1983 to 2004–5

	Calorie		*Protein (gm/day)*	
	Rural	*Urban*	*Rural*	*Urban*
1983 (NSS 38th Round)	2,221	2,089	62.0	57.0
1993–94 (NSS 50th Round)	2,153	2,071	60.2	57.2
1999–2000 (NSS 55th Round)	2,149	2,156	59.1	58.5
2004–05 (NSS 61st Round)	2,047	2,020	57.0	57.0

Source: NSS, 2004–5.

2,100 calories two decades ago has also fallen. It is obvious that the non-poor consume more calories on average than the poor. Hence, to allow for the distributional inequity that prevails in any society, calorie availability on average in the country as a whole should be at least
20 per cent higher than the per capita requirement (that is, 2,100 calories for urban areas and 2,400 calories for rural areas). Even 20 years ago, an Indian's consumption of calories on average was way below the requirement. So, inevitably the poor, let alone the extremely poor, were and still are consuming far fewer calories than the norm. In addition the intra-household allocation, not just among the poor but also among those who are marginally above the poverty line, is likely to be highly skewed against women and girls. When combined with the fact that women and girls are less likely to access health services when they fall sick (as reported by various NFHSs), it is hardly surprising that the sex-ratio in India is as low as it is, and falling.

No improvement in intergenerational height of mother and daughter

The Eleventh Five Year Plan document suggests that the absolute weights and heights of Indians, on an average, have not shown significant improvement over the last 25 years. A staggering 21.5 per cent of babies in India are born with low birth weight (*NFHS 3*),[17] a problem that begins in-utero. It is therefore, not surprising that about half the children are underweight (moderate to severe undernutrition) or stunted.

The mean heights and weights of children of SCs, STs, and other marginalized sections are below the national mean values. In addition, about 30 per cent of all adults (33 per cent of women and 28 per cent of men) have a BMI less than 18.5, which defines adult malnutrition.
Further, there is no improvement in the heights of daughters over mothers, indicating intergenerational stagnation of height among Indian women. Hence, growth failure is transmitted across generations through the mother. The theory is that small adult women are more likely to have LBW babies, in part because maternal size has an important influence on birth weight. LBW babies are more likely to have growth failure during childhood. Thus, girls born with a low birth weight are more likely to become small adult women. This cycle is accentuated by high rates of teenage pregnancy, as adolescent girls are even more likely to have LBW babies.

Calorie and multiple nutrient deficiencies lead to the high incidence of malnutrition in India

Some of the reasons for this grim picture in India are listed below. With a 500–600 kilocalorie deficit in energy intake (almost 40 per cent of their requirement) and multiple nutrient deficiencies such as fat, calcium, iron, riboflavin, vitamin C (all 50 per cent deficit), and Vitamin A (70 per cent deficit), it is not surprising that there is a massive inadequacy/hunger leading to malnutrition in children and adolescents. Studies by the National Nutrition Monitoring Bureau (NNMB) reported that protein-calorie adequacy is less than 30 per cent among children and it has been decreasing for all age groups (Table 4.3). The study also reported that the consumption

Table 4.3 Percentage Distributions of Children and Adults by Protein-Calorie Adequacy Status, 2002 and 2006

Year	*2002*		*2006*	
Age (yrs)	*%*		*%*	
1–3	31.8		30.1	
4–6	28.2		23.8	
7–9	28.1		24.4	
	Boys	Girls	Boys	Girls
10–12	26.0	32.9	22.4	21.7
13–15	34.7	43.1	29.0	38.2
16–17	50.2	64.0	45.3	61.5
Adult Sedentary	Men–68.8 Women–81.8		Men–67.9 Women–80.0	
Pregnant Women	64.3		61.0	
Lactating Women	62.2		59.7	

Source: NNMB Reports, 2002 and 2006.
Note: NNMB Report, 2002 covers 10 states and NNMB Report, 2006 covers nine states. They cover only rural areas according to the villages covered by the NSS. Therefore, both the reports may not be strictly comparable, but they present an overview of India's protein-calorie adequacy status.

[17] It has been scientifically established that a mean deficit of 1.4 to 1.6 kg in weight at one year worsens to a deficit of about 9 kg at 10 years and 13–18 kg in adulthood. A similar trend is seen in the case of height, where a deficit of 1cm at 1 year becomes 12–13 cm in adulthood.

of all food items except for roots and tubers were below the recommended dietary intake (RDI) levels in all age, sex, and physiological groups. The consumption of protective foods was grossly inadequate; consequently, the intake of micronutrients such as iron, vitamin A, riboflavin, and folic acid was far below the recommended levels (NNMB 2006).

On further scrutiny of the diet surveys, it becomes clear that over 70 to 80 per cent of the calories consumed by children (even though inadequate) are derived from cereals and pulses. This results in two things

- Children cannot consume more cereals to make up for the calorie deficiency because of its sheer monotony and lack of energy density.
- In the absence of fats, milk, eggs, and sources of iron, children are starved. The resultant iron deficiency, anaemia, further reduces their appetite.

Since 1972–3, calorie consumption by the poor is far below recommended levels and falling

Recent studies have suggested that per capita cereal consumption of India has been declining in both rural and urban areas over the past three decades (Planning Commission 2008; Dev 2004). It is evident from Table 4.4 that the decline is across all the major states and affects both rural and urban areas to a similar extent. For instance, in rural Andhra Pradesh, the per capita cereal consumption was 13.3 kilograms/month during 1993–4, which came down to 12.07 kilograms/month by 2004–5. The corresponding figures for urban Andhra Pradesh are

Table 4.4 Changes in Average Per Capita Cereal Consumption in 15 Major States in Physical Terms over 1993–94 to 2004–5

Year	*RURAL*							
	Monthly per capita cereal consumption (kg.) in the states of							
	AP	*ASM*	*BHR**	*GUJ*	*HAR*	*KTK*	*KRL*	*MP #*
1993–4	13.3	13.2	14.3	10.7	12.9	13.2	10.1	14.2
1999–2000	12.65	12.63	13.75	10.19	11.37	11.53	9.89	12.94
2004–5	12.07	13.04	13.08	10.07	10.66	10.73	9.53	12.16
	MAH	ORS	PUN	RAJ	TN	UP^	WB	IND
1993–4	11.4	15.9	10.8	14.9	11.7	13.9	15.0	13.4
1999–2000	11.32	15.09	10.58	14.19	10.66	13.62	13.59	12.72
2004–5	10.50	13.98	9.92	12.68	10.89	12.87	13.18	12.12
Year	*URBAN*							
	Monthly per capita cereal consumption (kg.) in the states of							
	AP	*ASM*	*BHR**	*GUJ*	*HAR*	*KTK*	*KRL*	*MP#*
1993–4	11.3	12.1	12.8	9.0	10.5	10.9	9.5	11.3
1999–2000	10.94	12.26	12.70	8.49	9.36	10.21	9.25	11.09
2004–5	10.51	11.92	12.21	8.29	9.15	9.71	8.83	10.63
	MAH	ORS	PUN	RAJ	TN	UP^	WB	IND
1993–4	9.4	13.4	9.0	11.5	10.1	11.1	11.6	10.6
1999–2000	9.35	14.51	9.21	11.56	9.65	10.79	11.17	10.42
2004–5	8.39	13.11	9.01	10.84	9.48	10.94	10.39	9.94

Source: NSS 50th, 55th, and 61st Rounds.
Notes: * includes Jharkhand; # includes Chhattisgarh; ^ includes Uttarakhand.

11.3 kilograms/month, and 10.51 kilograms/month respectively. Rural Orissa registered the highest per capita cereal consumption among major states for both time periods, but it has witnessed a deceleration.

The same was also observed for rural Kerala, the state with the lowest per capita cereal consumption.

Increase in the share of non-cereals is not enough to compensate for decline in cereal consumption

As suggested by Table 4.5, the share of food in total expenditure continued to fall throughout the three decades prior to 2004–5 in both rural and urban India. The overall fall was from 73 per cent to 55 per cent in rural areas and from 64.5 per cent to 42.5 per cent in urban areas. In urban India, not only has the share of cereals and pulses fallen, but there has been a steady fall in the share of other food groups as well; such as milk and milk products, edible oil, eggs, beverages, and sugar. In rural India, however, the share of milk and milk products, eggs, fish and meat, and fruits and nuts has increased by about one percentage point each, the share of vegetables has increased by 2.5 percentage points, and that of beverages, refreshments, and processed foods has increased by two percentage points since 1972–3. Apart from cereals, only the shares of sugar and pulses (the latter largely during the last decade) have declined noticeably. However, the increase in the share of non-cereals is not enough to compensate for the 22.6 per cent decline in cereal consumption.

Calorie consumption of the poorest quartile is significantly lower than the top quartile of the population

Nutritional requirements recommend a national norm of 2,400 kilo calories/day and 2,100 kilo calories/day for rural and urban areas, respectively, the difference being attributed to the lower rates of physical activity in the urban areas. These were the norms for consumption of calories at the poverty line for rural and urban areas that were agreed in the Planning Commission while determining the poverty line in 1973–4. However, the poor consume much below this recommended level of calories in both rural and urban areas. In rural areas, about 81 per cent of the population do not consume the recommended levels, and for urban areas it is about 57 per cent (Table 4.6). Further, calorie consumption for the bottom 50 per cent of the population has been consistently decreasing since 1987 (Table 4.7). The calorie consumption of the poorest quartile is significantly lower than the top quartile of the population, despite the poor needing more calories because of more manual work. On the one hand, cereal consumption is declining with no compensatory rise in non-cereal consumption, and on the other, the calorie intake is much below the required level and has also been showing a declining trend for more than 20 years for the

Table 4.5 Composition of Food Consumption, Rural and Urban 1972–3 to 2004–5

Sector	*Year*	*% share of major food groups in total expenditure*									
		All Food	*Cereals*	*Pulses*	*Milk and Milk Products*	*Edible Oil*	*Eggs Fish and Meat*	*Vegetables*	*Fruits and Nuts*	*Sugar*	*Beverages, etc.*
Rural	1972–73	72.9	40.6	4.3	7.3	3.5	2.5	3.6	1.1	3.8	2.4
	1987–88	64.0	26.3	4.0	8.6	5.0	3.3	5.2	1.6	2.9	3.9
	1993–4	63.2	24.2	3.8	9.5	4.4	3.3	6.0	1.7	3.1	4.2
	1999–00	59.4	22.2	3.8	8.8	3.7	3.3	6.2	1.7	2.4	4.2
	2004–05	55.0	18.0	3.1	8.5	4.6	3.3	6.1	1.9	2.4	4.5
Urban	1972–73	64.5	23.3	3.4	9.3	4.9	3.3	4.4	2.0	3.6	7.6
	1987–88	56.4	15.0	3.4	9.5	5.3	3.6	5.3	2.5	2.4	6.8
	1993–94	54.7	14.0	3.0	9.8	4.4	3.4	5.5	2.7	2.4	7.2
	1999–00	48.1	12.4	2.8	8.7	3.1	3.1	5.1	2.4	1.6	6.4
	2004–05	42.5	10.1	2.1	7.9	3.5	2.7	4.5	2.2	1.5	6.2

Source: Planning Commission (2008).

Table 4.6 Per Capita Per Diem Intake of Calories (Kcal) by MPCE Class, 2004–5

Rural			*Urban*		
MPCE Class (Rs)	*Cumulative Persons as Per Cent of the Total*	*Calorie Consumption*	*MPCE Class (Rs)*	*Cumulative Persons as Per Cent of the Total*	*Calorie Consumption*
0–235	2.9	1,376	0–335	5.4	1,413
235–270	5.7	1,575	335–395	10.7	1,608
270–320	12.0	1,679	395–485	21.0	1,687
320–365	19.2	1,800	485–580	31.2	1,833
365–410	27.0	1,885	580–675	40.0	1,856
410–455	34.8	1,962	675–790	48.7	1,943
455–510	44.0	2,042	790–930	57.1	2,024
510–580	54.7	2,158	930–1,100	65.4	2,110
580–690	67.4	2,290	1,100–1,380	75.5	2,209
690–890	81.4	2,380	1,380–1,880	87.1	2,341
890–1155	90.1	2,568	1,880–2,540	93.8	2,545
> 1155	100.0	3,018	> 2,540	100.0	2,839
Average		2,047			2,020

Source: 61st Round of NSS.

Table 4.7 Total Calorie Consumption (Kcal) by Decile and Quartile of Per Capita Expenditure, Rural India, 1983 to 2004–5

	Bottom Decile	*Bottom Quartile*	*Second Quartile*	*Third Quartile*	*Top Quartile*
1983	1,359	1,580	2,007	2,328	3,044
1987–8	1,488	1,683	2,056	2,334	2,863
1993–4	1,490	1,659	2,000	2,251	2,702
1999–2000	1,496	1,658	1,978	2,250	2,707
2004–5	1,485	1,624	1,900	2,143	2,521

Source: 61st Round of NSS.

vast majority, thus reinforcing the magnitude and intensity of hunger in India.

THE STATUS OF HUNGER ACROSS STATES

High interstate disparities with poor states at the bottom

The fundamental challenge before India is to help the states with alarming levels of malnutrition to at least reach the level of the states where the severity of the problem is much less. This extends to other dimensions of human development as well. The state-wise Hunger Index estimated for 17 states is presented in Table 4.8.[18]

It is evident from Table 4.8 that there is not a single state whose Hunger Index is less than 9.9, suggesting thereby that all the states have a serious to extremely alarming situation of hunger. The best performing state is Punjab, with a Hunger Index of 13.63, categorized as having a serious problem of hunger, in spite of its fairly high per capita income. Kerala, Andhra Pradesh, and

[18] If the score is < 4.9 it is low, 5.0– 9.9 is moderate, 10.0– 19.9 is serious, 20.0– 29.9 is alarming, more than 30, it is extremely alarming. For the detailed methodology and cut-off points, see *India State Hunger Index: Comparisons of Hunger across States* by Menon *et al*. (2009).

Table 4.8 Hunger Index of Selected Indian States, 2008

States	*Prevalence of Calorie Under Nourishment (per cent)*	*Proportion of Underweight Children Less than 5 years of Age (per cent)*	*Under Five Mortality Rate (Per 100)*	*Hunger Index (HI)*	*Rank as Per HI*
Punjab	11.1	24.6	5.2	13.63	1
Kerala	28.6	22.7	1.6	17.63	2
Andhra Pradesh	19.6	32.7	6.3	19.53	3
Assam	14.6	36.4	8.5	19.83	4
Haryana	15.1	39.7	5.2	20.00	5
Tamil Nadu	29.1	30.0	3.5	20.87	6
Rajasthan	14.0	40.4	8.5	20.97	7
West Bengal	18.5	38.5	5.9	20.97	8
Uttar Pradesh	14.5	42.3	9.6	22.13	9
Maharashtra	27.0	36.7	4.7	22.80	10
Karnataka	28.1	37.6	5.5	23.73	11
Orissa	21.4	40.9	9.1	23.80	12
Gujarat	23.3	44.7	6.1	24.70	13
Chhattisgarh	23.3	47.6	9.0	26.63	14
Bihar	17.3	56.1	8.5	27.30	15
Jharkhand	19.6	57.1	9.3	28.67	16
Madhya Pradesh	23.4	59.8	9.4	30.87	17
India	20.0	42.5	7.4	23.30	

Source: Menon *et al.* (2009).

Assam are the other three states with a serious problem of hunger. Madhya Pradesh is found to be the worst off as the hunger situation in the state is extremely alarming. The gap between the best performing state and the worst performing state is quite large, indicating that disparity in hunger across states is high. The data shows that incidence of hunger is very high in India.

It is important to note that the hunger status measured by the Hunger Index for some industrial states and states with high per capita income, namely, Tamil Nadu, Maharashtra, Karnataka, and Gujarat is worse than some poor states.[19] This suggests that economic prosperity alone cannot reduce hunger. Hence, there is a need for specific target oriented policies to improve the hunger and malnutrition situation. Inclusive economic growth and targeted strategies to ensure food sufficiency, reduce child mortality, and improve child nutrition are urgent priorities for all states in India. Given the serious problem of hunger, some of the outcome indicators are discussed in the following section.

MALNUTRITION: ANTHROPOMETRIC INDICATORS

The caring capacity of mothers is impaired

Malnutrition often begins *in utero* and extends to adolescent and adult life. A mother's health status is therefore intricately linked to the health status of the child and the society at large. The proximate determinant of a child's

[19] Assam, which is believed to be a poor state, is doing better than these four so-called developed states. Uttar Pradesh, West Bengal, and Rajasthan are performing better than Gujarat, Maharashtra, and Karnataka. Orissa, which has the highest incidence of poverty according to the latest NSSO report, is doing better than Gujarat, one of the most advanced industrial states of India.

health and nutritional status is caring capacity of the mother. The caring capacity of the mother in turn depends upon her own health, her physical capacity to breastfeed for an extended period, and her status in society. In the Indian context, women's health is affected over the life span due to life cycle discrimination against women.[20] For instance, in a patriarchal Indian society females often eat after males. This has a significant bearing particularly on poor households as they do not have enough food to eat. Thus, lack of food has an adverse impact on the nutritional status of the woman, which begins in her childhood, and this in turn has serious implications for her caring capacity, both for herself as well as for the family as a whole. Therefore, women's health and nutritional status should be the foremost concern if we wish to understand child health issues (see Figure 4.1).

Women's malnutrition has multiple implications for human development. Maternal malnutrition and iron deficiency anaemia increase the risk of the mother dying at delivery. Maternal malnutrition impacts significantly on aspects such as intra-uterine growth retardation and child nutrition. Low birth weight among children is the result of the mother's poor nutritional status, as malnourished mothers give birth to low weight babies. Underweight mothers giving birth to underweight children have low capacity to exclusively breastfeed them for the first six months after the birth, which is critical for the survival of the child and for the development of the brain. Further, the lack of awareness among women, mainly due to lack of education, results in improper care of children, often leading to diarrhoea and other diseases, resulting in high infant mortality. Improper care and lack of exclusive breastfeeding are a hindrance to children's physical and mental development. This results in poor performance in schools and high dropout rate at primary school level particularly in class one. The details on education can be found in Chapter 6 on 'Education'.

Adult Malnutrition

The nutritional status of adults can be assessed by BMI and Iron Deficiency Anaemia (IDA). It is evident from *NFHS 2* (1998–9) and *NFHS 3* (2005–6) data that there is no change in the percentage of women with BMI<18.5 at the national level.[21] Delhi and Kerala recorded the lowest proportion (about 15 per cent and 18 per cent, respectively) of underweight women in 2005–6. Punjab, one of the highest per capita income states in India, has witnessed a rise in this indicator. This suggests that economic prosperity is not a sufficient condition for reducing malnutrition.

No difference between Hindus and Muslims in adult female malnutrition

The major religious communities, namely Hindus and Muslims, have a similar situation of adult women's mal-nutrition. The percentage of Hindu and Muslim women with BMI<18.5 was close to the national average but the percentage is decreasing for Hindus whereas it is increasing for Muslims.

One of the highest increases was for Muslims in the state of Orissa.[22] Nine states have witnessed an increasing trend of female malnutrition for Hindus as well as Muslims.

In both religious communities, the highest incidence of women's malnutrition is observed to be concentrated among the low per capita income states. Bihar recorded the highest percentage of malnutrition among Hindu women, and Orissa recorded the highest for Muslim women (Table 4A.2).

Socially marginalized groups are found to be at a disadvantage with respect to adult female malnutrition. Malnutrition among women is higher than the national average of 36 per cent for both the SCs (41 per cent) and STs (47 per cent). The 'Others', that is, the general category women, had the lowest incidence of women with BMI<18.5 (29 per cent).

The state-wise data for different social groups for 2005–6 illustrates that malnutrition among Scheduled Caste (SC) and Scheduled Tribe (ST) women is very high in the states with low per capita income. For example, in Bihar and Orissa, more than 50 per cent of the SC women are malnourished. It is evident from Table 4A.3 that economically and educationally backward states are the worst off.[23] Further, interstate disparities with respect to

[20] India at present ranked 122 in Gender Equality Index which is the worst among the South Asian countries excluding Afghanistan (UNDP HDR 2010).

[21] It was 35.8 per cent in 1998–9 and 35.6 per cent in 2005–6.

[22] Percentage of Muslim women with BMI<18.5 for Orissa was 39.1 per cent in 1998–9 and the figure rose to 64.1 per cent by 2005–6.

[23] For detailed educational and economic status of social groups, see Chapter 6 on 'Education' and Chapter 3 on 'Employment, Asset Ownership, and Poverty'.

adult female malnutrition for SCs and STs have increased from 1998–9 to 2005–6.[24] However, Gujarat, one of the industrial and advanced states has performed very badly with respect to adult women's malnutrition among the socially marginalized groups. There are three other rich states, namely, Tamil Nadu, Maharashtra, and Karnataka where ST adult female malnutrition is greater than the national average, according to *NFHS-3*. This suggests that the economic prosperity in those states has not percolated to the socially marginalized groups.

There are 13 states[25] for which malnutrition among SC women is diverging from the national average; but there are 10 states[26] for which it is converging. There are 14 states[27] for which malnutrition among ST women malnutrition is diverging from the national average; but there are only three states[28] for which it is converging.

The percentage of men with BMI<18.5 is marginally lower than women and stood at 34.2 per cent during 2005–6. According to WHO, if 40 per cent or more of the population have a BMI less than 18.5 (which is quite close to the Indian situation), it is regarded as a state of famine. If India is not in a state of famine, it is quite clearly in a state of chronic hunger, since only such hunger can lead to a situation where a third of the country's adults have a BMI under 18.5.[29]

Child Malnutrition[30]

Significant decline in the percentage of stunted children

There was a significant decline in the percentage of stunted children and a minimal decline in the percentage of underweight children, whereas the percentage of wasted children increased between 1998–9 and 2005–6 (Table 4.9). It is a matter of concern that the percentage of severely stunted children and severely underweight children in the country stood at 22 per cent and 16 per cent, respectively, in 2005–6 (as per the new international reference population released by the WHO).

A higher percentage of rural children suffered from malnutrition as compared to those residing in urban areas. The primary reason for high malnutrition among the rural poor is low food intake and because a majority of socially marginalized groups (SCs and STs) live in rural areas malnutrition is quite high among them.

For the country as a whole in 2005–6, 24 per cent children were severely stunted out of the 45 per cent chronically stunted children. Similarly, 6 per cent were severely wasted out of the 23 per cent who were chronically wasted. Of the 44 per cent chronically underweight, 16 per cent were severely underweight.

Interstate inequality: Severely underweight children are concentrated in states with low per capita incomes

A high incidence of malnutrition among children is found among poor states. However, Gujarat, with a relatively high per capita income, witnessed a higher incidence of child malnutrition. Madhya Pradesh had the maximum number of chronically wasted and underweight children, followed by Jharkhand. There are seven states where the percentage of severely underweight children is higher than the national average.[31] Six of these seven states are poor,

[24] Coefficient of Variation (CV) for SCs was 27.4 per cent in 1998–9, which increased to 33.4 per cent by 2005–6. The corresponding figures for STs are 36.3 per cent and 50.4 per cent, respectively.

[25] Assam, Bihar, Delhi, Goa, Haryana, Gujarat, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Uttarakhand, and Uttar Pradesh.

[26] Chhattisgarh, Himachal Pradesh, Jammu and Kashmir, Sikkim, Jharkhand, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, and West Bengal.

[27] Andhra Pradesh, Assam, Bihar, Delhi, Goa, Gujarat, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Karnataka, Kerala, Tamil Nadu, and Uttar Pradesh.

[28] Chhattisgarh, Jammu and Kashmir, and West Bengal.

[29] Adult male malnutrition is found to be high in the states with low per capita incomes. In fact, the states with low per capita incomes are registering male malnutrition above the national average, with the exception of Gujarat. Tripura's performance is the worst (41.7 per cent), followed by Madhya Pradesh (41.6 per cent) and Rajasthan (40.5 per cent).

[30] Inadequate food intake by children often leaves them 'wasted' (low weight for height), 'stunted' (lower height for age), or 'underweight' (low weight for age). If the child has an anthropometric measurement that is far (that is, between two and three standard deviations) below the average value for the reference population, the child is considered chronically undernourished. If the indicator is more than three standard deviations below the average value for the reference population, then she is considered severely undernourished. A child who is stunted (low height for age) suffers from chronic undernourishment, which cannot be overcome by short-term alterations in the diet, whereas wasting (low weight for height) is a situation where undernourishment is short-term and slight alterations in the nutrient intake can help overcome it. Weight for age reflects both the long-term and short-term effects of nourishment and is considered indicative of both chronic and acute undernourishment.

[31] Meghalaya, Madhya Pradesh, Jharkhand, Bihar, Chhattisgarh, Uttar Pradesh, and Gujarat.

Table 4.9 Trends in Child Malnutrition, 1998–9 and 2005–6

Measures of Nutrition	*2005–6*			*1998–9*		
	Urban	*Rural*	*Total*	*Urban*	*Rural*	*Total*
Stunted (Height-for-age)						
Percentage below – 3 SD	16.4	23.8	22	19.7	30.2	27.7
Percentage below – 2 SD	37.4	47.2	44.9	41.1	54	51
Wasted (Weight-for-height)						
Percentage below – 3 SD	6.8	8.3	7.9	5.3	7.1	6.7
Percentage below – 2 SD	19	24.1	22.9	16.3	20.7	19.7
Underweight (Weight-for-age)						
Percentage below – 3 SD	10.6	17.4	15.8	11.3	19.6	17.6
Percentage below – 2 SD	30.1	43.7	40.4	34.1	45.3	42.7

Source: *NFHS 3* and *NFHS 2*.
Note: In *NFHS 2*, the nutritional status of children was measured only for the last two children less than three years of age of ever-married women who were interviewed, whereas in *NFHS-3*, all children in the household under five years of age were eligible to be measured. Therefore, when comparing the nutritional indicators in the two surveys, it is necessary to restrict the calculations to the *NFHS-2* criteria for eligibility.

and only one state that is, Gujarat, is economically developed. Among the major states, the maximum number of severely underweight children was observed in Madhya Pradesh, and the minimum number was observed in Kerala (Table 4A.7).

The share of underweight and wasted children is higher among Hindus than among other religious groups

It has been observed that the percentage of underweight and wasted children among Hindus is higher than among other religious groups. Among major religious communities, Hindus recorded the highest percentage of chronically underweight children followed by Muslims, and both of them are close to the national average. Sikhs and Jains recorded relatively lower percentages of under- weight children (Table 4.10).

Highest percentage of underweight and stunted children is recorded for the STs

Across social groups, the highest percentage of underweight and stunted children was recorded among STs at more than 50 per cent. Among SCs and Other Backward Classes (OBCs) the percentage was closer to the national average, though the percentage of underweight and stunted SC children was more than that of OBCs. It can be seen that the general category has the lowest percentage of children in all the three anthropometric indicators (Table 4.11). This suggests that socially marginalized groups are in a disadvantageous position, and this is a hindrance to India's inclusive growth strategy.

MICRONUTRIENTS: CURRENT SCENARIO

The minimum loss of GDP due to vitamin and mineral deficiency malnutrition per year is reportedly Rs 277,200 million (*NCF*, *Fifth & Final Report*, Vol. I). The NNMB Report of December 2006 reveals that the consumption of protective foods such as pulses, green leafy vegetables, milk and fruits, though increasing, was grossly inadequate. Consequently, the intake of micronutrients such as iron, Vitamin A, riboflavin, and folic acid were far below the recommended levels in all the age groups. The data from the nutritional survey of children under five years shows that the prevalence of signs of moderate Vitamin A de- ficiency and B-complex deficiency (angular stomatitis) was about 0.6 per cent and 0.8 per cent, respectively, among preschool children.[32] Bitot Spots were found in

[32] Symptoms of Vitamin A deficiency: Bitot Spots on conjunctiva in eyes.

Table 4.10 Percentage of Children below -2SD of the Indicator by Religious Groups—2005–6

Anthropometric Indicator	*Hindus*	*Muslims*	*Christians*	*Sikhs*	*Jains*	*Buddhists*	*Others*
Underweight (Weight for age)	43.2	41.8	29.7	22.0	24.0	39.2	62.7
Stunting (Height for age)	48.0	50.3	39.0	29.8	31.2	56.1	58.5
Wasting (Weight for height)	20.3	18.4	15.5	11.0	15.8	21.0	33.6

Source: *NFHS 3.*

Table 4.11 Percentage of Children below -2SD of the Indicator by Social Groups, 2005–6

Anthropometric Indicator	*SCs*	*STs*	*OBCs*	*Others*
Underweight (Weight for age)	47.9	54.5	43.2	33.7
Stunting (Height for age)	53.9	53.9	48.8	40.7
Wasting (Weight for height)	21	27.6	20	16.3

Source: *NFHS 3.*

1.9 per cent of school age children, and the prevalence of B-complex deficiency and dental fluorosis (mottling of teeth) was 2 per cent each. Given below are some specific micronutrient deficiencies that are a cause for public health concern.

Anaemia: *Gender discrimination results in very high incidence of anaemia among adolescent girls*

IDA is the most widespread micronutrient deficiency in the world, and is associated with increased susceptibility to infections, reduction in work capacity, and poor concentration. In India, anaemia is rampant among women in the reproductive age group, children, and low socio-economic strata of the population. IDA reduces the capacity to learn and work, resulting in lower productivity and loss of wages, thereby limiting economic and social development. Anaemia in pregnant women leads to adverse pregnancy outcomes such as high maternal and neonatal mortality, low birth weight, increased risk of obstetric complications, increased morbidity, and seriously impairs the physical and mental development of the child. Anaemia remains one of the major indirect causes of maternal mortality in India (Planning Commission 2008).

As per the District Level Health Survey (DLHS) (2002–4), the prevalence of anaemia in adolescent girls is very high (72.6 per cent) with the prevalence of severe anaemia among them being much higher (21.1 per cent) than among pre-school children (2.1 per cent). Among adolescent girls, educational or economic status does not seem to make much difference in terms of the prevalence of anaemia. This may be due to culturally determined and historically practised gender discrimination against girls. In India, in low income families the male child eats better quality food as compared to the girl child. Low dietary intake and poor iron and folic acid intake are major factors responsible for the high prevalence of anaemia in India. Poor bio-availability of iron in the Indian diet aggravates the situation. High levels of infection such as water and food borne infections, malaria, and hookworm infestations further aggravate the situation (Planning Commission 2008).

Anaemia: Incidence of anaemia among women was over 60 per cent for low income states and has not fallen over the years

The Eleventh Five Year Plan targeted reducing anaemia among women and girls by 50 per cent by 2012. During 2005–6, more than half (55.3 per cent) of women aged 15–49 years suffered from anaemia, an increase of three percentage points over 1998–9. Among the major states, the incidence of anaemia among women was over 60 per cent for low income states and it was observed that there was no progress in this regard.[33]

[33] Andhra Pradesh, Bihar, Jharkhand, Orissa, Assam, and West Bengal.

In 2005–6, the incidence was the lowest in Kerala (33 per cent) followed by Punjab (38 per cent). Anaemia is more prevalent among women in rural areas as compared to women in urban areas. The above facts suggest that the incidence of anaemia among women in poor states is comparatively higher than in rich states except for Gujarat, where the prevalence of anaemia among women is at par with the national average. There is a marginal increase in interstate disparities with respect to any anaemia among women (Table 4A.4).[34]

No difference between Hindus and Muslims with respect to anaemia among women

Across all religious communities (except for Jains and 'Others'), there was an increase in the incidence of women suffering from anaemia between 1998–9 and
2005–6. The increase was observed to be the highest for Muslim women with about six percentage points. While the prevalence of anaemia among Hindus and Muslims was closer to the overall national average, it was lowest for Sikh and Jain women. The figure for Hindu women was greater than Muslim women in 1998–9; however, the trend was reversed in 2005–6.

The state-wise percentage of women suffering from anaemia for both Hindus and Muslims demonstrates that the majority of low income states have performed worse than the national average. However, the percentage of Hindu women with anaemia in Uttar Pradesh is lower than that of Gujarat, Tamil Nadu, and Karnataka thereby suggesting that economic prosperity alone cannot address the problem of malnutrition among women since they have been historically discriminated against. Further, it should be noted that Uttar Pradesh which has a high percentage of Muslims in the population is doing better than Gujarat, Tamil Nadu, and Karnataka. Gujarat is far below the national average on this indicator for both Hindu and Muslim groups.[35]

Anaemia among women has increased for all caste groups over the years

While ST women are the worst off with regard to anaemia, the percentage of women suffering from anaemia increased for all caste groups during the period 1998–9 to 2005–6. Across caste groups, the highest percentage of anaemic women was recorded amongst STs during both the NFHS rounds. It was closer to the national average for SCs and OBCs in 2005–6. The percentage of SC women with anaemia has increased over the two time periods for 14 states, whereas it has decreased for only eight states. It is found that in the majority of poor states, the percentage of women with anaemia has increased for SCs and STs (Table 4.12). There are only two states where the figure for SCs, STs, and OBCs was increasing whereas it was decreasing for the general category (Table 4A.6).

Lack of awareness among women resulted in high incidence of anaemia among them

It appears from Figure 4.2 that there is a negative relationship between wealth indices and the percentage of women suffering from anaemia. Across India, nearly 65 per cent of women from the lowest wealth quintile were anaemic and the percentage declined for successive wealth quintiles with 46 per cent of women belonging to the highest wealth quintile being anaemic. Yet the relation- ship appears to be weak. Therefore, an exclusive causation from wealth to anaemia should not be drawn since a high percentage of women suffering from anaemia are found to be within the highest wealth quintile. This is because anaemia is a result of various factors, an important one being the lack of a balanced diet intake. This suggests that there is a lack of awareness among women regarding the necessity of a balanced diet. Lack of awareness is a result of poor literacy among women, and that is because girl child is discriminated against when pursuing education (see Chapter 6 on 'Education').

Anaemia among children: Increased over years with rising rural-urban disparity

During the early years of life, anaemia can prove to be an obstacle in a child's physical and emotional devel- opment. Anaemia causes low scholastic skills and also triggers increased morbidity from infectious diseases. The prevalence of anaemia is very high among young children (6–35 months). Around 79 per cent of India's children in the age group 0–5 years suffered from anaemia in

[34] Coefficient of variation was 24.5 per cent in 1998–9 and had increased to 28.6 per cent by 2005–6.

[35] According to *Gendering Human Development Indices: Recasting the Gender Development Index and Gender Empowerment Measure for India*, Ministry of Women and Child Development, 2006, Gujarat ranked 22 in the Gender Development Index and gender discrimination against women has been rising in this state.

Table 4.12 Classification of States by Trend in Percentage of Women with Anaemia, by Social Groups, 1998–9 to 2005–6

Social groups	*SCs*	*STs*	*OBCs*	*Others*
States with *rising trend* in percentage of women with anaemia	Andhra Pradesh, Goa, Haryana, Gujarat, Himachal Pradesh, Rajasthan, Madhya Pradesh, Karnataka, Bihar, Assam, Jammu & Kashmir, Maharashtra, Uttar Pradesh	Andhra Pradesh, Gujarat, Kerala, Karnataka, Assam, Rajasthan, Madhya Pradesh	Haryana, Andhra Pradesh, Kerala, Assam, Gujarat, Karnataka, Bihar Rajasthan, Himachal Pradesh, Goa, Delhi	Andhra Pradesh, Kerala, Karnataka, Gujarat, Haryana, Bihar, Delhi, Uttar Pradesh, Uttarakhand, Madhya Pradesh, Sikkim, West Bengal, Himachal Pradesh, Maharashtra, Goa
States with *declining trend* in percentage of women with anaemia	West Bengal, Delhi, Orissa, Sikkim, Jharkhand, Punjab, Tamil Nadu, Chhattisgarh	Jharkhand , Orissa, Chhattisgarh, Sikkim, West Bengal, Maharashtra, Bihar, Jammu & Kashmir, Uttar Pradesh, Tamil Nadu	Sikkim, Madhya Pradesh, Maharashtra, Tamil Nadu, Uttar Pradesh, Orissa, Jharkhand, West Bengal, Jammu & Kashmir, Punjab, Chhattisgarh	Rajasthan, Orissa, Jammu & Kashmir, Punjab, Jharkhand, Assam, Tamil Nadu, Chhattisgarh

Source: Computed from *NFHS 2* and *NFHS 3*.

2005–6). Around 72 per cent of urban children and 81 per cent of rural children were anaemic in 2005–6. Also, the overall prevalence increased from an already very high 74 per cent in 1998–9 to 79 per cent in 2005–6.

In the case of moderate anaemia, the percentage of rural children has gone up over the years, while it has remained unchanged for urban children. Further, there is an overall increase in anaemia of more than five percentage points for rural children, while it is about two percentage points for urban children, suggesting that the disparity between rural and urban areas has increased over the years (Table 4.13).

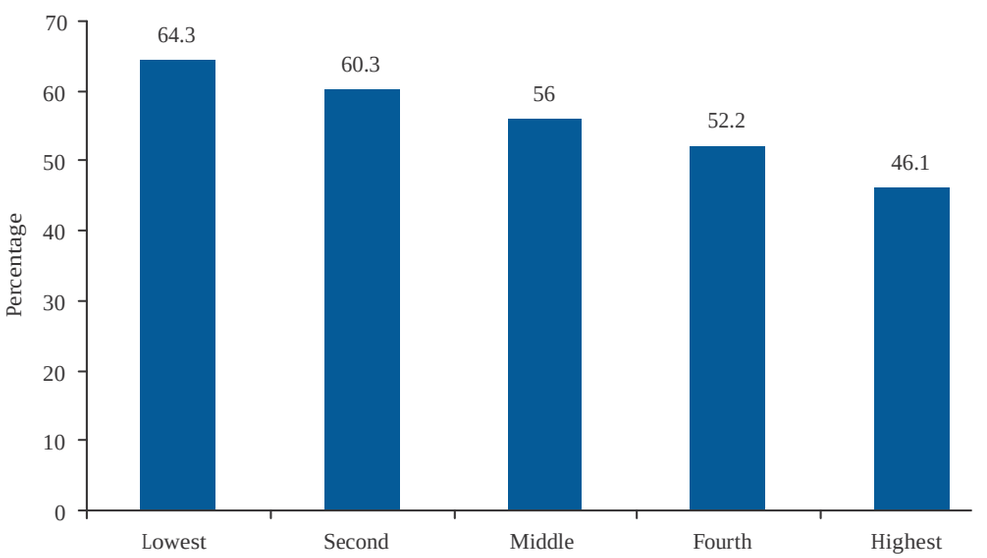

Figure 4.2 Percentage of Women Suffering from Anaemia by Wealth Index, 2005–6

Source: *NFHS 3* (2005–6).

Table 4.13 Anaemia among Children, 1998–9 and 2005–6

Anaemia Status by	*2005–6*			*1998–9*		
Haemoglobin level	*Urban*	*Rural*	*Total*	*Urban*	*Rural*	*Total*
Moderate	42	51.7	49.4	42	47.1	45.9
Severe	4.4	3.5	3.9	5.1	5.5	5.4
Any Anaemia	72.2	80.9	78.9	70.8	75.3	74.3

Source: *NFHS 2* and *NFHS 3*.

A high percentage of children suffering from anaemia belong to states with low per capita income

The prevalence of anaemia is found to be higher in low income states than high income states. However, Karnataka and Gujarat, two states with relatively higher per capita incomes have an incidence of anaemia above the national average. The lowest incidence of anaemia was recorded in Kerala (45 per cent). In other words, nearly half of the children in even the best performing state are suffering from anaemia. The prevalence of anaemia was the highest in Bihar (78 per cent), followed by Uttar Pradesh and Madhya Pradesh (both 74 per cent). Similarly, with respect to moderate anaemia, states which have recorded an incidence higher than the national average are poor states, with the exception of Gujarat. The poor states have shown divergence from the national average over the two NFHS rounds. (Table 4A.8).

It is observed that among the major states with a high concentration of Muslims in the population, the percentage of Muslim children with anaemia is higher than that of Hindu children (and also higher than the other major religious communities). The incidence of anaemia was the lowest in the case of the Jain community (58 per cent).

The prevalence of anaemia was a serious problem among SC and ST children. STs had the highest percentage (77 per cent) of children suffering from anaemia in 2005–6, followed by SCs (72 per cent). Children of the OBCs had a prevalence rate similar to the national average of
70 per cent. Further, it has been observed that amongst SCs and STs a very high percentage of children suffering from anaemia belong to the states with low per capita incomes. Among the STs the maximum number of children suffering from anaemia was found in West Bengal (86 per cent) (Table 4A.9).

Iodine Deficiency Disorders (IDDs): *Iodine deficiency is the greatest cause of preventable brain damage in childhood*

Iodine deficiency disorders (IDDs) are a major public health problem for populations throughout the world, particularly for pregnant women and young children. The most devastating outcomes of iodine deficiency are increased prenatal mortality and mental retardation. Iodine deficiency is the greatest cause of preventable brain damage in childhood—another source of difficulty for children when they enter school. The main factor responsible for iodine deficiency is the low dietary intake of iodine. It occurs in populations living in areas where the iodine content in the soil is very low as a result of past glaciations or the repeated leaching effects of snow, water, and heavy rainfall. Crops grown in this soil, therefore, do not contain adequate amounts of iodine (Planning Commission 2008).

Goitre is the most visible manifestation of IDD. In severely endemic areas, cretinism may affect up to 5–15 per cent of the population. The Indian National Goitre Control Programme (NGCP) was launched in 1962 with a focus on the goitre belt in the country. However, the programme of universal iodization was introduced only in 1984, when all edible salt in the market was required to contain 30 ppm (parts per million) iodine at the production level. This was legalized through the Prevention of Food Adulteration Act of 1988 that also banned the availability of crystalline salt (non-iodized) as an edible product. It was accepted in different degrees by different states, some putting only a partial ban and others none at all. Based on the recommendations of the Central Council of Health, the Government took a policy decision that all edible salt in the country was to be iodised by 1992. Since 1992, the National Iodine Deficiency Disorders Control

Programme (NIDDCP) is the new name given to the erstwhile National Goitre Control Programme. This change has been effected with a view to covering the wide spectrum of IDDs such as mental and physical retardation, deaf-mutism, and cretinism under the programme. Due to various research reports, the central government lifted the ban on the sale of non-iodized salt in 2000. The states chose to retain or revoke the ban depending upon their own assessment. In 2005, a country-wide ban on the sale of non-iodized salt for human consumption was again imposed by the central government.

Vitamin A Deficiency (VAD): *India has the largest number of Vitamin A deficient children in the world*

Vitamin A deficiency (VAD) has been recognized as a major controllable public health and nutritional problem. An estimated 5.7 per cent of children in India suffer from eye signs of VAD. Of the 37 million people across the globe who are blind, about 15 million are from India. More than 320,000 children in India suffer from avoidable blindness. Recent evidence suggests that even mild VAD probably increases morbidity and mortality in children, emphasizing the public health importance of this disorder.

The intake of Vitamin A is grossly inadequate for all groups, particularly among children in the age group 1– 3 years. Though the prevalence of severe forms of VAD such as corneal ulcers and softening of cornea (keratomalacia) are now rare, the incidence of Bitot Spots was found to be prevalent in varying degrees in different parts of the country (NNMB 2003). The prevalence was higher than the WHO cut-off level of 0.5 per cent, indicating the public health significance of the problem of VAD. There is a huge interstate variation in the prevalence of VAD among children.

Other Micronutrient Deficiencies: Balanced food, including protective food, is critical for reducing latent hunger

Recently, the Government of India examined the issue of the use of zinc in the management of diarrhoea among children and recommended administering zinc as part of ORS in the management of diarrhoea for children older than three months. It is expected that this will go a long way towards reducing the infant mortality rate in the country.

Apart from major macro- and micronutrients, there exist more than 300 nutrients which are vital for the body. In recent years micronutrients and phyto nutrients (nutrients in edible plants having anti-oxidant and anti-inflammatory properties) have taken centre stage in the field of nutrition. Phyto nutrients in foods have biological properties for disease prevention and health promotion. A truly nutritious diet is one that promotes health and prevents diseases. There is considerable interaction between different micronutrients with respect to metabolic functions. The diets of the poor and even of some rich people may be deficient in a number of nutrients. Evidence based on research suggests that the consumption of balanced food including protective foods like milk, a variety of fruits, vegetables, and so on, will meet the nutritional needs of the body.

MAJOR PROGRAMMES TO ADDRESS THE PROBLEM OF HUNGER AND MALNUTRITION

Integrated Child Development Scheme (ICDS): *Little consensus on success of the programme*

In 1975, a committed Government introduced the ICDS programme in India, to address the immediate cause of malnutrition in the country.[36] Today the ICDS is one of the largest nutrition programmes in the country. The Supreme Court, through judgments during the decade of the 2000s, has been instrumental in ensuring that all children below six years, all pregnant and lactating mothers, and adolescent girls in all rural habitations and urban slums are covered by the ICDS nutritional and health services in a phased manner latest by December 2010.[37] The programme provides services through *Anganwadi* centres (AWC) at the community level.[38]

[36] See Figure 4.1 for the immediate causes of Malnutrition.

[37] As of 31 December 2009 there were 87,531,781 beneficiaries of this programme constituting of 71,845,264 children and 15,686,517 pregnant and lactating mothers (MWCD).

[38] Range of of Services that the ICDS seeks to provide to Children and Women are: Health check-ups and treatment, Immunization Micronutrient, supplementation Health and Nutrition, Education Supplementary, and Nutrition Pre-school Education.

Coverage of ICDS: Dramatic increase[39]

Only 46 per cent of the children are covered by the Supplementary Nutrition Programme (SNP) of the ICDS, leaving more than half of the children out of this programme (Commissioners to the Supreme Court, Ninth Report, 2009). Under the ICDS's SNP the coverage of children under six increased from 58 million in 2006–7 to 68 million in 2007–8 but this is still less than 60 per cent of the under-six population in the country as identified by the Anganwadis (Commissioners to the Supreme Court, Ninth Report 2009, http://www.sccommissioners.org/Reports/Reports/SCC9_0909.pdf). NFHS-3 reported that 81 per cent children under six years of age were living in areas served by an AWC. About 20 per cent of children were not even been covered by the Anganwadi survey and can be assumed to have been left out of any of the Anganwadi benefits (Right to Food Campaign, Commissioners to the Supreme Court, Ninth Report, 2009).

The situation has been improving since the Supreme Court order in December 2006 that said that the ICDS should be universalized. The number of Anganwadis has been increasing rapidly.

However, as the Supreme Court Commissioners noted, SNP coverage for pregnant and lactating mothers was very low. Only 12 million pregnant and lactating women were covered under the ICDS's SNP during 2006–7, which increased to 14 million in 2007–8, constituting only about 35 per cent of the pregnant and lactating mothers in the country. This indicates that the coverage of pregnant/lactating is even lower than the coverage of children. The situation for adolescent girls is even worse than that for the pregnant and lactating mothers.

The Ministry of Women and Child Development (MWCD) has launched two programmes for adolescent girls, the Kishori Shakti Yojana (KSY) and the National Programme for Adolescent Girls (NPAG). Neither of these programmes provides for universal distribution of supplementary nutrition for adolescent girls. The KSY has been extended to cover all the blocks in the country but data on the number of beneficiaries under this scheme is not available. The NPAG covers undernourished adolescent girls in the age group 11–19 years who are underweight (weight<35 kg). Each beneficiary is given six kilograms of free food grains per month.

The Supreme Court in various orders directed the Government of India and the state/UT (Union Territory) governments to ensure that not only every eligible child, adolescent girl and woman be covered, but also that the scheme be geographically universalized—in other words, there should be an Anganwadi centre in every habitation. Priority must be given to SC/ST hamlets and urban slums in the process of universalization. Although the Government has not been able to meet the deadline set by the Supreme Court, there has been a lot of progress since the order was passed[40] The ICDS coverage of the SC and ST population could not be ascertained due to data constraints.

However, the data maintained at the Anganwadi centres demonstrates gross under-reporting of severely malnourished children, probably due to the vertical institutional framework that is in operation which gives the ground level worker the incentive to report false data. For instance, as of 31st December 2009, MWCD reported that only 0.4 per cent of children are severely malnourished (Grade III and Grade IV malnutrition), and only 13.07 per cent are moderately malnourished (Grade II malnutrition). These figures are totally at variance with the NFHS-3 figures, which state that 15.8 per cent of children are severely malnourished and 40.4 per cent are moderately malnourished. The divergence may be partly due to fallacious reporting by the Aanganwadi workers (AWWs) to show good progress in the health status of children and partly because ICDS does not cover all the children in the age group 0–6 years.

Despite 30 years of existence, there is little consensus as to the success of the ICDS programme; there have been small quasi-experimental studies that looked at the effect of ICDS on certain health behaviours but these have reported mixed results.

[39] There are six major states, with low per capita income, where the coverage of SNP for children is even less than that of national average. There are two major states, Bihar and Rajasthan, with less than 40 per cent coverage of SNP and there are four major states namely, Jammu & Kashmir, Uttarakhand, Madhya Pradesh, and Jharkhand with more than 40 per cent coverage, but less than national average (Right to Food Campaign, Commissioners to the Supreme Court, Ninth Report, 2009).

[40] There are six major states, with low per capita income, where the coverage of SNP for children is even less than the national average. There are two major states, Bihar and Rajasthan, with less than 40 per cent coverage of SNP and there are four major states, namely, Jammu & Kashmir, Uttarakhand, Madhya Pradesh, and Jharkhand with more than 40 per cent coverage, but less than national average (Right to Food Campaign, Commissioners to the Supreme Court, Ninth Report, 2009).

In addition, India's high rates of malnutrition are due to high levels of exposure to infection and inappropriate infant and child feeding practices, mostly in the first three years of life. However, much of ICDS's work revolves around the assumption that food insecurity is the primary cause of malnutrition. Thus, the slant towards food-based interventions has failed to address other determinants of malnutrition in India. It is for this reason that public investments in ICDS should be redirected towards the younger children (0–3 years) and the most vulnerable population segments in those states and districts where the prevalence of under nutrition is high.

Looking at the current scenario and universalization of ICDS, Commissioners to the Supreme Court has made several recommendations (see Box 4.1).

Food and Nutrition Security and Right to Food

Subsidised food grains should be extended to majority of the country's population

A sustainable national food and nutrition security system should address the three dimensions of hunger and it must also address the three issues of availability, access, and absorption.

1. Availability of food at the household level depends upon food production and distribution.
2. Access to food depends on livelihoods/purchasing power.[41]
3. Absorption of food is influenced by access to clean drinking water, environmental hygiene, and primary healthcare.[42]

Under the draft National Food Security Act, 2010 every identified Below Poverty Line (BPL) family will be entitled to receive 25 kilograms of food grains such as rice and/or wheat every month from the Government at subsidized issue prices fixed from time to time. The above poverty line (APL) families are entitled to 35 kilograms of food grains.

Need for UID to get rid of bogus cards

The new draft bill proposes to index prices of food grains distributed through the Public Distribution System (PDS), both for the poor and those living to the minimum support price (MSP), the floor price offered to farmers after harvest, and determine entitlement on a per capita basis. It has also proposed, with a view to avoiding leakages, that the PDS should shift towards a smart card based system which ties in with 'Aadhaar', the Government's programme to provide a unique identity to all residents. The argument is that since the identity is based on biometric verification, it would eliminate the problem of bogus cards.

Box 4.1 Recommendations of Commissioners to the Supreme Court on Right to Food

- The Government of India must operationalize all the sanctioned AWCs at the earliest.
- A simple procedure for setting up of an 'Anganwadi on demand' must be put in place so that an AWC is sanctioned and operationalized within three months of such a demand being made, in accordance with the order of the Supreme Court dated 13 December 2006.
- Children in the age group 3–6 years should be provided a hot cooked meal at the AWC every day. The SNP so provided should be age appropriate, culturally appropriate, nutritious and locally procured.
- Make adequate budget allocations for the ICDS programme so as to be able to provide SNP to every child under six, every pregnant and lactating mother, and every adolescent girl.
- The Government of India must make provision for supplementary nutrition for all adolescent girls according to the same norms as those set for SNP for pregnant and lactating mothers.
- Strict action must be taken at all levels against the false reporting of data that show inflated figures of enrolment and deflated figures of malnutrition. To check this practice, a system of independent monitoring must be put in place, so that a sample of the households is routinely checked and the data compared with that reported by the ICDS.

Source: http://www.sccommissioners.org/reports, accessed on 18 March 2011.

[41] As on March 2008, 10.1 lakh anganwadis were operationalised of the 10.5 sanctioned anganwadis. Further, in the end of 2008, the Government of India has sanctioned another 2.1 lakh anganwadis taking the total number of anganwadis to 14 lakh.

[42] This depends upon the employability of the person, detail of which is discussed in Chapter 1 of this report.

The sixth meeting of the National Advisory Council (NAC) on 23 October 2010 made the following recommendations for strengthening the Right to Food Policy of India (see Box 4.2).

Minimum Support Price (MSP), Food Procurement Policy, and the Public Distribution System

Highly subsidized food grains are provided to the poorest families

The MSPs are fixed on rates recommended by the Commission for Agricultural Costs and Prices (CACP). These rates are set mainly using the cost of cultivation. These grain stocks essentially supply the PDS of the country. Through the PDS, cereals are made available to BPL households as well as to APL households—at different ial prices. There is a third category of beneficiaries—*Antyodaya*, card holders. Under the Antyodaya Anna Yojana (AAY), 35 kilograms of food grains are provided to the poorest of the poor families at the highly subsidized price of Rs 2 per kilogram for wheat and Rs 3 per kilogram for rice.

Since 2004–5, the MSP of wheat has increased from Rs 630 per quintal to Rs 1,080 per quintal. Similarly the MSP bonus of paddy (common) has increased from Rs 560 per quintal to Rs 1,000 per quintal. However, the Central Issue Price (CIP) of wheat and rice for AAY, BPL, and APL families has not been raised. As a result, the gap between economic cost and CIPs has been increasing and food subsidy costs incurred by the Government have risen substantially. Food grains are procured at the MSP fixed by the Government. The MSP for Common and Grade 'A' paddy was fixed at Rs 950 and Rs 980 per quintal, respectively, for the Kharif Marketing Season (KMS), 2009–10 (October 2009—September 2010). An

Box 4.2 Recommendations of the National Advisory Council

- Legal entitlements to subsidized food grains should be extended to at least 75 per cent of the country's population—90 per cent in rural areas and 50 per cent in urban areas.
- The priority households (46 per cent in rural areas and 28 per cent in urban areas) should have a monthly entitlement of 35 kilograms (equivalent to 7 kilograms per person) at a subsidized price of Rs 1 per kilograms for millets, Rs 2 for wheat and Rs 3 for rice. Rural coverage can be adjusted state-wise based on the Planning Commission's 2004–5 poverty estimates.
- The general category households (44 per cent in rural areas and 22 per cent in urban areas) should have a monthly entitlement of 20 kilograms (equivalent to 4 kilograms per person) at a price not exceeding 50 per cent of the current MSP for millets, wheat and rice.
- The minimum coverage and entitlements, as well as prices, should remain unchanged at least until the end of the twelfth Five Year Plan. The Government of India should specify the criteria for the categorization of the population into priority and general households. The NAC recommends that in the first phase, food entitlements should be extended to 85 per cent of the rural population and 40 per cent of the urban population. Full coverage of food entitlements as enumerated above should be extended to all by 31 March 2014.
- Other important components of the Food Security Bill recommended by the NAC include legal entitlements for child and maternal nutrition (including nutrition programmes for pre-school children, pregnant and nursing mothers, maternity benefits, and midday meals for school children) as well as community kitchens and programmes for feeding destitute and vulnerable groups. For the new components, programmes will need to be developed as soon as possible.
- For further advancing food and nutritional security, the NAC has recommended as enabling provisions, among other things, measures for revitalizing agriculture, diversifying the commodities available under the PDS, ensuring universal access to safe water and proper sanitation, universalizing primary healthcare, extending nutrition and health support to adolescent girls, strengthening the school health programme, the programmes for Vitamin A, iodine and iron supplementation and the National Programme for Crèches.
- An essential aspect of the PDS reform should be to plug leakages and enhance accountability. The NAC is examining proposals for PDS reforms including: (a) decentralized procurement and storage; (b) de-privatization of PDS outlets; (c) doorstep delivery of grains to PDS outlets; (d) revision of PDS commissions; (e) application of ICT including end-to-end computerization of the PDS; (f) full transparency of records (including pro-active disclosure, transaction-based Management Information System (MIS), right of immediate inspection, and mandatory social audits); (g) use of Smart Cards and biometrics subject to successful pilots.
- The NAC Working Group on Food Security will draft the National Food Security Bill for consideration of the Council.

Source: http://nac.nic.in/press_releases/23_october%20_2010.pdf, (Accessed on 18 March 2011).

incentive bonus of Rs 50 per quintal over and above the MSP was also given during the entire KMS, 2009– 10. The MSP of wheat was fi xed at Rs 1,080 per quintal for the Rabi Marketing Season, 2009– 10.

The PDS is a major state intervention in the country aimed at ensuring food security to all people, especially the poor. The PDS operates through a large distribution network of almost half a million fair price shops (FPSs), and is supplemental in nature. Under the PDS, the central government is responsible for the procurement and trans- portation of food grains up to the principal distribution centres of the Food Corporation of India (FCI), while the state governments are responsible for the identifi cation of families living below the poverty line, the issue of ration cards, and the distribution of food grains to the vulner- able sections through FPSs. The PDS seems to have failed in meeting its second objective of making food grains available to the poor. If it had, the consumption levels of cereals would not have fallen on average—as it has been over the last two decades.

With a view to improving its efficiency, the PDS was redesigned as the Targeted Public Distribution System (TPDS) with eff ect from June 1997. Over 500 million targeted people are benefi tting under this scheme. Under the TPDS, higher rates of subsidies are being given to the poor and the poorest among the poor. The APL families are also being given food grains under the TPDS but with a lower subsidy. The issue of food grains under TDPS for Antyodaya cardholders was initially 10 kilograms per family per month, which has progressively increased to 35 kilograms per family per month with eff ect from April 2002. At present, 35 kilograms of rice or wheat, as well as sugar and kerosene are provided at subsidized rates to BPL families. The BPL families are identifi ed by the state governments and about 40 per cent of them receive an additional subsidy under the AAY, which entitles them to the same quantity of food grains, but at roughly half the price at which it is sold to the other BPL families. The AAY scheme has been expanding since its inception (Department of Food and Public Distribution).

Major defi ciencies of TPDS: High exclusion and inclusion errors

As identifi ed by various studies, the major defi ciencies of the TPDS include: (a) high exclusion and inclusion errors, (b) non-viability of fair price shops, (c) failure in fulfi lling the objective of price stabilization, and (d) leakages (Planning Commission 2008). Given the present scenario of hunger and malnutrition in India, there is a long road ahead to remove hunger and malnutrition. The Steering Committee of a High Level Panel of Experts on Food and Nutrition reported that India urgently needs a comprehensive coordinated approach, not piecemeal approaches, to tackling chronic, hidden and transitory hunger. However, the immediate challenge before India is to face the anticipated food crisis arising due to the possible steep rise in food prices during 2011. To meet this challenge, recommendations made by the National Commission on Farmers (NCF) need urgent and concurrent attention. Six of the recommendations are to be given top priority as pointed out by the Chairman of NCF, M.S. Swaminathan. These are presented in Box 4.3.

CONCLUDING REMARKS

The situation of protein-energy malnutrition has shown little or no signs of improvement over several decades. Sixty years after Independence, nearly half of India' s children under three are malnourished. As a result, India has the largest number of malnourished children in the world. Even more signifi cantly, India' s rate of malnutri- tion is worse on average than that in Africa. With respect to other BRIC and SAARC nations, India' s performance is the worst in terms of underweight children, infant mor- tality and under-fi ve mortality.

Even more worrying is the fact that there has been no signifi cant decline in the percentage of underweight chil- dren over the last decade-and-a-half when the economy has been growing at over 6 per cent per annum on aver- age. Given the increase in population, the number of mal- nourished children is likely to have actually increased.

The percentage of women with BMI<18.5 in poor states (except Orissa) recorded an increase, whereas most north-eastern states (excluding Assam and Tripura), and the rich states (excluding Punjab and Delhi), have done better over the years.

In Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, and Uttar Pradesh child malnutrition rates are well above the national average. Some of these states have actually seen an increase in the share of malnourished children under the age of three between 1998– 9 and 2005– 6.

The incidence of anaemia among women in poor states is comparatively higher than that in their richer counterparts except for Gujarat, where the prevalence of anaemic women is at par with the national average.

Box 4.3 Recommendations of National Commission on Farmers

- First, revive farmers' interest in farming. Without the wholehearted involvement of farmers, particularly of young as well as women farmers, it will be impossible to implement a Food Entitlements Act in an era of increasing price volatility in the international market.
- Second, every state government should launch a 'bridge the yield gap' movement, to take advantage of the vast untapped yield reservoir existing in most farming systems even with the technologies currently on the shelf.
- Third, the prevailing mismatch between production and post-harvest technologies should be ended. Although India is the second largest producer of fruits and vegetables in the world, one-third is wasted. Safe storage, marketing, and value addition to primary products have to be attended to at the village level. Home Science colleges can be enabled to set up Training Food Parks for building the capacity of self-help groups of women in food processing. A national grid of ultra-modern grain storage facilities must be created without further delay.
- Fourth, a nutrition dimension should be added to the National Horticulture and Food Security Missions. Hidden hunger caused by the deficiency of micronutrients like iron, iodine, zinc, Vitamin A, and Vitamin B12 can be overcome at the village level by taking advantage of horticultural remedies for nutritional maladies.
- Fifth, a small farm management revolution which will confer on farmers operating one hectare or less the power and economy of scale is an urgent need.
- Sixth, there is need for proactive action to minimize the adverse impact of unfavourable changes in climate and monsoon behaviour and to maximize the benefits of favourable weather conditions.

Sources: M.S. Swaminathan, 'Managing the Anticipated Food Crisis', *The Hindu*, 19 December, 2010; and NCF Fifth Report.

Overall, there is high interstate disparity with respect to hunger in India with poor states at the bottom.

Further, it is observed that socially marginalized groups (SCs and STs) have a higher percentage of women with BMI <18.5 and they have been diverging from the national average over the years. A higher percentage of children in rural areas suffered from malnutrition as compared to those residing in urban areas. The primary reason for high malnutrition amongst the rural poor is inadequate food intake. Further, the majority of socially marginalized groups (STs and SCs) among whom malnutrition is quite high live in rural areas.

Socially marginalized groups are in a disadvantageous position and their situation is worse in the states where their concentration is high. In the majority of states SC and ST female malnutrition has been diverging from the national average. However, in two poor states, namely, Chhattisgarh and West Bengal, female malnutrition has been converging towards the national average. It has been observed that more than 50 per cent of children from STs are underweight and stunted and above 75 per cent suffer from anaemia.

Among major religious communities it has been observed that there is no difference between Hindus and Muslims in terms of women's malnutrition. Hindus recorded the highest percentage of underweight and stunted children. Further, there is no difference between anaemia among Hindu and Muslim women. But the worrying fact is that the states with a high concentration of Muslims in the population have a higher percentage of children suffering from anaemia.

The prevalence of anaemia in adolescent girls is very high in India and the prevalence of severe anaemia among them is much higher than that in pre-school children. Educational or economic status does not seem to make much difference. This may be due to the cultural and historical gender discrimination against girls.

To address the problem of hunger and malnutrition programmes such as the ICDS, MSP, and the PDS need specific improvements in programme design aimed at addressing the problems faced by socially marginalized groups.

Given the seriousness of hunger and malnutrition in India, the Government has universalized the ICDS programme. To motivate the ground level ICDS workers, the Government has proposed an increase in the salary of Anganwadi workers and helpers in the present budget. Finally, the National Food Security Bill is a step in the right direction for ensuring food security.

However, the fact remains that the problems that were identified early in this chapter have not been addressed. The Conceptual Framework that explains the underlying

and proximate causes of child malnutrition and chronic adult hunger (as demonstrated in the high proportion of the adult population with a BMI>18.5), shows that certain critical problems have not been addressed. As is reiterated in the next chapter (on health), there has to be a focus of attention of the health system and the anganwadis on the period of pregnancy and the first year after birth of the entire population. Adequate food and cash transfers (through the 2011 central government maternity benefit scheme piloted in 52 districts) has to be ensured. The Janani Suraksha Yojana (see Chapter
5 for detail discussion), aimed at securing institutional delivery for all pregnant women must be universalised. The public health system has to be functional enough to ensure that (a) that colustrum feeding takes place for all newborns during the first hour after birth; (b) the post-natal care during first 28 days after childbirth takes place at the quality that will bring down infections and thus infant mortality. The anganwadi and the primary health system will ensure exclusive breastfeeding by all mothers of India. The same two systems of service delivery are so made functional that solid-mushy food is introduced for all infants between 6– 9 months of the baby' s birth, alongside breastfeeding. And finally, full immunization for all infants and toddlers occurs in a timely manner.

Without these conditions being met, there is little hope for inclusive growth becoming a reality in India.

5

Health and Demography

INTRODUCTION

Health is regarded as a vital component in the growth and development of any country. Healthy children are said to have better school attendance and learning, which later translates into better earning capacity. In other words, ill health can lead to capability deprivation and hence poverty, causing a substantial loss of fi nancial and human resources. Poverty caused by poor health further reinforces ill health; poverty leads to low food intake, nutritional defi ciencies, deprivation of basic amenities like sanitation and clean drinking water cause infections. The poor are more exposed to environmental risks (poor sanitation) and less prepared to cope with them, they are less informed about the benefi ts of healthy lifestyles, and have less access to quality healthcare. Figure 5.1 highlights some of the synergistic relationships between health and well-being.

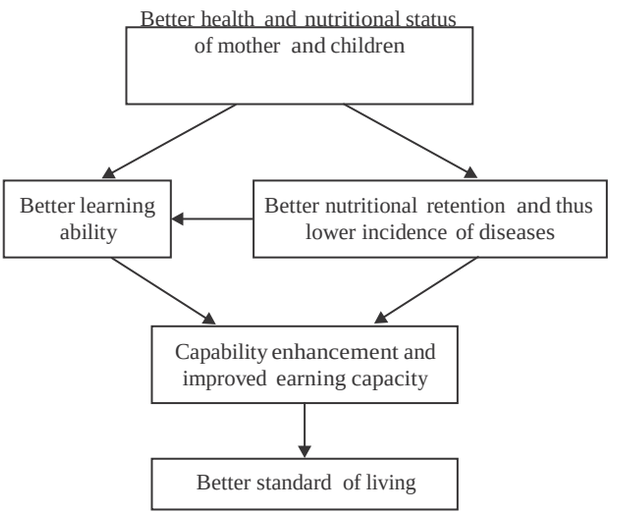

Figure 5.1 Synergy between Health and Standard of Living

As discussed in the Synergies model in the 'Overview' (Chapter 1), there are feedback loops in terms of both inputs and outcomes in human development. Health and nutritional status, family size, and healthy living condi- tions (such as clean water and sanitation) are inputs as well as the human development outcomes (Mehrotra and Delamonica 2007). For instance, family planning helps in the spacing of children and benefi ts the health status of both the mother and the child, improves child survival rates, thereby reducing infant and maternal mortality and improving life expectancy. On the other hand, healthier children learn better in school, and grater child survival in the medium-term, reduced fertility (Caldwell 1986). Lower fertility rates in turn, have positive implications for improving health and increasing life expectancy. In addition, fewer children imply better care for each child by the mother and greater per capita family resources for education and food intake. Thus, wealth, education, and better amenities like improved sanitation and water, directly or indirectly, contribute to the better health of the mother and her child (Figure 5.2).

Against this backdrop, it was observed that over the last decade India has seen improvement in various health outcomes. Death rates, infant mortality rates (IMR) and under fi ve mortality rates (U5MR), as well as fertility rates have declined. These, along with other medical advances, have improved life expectancy in the country. Not only this, it is commendable that India performs better than

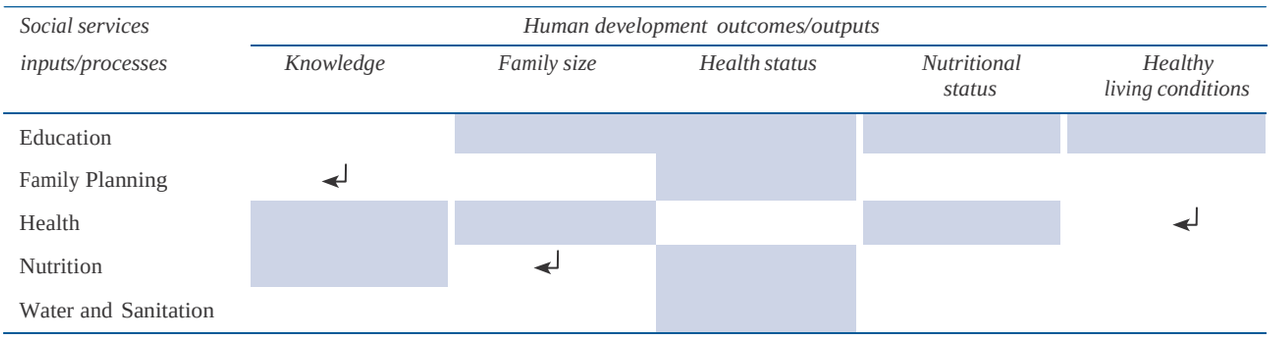

Figure 5.2 Feedback Loops in the Human Development Process—A Focus on Health Related Inputs and Outputs

Sub-Saharan Africa and South Asia in terms of child mortality and healthcare of mothers.

However, these improvements can only be seen in a relative sense because the absolute health status of the Indian population remains poor, which partly reflects supply side constraints. A comparison with other Brazil, Russia, India, and China (BRIC) economies shows that India has the highest child mortality and the proportion of women receiving antenatal care at least once is far lower compared to China and the Latin American and Caribbean nations.

Despite improvements, the following key issues still confront the country.

- In terms of outcome indicators
  - Infant mortality rate (IMR) and maternal mortality rate (MMR) continue to remain way above the target as set in the Eleventh Five Year Plan
  - India has the worst sex-ratio among Asian nations and a declining child sex-ratio
- With respect to process indicators,
  - Not even 50 per cent of Indian women have institutional deliveries and less than half of the children undergo all vaccinations
  - Three or more antenatal care visits are received by only a little over half of all pregnant women in 2005–6
  - Only a little over half the population of reproductive age is using contraception
- The input indicators continue to remain insufficient,
  - Despite a commendable increase in human resources brought about by the National Rural Health Mission, many health centres still do not have doctors/nurses in place
  - There is a shortage of Primary Health Centres (PHCs), Community Health Centres (CHCs) and Sub-Centres
  - The expenditure incurred on healthcare is extremely low by international standards, as well as considering the unmet needs of the population
  - Only about half the population has access to sanitation facilities, which is particularly a problem given the very high density of population (in comparison with say, Africa), especially in urban areas.

How effective the services and infrastructure are depends in turn on the country's/state's commitment towards its people. There are wide variations across states, within rural and urban areas and between various social and religious communities, in terms of health and access to healthcare services. It is commonly known that the performance of northern and eastern states in terms of health indicators is worse than the states in southern India. The situation is worse for rural areas (that account for 65 per cent of the population in 2011) in general and poorer state like Bihar, Chhattisgarh, Orissa, Uttar Pradesh, and Madhya Pradesh—in particular.

According to Baru *et al*., there are mainly three forms of inequities that persist in India's health sector—historical inequalities rooted in the policies and practices of British colonial India that have been pursued even after Independence; socio-economic inequities in terms of caste, class, and gender; and inequities pertaining to availability, utilization, and affordability of healthcare. Of these, the latter two pose serious issues. The situation is worse in the case of the poor, particularly those belonging to SC and ST communities, especially in the less developed States, because they are prone to multiple deprivations.

Over the years, the focus of India's health policy has shifted from a comprehensive universal healthcare system as propagated by the 1946 Bhore Committee, to a healthcare policy that is more selective, single disease, and targeted programme-based. And in terms of the public domain it is mostly confined to family planning, immunization, select disease surveillance, and medical education and research (Gangolli *et al.* 2005).

The most striking weakness of our public health system has been its failure to reach the bottom of the pyramid, that is, to almost 300 million poor people in the country. These people are mostly in rural areas and in urban slums and are forced to incur high costs for private healthcare. High out of pocket expenditure is one of the most important reasons why people are pushed into poverty. The case of SCs, STs, and OBCs, which account for 70 per cent of the total population, is no different. They are in fact, more prone to poor health outcomes, particularly due to their low socio-economic status.

The inequalities across social groups are immense. The analysis shows that OBCs enjoy a better health status than SCs and STs. However, special mention must be made of the fact that SCs perform better than STs in terms of health outcomes, inputs as well as process indicators, which is partly due to the higher concentration of STs in rural and forest areas, where the inhospitable terrain is partly a reason for the restricted reach of administration (Government of India 2008). As discussed in Chapter 2 of this Report, the poor health outcomes in states like Bihar, Jharkhand, Madhya Pradesh, Orissa, Chhattisgarh, and Andhra Pradesh are correlated with the fact that these states together account for almost half of the country's ST population and 37 per cent of the SC population.

However, in the case of STs as well as SCs, the improvement in various health outcomes, albeit slow, should not be ignored. The southern states' success in mobilizing their poor performing lower castes underlines the state governments' commitment towards improving their health status. As a consequence, SCs and OBCs in states like Kerala, Andhra Pradesh, and Tamil Nadu not only perform better in terms of various health indicators as compared to their counterparts in other states, but sometimes they perform even better than the national average for the upper castes. For instance in Tamil Nadu, health outcomes for the SCs and OBCs were better than those for the upper castes in Uttar Pradesh (Mehrotra 2006).

In terms of inter-religious inequalities, it was observed that Hindus performed the worst in terms of various health outcomes, followed by Muslims. This is surprising because Hindus are better placed in terms of various input indicators like vaccinations among children, number of institutional deliveries, and antenatal care (ANC) of mothers. Muslims registered the highest fertility rates, but enjoy a sex-ratio advantage over other major religious communities. The high fertility among Muslims is similar to that of the STs; in fact, the poor in general have high fertility rates.

The above indicators and their trends across states, social and religious groups (wherever data are available),[1] are analysed in the succeeding sections of this chapter. The next section discusses health outcome indicators like IMR, U5MR, death rates, life expectancy, demography, fertility rates, and sex-ratio. The following section examines the process indicators for health, such as place of delivery, prevalence of contraception, ANC, and vaccination of children. The next section provides an analysis of health inputs like health service infrastructure, human resources, healthcare expenditure, and the associated out-of-pocket expenditure. Following section discusses the demand for healthcare facilities and the sixth section examines about the access to water and sanitation, which also determines the health status of people. The last section provides some conclusions.

Data for this chapter has been taken from the Census of India (1981, 1991, 2001, and 2011), *National Family Health Survey 2* (*NFHS 2*) (1998–9) and *NFHS 3* (2005–6), data on health statistics from the Ministry of Health and Family Welfare and the National Sample Survey (NSS) 58th (2002) and 65th (2008–9) rounds.[2] Further,

[1] Caste and religion-wise data across the states are not available for life expectancy, percentage distribution of live births by place of delivery, prevalence of contraception, percentage of women who had ANC visits, percentage distribution of households by source of healthcare for treatment, state/UT-wise number of sub-centres, functioning of PHCs and CHCs, state/UT-wise number of government hospitals & beds in rural & urban areas, state/UT-wise number of government. Allopathic doctors & average population served, State/UT wise number of registered nurses and pharmacists, state/UT-wise health manpower in rural areas (government, public expenditure in health, distribution of health expenditure by the public and private sector, out-of-pocket expenditure on health, total fertility rate, death rate, percentage of persons not expected to survive beyond 40 years.

[2] A two period comparison for religious communities could not be done in case of National Sample Survey (NSS) data because the 58th round does not provide data by religion.

an attempt has been made to correlate some of the variables with the Wealth Index by constructing wealth quintiles.[3] This exercise is done to assess whether there is a positive relation between better health status and greater wealth at hand.

HEALTH OUTCOMES

Improving health outcomes is crucial to pro-poor growth. India, which is home to one third of the world's poor, has a poor record in terms of health outcomes. The present section details the performance of some of the health outcome indicators.

The mother's health status affects not just the child's nutritional status but also the child's survival prospects. Thus, indicators like IMR, U5MR, and life expectancy at birth are also linked to the mother's health status. In India, neonatal mortality (death within 28 days of birth) accounts for 60 per cent of infant mortality, due to partly delivery without medical supervision.

Child Mortality: *A declining trend with rural-urban convergence—yet IMR is well above the MDG target*

Infant Mortality Rate refers to the number of deaths in the first year of life per 1,000 live births. It reflects the probability of a child dying before attaining age one year due to poor health of either the child or mother, or poor healthcare. About 1.5 million children die in India every year before their first birthday (MOSPI 2009).

However, the last decade has witnessed a dramatic fall in the IMR, in both rural as well as urban areas (Table 5.1).

The greatest improvement was seen in the states of Chhattisgarh, Jharkhand, Madhya Pradesh, Rajasthan, Uttar Pradesh, Orissa, and Tamil Nadu. At both points of time (2000 as well as 2009), the highest IMR was observed in Madhya Pradesh and the lowest in Kerala (Table 5A.1).

Even though infant mortality is higher in the rural areas, the rural–urban gap has narrowed over time (Table 5A.1). Figure 5.3 shows some of the states where there was a sharp reduction in the rural–urban gap.

Table 5.1 Infant Mortality Rate, 2000 and 2009

	2000	*2009*
Urban	44	34
Rural	74	55
Combined	68	50

Source: Sample Registration System, Registrar General, India.

The IMR for females was higher than for males at both points of time. This may be attributed to gender discrimination in terms of child care. The gap was greater than five in 2009 for the states of Assam, Chhattisgarh, Goa, and Jammu and Kashmir (Table 5A.2).

IMR among Muslims is less than that among SCs and STs

Data on IMR for religious and social groups is available from *NFHS 2* (1998–9) and *NFHS 3* (2005–6). There is a decline in the all India average for 2005–6 over 1998–9 for almost all major religious communities. Hindus have the highest IMR at both points of time (77 in 1998–9 and 56 in 2005–6), followed by Muslims. Whereas other religious communities experienced a fall in IMR across states, the IMR increased for Muslims in the states of Andhra Pradesh, Bihar, Gujarat, Haryana, Uttar Pradesh, and Delhi,[4] where 45 per cent of the country's Muslim population lives. The IMR for Hindus showed the greatest decline in the state of Haryana over the period 1998–9 to 2005–6 (Table 5A.3).

IMR among SCs and STs converging with the national average, for STs at a higher pace

The average IMR for India and for individual states decreased substantially for all social groups in 2005–6 as compared to 1998–9. However, during this period there was an increase in the IMR among SC children in Jammu and Kashmir and Himachal Pradesh, and ST

[3] Since NFHS 3 data does not contain information on income or expenditure, information related to household assets and durables was combined to create an index of household wealth. The Wealth Index is a composite measure of the cumulative living standard of a household. The Wealth Index is calculated using data on a household's ownership of selected assets, such as televisions and bicycles, materials used for housing construction, and types of water access and sanitation facilities, based on which households were grouped into five quintiles. Wealth quintiles are expressed in terms of quintiles of individuals in the population.

[4] The greatest increase was seen for Andhra Pradesh (22.5 percentage points).

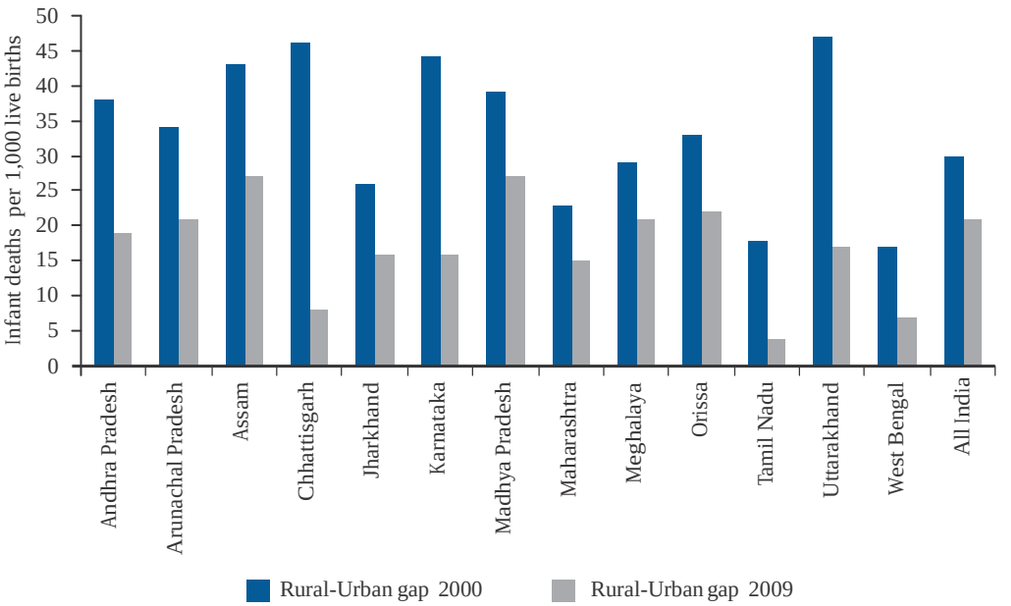

Figure 5.3 Closing Rural-Urban Gap in IMR in Most States, 2000 and 2009

Source: SRS, RGI.
Note: The rural-urban gap is calculated as the excess of rural IMR over urban IMR.

children in Gujarat. ST households registered the greatest improvement over this period while SC infants had the highest risk of mortality (Table 5A.4).

The Eleventh Plan target was to reduce IMR to 28 per 1,000 live births by 2012 and the Millennium Development Goal (MDG) target is 26.7 per 1,000 live births by 2015. IMR was 68 in 2000 and 50 in 2009 the Survey Registration Scheme (SRS), a decrease of 18 in nine years. Given the current pace, it seems impossible that the targets will be reached in the defined time frames.

One of the important determinants of infant mortality is the standard of living. The Wealth Index includes indicators like household assets and durables, which are indicative of the income level and standard of living of the people. Figure 5.4 shows that the top 20 per cent of the population has an IMR more than double that of the bottom 20 per cent of the population.

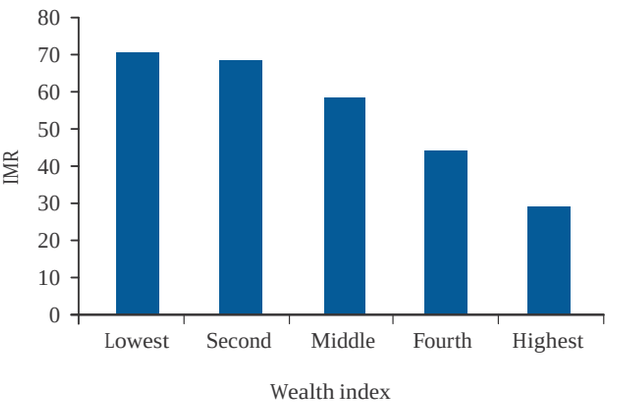

Figure 5.4 Infant Mortality Rate by Wealth Index, 2005–6

Source: *NFHS 3*.

Under Five Mortality Rate: Under five children in poorer States face greater risk of mortality

U5MR refers to the probability of children born in a specific period dying before reaching the age of five years and is expressed as number of deaths per 1,000 live births. U5MR indicates the level of child health.

The NFHS estimates show that the rural– urban gap (with rural higher than urban U5MR) reduced from 44 during *NFHS 1* to 30 during *NFHS 3*. U5MR, in conformity with IMR, was higher in rural areas across all time periods (Table 5.2).[5]

[5] Rural areas experienced a fall of 37 from *NFHS 1* to *NFHS 3* whereas it was 21 for urban India during the same time period.

Table 5.2 Under Five Mortality Rate

Place of residence	*NFHS 1**	*NFHS 2**	*NFHS 3**	2009
Urban	74.6	63.1	52.0	41
Rural	119.4	103.7	82.0	71
Combined	109.0	95.0	74.0	64

Note: *All estimates are for the five years preceding the survey (approximately 1988–92 for *NFHS 1*, 1994–8 for *NFHS 2*, and 2001–5 for *NFHS 3*).
Source: *NFHS 3* and SRS (2011).

According to National Family and Health Survey (NFHS) data, U5MR declined for both males and females over the period 1998–9 to 2005–6 in all the states except for Nagaland, where there was a marginal increase. The best performing states in 2005–6 were Goa (20) and Kerala (16) with IMRs similar to rich countries and the two worst were Madhya Pradesh (94.2) and Uttar Pradesh (96.4) at African levels. Other states with U5MR above the all India average in both periods were Bihar, Orissa, and Rajasthan (Table 5A.5).

The MDG target for U5MR is 42 per 1,000 live births by 2015. According to SRS data, U5MR in 2009 was 64 per 1,000 live births compared to 31 in China. It has fallen from 85 per 1,000 live births in 2000 U5MR for both males and females declined over the period 2000–2009 from 84 to 60 and 95 to 69 respectively (SRS 2011). The male-female differentials were also higher in rural areas. In 2008, the differential was highest in rural Himachal Pradesh. What is commendable is that in urban Tamil Nadu and Madhya Pradesh, the female U5MR is lower than that for males. The lowest recorded U5MR is for the state of Kerala where it is 14 per 1,000 live births (Table 5A.6).

U5MR highest for Hindus, but Hindu–Muslim gap decreasing

The U5MR declined for all major religious communities in 2005–6 compared to 1998–9. Though registering the highest fall in U5MR,[6] Hindus performed the worst among the major religious communities. For Muslims U5MR fell from 83 in 1998–9 to 70 in 2005–6. In the case of both IMR and in U5MR the gap between Hindus and Muslims is decreasing.[7] This seems to be due to the slower improvement among the Muslim population and a faster improvement among the Hindu population, as was also evident in the discussion on IMR. U5MR is the lowest in the case of Sikhs who have better access to healthcare services (Table 5A.7).

Despite huge improvement, U5MR among SCs, STs, and OBCs greater than Muslims

The U5MR was higher than the national average for these social groups in 2005–6 and was the highest for the STs (95.7).[8] It declined for the three social groups (SCs, STs and OBCs) during the period 1998 to 2006 by over 30 per thousand (Table 5A.8). However, it is interesting to note that SCs in states like Delhi, Tamil Nadu, Maharashtra, and West Bengal have a lower U5MR as compared to the national average for upper castes (' Others') in all states. This is also true for OBCs in Delhi, Haryana, Himachal Pradesh, Kerala, Punjab, and Tamil Nadu, where they perform even better than the national average for upper castes.

The U5MR shows the same trend as IMR when plotted against the Wealth Index quintiles, that is, U5MR declines with increase in the Wealth Index of households. The health status of the lowest 20 per cent households is deplorable as can be seen from the fact that their U5MR is way above the national average of 74.3, while for the top 20 per cent, the U5MR is 33.8.

Death Rate: *Better healthcare reduces death rate*

The death rate is defined as the number of deaths per 1,000 persons. It was higher for males than females in all the time periods. The death rate declined from 9.8 to 7.3 over the period 1991–2009. During this period, the highest death rate among states was recorded in Orissa and Madhya Pradesh. Other states/UTs (Union Territories) with high death rates (exceeding the all India average figure) include Assam, Bihar, Chhattisgarh, Meghalaya, Uttar Pradesh, and Puducherry. Among the north-eastern states, Manipur had a death rate below six across the same time period (Table 5A.9). A declining trend in the death rate is attributed to an increase in healthcare facilities, more awareness among people about diseases, and so on.

[6] From 107 in 1998–9 to 76 in 2005–6.
[7] The gap in 1998–9 was 24 percentage points, while in 2005–6, it came down to only 6.
[8] For SCs it was 88, for STs it was 95.7, for OBCs it was 73, and for ' Others' it stood at 59.

This has even led to a decline in the rural–urban gap with respect to death rates.

Life Expectancy: *Increasing consistently, albeit slowly, bridging the rural-urban gap*

Life expectancy is the number of years a person is expected to live, given the prevailing age specific mortality rates to which he/she belongs. Life expectancy of an individual (at any age) is closely linked to IMR and U5MR. As an input to building the HDI, life expectancy is a significant dimension in the development of human population.

Life Expectancy at Birth: An increase of 1.3 years in a decade

Life expectancy at birth has increased over the period 1981–5 to 2004. It has increased more for females than males due to which the gender gap in life expectancies has increased over the period 1992–6 to 2004. The rural areas, normally disadvantaged, too experienced an increase in life expectancy, thus reducing the rural–urban gap
(Table 5.3).

Rural areas in Kerala registered exceptionally good performance across the time periods. Despite improvement over time, states like Assam, Bihar, Orissa, Rajasthan, Uttar Pradesh, and Madhya Pradesh fared below the national average. These states attained life expectancies at birth in the range 58–62 years in 2004, levels which Kerala had attained in the 1970s. In 2004, the life expectancy at birth in Kerala was 74 years. It is interesting to note that the life expectancy for males in Kerala is 71 years, which is very close to the life expectancy of males in North America at 72 years (Arora and Nanda 2010). This is due to better awareness among people and a universally available public health system in Kerala. Punjab was also quite close to Kerala in terms of life expectancy. Life expectancy at birth in Tamil Nadu, Maharashtra, Karnataka, HimachalPradesh, and Haryana was in the range 65–8 years (Tables 5A.10).

Higher expectations for the next decade

Projected levels of life expectancy at birth in 2006–10 show that the all India average is estimated at 67 years, with the highest for Kerala, followed by Delhi and Himachal Pradesh. The north-eastern states, excluding Assam, are estimated to have a life expectancy at birth greater than the national average. In fact, Assam (62.2) has the lowest projected life expectancy at birth, followed by Madhya Pradesh (62.9) (Table 5A.11).

Life Expectancy at Age One: An increase of one year in a decade

Life expectancy at age one is the number of years a person is expected to live at age one. The importance of this indicator is the fact that it abstracts the impact of IMR.

At the national level this indicator has improved over the period 1981–5 to 2004 with a declining rural–urban gap over time.

In general, male life expectancy was slightly higher than that of females during the period 1981–5. In the subsequent periods a reverse pattern was observed. However, there were exceptions. Bihar, Madhya Pradesh, Orissa, and Uttar Pradesh had higher life expectancies for males than females—which is perverse, since biologically women live longer than men (Table 5A.12). One of the reasons could be the discrimination against the girl child in terms of nutrition and healthcare right from infancy, which continues through the life-cycle of women (see argument in Chapter 4).

Kerala and Punjab were amongst the best performing states in terms of life expectancy at age one. Barring

Table 5.3 Life Expectancy at Birth, 1981–2004

	1981–5			*1992–6*			*2004*		
	Male	*Female*	*Persons*	*Male*	*Female*	*Persons*	*Male*	*Female*	*Persons*
Rural	54.0	53.6	53.7	58.9	59.8	59.4	60.1	61.6	60.96
Urban	61.6	64.1	62.8	64.9	67.7	66.3	66.0	69.0	67.60
Combined	55.4	55.7	55.5	60.1	61.4	60.7	61.3	63.0	62.2

Source: Compendium of India's Fertility and Mortality Indicators, based on SRS, Registrar General of India.

Assam, Bihar, Madhya Pradesh, Orissa, and Uttar Pradesh, all the other states were above the national average (66 years in 2004) (Tables 5A.12).

Persons not Expected to Survive beyond Age 40 Years has declined

The proportion of persons not expected to survive beyond the age of 40 years reflects the deprivational aspect of longevity in the population, as it presents the proportion of population that is not likely to live to an age which is just about half the expected life span of people in the developed world. The proportion of persons not expected to survive beyond the age of 40 years has declined over the period 1981–2004, which is good news (Table 5A.13). However, the rural–urban gap has decreased, with life expectancy improving faster in rural than in urban areas. During the same period, proportionately more females than males were expected not to survive beyond the age of 40 years, which, as we noted earlier, is an indicator of gender discrimination over the life cycle of girls and women in India. The gender gap too has also decreased over time, which is good news.

Across the states, Kerala was the best performer, where the proportion of persons not expected to survive beyond the age of 40 years in 2004 was only 5.6 per cent. In Assam and Madhya Pradesh the proportion was more than four times than that of Kerala in 2004. However, the percentage declined in Madhya Pradesh from 1991 (Table 5A.13).

Eighteen per cent of the country's population is not expected to live beyond the age of 40 years. At the same time, on an average, an adult is expected to live for just over 60 years. The implication is that 18 percent of the population is losing 20 years of potential (work) life, which, supported by sufficient resources, could drive economic growth.

Demography: *An opportunity called 'demographic dividend'*

Due to declining fertility and the improvement (albeit slow) in life expectancy, India is experiencing a fall in the dependency ratio. This trend has led to the emergence of what is called the 'demographic dividend', which is a 'bulge' in the working age population. The demographic dividend, if harnessed, can act as an opportunity for economic growth with increased savings and hence, increased investments.

The age composition of the population (Figure 5.5) shows that almost 57 per cent of the population lies in the age group 15–59 years, the age bracket of the working population.

India has the youngest population in the world; its median age in 2000 was less than 24 compared to 38 for Europe and 41 for Japan. Even China had a median age

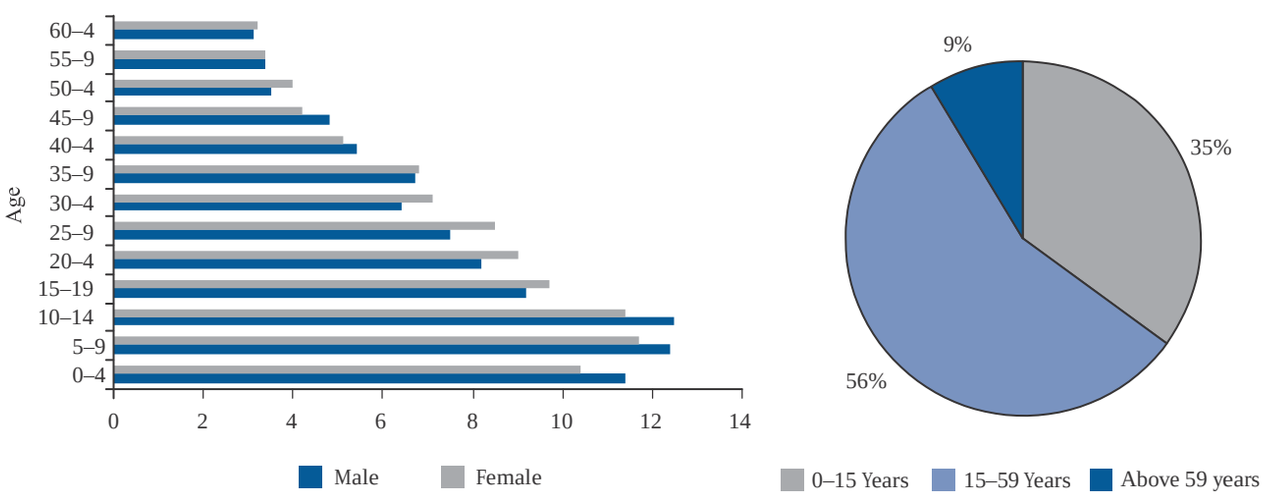

Figure 5.5 Structure of Population in India

Source: RGI 2005, as cited in High Level Committee Report on Social, Educational, and Economic Status of Muslims in India 2006.

of 30. This means that India has a unique opportunity to complement what an ageing rest of the world needs most. India's demographic structure, in comparison to that of competing nations, would work to her advantage as the youth could acquire skills and seize global employment opportunities in the future. This involves coordination, dialogue, and discussions with the state governments, pri- vate partners, and other stakeholders to arrive at estimates of the number of skilled personnel required across the sectors, align them with the career objectives of the youth and prepare diff erent sector-specifi c modules of varying duration (Planning Commission 2008).

The characteristics of the population and its changes are strongly infl uenced by health conditions. Changes in mortality and fertility rates are major determinants of the population's growth rate and its composition.

India entered the second stage of demographic transition during the 1960s with a population growth rate of over 2.2 per cent per annum. India is now the second most populous country in the world, with a population of about 1.2 billion. What is commendable however is that the population growth rate has come down to 1.4 per cent per annum (estimated for 2010) though there are large interstate variations. In India, mortality is not yet very low life expectancy has crossed 60 years but is much lower than that in the developed world and the total fertility rate (TFR) is still above replacement level. India has yet to complete the process of demographic transition.

Total Fertility Rate: *Nine major States have already achieved the replacement rate but poorer northern states are far behind*

The TFR is defi ned as the number of live births a woman would expect to deliver if she were to live through her reproductive years (age 15– 49 years) and to bear children at each age in accordance with the prevailing age specifi c fertility rates. Two important demographic goals of the National Population Policy (Government of India 2000) are achieving the population replacement level (TFR of 2.1) by 2010 and a stable population by 2045.

The TFR in the country declined over the period 1980– 2008 and reached 2.6 in 2008 (Table 5A.14). The north-eastern states also experienced this decline in fertility, with the highest fall observed in Tripura.

The decline was observed in both and urban areas. The rural– urban gap also declined over the same period. As expected, it was observed that a woman in rural areas gives birth to more children than her urban counterparts.

Many states like Goa, Kerala, Nagaland, Tamil Nadu, and Tripura had fertility rates below the replacement level even in 1995– 7. The year 2008 witnessed a marked improvement, with nine major states having achieved the replacement level, namely Andhra Pradesh, Delhi, Himachal Pradesh, Karnataka, Kerala, Maharashtra, Punjab, Tamil Nadu, and West Bengal. In particular, Andhra Pradesh, Himachal Pradesh, and West Bengal saw a huge fall in fertility over the 1990s (Table 5A.15,
5A.16).

In certain states however, TFR was way above the targeted rate. For instance, in 2007, TFR was four for Bihar and Uttar Pradesh—almost double the target rate. The TFR for these states marginally declined in 2008. This refl ects the miserable condition of health services and limited public health interventions with respect to family planning in the states. Other states recording TFRs above three include Chhattisgarh, Jharkhand, Madhya Pradesh, and Rajasthan. These poorer states also witnessed high population growth rates of over 2.2 per cent per annum. However, all states are expecgted to achieve the replacement rate TFR of 2.1 in 10– 12 years.

High TFRs contributing towards increasing poverty in the resource constrained states increasing their share of the country's poor population. Lower fertility rates, especially in the poorest households, is a necessary condition of demographic transition, which in turn can be a key underlying determinant of per capita income growth; however, low fertility rates can be achieved easily only with greater gender equality in several dimensions of human well-being (Mehrotra and Kapoor 2009).

TFR in the majority of northern states is worse than that in the southern states. This can be traced back partly to the diff erence in the health care systems and services in the states. For instance, as would be seen later, the contraception prevalence rate in Tamil Nadu, Kerala, and Andhra Pradesh is much higher than that in the poor northern states of Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh.

The Mid Term Appraisal of the Eleventh Plan also showed optimism on this front—the TFR was 2.6 in 2008 (SRS). A plausible explanation for this falling trend is the rising education of people. An educated woman is more likely to understand the advantages of bearing a small family and the implications of family planning initiatives. This has also been depicted in the matrix showing

feedback loops at the micro-economic level at the beginning of the chapter. Figure 5.6 represents the relationship between education status and TFR.

Muslims experience maximum fall in TFR (in percentage points) among social groups and religious communities

It was found that with the exception of Sikhs, all other religious communities had fertility rates above the replacement level. The highest fertility rate was observed among Muslims at 3.09 with an accompanying high population growth rate of 2.9 per cent per annum, again the highest among the religious communities. This is due to the relatively high proportion of Muslim women in the reproductive age group, and also their lower use of contraception compared to other religious communities. Between 1998–9 and 2005–6 there was a decline in TFR for all major religious communities, the maximum fall being among the Muslims (Table 5.4).

TFR among SCs and Muslims approaching the national average

All the major social groups have TFRs above the replacement level, the highest being for STs at 3.12. Between 1998–9 and 2005–6 there was a fall in TFR for all groups except for the STs. The OBCs had a lower fertility rate in comparison to SCs and STs in both the periods (Table 5.4). The average TFR in India is 2.6 and the TFR of the poorest groups (STs, SCs, and Muslims) is higher. However, for SCs and Muslims it is converging towards the national average over time.

ST women have the highest TFR among all social and religious groups

A high TFR is essentially the outcome of poverty and lack of education/awareness about contraception. The poor consider every child as a source of income. Thus, STs and Muslims have high TFRs not because of their socio-religious status, but because of their economic status.

Sex-Ratio: *Female defi cit prevails despite an improvement over time*

The sex-ratio is indicative of the composition of the population. It is defi ned as the number of females per 1,000 males. What is striking is that India has had a female defi cit for a long period of time. The overall sex-ratio de- clined from 934 in 1981 to 927 in 1991 then increased to 933 in 2001. However, this is still below the 1981 level (Tables 5.5, 5A.17). The partial good news is that the sex-ratio improved slightly between 2001 and 2011 from 933 to 940.

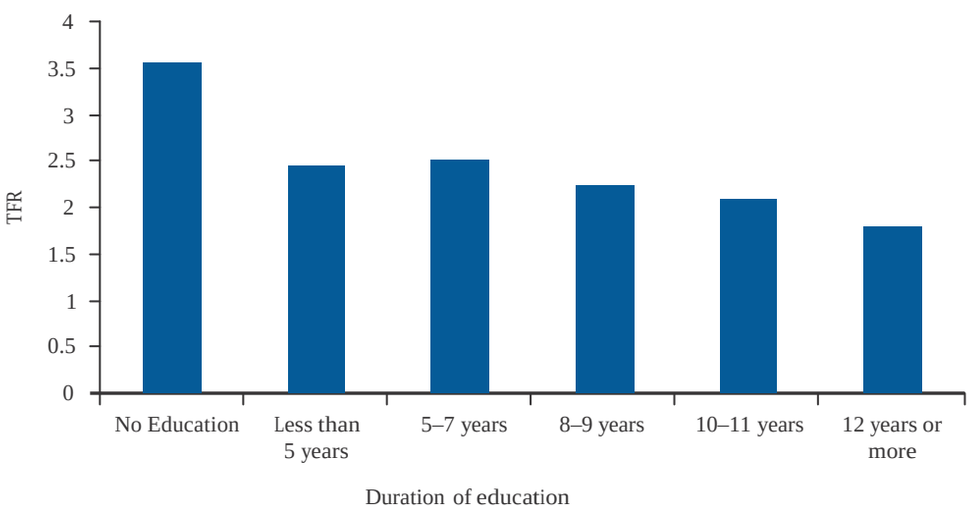

Figure 5.6 Relationship between TFR and Education Status of Women, 2005–6

Source: *NFHS 3.*

Table 5.4 Total Fertility Rate of Religious and Social Groups, 1998–9 and 2005–6

Religious Communities	*Total Fertility Rates*	
	1998–9	*2005–6*
Hindus	2.78	2.65
Muslims	3.59	3.09
Christians	2.44	2.35
Sikhs	2.26	1.96
Social Groups	*Total Fertility Rates*	
	1998–9	*2005–6*
SCs	3.15	2.92
STs	3.06	3.12
OBCs	2.83	2.75
Others	2.66	2.35

Source: *NFHS 2 and NFHS 3.*

Table 5.5 Overall Sex-Ratio, 1981–2011

Place of residence	*1981*	*1991*	*2001*
Rural	952	939	946
Urban	880	894	901
Combined	934	927	933

Source: Census of India.

Sex-ratio even worse in richer states

The worst sex ratios were found in the states with high per capita income, like Delhi, Haryana, Punjab, Gujarat, and Chandigarh. This is a refl ection of the access to technology, which helps in detecting the sex of the foetus. The high female defi cit in Delhi depicts the demonstration eff ect of Haryana and Punjab. However, even the states with a low per capita income like Bihar, Rajasthan, and Uttar Pradesh suff er from an adverse sex-ratio due to gross gender discrimination.

The sex-ratio was the worst in Delhi (821) and was less than 900 in several states, including Punjab (874) and Haryana (861). Kerala is an exception, where there were more females than males. This may be a refl ection of the best female literacy rates, better performance in terms of health indicators, and greater autonomy to females owing to greater participation in the labour force in southern India as compared to the northern states, where females are discriminated against.

In 2001, the sex-ratio in rural areas was greater than that in urban areas. The rural areas of Chhattisgarh, Kerala, and Uttarakhand had a female surplus. Due to biological reasons, at the time of child birth the probability of male mortality is higher than that of females; and urban areas are better equipped with healthcare facilities as compared to rural areas. This causes greater male mortality in rural India and thus there are a greater number of females as compared to urban India. In addition, the higher sex-ratios in rural areas may also refl ect the migration of males to urban areas.

Provisional estimates of Census 2011 show that the sex-ratio has increased from 933 females per 1,000 males in 2001 to 940 in 2011. Among the major states, Delhi still has the worst sex-ratio (866), followed by Haryana (877), Jammu and Kashmir (883), and Punjab (893). However, some of the poorer states like Chhattisgarh (991), Orissa (978), and Jharkhand (947) have higher sex-ratios. Kerala has the highest sex-ratio with 1,084 females per 1,000 males, followed by Tamil Nadu (995) and Andhra Pradesh (992). Over the decade, sex-ratio has declined in Jammu and Kashmir, Bihar, and Gujarat. Despite the highest increase of 45 points, female defi cit is most pronounced in Delhi (Table 5A.17).

Child sex-ratio in the population age group 0– 6 years is also an important indicator of the composition of the population. In 2001, child sex-ratio was 927 females per 1,000 males. Even Kerala, which had an overall sex-ratio above 1,000, suff ered from female defi cit in the age bracket 0– 6 years (Table 5A.18). The adverse sex-ratio in the age group 0– 6 years refl ects the pervasive discrimination against girls and the high incidence of female foeticides.

Provisional estimates of Census 2011 show worsening of the child sex-ratio. Over the decade it has declined to 914 females per 1,000 males. Lowest child sex-ratio is in Haryana (830), followed by Punjab. Child sex-ratios are relatively higher for the north-eastern states. All the major states except for Himachal Pradesh, Haryana Punjab, Gujarat, and Tamil Nadu, experienced a decline in 2011 in child sex-ratio over 2001. The highest decline is observed for Jammu and Kashmir, followed by Maharashtra (Table 5A.18).

The data on religious communities showed a similar trend. Christians performed the best amongst religious communities, in both rural as well as urban areas. Surprisingly, the Sikh households were the worst placed, with a sex-ratio at birth of only 770 (it was 769 for urban India

and 771 for rural India), whereas they perform better than the others in many other health indicators. The reason for this pattern lies in the fact that over 80 per cent of Sikh households are located in Punjab and the state has a strong preference for male children,[9] leading to an in- creased possibility of female foeticide (Table 5A.19).

Muslims have a higher sex-ratio compared to Hindus

Muslims had an advantage over Hindus with respect to the sex-ratio (Table 5.6). The strong preference for sons among Hindus, has led to sex detection and selection, adversely affecting the sex-ratio at birth among Hindus (Alagarajan and Kulkarni 2008). The details are given in Table 5A.19.

Table 5.6 Sex-Ratio at Birth by Religious Community, 2001

Place of residence	*Hindus*	*Muslims*	*Christians*	*Sikhs*
Rural	903	930	960	771
Urban	897	934	972	769
Combined	901	931	963	770

Source: Calculated from Census of India (2001, Table F10S).

SCs and STs have a higher sex-ratio than non-SC/ST households

Interestingly, ST households had a sex-ratio at birth above the national average of 933. Not only this, STs had a greater sex-ratio than SCs as well as non-SC/ST households, in both rural and urban India (Table 5A.20). The sex-ratio was the lowest for non-SC/ST households, well below the national average (Table 5.7).

Discussing the latest figures for sex-ratio in the age group 0–4 years and the slow improvement over time, the Mid Term Appraisal suggested that the current sex-ratio for 0–4 years does not augur well for the gender equality goal.

One of the factors responsible for such high fertility rates and 'missing women' in terms of the adverse sex- ratio in our country is gender discrimination against women and the girl child. Gender discrimination leads to an inter-generational transfer of ill-being from women to children, especially for the female child. Very high fertility rates are a reflection of the minimal reproductive rights

Table 5.7 Sex-Ratio at Birth by Social Group, 2001

Place of residence	*SCs*	*STs*	*Non SC/ST*
Rural	921	940	896
Urban	917	934	901
Combined	920	940	897

Source: Calculated from Census of India (2001, Table F 10).

a woman enjoys, more so in the poor northern states because of their low educational levels. For biological reasons, women live longer than men and so the expectation is that the women's share in the population of any country would be higher than that of men. However, the fact that India still faces a female deficit is due to gender discrimination against women over the life cycle as well as sex selective abortions. Women's lack of autonomy and reproductive rights only slows down the demographic transition and hence per capita income growth and human development (Mehrotra and Kapoor 2009).

What deserves a special mention here is the experience of Kerala vis-à-vis the northern states. The process of demographic transition began in Kerala much ahead of other states. This was the outcome of historic change which had occurred in the state. Since the early 1960s, education and employment of women has been on the increase. This has given them a purpose in life other than child bearing and child rearing and more freedom to choose their age of marriage. It is no surprise that the state achieved replacement level fertility rate in 1988 (Mitra1978; RGI 2006). In stark contrast, the northern belt has a long history of discrimination against the female child, coupled with low literacy rates and relatively lower participation of women in the workforce.

REPRODUCTIVE AND CHILD HEALTH

Reproductive and Child Health (RCH) programmes aim at ensuring safe motherhood and improved child health, in addition to raising contraception prevalence rates (CPR). The performance of the health outcome indicators like child mortality (IMR, U5MR), maternal mortality (MMR), death rate and other indicators, crucially depends on the efficiency of the RCH programme. For instance, if women's deliveries took place at a medical institution, rather than at home, it would ensure better health for

[9] In 2005–6, 18 per cent women and 13 per cent men in Punjab wanted more sons than daughters as compared to only about 2 per cent each of women and men wanting more daughters than sons.

them as well as the newborn. Similarly, the prevalence of contraception and the number of antenatal visits are indicative of the healthcare resources available to women, which would contribute to their health and empowerment. Vaccinations received by children would help reduce not only the disease burden amongst children, but also child mortality. Against this backdrop, the better-than-average performance of the southern states like Kerala and Tamil Nadu in reducing their TFR and IMR could be attributed to the success of their RCH programmes. Thus the present section dwells on such processes in healthcare.

Place of Delivery: *A rise in institutional deliveries post NRHM and JSY*

The place of delivery is crucial in determining the maternal health status and is a good indicator for assessing the demand for the public health system. A large proportion of Indian women, particularly in rural areas, do not go to an institution for their deliveries. This is a major reason for high maternal and neonatal mortality in rural areas.

In order to address health related issues, such as institutional deliveries, existing in rural areas, the Government of India launched the National Rural Health Mission (NRHM) in April 2005 with a special focus on 18 states, namely, eight Empowered Action Group (EAG) states, eight north-eastern states, and the states of Jammu and Kashmir and Himachal Pradesh which had poor health indices. The aim of the NRHM is to provide accessible, affordable, accountable, effective, and reliable healthcare facilities in the rural areas of the entire country, especially to the poorer and vulnerable sections of the population. Janani Suraksha Yojana (JSY), an intervention under the purview of NRHM, aims at reducing maternal and neo- natal mortality by increasing institutional deliveries for Below Poverty Line (BPL) families. Under this scheme, the beneficiaries receive cash incentives immediately after the delivery.

It is to be noted that during 2005–6, on an average only 39 per cent of deliveries in the country took place in an institution. There are 12 states which were below the national average, namely, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Meghalaya, Nagaland, Orissa, Rajasthan, Uttarakhand, and Uttar Pradesh. The lowest placed was Nagaland at only 11.6 per cent while Kerala had almost 100 per cent institutional deliveries (Table 5A.21). On average, the private sector's share of institutional deliveries was higher, but only marginally, than that of the public sector.

Institutional deliveries in rural areas were lower than that in urban areas. In rural areas, the condition of women belonging to states like Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Rajasthan, and Uttar Pradesh was worrying. A very low proportion of women had institutional deliveries and thus there was a higher risk of maternal as well as infant mortality. Also, the rural areas of the north-eastern states of Arunachal Pradesh, Assam, Meghalaya, and Nagaland fared poorly in terms of institutional deliveries (Table 5A.22 and 5A.23).

However, after the introduction of NRHM in 2005, there has been an improvement in institutional deliveries in rural areas. This has been credited to the increase in human resources deployed in the public health sector, especially in rural areas.

Over 31.9 million women have so far been covered under JSY (NRHM, Ministry of Health and Family Welfare). As of March 2009, institutional deliveries as a percentage of total reported deliveries stood at 78 per cent (NRHM DMU Report 2010). However, the Third Common Review of NRHM shows that after delivery mothers remain in institutions for less than half a day in most cases and the quality of care also needs to be improved.

Only one-third of Muslim and Scheduled Caste women have institutional deliveries, Scheduled Tribes even fewer

Across religious communities, there were significant inter-religious disparities in the place of delivery. Most religious communities experienced an increase in the proportion of women having institutional deliveries (except for Christians, where there was a marginal fall). In 2005–6, only a third of the deliveries among Muslims were institutional which was below the national average of 39 per cent. Other religious communities performed relatively better. Sikh households outperformed other religious communities, registering the maximum improvement in the number of institutional deliveries (Table 5.8).

Among the social groups, a significant proportion of deliveries took place at home during both the time periods. This reflects their backward status. In the case of STs, the percentage was as high as 82 in 2005–6, which is a matter of concern. Moreover, there was no change in this proportion over time. The reason is that most of the

Table 5.8 Percentage Distribution of Live Births by Religious Community

Place of delivery	*Hindus*		*Muslims*		*Christians*		*Sikhs*	
	1998–9	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*
Institutional	32.9	39.1	31.5	33	54.4	53.4	47	58.3
Home	66	60.6	67.5	66.8	45.2	46.5	52.7	41.6

Source: *NFHS 3.*

STs live in rural areas. The OBCs were relatively better placed (Table 5.9).

A woman delivering at home cannot get comprehensive healthcare for the mother and the child, the primary reason for such high maternal mortality in the country. MMR fell from 301 per 100,000 live births in 2001–3 (SRS 2001–3) at an average rate of 16 per year to 254 in 2004–6 (SRS 2004–6). The highest MMR was recorded for Assam, followed by Uttar Pradesh.[10] Almost all the states, except for Punjab and Haryana, experienced a fall in MMR over the period.

States with a higher incidence of maternal mortality, mostly over 300 per 100,000 live births, are also the states with fewer cases of institutional deliveries. Kerala which recorded the lowest MMR has around 99 per cent of institutional deliveries. MMR further declined to 212 in 2007–9, a 17 per cent decline over 2004–6. To achieve the 11th Plan goal of MMR of 100 by 2012, a reduction of 28 per 1,00,000 per year is needed (Tables 5A.21 and 5A.24).

A major factor determining the occurrence of institutional deliveries is education. It can be seen that as the number of years of education increases, more and more women choose institutional deliveries. This is because educated women are aware of the importance of hygiene during delivery, quality postnatal care, and maternal and child care. A similar trend is seen in both urban and rural areas (Figure 5.7). Thus, education has a huge potential to turn around the status of maternal and infant care in rural areas. It can also be seen that at each level of education, urban India experiences a greater number of institutional deliveries as compared to its rural counterpart.

A wide disparity is seen in the percentage of institutional deliveries between those with no education and those with 12 or more years of education. The all India average was 18.4 per cent and 86.4 per cent, respectively, for the year 2005–6, confirming the fact that education, along with resultant empowerment, also enables access to better healthcare services (Tables 5A.25 and 5A.26). However, it needs to be noted that poor women in remote areas have less wealth and resources to be able to gain access to institutional arrangements. Hence, the urgent need for functional health services at the bottom of the pyramid.

Beside education, economic characteristics, as measured by the Wealth Index, share a positive correlation with institutional deliveries (Figure 5.8). For the lower three wealth quintiles, more than 50 per cent of the deliveries was at home. This proportion declines for the higher wealth quintiles.

Prevalence of Contraception: *Across the board increase in the CPR, as also depicted by falling TFR*

As discussed in the context of feedback loops, family planning and reduced family size are important processes

Table 5.9 Percentage Distribution of Live Births by Social Groups

Place of delivery	*Scheduled Castes*		*Scheduled Tribes*		*Other Backward Castes*		*Others*	
	1998–9	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*
Institutional	26.8	33	17.1	17.7	36.1	37.8	40.1	52.6
Home	72.1	66.8	81.8	82	62.8	61.9	59	47.3

Source: *NFHS 3.*

[10] It was as high as 480 per 100,000 live births in Assam and 440 in the case of Uttar Pradesh in 2004–6.

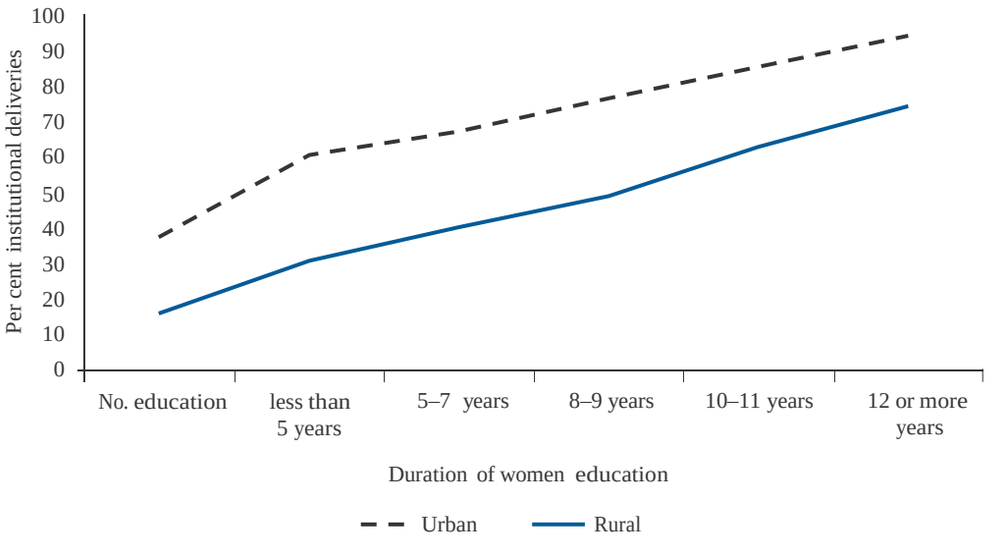

Figure 5.7 Relationship between Duration of Education and Share of Institutional Deliveries (per cent), 2005–6

Source: *NFHS 3*.

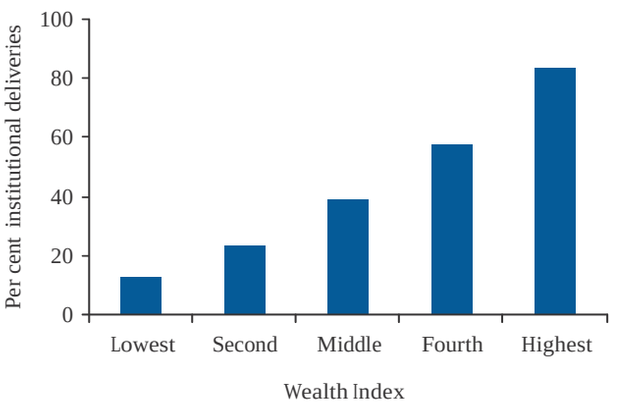

Figure 5.8 Place of Delivery: Distribution of Live Births by Wealth Index, 2005–6

Source: *NFHS 3*.

in shaping the health outcomes of a household. Spacing of children helps improve the health status of the mother and the child, which has positive implications for improving life expectancy. In addition, a smaller family size also improves the chances of a poor family being able to afford food, nutrition, and education for all the children.

The success of states like Kerala and Tamil Nadu in reducing their fertility rates, reaching replacement levels and better performance in health indicators can be attributed to their success in raising the CPR. These states have been better prepared than most others in implementing many components of the reproductive health programme that India launched in October 1997. For example, even before the Government of India announced the removal of method-specific family planning targets in major states in 1995, the Tamil Nadu government had removed targets assigned to non-health personnel in the district of North Arcot as early as 1991–2 (Visaria 2000). On the other hand, the health and family welfare programme in most of the other states is oriented towards either using traditional methods of family planning or sterilization, when it should be focused on increasing birth spacing through condom use.

Using contraception can not only reduce the fertility rate but can also help prevent the transmission of HIV. *National Family Health Survey 3* data shows that the prevalence of contraception in 2005–6 was 56.3 per cent at the all India level (Table 5A.27).[11] Of this, 48.5 per cent constituted prevalence of modern methods of contraception. The prevalence of contraception was the highest in Himachal Pradesh followed by West Bengal, while CPR was the lowest in Meghalaya. States which were above the national average included Andhra Pradesh,

[11] This was only 48 per cent in 1998–9 (*NFHS 3*).

Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Maharashtra, Mizoram, Punjab, Sikkim, Tamil Nadu, Tripura, Uttarakhand, and Delhi. Except for Arunachal Pradesh, Meghalaya, and Nagaland, all the north-eastern states were above the national average.

Contraception was less prevalent in rural areas as compared to urban areas, owing to ignorance and lack of autonomy in reproductive health rights for women in the rural setting. It should be noted that modern methods were more prevalent than any traditional method in rural areas also. In eight states namely Andhra Pradesh, Goa, Gujarat, Haryana, Himachal Pradesh, Manipur, Kerala, and West Bengal, the rural–urban gap was very narrow with regard to the prevalence of modern methods. It is interesting to note is that in states like Karnataka, Maharashtra, Punjab, Tamil Nadu, Tripura, and Delhi the use of modern methods in rural areas slightly exceeded that in urban areas. In the rest of the states, there is far greater prevalence of modern methods in urban areas as compared to rural areas (Table 5A.27).

Table 5.10 Prevalence of Contraception by Religious Communities (*per cent*)

Religious communities	*1998–9*	*2005–6*
Hindus	49.2	57.8
Muslims	37	45.7
Christians	52.4	57.7
Sikhs	65.2	66.5

Source: *NFHS 2 and NFHS 3.*

Table 5.11 Prevalence of Contraception by Social Groups (*per cent*)

Social group	*1998–9*	*2005–6*
Scheduled Castes	44.6	55
Scheduled Tribes	39.1	47.9
Other Backward Classes	46.8	54.2
Others	53.5	61.9

Source: *NFHS 2 and NFHS 3.*

TFR across Socio-religious Groups: Maximum fall in TFR experienced among Muslims along with a sharp rise in CPR

The prevalence of contraception increased for all major religious communities in 2005–6 as compared to 1998–9. Muslims had the lowest CPR in 1998–9 followed by Hindus and Christians. However, during this period, there was a commendable increase in CPR among Muslims, in fact the highest percentage improvement for any religious community (Table 5.10). It is this increase in the CPR which has led to a fall in the TFR among Muslims. However, the CPR among Muslim households in 2005–6 was still below that for ST households (Table 5.11).

CPR among SCs, STs and Muslims converging with all India average, at the highest pace for SCs

The prevalence of contraception increased among all social groups over time. Except for STs, the prevalence of contraception was above 50 per cent in 2005–6 (Table 5.11). However, despite improvements, SCs and OBCs are at the level that 'Others' were in 1998–9.

The prevalence of contraception increases with a rise in the household wealth status (Figure 5.9). This is to say that with a better standard of living, people are more aware of the benefits of contraception and thus the usage. Among the lowest two quintiles, CPR is less than the national average.

Antenatal Care: *Coverage remains low*

Women in India suffer when they do not avail/access healthcare services during pregnancy. In 2005–6, while more than 70 per cent had at least one ANC visit, the proportion of pregnant women who had three or more antenatal visits was much lower. This reflects insufficient care provided to the pregnant woman and the unborn child. Women in Arunachal Pradesh, Assam, Bihar, Jharkhand, Madhya Pradesh, Nagaland, and Uttar Pradesh had the least access to ANC. By contrast, in states like Goa, Kerala, and Tamil Nadu, more than 90 per cent of the women had three or more ANC visits (Table 5A.28). However, the Government of India (2009) found that barring these few states, the ANC coverage remains quite low and of poor quality, especially in rural areas.

Not even 50 per cent Muslim, SC and ST women receive three or more ANC visits

In 2005–6, among the religious communities, Sikh households had the highest percentage of pregnant women

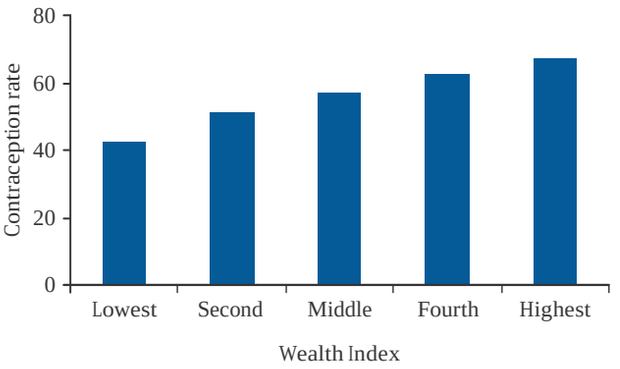

Figure 5.9 Prevalence of Contraception by Wealth Index

Source: *NFHS 3.*

receiving ANC services. The lowest share of Muslim women receiving ANC—less than half of the Muslim women received three or more ANC visits, whereas visits by the remaining groups were above the national average (Table 5.12).

Among SCs, STs, and OBCs the percentage of women who had at least one ANC visit or three or more ANC visits was below the national average. The OBC women, however, were relatively better placed than SC and ST women. The ST women suffer the most on this account and this can partly be attributed to the fact that they are concentrated in rural areas (Table 5.13).

Vaccination of Children: *Rise in immunization among children over time, but not even half the children are fully immunized*

To assess the percentage of children receiving vaccination, the Report has focused primarily on the best case and the worst case scenarios. The percentage of children receiving all vaccinations reflects the best case and the percent- age of children receiving no vaccinations the worst case scenario.[12]

At the all India level in 2005–6 only 5 per cent children did not receive any vaccination, an improvement over 14 per cent in 1998–9 (Table 5A.29). At the same time, in 2005–6, not even half of the children surveyed had received all the vaccinations.

Table 5.12 Health Services Received by Pregnant Women by Religious Communities (*per cent*)

Religious communities	*At least one ANC*	*3 or more ANC visits*
Hindus	77.1	52.5
Muslims	72.2	45.7
Christians	82.2	67.7
Sikhs	88.7	76
All India	76.4	52.0

Source: *NFHS 3.*

Table 5.13 Health Services Received by Pregnant Women by Social Groups (*per cent*)

Social groups	*At least one ANC visit*	*3 or more ANC visits*
Scheduled Castes	73.5	45.7
Scheduled Tribes	69.2	40.1
Other Backward Classes	74.1	49.9
Others	83.9	63.5

Source: *NFHS 3.*

Tamil Nadu is the best performing state in terms of children receiving all vaccinations in both the periods. Assam, Bihar, Madhya Pradesh, Maharashtra, Meghalaya, Sikkim, and West Bengal registered a substantial rise in the number of children receiving vaccinations over time. Mizoram faced a decline of 13 percentage points, whereas all the other north-eastern states registered an improvement (Table 5A.29).

A higher proportion of children received all vaccinations in urban areas as compared to rural areas. In the rural areas, Arunachal Pradesh and Nagaland had over 20 per cent of children who had received no vaccinations compared to the all India average of 5.6 per cent (Table 5A.30).

STs and Muslims converge with all India average with respect to children receiving all vaccinations

Between 1998–9 and 2005–6 all major religious com- munities experienced a fall in the percentage of children

[12] All vaccinations include BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth).

receiving no vaccination. The fall was steep amongst Muslims. There was a rise in the number of children receiving all vaccinations, except in the case of Christians and Sikhs (Table 5A.31a and b).

A lower percentage of SC children receive no vaccination compared to ST and Muslim children

The percentage of children receiving all vaccinations increased for STs in 2005–6 as compared to 1998–9, but decreased in the case of SC and OBC children. As in the case of religious communities, the percentage of children receiving no vaccinations declined for all social groups in 2005–6 compared with 1998–9 (Table 5A.32).

HEALTH INPUTS

The Government of India's vision for health involves achieving good health, especially for the poor and the underprivileged and paying special attention to the needs of the marginalized. Accomplishing this task depends crucially on the circumstances and availability of health infrastructure as well as financial and human resources.

Healthcare Expenditure

Expenditure on health as a percentage of GDP in India is below South Asia and Africa

The availability of health infrastructure, its delivery, and various health outcomes hinges primarily upon the expenditure incurred on healthcare. The public expenditure on healthcare is abysmally low in India. The total expenditure (both public and private) on health as a percentage of GDP stood at only 4.1 per cent in 2007 (WHO Statistics 2010). China was in a slightly better position with a share of 4.3 per cent of GDP. The African region as a whole did better than India, with the total expenditure on health constituting 6.2 per cent of its GDP. Furthermore, except for Bangladesh and Pakistan, all South Asian countries had a greater share of GDP spent on health as compared to India.

Share of public expenditure in total health expenditure remains consistently low in India at one per cent of GDP

The most worrisome aspect of health expenditure in India is its distribution between public and private expenditure—public expenditure on health is extremely low as compared to private expenditure. In 2008, the share of public expenditure was not even one third of the total expenditure (both public and private). Public expenditure on health was only 28 per cent of the total expenditure and the remaining 72 per cent was private expenditure. The same pattern existed in South Asian countries barring Maldives and Bhutan. In Brazil, South Africa, and China public expenditure on health was more than 40 per cent of the total expenditure (WHO Statistics 2010).

Share of private expenditure in total health expenditure in India is high at 72 per cent compared to 20 per cent in Bhutan, and 53 per cent in China

A high share of private expenditure on health is attributed to a larger share of out-of-pocket (OOP) expenditure by households in private health expenditure. The OOP expenditure for India and China was much above that in the African region as well as South Asian countries like Maldives, Pakistan, and Sri Lanka. A high share of OOP expenditure in private expenditure implies very low expenditure on health insurance and expenditure towards healthcare by firms and NGOs.

The National Health Accounts (Government of India 2009c) reveals that in 2004–5 the total health expenditure in India was only 4.25 per cent of the GDP. Of this, the share of public expenditure was 0.84 per cent, the share of private expenditure was 3.32 per cent and the remaining minimal share was external flows. Duggal (2006) conjectures that although the central government's own expenditure is increasing rapidly, the state governments' spending on health is stagnant and, as a consequence, the overall public health expenditure remains below (or around) 1 per cent of GDP. Provisional estimates show that total health expenditure as a share of GDP fell from 4.23 per cent in 2005–6 to 4.11 per cent in 2007–8, but increased (though marginally) to 4.13 per cent in 2008–9. However, the health expenditure had increased in absolute terms during this time. At the same time, public expenditure as a share of GDP witnessed a rise of 0.14 percentage points from 2005–6 to 2008–9 (Table 5.14).

The analysis of the composition of the total health expenditure shows that the private sector had a predominant share at 78.05 per cent in 2004–5, which decreased to 75 per cent in 2007 (Table 5.15).

Table 5.14 Health Expenditure in India (in Rs 000), 2005–6 to 2008–9

Type of Expenditure	*2005–6*	*2006–7*	*2007–8*	*2008–9*
Health Expenditure as share of GDP	4.23	4.12	4.11	4.13
Public Expenditure as share of GDP	0.96	0.98	1.03	1.10

Source: As cited in National Health Profile 2009, Ministry of Health and Family Welfare.

Table 5.15 Composition of Healthcare Expenditure, 2004–5

Type of Expenditure	*Share of Total Health Expenditure (per cent)*
Public Expenditure	19.7
Private Expenditure	78.1
External Flow	2.3
Total Health Expenditure	100

Source: As cited in National Health Profile 2009, Ministry of Health and Family Welfare.

Private expenditure is not only inequitable as it adversely impacts the poorest people, pushing them further into poverty, but also highly inefficient because there is not much improvement in health outcomes, as seen in an earlier section. This is a matter of concern.

A State-wise analysis for the year 2004–5 shows that the share of public expenditure on health as a percentage of Gross State Domestic Product (GSDP) varied between 0.49 per cent and 4 per cent. It is noteworthy that in all the north-eastern states public expenditure on health as a percentage of GSDP was either touching or above 1 per cent. Even poorer states like Bihar, Rajasthan, and Uttar Pradesh had a similar proportion which was higher than many better performing states. The ratio may be higher in these states because of lower GSDP. There is still a marked difference between the health status of the north-eastern states and these poorer states. Looking at the per capita expenditure, it can be seen that this ratio is high in the north-eastern states because not only is their per capita public expenditure higher, but it is even higher than the per capita private expenditure. By contrast, the poorer states incurred an abysmally low per capita public expenditure on health (Table 5A.33).

Among the major states, the share of private expenditure was well above 80 per cent of the total health expenditure in case of Andhra Pradesh, Bihar, Haryana, Kerala, Madhya Pradesh, Maharashtra, Punjab, Tamil Nadu, Uttar Pradesh, and West Bengal. It is for this reason that even the maximum public expenditure on health as a share of GSDP is only 4 per cent (Tables 5A.33 and 5A.34).

Within the private expenditure, in 2004–5, 71 per cent of the total health expenditure was incurred by households, that is, OOP expenditure for availing healthcare services, followed by firms with 5.7 per cent. Social insurance funds and Non-Governmental Organizations (NGOs) (the other two categories of private expenditure) contributed 1.13 per cent and 0.07 per cent to the total health expenditure, respectively. It is to be noted that despite government policies and free hospital services in government schemes OOP expenditure is still high. This is pushing many people into poverty. Around 66 per cent of OOP expenditure was on outpatient care while inpatient care accounted for 23.5 per cent. Of the total OOP expenditure, 62 per cent was in rural households as compared to 38 per cent in urban households.

A major share of the inpatient care expenditure was incurred on medicines both in public and private institutions. Rural households incurred 66.5 per cent of OOP expenditure on medicines in public institutions, which was higher than that incurred by their urban counterparts at 62 per cent. In the rural areas of Haryana, Madhya Pradesh, Orissa, and Rajasthan, the expenditure incurred on medicines as a proportion of expenditure incurred on inpatient care was over above 70 per cent, whereas in urban areas this pattern existed for Bihar, Chhattisgarh, Madhya Pradesh, and Orissa. The high share of expendi- ture on medicines in public institutions was explained by the non-availability of drugs in the states run institutions. The doctors' fee was only a small component of OOP expenditure[13] (Tables 5A.35 and 5A.36).

In private institutions, the doctors' fee as well as expen- diture on medicines formed a major share of OOP expen- diture on in-patient care. For the major states, the share of medicines was higher in rural areas (40.4 per cent) than urban areas (37.8 per cent) whereas the share of doctors' fee was higher in urban areas (27.3 per cent) as compared to rural areas (25.8 per cent). Under private inpatient care, households in Jharkhand, Madhya Pradesh, and

[13] 4.2 per cent in the rural areas of major states and 4.6 per cent in the urban areas.

Uttar Pradesh incurred an expenditure of over 47 per cent on medicines in rural areas. Among the major states, urban Chhattisgarh, Punjab, and Uttar Pradesh incurred an expenditure of over 47 per cent on medicines (Tables 5A.37 and 5A.38).

Public and private insurance schemes cover barely 11 per cent of the population (GoI 2006)

These are some of the reasons why healthcare is substantially financed by high OOP expenditure (Baru *et al.* 2010), a burden which is disproportionately higher for the poor in rural areas. NSS estimates for consumer expenditure in 2007–8 support the fact that for households in rural areas, expenditure on medical care accounts for a large proportion of their total monthly per capita consumption expenditure (Figure 5.10), with health expenditure in the poorest decile in rural areas accounting for 11 per cent of total consumption expenditure.

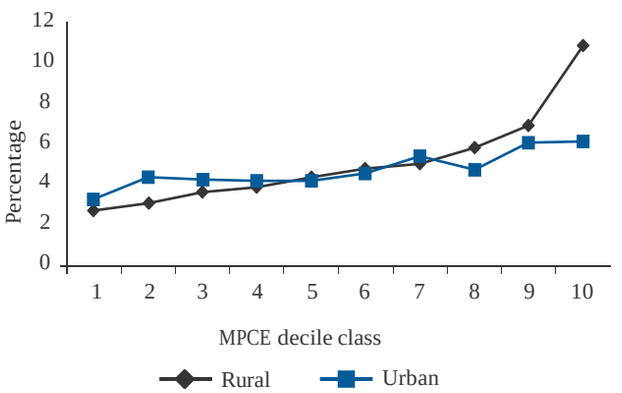

Figure 5.10 Share of Expenditure on Medical Care[14] in Consumer Expenditure, 2007–8

Source: NSS 64th Round.

High OOP expenditure severely hampers the non-medical consumption of households, more so for rural households. In order to curb huge OOP expenses incurred by the BPL population, the Ministry of Labour and Employment launched the Rashtriya Swasthya Bima Yojana (RSBY) in 2007 (which will be discussed later).

Services Infrastructure: *Difficult to sustain the growing population*

The infrastructure for healthcare services in India is a three tier system based on population norms. The Sub Centre is the peripheral health unit that provides the first link between the community and the PHC system. Each PHC acts as the referral centre for six Sub Centres and is the first contact between the community and the Medical Officer heading the PHC. The next tier comprises the CHCs each serving as a referral centre for four PHCs and also providing obstetric and special- ist consultations. Table 5A.39 lists the number of Sub Centres, PHCs, and CHCs in all states.

Lack of Health Infrastructure in the Country: Compared to 30 hospital beds per 10,000 population in China, India has nine

Two indicators which speak of the quality of services available in hospitals are population served per government hospital and population served per bed. As per the World Bank's estimates,[15] the number of hospital beds per 1,000 population in India is equivalent to the South Asia average (0.9). However, many South Asian countries like Sri Lanka, Bhutan, Maldives, and Nepal are better off than India.[16]

That there is a severe lack of healthcare infrastructure in the country can be seen from the fact that the average population served per government hospital and population served per bed was 97,958 and 2,105, respectively, in India. In Andhra Pradesh, Chandigarh, Uttarakhand, and West Bengal the population served per government hospital was in the range of 190,000 and 300,000, highlighting the insufficiency of government healthcare facilities. A very high value of this indicator implies a possibility of deterioration in the quality of service provided by hospitals. The states with a considerably high population served per bed were Assam, Bihar, Chhattisgarh, Haryana, Jammu and Kashmir, Jharkhand, Orissa, and Madhya Pradesh (Table 5A.40).

The government's flagship programme, NRHM plays a critical role in addressing the need of health infrastructure

[14] Medical institutional as well as non-institutional.
[15] Time period for each country is different. The latest available data for each country has been taken.
[16] Sri Lanka had 3.1 beds per 1,000 population; Bhutan had 1.7, Maldives 2.6, and Nepal had five beds per 1,000 population.

(physical, financial, as well as human resources). Since the inception of NRHM, there has been a marked upgradation in infrastructure in rural areas, with a large number of new buildings being built and renovations being done. However, certain shortages still exist. For instance, in Jammu and Kashmir, a large part of the health infrastructure is located in rented buildings. Similarly, in West Bengal, public health facilities face overcrowding and need repair and renovation. It is the same in large states like Rajasthan, Haryana, and Andhra Pradesh. Moreover, it has been observed that the secondary and tertiary hospitals (both public and private) are largely skewed towards urban areas and relatively developed states, with a greater inequality in the distribution of private health services (Baru *et al*. 2010).

The Mid Term Appraisal of the Eleventh Five Year Plan shows that the inadequacy of the health infrastructure was a major reason for poor health services. The shortfall of CHCs had decreased in 2008 as compared to 2005, but the number of Sub Centres and PHCs was almost unchanged.

Poor financing and expenditure provisioning has led to inadequate public health facilities in relation to population and thus, deterioration in quality. Therefore, people resort to private health centres and incur high OOP expenditure.

Human Resources: *Despite an increase after the inception of NRHM, the shortage of doctors and paramedics persists*

Manpower is an important prerequisite for the efficient functioning of health infrastructure. The primary issue in the effective functioning of the public health system is not mere availability of infrastructure, but also human resources. The biggest lacuna of our public health system has been the sheer failure to provide adequate human resources for our health infrastructure.

In addition to providing physical infrastructure the NRHM addressed the issue of human resources to make the health delivery system functional and accessible in rural India. Since its launch in 2005, there has been an increase in the human resources deployed in the rural health centres. The states have introduced various incentives for attracting human resources. For instance, Haryana has introduced a mix of incentives and simplified the recruitment process. Chhattisgarh has used the 'three year doctor' (now called the 'rural medical assistant') to almost completely eliminate the large number of vacancies for medical officers. Some of the innovative methods adopted in Sikkim for better delivery of healthcare facilities and to address the issue of professional and social isolation are building a positive workforce environment, continuous medical education (CME) programmes, and turning PHCs into social hubs (GoI 2009).

However, the new posts are only contractual and regular post creation still lags behind requirement. Such a trend has only created dissatisfaction among the personnel regarding the salary and regularization prospects, hampering the quality of service provided. Not only this, despite the progress in generating manpower, India faces a shortage of skilled human resources in many states, which would severely affect its achievement of the MDGs, which aim at attaining universal coverage of institutional deliveries by skilled personnel.

Doctors: *India has six physicians per 10,000 population compared to 14 in China*

'As per the Medical Council of India (MCI) Annual Report 2008, total number of doctors registered in the country up to 31 March 2008 is 695,254. This translates to a doctor to population ratio of 1 per 1,600 persons or 6 per 10,000 population which is significantly lower than developed countries like Australia, Canada, UK, and US. Adjusting for those who are likely to be registered and practising, the estimate puts the doctor to population ratio to a modest 3.8 per 10,000 population' (Sundararaman and Gupta 2010).

However, the number of physicians in India was not only equivalent to the South Asian average and Sri Lanka,[17] but greater than that in many of the South Asian countries like Afghanistan, Bangladesh, Bhutan, and Nepal (World Development Indicators, World Bank 2009).

The share of population served per government allopathic doctor in India was above 10,000 in the majority of the states.[18] However, with time the share has fallen in some southern states like Andhra Pradesh, Karnataka, and Tamil Nadu as well as in the poorer states of

[17] Data for different countries pertains to the latest year for which data was available.

[18] It was as high as 23,986 in Uttar Pradesh as on January 2000 and 23,174 in Bihar as on January 2008.

Rajasthan and Uttar Pradesh (Table 5A.41). The Indian Public Health Standards (IPHS) norms envisage three (allopathic) doctors plus a fourth trained in indigenous medical systems for each PHC. However, only Delhi, Gujarat, and Orissa fulfilled the norms in 2007. A majority of the states had less than three doctors. In Madhya Pradesh, 196 out of 1,155 PHCs are functioning without any doctors. In Uttar Pradesh, the percentage shortfall at PHCs is 79 per cent for Medical officers.[19]

Paramedics: Auxiliary Nurse Midwives, Nurses, and Other Health Workers in short supply

The nurse to population ratio in India is 1:1205 as against 1:100–150 in Europe while nurse to doctor ratio is about 1.3:1 as compared to ratio of 3:1 in most developed countries. NSSO and Census estimates of total health workers is around 2.2 million health workers in India, which gives a density of approximately 20 health workers per 10,000 population. This figure however has to be adjusted for the fact that both Census and NSSO include all those who self report to be medical practitioners as their main occupation. This includes a large number of unqualified persons. This is as high as 40 per cent of doctors. In addition, the number of nurses who are recorded in registers are much higher than those who are practicing. (Sundararaman *et al.* 2010).

The number of nurses and midwives per 1,000 population in India was better than all the South Asian countries except Sri Lanka and Maldives (WDI, World Bank).

As on December 2008, there were over half a million Auxiliary Nurse Midwives (ANMs) in India (Table 5A.42).[20] As per IPHS norms, there should be two ANMs for each Sub Centre,[21] but it was found that 116 Sub Centres (9 per cent) of 20 states/UTs were functioning without an ANM and at 992 Sub Centres (77 per cent) of 29 states/UTs the stipulated two ANMs were not posted.[22] In Himachal Pradesh, Karnataka, Madhya Pradesh, Manipur, Meghalaya, Sikkim, Tamil Nadu, Uttar Pradesh, West Bengal, and Lakshadweep none of the Sub Centres had two ANMs.

The Common Review Mission has also noted that in actual practice the ANM makes no house visits and the role of the second ANM is not clear. In addition, the states which needed ANMs the most, such as Bihar, Jharkhand, Chhattisgarh, and Uttar Pradesh have been unable to recruit them.[23] Furthermore, there was a dearth of male health workers in rural areas across all the states (Table 5A.43).

A study conducted by the National Institute of Health and Family Welfare (2007) reveals that nurses constitute one of the largest workforces in the country. It was found that in the states of West Bengal, Tamil Nadu, and Uttar Pradesh nurses lacked adequate resources and facilities and had a very submissive approach. According to the study, Uttar Pradesh had a shortfall of staff nurses to the magnitude of 100 per cent. Haryana and Orissa also faced a shortage of Lady Health Visitors (LHV) and nursing staff respectively (The Third Common Review Mission 2009).

The Mid-Term Appraisal of the Eleventh Five Year Plan also revealed a severe shortage of human resources in the healthcare sector. The overall shortfall of health workers/ANMs was relatively low at 10.9 per cent in 2005, but increased to 12.4 per cent of the total requirement in 2008. There was a large shortfall of male health workers, radiographers, lab technicians, and specialists at the CHCs. The shortfall of doctors at PHCs was 15.08 per cent. A significant percentage of sanctioned posts were vacant at all levels.

Bhandari *et al.* (2007) points out that absenteeism among the primary health workers is high in India—as high as 40 per cent—and much above other countries such as Bangladesh, Indonesia, Peru, Ecuador, and Uganda. This is because poor infrastructure and the incentive structure fail to motivate the health workers to go for work.

Box 5.1 gives an assessment of the NRHM with regard to the rural health infrastructure and human resources.

The central government has spent millions on the NRHM, in order to ensure access to healthcare facilities for the rural populace. The allocation for NRHM increased from Rs 134.6 billion to Rs 160.56 billion in the Union Budget 2011–12. However, the Centre's attempt to

[19] The Third Common Review Mission (2009).

[20] 1,043,363 General Nursing and Midwives (GNM), and 51, 776 LHVs.

[21] The *National Rural Health Mission* aimed to ensure two ANMs at 30 per cent of the Sub Centres by 2007 and 60 per cent by 2008 with the second ANM being appointed on a contract basis.

[22] A survey was done by CAG for the year ended March, 2008.

[23] The Third Common Review Mission (2009).

Box 5.1 An Assessment of the National Rural Health Mission

The NRHM was launched in 2005. One of its objectives was to bridge the gaps in the existing infrastructure of rural healthcare. Since its inception there have been changes in the health outcomes of the poor, which directly and indirectly depend on rural health infrastructure and manpower. A review of NRHM was done in 2009 in 14 states and three UTs, which presented the achievements as well as certain lacunae in the health system that needed to be addressed. Some of the achievements/positives under the scheme are given below:

1. Every state has reported a sharp increase in human resources deployed in the public health sector, thereby breaking the 15 year stagnation. Close to 100,000 health service providers and managers have been contracted into the system across the country.
2. Many states like Chhattisgarh, Rajasthan, and Haryana have come up with innovative measures for attracting and retaining professionals in public service in rural and remote areas states by focusing on financial incentives for working in difficult areas.
3. Efforts have been made to further strengthen the performance of Accredited Social Health Activists (ASHAs) by providing them with training in states like Rajasthan, Andhra Pradesh, Orissa, and Chhattisgarh.
4. Under the RCH programme there have been sustained increases in institutional deliveries, improved referral transport to institutions for delivery, effective use of Village Health and Nutrition Days, and improved outreach for enhanced immunization coverage.
5. There are instances where, in order to fill in the gaps in services, the various healthcare activities have been carried out with the support of non-governmental partnerships e.g.in Gujarat, Haryana, and West Bengal. Madhya Pradesh has witnessed an improvement in health owing to the involvement of the Rogi Kalyan Samiti (RKS) at hospitals, which comprises of local bodies, NGOs and members of the community. The poor are treated free of cost, thanks to the RKS.

In another assessment of NRHM by Gill (2009) in three focus states (Bihar, Rajasthan, and Uttar Pradesh) and one non-focus state (Andhra Pradesh), the quality and quantity of service delivery in public primary healthcare at the decentralized level was evaluated. It was found that even though the focus states were still lacking in absolute terms, they were making progress towards Andhra Pradesh, the non focus states. A commendable change which was observed was that NRHM has initiated a decentralised delivery of services, reaching the poor. However, a huge amount of money allocated to the states under NRHM still remains unspent. Addressing the acute shortage of staff faced by the states, the study recommended improvement in the training and education of para-medical and medical staff .

All in all, NRHM has been instrumental in directing the focus of healthcare towards rural India, which has over 70 per cent of the country's population. It has improved the healthcare infrastructure and delivery and assisted in the computerisation of health data.

However, despite these improvements, certain challenges still remain, which can be overcome with greater support from the state governments.

- Almost 20–5 per cent of funds lie as outstanding (advances), of which only one-third has been spent.
- The proportion of unutilized funds was as high as 39 per cent in Uttar Pradesh, 41 per cent in Bihar, and 35 per cent in Rajasthan in 2006–7.
- There still exists a dearth of health personnel in many states. Vacancies are still impermissibly high, especially in the poorer states. For instance, in Bihar only 30 to 40 per cent of the Sub Centres had a second ANM in place. In Madhya Pradesh 196 out of 1,155 PHCs were functioning without a doctor, 153 health Sub Centres without either an ANM or a male Multi-purpose Worker (MPW). Furthermore, it has been noted that other programmes need to be in synergy with NRHM. For instance, there is no convergence of NRHM with MGNREGS, which would have helped the most vulnerable sections of population. More often than not, it has been found that the staff is not very motivated because the states will only take over the financing of the scheme after 2012. Despite NRHM bringing about a change in the health care system of rural India, in some states the staff's behaviour is still indifferent. Given the greater cause which the NRHM seeks to address, it should also give due consideration to overcoming social exclusion and gender discrimination.

Source: GoI (2009); Gill (2009); and *The Hindu*, December 2010, http://www.hindu.com/2010/12/30/Stories/2010123055021200.htm, last accessed on January 2011.

increase spending on public health by hiking allocations to its NRHM programme has failed because the state governments' expenditure is stagnant or decreasing as they are facing a severe fiscal crisis. For example, poor health indicators in Madhya Pradesh, Bihar, and West Bengal are a reflection of stagnant/decreasing state expenditures (Duggal 2009). The CAG report on NRHM in 2009 found that many high focus states had large unused balances that resulted in a reduced annual allocation from the government.

Against this backdrop, it is important to highlight that in our country, central public health interventions are focused largely on single issue programmes, which ' does not adequately address the need for development of public health systems to anticipate and reduce exposure to disease' (Gupta *et al.* 2010). For instance, there are various single disease programmes like National AIDS Control Programme (NACP), Directly Observed Treat- ment, Short Course (DOTS), and the malaria eradication programme, which are programmes largely handled by the central government. However, what are essentially needed are comprehensive health schemes with a com- mon objective of improving the health systems and the general health of the public. Similarly, the mere provision of safe drinking water or construction of toilets will not help to improve the health status of the populace without an integrated behaviour triggering approach.[24] In addi- tion, there are various schemes that run across ministries, but the lack of coordination between them often reduces the extent of their intended impact, as discussed in the case of ICDS in Chapter 4.

DEMAND FOR HEALTHCARE

Lower public expenditure on healthcare results in limited demand for public healthcare facilities

The demand for healthcare services and the public health system depends on the quality of healthcare services provided. A very high population served per hospital and per hospital bed and the shortage of human resources coupled with poor financing have serious implications on the quality of healthcare.

Since 1998– 9, the country has witnessed a decline in the share of households approaching the private sector and NGOs for healthcare and a rise in the proportion of households approaching the public sector. The same pattern was observed across urban and rural areas in both the periods. In 2005– 6, almost two-thirds of the households sought healthcare from the private sector while one-third sought medical care from the public sector and 0.4 per cent each sought care from an NGO or trust hospital and other care (Table 5A.44a and b).

Public healthcare was more sought after in rural areas than in urban areas (in both 1998– 9 and 2005– 6) whereas private medical services were more popular in urban areas.

The majority of households in all the north-eastern states approached the public sector for treatment (2005– 6). In the rest of the states, except for Himachal Pradesh, Jammu and Kashmir, Orissa, and Rajasthan, the majority of the households sought medical care from the private sector. Kerala had an almost equal share of public and private sector healthcare provision.

Among households that generally did not seek healthcare from government sources, the most commonly cited reasons were the poor quality of care (58 per cent), distance to government facility (47 per cent), and long waiting time (25 per cent). It seems clear that private providers are perceived by many to provide better quality services compared to public providers (*NFHS 3*).

In the lowest three wealth quintiles, the percentage of households seeking private medical care remains more or less the same i.e. around 60 per cent, which is quite high. The last two quintiles have an even higher percentage of people seeking private medical care. Thus, there exists a positive relationship between wealth status and the seeking of private medical care by people (Figure 5.11).

To offset the high OOP expenditure which pushes more and more people into poverty, in 2007, the Government of India launched a health insurance scheme for the BPL population called RSBY. Box 5.2 gives details about this scheme. By covering the healthcare needs of the poor, it has enhanced the demand from the poor and addressed the supply side shortage (of finance).

SANITATION AND DRINKING WATER

As we noted in Table 5.1, improved water sources, sanitation, and hygienic conditions at the community level generate important positive externalities in terms of

[24] A process whereby collective local action to achieve open defecation is brought about, by educating the people of a community of the health hazard of open defecation.

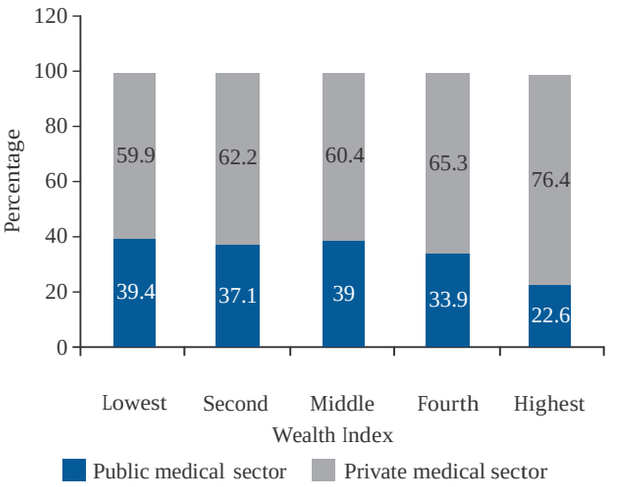

Figure 5.11 Source of Healthcare by Wealth Index: Public v/s Private (per cent)

Source: NFHS 3.

better health. Sanitation is one of the basic necessities for a hygienic and healthy life. Access to safe drinking water and sanitation reduces the incidence of waterborne diseases like diarrhoea that are a major cause of death of millions of children and adults each year. Access to toilet facilities within the home provides privacy, dignity, and a sense of security to family members especially the female members. Similarly, the presence of toilets, safe water, and hygienic conditions at schools can reduce some of the constraints on students, especially girls, in attending school.

However, mere provisioning of such facilities is not enough. A great deal hinges upon the practices of people. For example, in order to ensure hygiene and healthy living, it is essential that hands are washed using soap and that the water sources are covered. Unless people' s practices are changed (by creating awareness), achieving superior health outcomes becomes difficult.

Box 5.2 Rashtriya Swasthya Bima Yojana (National Health Insurance Programme)

The Government of India launched the RSBY in October 2007, to provide social health protection against the high OOP expenditure burden of healthcare and the consequent debt trap (if any). It addresses the healthcare needs of the BPL workers in the unorganized sector and their families. The Scheme will now be extended to MGNREGA beneficiaries and *beedi* workers (Union Budget 2011– 12).

The RSBY is implemented through a Smart Card, which entitles the insured to cashless hospitalized care in all empanelled hospitals (public or private) across the country, with a total sum insured of Rs 30,000 per annum per BPL family for only five members: the head of the family, one spouse and three dependants. The premium is shared between the central government and state governments in the ratio 3:1. The only cost that a BPL family has to incur is the registration/renewal fees of Rs 30 per annum.

The Scheme gives beneficiaries the autonomy to choose between private and public hospitals. The beneficiary is also paid Rs 100 as transportation cost at the time of discharge. However, the total transportation amount cannot exceed Rs 1,000, which is included in the annual cover of Rs 30,000. A unique feature of the Scheme is that it is a cashless facility, and hence convenient to all the stakeholders. It covers all pre-existing diseases, hospitalized care, and day care surgical procedures. Jutting (2003) conjectures that a health insurance scheme (for the poor) would stabilize their incomes. Not only this, it may lead to consumption smoothening (or increase) over time which would contribute to better health and overall income.

By the year 2012, RSBY aims to cover an estimated 60 million BPL families (300 million persons) in about 631 districts across 35 states and centrally administered territories in India, which would necessitate an expenditure of US $880 million per year. The Union Government would increase the allocation from Rs 90 million to Rs 900 million (Union Budget 2011– 12)

Overall the Scheme has led to an increase in hospitalization rates despite dispersion in the utilization rates across the districts being covered. Whereas some states were passive in implementing the Scheme, others had adopted a proactive approach.

A state which has registered commendable progress on certain fronts of the Scheme is Kerala. First and foremost, the state covered all the 14 districts within one year of implementing the Scheme. Interestingly, Kerala has the highest utilization rate. Second, since the beneficiaries have the discretion to choose between private and public hospitals from a list of empanelled hospitals, a competition started between the empanelled public and private hospitals to provide quality care. This not only made the public hospitals improve their quality of services and enhance infrastructural facilities (through the revenue generated by RSBY and Arogyakeralam) but has now put them in a position where they are able to compete with the private hospitals. A testimony to this is the fact that the empanelled government hospitals generate more revenue than their private counterparts. Third, almost 100 per cent of the respondents (beneficiaries) were satisfied with the services provided through the RSBY in the districts covered. In addition, in a unique initiative, a part of the revenue generated is given to the staff in order to incentivize and motivate them to work towards quality service provision.

Source: www.rsby.gov.in, Arora and Nanda (2010), and The Research Institute (2009).

Access to improved sources of drinking water in India better than South Asia but there is a lack of sanitation facilities

Comparisons across the globe show that South Asian countries, on an average, performed better than Sub-Saharan African countries regarding the percentage of population using improved drinking water sources and the percentage of households using improved sanitation facilities.

Within South Asia, India has a larger proportion of the population using improved sources of drinking water than all South Asian countries (except for Pakistan, which is at par). At the same time India, along with Afghanistan, is the worst performing South Asian country, next only to Nepal, when we look at the percentage of population using improved sanitation facilities. India is on track for achieving the MDG target of sustainable access to improved sources of drinking water, but sanitation is still a challenge for almost half the population of the country.

Sanitation: *About half of Indian households still lack access to sanitation facilities*

Sanitation coverage, which ought to be a way of life to safeguard health, is inadequate in India. Access to sanitation facilities is still a challenge—almost 50 per cent of households have no toilets. Furthermore, the practice of open defection (OD) in India remains a major challenge for achieving the MDGs, which include reducing by half the proportion of people without access to basic sanitation by 2015.

Despite improvement, achieving open defecation free (ODF) status looks challenging in many states, especially the poorer ones

In India, only 40 per cent of households had access to sanitation facilities in 2002, which increased to 51 per cent in 2008–9. In Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Tamil Nadu, and Uttarakhand over 60 per cent of households were without toilets, and thus there was a greater possibility of OD in these states. In 2008–9, the north-eastern states were better off than most of the remaining states in terms of access to sanitation facilities (Table 5A.45).

Around two-thirds of rural households do not have toilets

In both 2002–4 and 2008–9, the proportion of households with toilet facilities was signifi cantly higher in urban areas than rural areas. It should be noted that in rural India as many as 65 per cent of households were without toilets. Thus, it is not surprising that in the rural areas the population has many health problems. Except for Rajasthan, Tripura, Bihar, Jharkhand, and Assam, the rural areas of all the states showed a rise in access to sanitation facilities (Table 5A.46–47).

One-third Muslim households and around two-thirds of SC and ST households lack toilets

The proportion of households without toilets is much above the national average of 49 per cent for all the three social groups—SCs, STs, and OBCs. However, OBC households were relatively better placed compared to SCs and STs, with around 54 per cent of OBC households without toilet facilities as against 69 per cent ST households and 65 per cent SC households (Tables 5A.48a and b). Among major religious communities, Hindus were the worst off as 50 per cent of households lacked toilet facilities, compared to 36 per cent for Muslims. The relatively higher access to toilet facilities among Muslims is probably explained by the fact that a higher proportion of Muslims (than Hindus) live in urban areas.

Septic tanks and pit latrines have together been classifi ed as improved sanitation by the NSS (2008–9). Going by this defi nition, access to improved sanitation has increased over time (Figure 5.12).

Not even one-fourth of rural ST households have access to improved sanitation facilities

Across social groups, there has been an increase in the proportion of households with improved sanitation facilities that is, septic tanks/fl ush toilets and pit toilets, during the period 2002 to 2008–9. In 2008–9, OBC households had the highest proportion of households with access to improved sanitation at 43.2 per cent. ST households were the worst with only 28 per cent households in urban areas using improved sanitation facilities. The situation is worse in the case of their rural counterparts, with only
22 per cent of rural ST households with access to improved sanitation facilities.

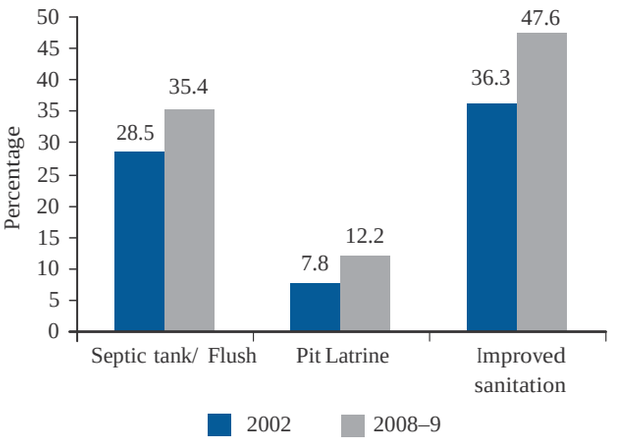

Figure 5.12 Households with Improved Sanitation, 2002 and 2008–9 (per cent)

Source: NSS 58th and 65th Rounds.

Across religious communities, Sikh and Christian households had the highest (over 70 per cent) access to improved sanitation facilities in 2008–9. Hindus had the least access at 45 per cent (Table A5.49).

The review of NRHM has noted an improvement in the sanitation situation in rural areas, even in states like Uttar Pradesh and Rajasthan. However, it was far from satisfactory in the case of Bihar, West Bengal, and Chhattisgarh. A World Bank study found that poor sanitation can be a huge burden on the exchequer. Box 5.3 discusses the findings of the study.

To address the sanitation issues faced by the country, a central government funded programme, Total Sanitation Campaign (TSC), was launched in 1999. It looks at sanitation through a holistic lens. Its objectives are to improve the quality of life in the rural areas, increase sanitation coverage, use awareness and health education to generate demand, provide all schools and Anganwadi centres in rural areas with sanitation facilities, and undertake efforts to prevent waterborne diseases. Under TSC, BPL families are provided subsidies to construct toilets with the objective of having ODF villages. Open defecation free status can be ensured only if emphasis is laid on improving attitudes and knowledge about sanitation and hygiene by conducting information, education, and communication (IEC) activities—a major plank of TSC. IEC seeks to create awareness among, and encourage the participation of, the entire community in a village. Box 5.4 gives examples of Himachal Pradesh and Haryana where community participation is ensuring better sanitation. The example of Himachal Pradesh presents a unique experience of trying an innovative methodology to achieve greater sanitation gains in the context of the TSC with the state government providing apt and timely policy and programme support.

The year 2003 witnessed an innovation in the TSC scheme, when the government introduced the Nirmal Gram Puraskar (NGP),[25] an award which would be given to the Panchayati Raj Institutions (PRIs) which achieved a 100 per cent ODF environment. Overall, Kerala is the

Box 5.3 Economic Implications of Inadequate Sanitation

A study by the Water and Sanitation Programme (WSP), World Bank estimates that inadequate sanitation amounts to an economic loss of Rs 2.4 trillion in a year, which is approximately 6.4 per cent of India's GDP in 2006. Of this loss, about Rs 1.1 trillion is the loss in flow of economic value in 2006, while Rs 1.3 trillion is the present value of future losses owing to human capital lost in 2006. In per capita terms, this amounts to an impact of Rs 2,180. The largest impact in the loss of Rs 2.4 trillion is accounted for by health related economic impacts (Rs 1.75 trillion), of which Rs 1.3 trillion is due to premature mortality, diarrhoea being the largest contributor. Drinking water related impacts in addition to access time (lost to access sanitation facilities) are the other major losses.

As per the study, total losses for the rural households in the poorest quintile amount to Rs 204 billion, which are quite substantial compared to their urban counterparts (Rs 16 billion). Without doubt the problem of inadequate sanitation is a serious concern in rural areas.

In this context, the study estimates that comprehensive sanitation and hygiene interventions can avert 45 per cent of health related economic losses and translate into a potential gain of about Rs 1.5 trillion, Rs 1,321 in per capita terms.

Source: World Bank (2010).

[25] Since its inception in 2005, 22,575 GPs, 158 Block Panchayats (BPs), and 10 District Panchayats have been awarded NGPs (Ministry of Rural Development 2010).

Box 5.4 Community Participation in Promoting Sanitation Facilities

Himachal Pradesh

Himachal Pradesh's experience represents a radical departure from the conventional approach of promoting sanitation in India. The state adopted a participatory innovative approach called Community Led Total Sanitation (CLTS) for creating an effective and sustainable demand for sanitation under the purview of the Government of India's TSC. CLTS engages people in the analysis of their existing sanitation situation through a series of triggering exercises leading to collective local action to clean up and sanitize their surroundings by putting an end to OD and adopting safe solid and liquid waste management practices. CLTS is known for producing dramatic results on the ground in more than 40 countries across Asia, Africa, and Latin America. It has spread to 11 states across India and created hundreds of ODF communities

Himachal Pradesh has a population of approximately seven million with more than 90 per cent of the people living in rural areas. Household toilet coverage in Himachal Pradesh was about 28 per cent in the year 2004. In 2005, the Government of Himachal Pradesh adopted a new strategy to provide an enabling environment for accelerating rural sanitation in the state. The shift in the strategy included three key decisions—downplaying individual subsidies and promoting community incentives; generating demand for sanitation through CLTS orientations across the state, and devising appropriate mechanisms for effective monitoring and follow-up.

The same year, the Government of Himachal Pradesh entered into a strategic alliance with the Water and Sanitation Programme-South Asia (WSP-SA), for accelerating rural sanitation in the state by implementing CLTS across all the districts. In 2006, WSP engaged a development support agency known as Knowledge Links, specializing in providing large-scale capacity building support for CLTS trainings and follow-up programmes in all the 12 districts of the state. The training involved triggering some 200 villages with more than 50 natural leaders emerging from the grass-root level.

The recent data available on the website of the Department of Drinking Water and Sanitation (www.ddws.nic.in) shows that Himachal Pradesh has achieved 100 per cent toilet coverage with 520 Gram Panchayats (GPs) winning the Nirmal Gram Puraskar (NGP) by the year 2009. It is estimated that the ODF claim of another 2272 GPs is under consideration making more than 86 per cent of Himachal Pradesh open defecation free. The state government envisages making Himachal Pradesh completely open defecation free by the year 2012.

Haryana

Haryana is another state where the CLTS Approach has been applied. In the rest of India, rather than using the CLTS approach, great emphasis has been laid on providing subsidies to BPL households to build toilets.

To implement the TSC, the village administrators adopted the CLTS, a process that empowers local communities to end OD and to build and use latrines without the support of any external subsides. To do this, the District Rural Development Agency (DRDA) worked on the capacity-building of different stakeholders, while also identifying village motivators. The goal was to inform at least 60 per cent of the women in each village about TSC, and inform 20 per cent of the families about the low cost options for latrines. Participatory appraisals were carried out by the village motivators in order to understand the existing situation in the village. The village motivators were assigned 300 households, where they encouraged families to build toilets, and encouraged washing of hands before meals and after defecating.

Source: Knowledge Links, Gupta and Pal (2008).

best performer with 87 per cent of its GPs having won NGP awards. By contrast, only 2 per cent GPs in Bihar have won this award, reflecting the state of sanitation in the region.

Though NGPs have spurred competition among PRIs to build toilets, it is apparent that the rush to meet the target has compromised the quality and sustainability of achievements (Planning Commission 2011).

Toilets used for other purposes; sustainability of ODF status a concern

In a study conducted by UNICEF and TARU in 2008, of 162 GPs which had received NGPs in six states (Andhra Pradesh, Chhattisgarh, Maharashtra, Tamil Nadu, Uttar Pradesh, and West Bengal), it was found that 81 per cent households had individual household toilets. Of these only 64 per cent were reported to be using them and

6 per cent were using community toilets. The remaining households (30 per cent) were going for OD. Further, many toilets were not used for the purpose of defecating but for storing, bathing, and washing purposes. Of the 162 GPs which had received NGPs, only 4 per cent (mostly from Maharashtra) had sustained the ODF status. In the remaining GPs, there were households who had gone back to defecating in the open[26] (Table 5.16).

The central government's expenditure on sanitation as a percentage of total Government of India releases has increased from 48 per cent in 2005–6 to 128 per cent in 2009–10 (Department of Drinking Water and Sanitation). Three-fourths of this is spent on the con- struction of individual household toilets (which are often put to various other uses). Expenditure on IEC, which is an important component in generating demand for sanitation, was only five per cent. Himachal Pradesh and Haryana, among the best performing states in terms of ODF status spent close to 70 per cent of approved IEC funds. In contrast, in Bihar, Jharkhand, and Orissa less than 20 per cent of the approved IEC funds were spent.

Access to Improved Source of Drinking Water: *Consistent rise—a move towards healthy living*

During both the time periods, taps and tube-wells were the two major sources of drinking water. In addition to these, protected wells and harvested rainwater are considered to be improved sources of drinking water.

Over time there has been a rise in the proportion of households with taps as a source of drinking water, with a corresponding fall in the proportion of households using wells as a source of drinking water (Figure 5.13).

In 2008–9 there were many states in which the proportion of households with taps as a source of drinking water was much above the national average of 43 per cent (Figure 5.14).

The proportion of households with access to improved sources of drinking water in 2008–9 was 91 per cent.[27] This proportion was over 90 per cent even in states like Bihar, Chhattisgarh, Madhya Pradesh, and Uttar Pradesh. This was largely because these states had over 70 per cent of their households accessing tube wells/handpumps as sources of drinking water.

The north-eastern states, except for Arunachal Pradesh, were much below the national average. So too were many other poorer states like Jharkhand, Orissa, and Rajasthan. For instance, not even 50 per cent of the households in Manipur and Mizoram had access to improved sources of drinking water, whereas over 90 per cent of households in poorer states like Bihar and Chhattisgarh did. In Kerala, only 73 per cent of households had access to improved sources of drinking water. This is partly responsible for the high morbidity on account of waterborne diseases in the

Table 5.16 NGP Villages with Proportion of People still Defecating in the Open, 6 States, 2008

	None	*<20 per cent*	*20–40 per cent*	*40–60 per cent*	*60–80 per cent*	*>80 per cent*	*Total*
Andhra Pradesh		5	4	1			10
Chhattisgarh				4	5	1	10
Maharashtra	6	36	4	6	7	1	60
Tamil Nadu		11	6	9	5	2	33
Uttar Pradesh		1	7	6	1		15
West Bengal		11	18	3	2		34
Total	6	64	39	29	20	4	162
Per cent of Total	4	40	24	18	12	2	100

Source: The Action Research Unit (2008b).

[26] In 32 per cent of GPs, more than 40 per cent of the people were not using the toilet built for them under TSC and were defecating in the open.

[27] As per NSS 2008–9, improved sources of safe drinking water consist of the sources of water, taps, tube wells/handpumps, protected wells and harvested rainwater. This cannot be compared with 2002 data because in 2002, (i) there was information available only on wells (which is an aggregate of protected and unprotected wells) and not protected wells, and, (ii) harvested rainwater was included under the category of 'others'.

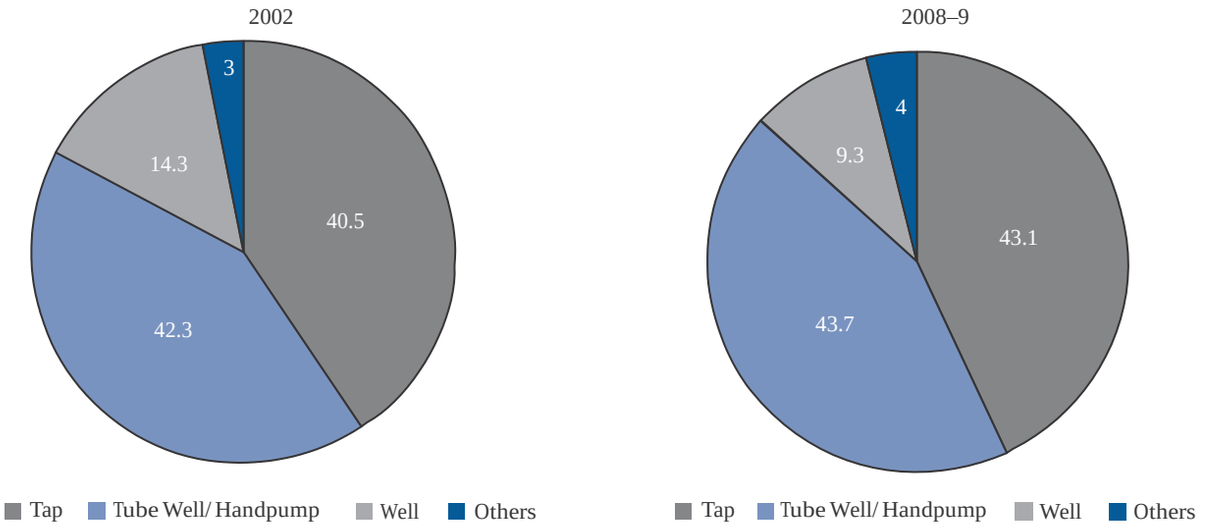

Figure 5.13 Distribution of Households by Source of Drinking Water, 2002 and 2008–9 (per cent)

Source: NSS0 58th and 65th Rounds.

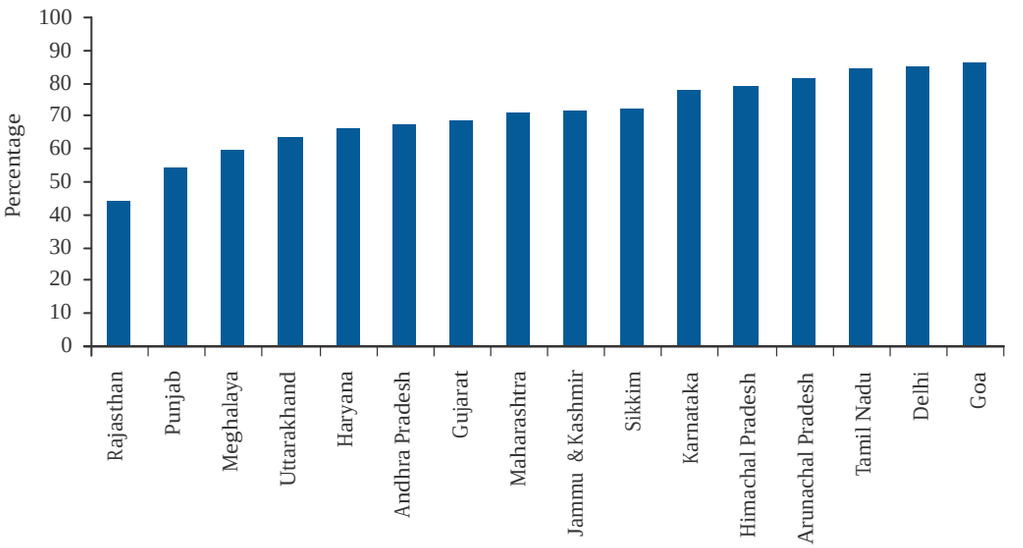

Figure 5.14 Percentage of Households with Taps as a Source of Drinking Water (2008–9)

Source: NSSO 65th Round.

state. What needs special mention in the case of Kerala is that 70 per cent of the households had access to either taps or protected wells, whereas in Bihar and Chhattisgarh, 90 per cent and 73 per cent of households, respectively, had access to tube wells/handpumps as sources of drinking water, which when compared to taps and protected wells are worse sources of drinking water.

In rural India, 90 per cent of the population had access to improved sources of drinking water. A further break-up of various sources revealed that as many as 55 per cent of households had tube wells/handpumps as sources of drinking water, the consumption of which makes the populace more vulnerable to waterborne diseases as compared to tap water (Tables 5A.50, 5A.51, 5A.52, and 5A.53).

As 97 per cent households have taps, tube wells/handpumps or wells as major sources of drinking water, the analysis of social and religious communities is restricted to these categories only.

Taps as a source of water more prevalent among Scheduled Castes than Scheduled Tribes and Muslim households

Over time, all social groups experienced a rise in the proportion of households using taps and tube wells/handpumps with a corresponding fall in the proportion using wells, which are not considered safe sources of drinking water. Across social groups, OBCs have a greater propor- tion of households using taps compared to SCs and STs who have tube wells/handpumps as major sources of drinking water. However, SCs and STs performed much above the national average in the states of Arunachal Pradesh, Himachal Pradesh, Karnataka, Sikkim, Tamil Nadu, and Uttarakhand in terms of the proportion of households which had taps as a source of drinking water (Table A5.54).

Across religious communities, Sikhs have the highest proportion of households dependent on tap water (49 per cent) whereas in the case of Muslims the proportion is only 36 per cent. Over half the Muslim households were dependent on tube wells/handpumps. However, the fact that over three-fourths of the Muslims in the states of Andhra Pradesh, Arunachal Pradesh, Gujarat, Jammu and Kashmir, Karnataka, Maharashtra, Sikkim, and Tamil Nadu have taps as a source of drinking water needs mention. In the rural areas, except for Christians, all religious communities have a greater proportion of households dependent on tube wells/handpumps for drinking water (Table A5.55).

The Mid Term Appraisal of the Eleventh Five Year Plan suggested that the progress in providing clean drinking water to all was behind schedule. Also there were regular regressions (that is, many covered areas fell back under uncovered areas) due to the increase in population, inadequate sources of water supply, or falling ground water levels.

Even if many villages do have access to a handpump, the presence of excessive contaminants renders the water undrinkable. This means that the women and children have to walk for miles to fetch potable water. Providing clean drinking water to Indian villages has been a policy priority since the First Five Year Plan. Bharat Nirman identifi ed rural water supply as one of the key areas essential to further rural development.

As noted above, drinking water and sanitation are crucial inputs for improved health outcomes. In this context, as seen in case of Himachal Pradesh and Haryana (Box 5.4), state governments and NGOs play a central role in mobilizing the populace. Box 5.5 highlights two examples of community participation in the state of Rajasthan.

CONCLUDING REMARKS

Health outcomes have improved with time. Maternal mortality, child mortality, and death rates have reduced. Falling TFR, coupled with slow improvement in life expectancy, has led to a reduction in the dependency ratio, with a corresponding rise in the working age population.

Yet, the absolute levels of outcomes leave much to be desired. Similarly, the rates of improvement are such that the health related MDGs will not to be achieved while in the case of most other MDGs (except hunger and malnutrition) the progress suggests that the MDGs can be achieved. The poor levels of change in health outcomes can be attributed to poor process and input indicators. For instance, there is a shortage of human resources as well as an inadequate number of PHCs in many states. Not even half of our children are fully immunized. A large proportion of women still deliver at home. Public expenditure on health is quite low, which results in high OOP expenditure. All these are a refl ection of the ineffi cient public health system which has failed to reach the lower strata of society.

In addition, there are other areas which require exploration and thought. Firstly, as discussed earlier, there are various single issue/disease programmes that often bypass the need for a comprehensive public health system. To implement such an approach, it is suggested that health services be monitored along with the accompanying aspects like water safety, solid waste management, and sewerage. An eff ort like this would help strengthen the environmental health services, which along with public health services form a basic part of a country' s developmental infrastructure.

Secondly, considering the performance audit of NRHM by the Comptroller and Auditor General (CAG) of India, there is need for timely community health planning and monitoring, which must be actively encouraged by the states. State governments play a crucial role in transforming the health delivery system. Thus, greater commitment and intervention is called.

Box 5.5 Community Participation in Sanitation and Water Supply in Rajasthan

The Bhoruka Charitable Trust (BCT) is working in about 700 villages of Churu, Pali, Dungarpur, Hanumangarh, Barmer, and Jaipur districts in Rajasthan in the fields of health, sanitation, education, women and child development, and drinking water among other integrated rural development activities. In 1984, the BCT initiated efforts in the villages of Rajgarh Block (Churu district) for the construction of 100 Low Cost Latrines (LCLs) in individual households, with 10 per cent contribution from the beneficiaries. This has become a mass movement, which has led to the construction of more than 35,000 LCLs in the villages of Churu and its adjoining districts. The users contribute more than 50 per cent in the form of labour and bricks.

In addition, BCT has been involved in the conservation of traditional water harvesting structures by constructing community rainwater harvesting *Talabs (Johads)* which can provide drinking water for consumption. BCT has implemented many rainwater harvesting projects in the villages of Churu district. Till date, BCT has constructed a total of 2,500 rooftop rain water harvesting structures, refurbished 250 community rainwater harvesting structures, and constructed 40 new community structures.

' Aapni Yojna' is the largest centralized rural water supply scheme in Asia with a geographical spread of 20,000 square kilometres. The project is providing potable water to 900,000 individuals living in about 370 villages and two towns of Churu and Hanumangarh districts of Rajasthan Establishing a community-based water distribution management system was at the core of this effort. A Water and Health Committee manages the water distribution system in each village. The community was motivated through creating awareness for water conservation, equal and fair distribution to all villages, health education measures, and sanitation measures. As women were the main beneficiaries of the improved water supply and also the principal target group for health education, women's participation was a key element across all these activities. The focus of Aapni Yojna was that the community should own the water supply system within the villages.

Source: Bhoruka Charitable Trust.

The third area needing attention is the severe under funding of the health sector that adversely affects the capital investment in public hospitals. In addition, the allocation of public funds is iniquitous, with urban areas and certain states (Himachal Pradesh, Punjab, Goa, Delhi, and Mizoram) enjoying an advantage. Besides, the allocation of resources indicates wide disparity in spending and outcomes across states. It is therefore necessary to focus on health outcomes rather than only on health outlays, including a disaggregated examination by gender, class, caste, and such others to assess their impact on different groups.

Also, there are wide variations across states, within rural and urban areas and within various social and religious communities in terms of health and access to healthcare services.

For instance, the poor states of Assam, Bihar/Jharkhand, Madhya Pradesh/Chhattisgarh, Orissa, Rajasthan, and Uttar Pradesh/Uttarakhand not only account for 47 per cent of the country's population, but also represent the core of poor performances in major health outcomes like life expectancy, IMR, U5MR, and TFR. In addition, there are huge variations between the best performing states like Kerala and Tamil Nadu compared to the less developed states. These achievements highlight the state's role in investing in social development expenditure for healthcare and education, such that the benefits are reaped equally by all the social groups in the state. The underlying cause of poor health outcomes in the less developed states is the sheer lack of public investment in healthcare resources and expenditure resulting in a dysfunctional public health system.

As mentioned earlier, the poor status of health across the country is largely attributable to the poor process and input indicators. Some of the states which experience such constraints are Arunachal Pradesh, Assam, Bihar, Jharkhand, Meghalaya, Orissa, Rajasthan, Madhya Pradesh, and Uttar Pradesh. If the state governments re- main reluctant to increase Plan/non-Plan fund allocations for health services, the central government may have to continue to increase its allocation.

With respect to caste-based inequalities, it has been observed that the SCs and STs suffer the most on account of poor access to healthcare facilities. The condition of OBCs is better as compared to SCs as well as STs. Among SCs and STs, SCs perform relatively better in terms of health indicators.

Across religious communities, it was found that Muslims suffer most in terms of health inputs/process indicators like vaccination of children, maternal health

care, contraception, and sanitation. This in turn could reflect their poor access to medical facilities on account of their being disproportionately concentrated in states like Uttar Pradesh, Bihar, and West Bengal. However, this is not the case in terms of output indicators, where Muslims are seen to be doing relatively better than Hindus.

In another kind of analysis by the Prime Minister's High Level Committee—the Sachar Committee (2006)— which examined the health status and the related facilities across socio-religious communities, it was found that Muslims fared better than many social and religious com- munities, particularly SCs/STs in terms of health. This has also been verified in the analysis of this chapter.

One should not overlook the improvements made by these social and religious communities. The analysis presented in this chapter shows that over time these groups are converging with the national averages. It is not merely that some groups in particular lack access to healthcare facilities, but that the poor are generally excluded. This is the reason why the vast majority of our poor population does not access public healthcare facilities, irrespective of the social or religious group they belong to. All this is a result of low government expenditure on health. The priority therefore should be to ensure a functional health system that is seen as credible and accessible by the poor belonging to all communities.

In view of this, the government intends to raise public expenditure on health from the present 1 per cent of GDP to around 3 per cent. Though India is moving in the right direction in terms of improving the health status of its populace, the present pattern and pace would make it difficult for India to achieve its MDG targets by 2015.

6

Education

Achievements and Challenges

Where the mind is without fear
and the head is held high,
Where knowledge is free;
Where the world has not been broken
up into fragments by narrow domestic
walls;

… Where the mind is led forward
by thee into ever-widening
thought and action-
into that heaven of freedom,
my Father,
Let my country awake.

— *Rabindranath Tagore*

INTRODUCTION

Rabindranath Tagore viewed education as 'a right which enables individuals and communities to act on reflection'. To what extent the present school education system enables students 'to act on reflection' is difficult to judge, and therefore, an analysis of Tagore's view on education in contemporary India is much beyond the scope of this chapter. The primary focus of this chapter will be on conventional measures of educational attainment across socio-economic groups and religious communities. The primacy to an analysis based on objectively measurable parameters, instead of an analysis founded upon a much more philosophical paradigm, stems from the presumption that 'the case for a broader view of the value of education (a view which goes much beyond the employment motive of education) does not entail a denial of the economic benefits' (PROBE 1999).

It was observed in Chapter 1 (Overview) that within the social sector, the influence of education is most widely spread (Figure 6.1), and education has an impact on all types of human development outcomes (Mehrotra and Delamonica 2007). Research, for instance, has indicated that literate women had a better knowledge of health and family planning, and were more likely to adopt preventive health measures like immunization (UNESCO 2006). Educated parents provide better nutrition and healthcare for themselves and their children. Various factors ensure this result. The general knowledge acquired at school increases understanding of modern health practices and scientific beliefs, which makes mothers (and fathers) more open to using healthcare centres. The education of the parents is also an important factor in reducing child labour (Self *et al.* 2008). In other words, education has a positive impact on all types of human development outcomes.

The economic motive is not the only reason why education is vital for the individual's well-being. Education is important in other ways as well—such as improving self esteem, enhancing social status, and gaining confidence while dealing with officials. Education, especially of mothers helps to enhance the autonomy women have in household decision-making; and it also has a strong positive influence on schooling outcomes, in particular for the girl child (Chandrasekhar and Mukhopadhyay 2006). An educated girl is likely to marry later than a girl who is

Social services inputs/processes	*Human development outcomes/outputs*				
	Knowledge	*Family size*	*Health status*	*Nutritional status*	*Healthy living conditions*
Education					
Family Planning	↵				
Health	↵	↵		↵	
Nutrition	↵	↵	↵		↵
Water and Sanitation					

Figure 6.1 Feedback Loops in the Human Development Process

not educated. This is especially true if the girl's education extends at least a few years beyond the primary level and she engages in economic activity outside the home. The benefits of girls' education accrue from generation to generation (Mehrotra and Delamonica 2007).

Among all the parameters of educational attainment, literacy is the most fundamental one as it paves the way for further learning and training in the formal sector. Further, written formal communication is impossible in a state of illiteracy, and hence illiteracy acts as a hindrance to good governance. Taking stock of the literacy status in this country, therefore, forms the starting point for this chapter (Section on 'Literacy'). An analysis of literacy among social groups and religious communities in rural and urban areas across states revealed that despite considerable improvement in the literacy rate, illiteracy remains a major problem, particularly in rural India. Other important findings on literacy in India are as follows:

- Though the rate of increase in literacy was higher in rural India than urban India, more than half of the females belonging to the Scheduled Castes (SCs) and Scheduled Tribes (STs) in rural India were illiterate
- Muslims had the lowest literacy rate among all religious communities even though there was improvement in their literacy rate over the years
- Although literacy rates among SCs, STs, and Muslims were lower, their literacy rates were converging towards the national average
- Even though the north-eastern states and Kerala had much higher literacy rates as compared to other states, literacy rates across states were converging over time
- The illiterates among the SCs, STs, and Muslims were concentrated within a few states

Though literacy is important, it is not an end in itself—the level of education is an important determinant of well-being for an individual, and hence, the Section on 'Aspects of School Education' analyses different aspects of access to education and educational progress. The aspects covered in this section are enrolment, attendance, promotion and repetition, and dropouts. Here too, the analysis is disaggregated by social groups and religious communities across states. The major findings of this analysis are given below.

- Though enrolment rates improved over the years, there was a sharp reduction in enrolment at higher levels of education for all social groups
- The net enrolment ratio has shown considerable improvement at the primary level and it was at par with the developed countries in the year 2007
- An important feature of schooling in India was that despite attaining a high enrolment rate, attendance was much lower than enrolment, and the difference between the two increased at higher levels of education
- Disparity in the net attendance ratio across social groups increased at higher levels of education
- In rural India, there has been over time a sharp fall in the gender gap in net attendance ratio at both primary and upper primary levels
- Among all religious communities net attendance ratio was the lowest in the case of Muslims at all levels of education
- There was a sharp increase in attendance at private unaided institutions
- One-fifth of the children in the age group 6–17 years were out of school, and financial constraint was an important reason for discontinuation of education

- Lack of pre-primary school training and child malnutrition were important determinants of learning deficiency
- Mean years of schooling which we estimated for 2007–8 was only 4.2 years for the country as a whole (implying that it was below the primary level) along with significant rural–urban disparity

Provision of quality education is possible only when proper infrastructure, along with qualified teachers, is put in place. The section on 'Physical Infrastructure' gives an insight into the existing infrastructure in schools with respect to classrooms, water and sanitation, electricity, and other facilities. The important findings of this section are:

- The norm of one classroom per class for all schools as per the Right to Education (RTE) Act remains a major challenge with 9 per cent of schools in India having only one classroom.
- Half of the schools in India did not have separate toilet facilities for girls, though the RTE Act stipulates this.

The next section ('Indicators Related to Teachers') is on human capital within the school system, and discusses single-teacher schools because of the shortage of teachers, and the consequent dependence on para-teachers. The gender and social group of the teachers across states are also analysed in this section. The broad picture that emerged from the analysis is as follows:

- Teacher shortages posed a serious challenge to the universalization of elementary education, and the pupil-teacher ratio at the primary level was much higher than the stipulated norm of 30 as per the RTE guidelines
- The pupil–teacher ratio at the primary level was much higher than the world average and it was even worse than that of Sub-Saharan Africa
- Para-teachers were seen as an important instrument to overcome teacher shortage, and more than 10 per cent of the teachers in India were para-teachers
- Fewer female teachers in rural areas were an important factor for low school attendance among females
- Under-representation of SC teachers adversely affected participation of SC students in the education system

The section on 'Expenditure on Education' analyses public expenditure on education—elementary education, secondary education, university and higher education. This section also analyses out-of-pocket expenditure on education across social groups and religious communities in India. The major findings that emerge from the analysis are as follows:

- Public expenditure on education continued to be low
- Out-of-pocket expenditure in private unaided institutions was much higher than in government schools
- High out-of-pocket expenditure was a deterrent to educational attainment for the economically disadvantaged who were mostly SCs, STs, and Muslims

The last section concludes.

The qualitative and quantitative dimensions of the parameters of educational attainment are analysed through different sources of data such as various rounds of National Sample Surveys conducted by the National Sample Survey Organization (NSSO), District Information System for Education (DISE) (the responsibility of which was assigned to the National University of Educational Planning and Administration [NUEPA], National Family and Health Survey (NFHS), and annual reports of the Ministry of Human Resource Development.[1]

LITERACY

Literacy adds value to a person's life and plays a crucial role in his/her overall development. It also adds tremendous value to society at the macro level. There is a strong correlation between lack of literacy and poverty, both in the economic sense and in the broader sense of deprivation of capabilities (UNESCO 2006). Female literacy, in particular, is of vital importance for the future of the nation, as a child's health is crucially linked to the mother's literacy.

[1] The District Information System for Education (DISE) is essentially the result of the requirement for a sound information system for school education in India and was accorded priority from the beginning of the District Primary Education Programme (DISE 2010). The coverage of the schools in DISE has increased over time, and so the inter-temporal comparison might not necessarily entirely capture the real change over the same set of schools. Despite considerable increase in coverage, by its own admission DISE (2010) noted that some private unaided schools are yet to be covered.

Despite considerable improvement India has the largest number of illiterate people in the world

Globally, the literacy rate increased from 56 per cent in 1950 to 82 per cent during 2000–4 (UNESCO 2006). Despite considerable improvement in the literacy status, India is home to the largest number of illiterate people in the world. According to UNESCO's *Global Monitoring Report 2006*, out of 771 million illiterate people in the world, 268 million (nearly one-third) were estimated to be in India.

The All India Picture: *Increase in literacy rate higher in rural India but literacy among rural females still very low*

The literacy rate has shown considerable improvement during the period 1999–2000 to 2007–8. The improvement in literacy rate was seen across all social groups and religious communities, in both rural and urban India (Tables 6.1 and Table 6.2). The increase in literacy rate was higher in rural India (11 percentage points) than in urban India (4.5 percentage points).

Despite this, for the country as a whole, 28 per cent of the population above the age of seven years was illiterate in 2007–8.[2] The problem of illiteracy was particularly acute in rural India, especially in the case of rural females, 43 per cent of whom were illiterate. In other words, precisely that half of the nation's population whose literacy matters more to society was found to be more deprived. Unfortunately, South Asia has the worst adult literacy rate (67.2 per cent) in the world, worse than Sub-Saharan Africa (69.4 per cent). This is because the India's female literacy rate is far worse (57 per cent) than Sub-Saharan Africa's (63.9 per cent).

The male–female literacy gap in rural India persisted and the 20 percentage point gap that existed in 2001 continued in 2007–8. So, despite the improvement in literacy rate, a considerable proportion of females remained illiterate.

In recent years, the overall literacy rate in India has increased to 74 per cent in 2011.[3] The female literacy rate has improved considerably by 50 per cent from 224 million in 2001 to 334 million in 2011. Overall, female literacy rate in India is 65 per cent and male literacy rate is 82 per cent in the year 2011.

Literacy across Social Groups: More than half of the SC and ST females in rural India were illiterate

Across social groups, STs had the lowest literacy rate in rural India, while SCs had the lowest literacy rate in urban India in 2007–8. Compared to rural India, the status of literacy in urban India was much better across all social groups, and also across genders within any particular social group. The rural–urban gap in female literacy was much greater than that in male literacy (Tables 6.1 and 6.2).

Despite the improvement in literacy rates across all social groups, the gender gap was an over-arching problem for all social groups. The problem of persistent gender discrimination against females is a systemic problem in Indian society. In rural India, gender disparity in terms of literacy existed in all the states and Union Territories, with literacy rate among males higher than that for females. For the country as a whole, the male literacy rate was 20 percentage points higher than the female literacy rate in 2007–8. Among the major states, gender disparity in the literacy rate was the highest in Rajasthan, followed by Jharkhand and Bihar (Table 6A.1).

As in the case of rural India, the male literacy rate was higher than the female literacy rate across all the states in urban India in 2007–8. Among the major states the gender disparity was the greatest in Rajasthan, where the male literacy rate was greater than the female literacy rate by 20 percentage points, followed by Bihar (Table 6A.2).

Literacy across Religious Communities: Despite improvement Muslims have the lowest literacy rate

Across religious communities the literacy rate was the lowest among Muslims, both in rural and urban India in 2007–8 (Tables 6.1 and 6.2). In rural India only 55 per cent of Muslim females were literate (Table 6.1). The female–male differentials in literacy were the greatest for Hindus and Muslims, and were much lower for Sikhs and Christians. All leaders, especially religious leaders among Hindus and Muslims, can perhaps play a greater role in exhorting their communities to acquire basic literacy and numeracy skills.

[2] NSS 64th Round (Education in India, 2007–8: Participation and Expenditure).
[3] Census 2011.

Table 6.1 Literacy Rate, by Social Groups and Major Religious Communities (Rural), 1999–2000 and 2007–8 (*per cent*)

	Males		*Females*		*Persons*	
	1999–2000	*2007–8*	*1999–2000*	*2007–8*	*1999–2000*	*2007–8*
By Social Group						
Scheduled Castes	58.8	70.6	33.6	49.9	46.6	60.5
Scheduled Tribes	53.8	69.3	30.1	47.8	42.2	58.8
Other Backward Classes	67.8	77.7	41.1	55.4	54.8	66.7
Others	78.1	84.6	56.7	68.8	67.7	76.9
All Social Groups	67.8	77.0	43.4	56.7	56.0	67.0
By Major Religious Community						
Hindus	68.2	77.4	42.5	56.2	55.7	67.0
Muslims	61.4	71.7	42.1	55.0	52.1	63.5
Christians	80.1	85.9	67.5	78.0	73.7	82.0
Sikhs	67.2	75.9	55.3	63.4	61.5	69.9

Source: NSS 55th Round, Report No. 473 (for 1999–2000) and calculated from NSS Database 64th Round (for 2007–8).
Note: For population 7 years and above.

Table 6.2 Literacy Rate, by Social Groups and Major Religious Communities (Urban), 1999–2000 and 2007–8 (*per cent*)

	Males		*Females*		*Persons*	
	1999–2000	*2007–8*	*1999–2000*	*2007–8*	*1999–2000*	*2007–8*
By Social Group						
Scheduled Castes	76.0	83.1	55.7	66.1	66.2	74.9
Scheduled Tribes	78.1	86.0	61.2	69.0	70.0	78.0
Other Backward Classes	83.5	88.3	66.4	74.6	75.3	81.7
Others	91.4	93.8	81.0	85.5	86.5	89.9
All Social Groups	86.5	89.9	72.3	78.0	79.8	84.3
By Major Religious Community						
Hindus	88.0	91.6	73.4	79.3	81.1	85.8
Muslims	76.7	80.9	62.2	68.8	69.8	75.1
Christians	94.4	95.3	87.9	89.0	91.1	92.0
Sikhs	88.1	90.8	78.6	85.3	83.5	88.2

Source: NSS 55th Round, Report No. 473 (for 1999–2000) and calculated from NSS Database 64th Round (for 2007–8).
Note: For population 7 years and above.

Convergence of literacy rates for SCs, STs, and Muslims towards the national average

Over the years the literacy rates for SCs, STs, and Muslims have converged towards the national average. As compared to 1999– 2000, there has been an improvement in the ratio of literacy rates for SCs, STs, and Muslims with respect to the national average in both rural and urban India (Table 6.3). This convergence was most pronounced among STs in rural India.

Table 6.3 Ratio of Literacy Rates for SCs, STs, and Muslims to National Average, 1999–2000 and 2007–8

Social Group/ Religious Community	*Rural*		*Urban*	
	1999–2000	*2007–8*	*1999–2000*	*2007–8*
SCs	0.83	0.9	0.83	0.89
STs	0.75	0.88	0.87	0.92
Muslims	0.93	0.95	0.87	0.89

Source: Calculated from Tables 6.1 and 6.2.

Literacy across Diff erent States: *Literacy rates in north-eastern States and Kerala much higher as compared to other States*

There was a lot of variation in literacy rates across diff erent states in rural India. The north-eastern states and Kerala had very high literacy rates (with at least 80 per cent of the people in the age group of 7 years and above being literate) in the year 2007– 8. On the other hand, the literacy rate was less than 60 per cent in Bihar, Rajasthan, and Andhra Pradesh (Table 6A.1).

The north-eastern states and Kerala had higher literacy rates as compared to other states in the urban areas as well (Table 6A.2).

Convergence in literacy rates across States

The variation across states in terms of literacy rates has come down in both rural and urban India. The standard deviation across states in rural India declined from 13.6 in 1999– 2000 to 11.1 in 2007– 8. In the case of urban India, standard deviation declined from 6.8 in 1999–2000 to 5.7 in 2007– 8. Therefore, the variation in terms of literacy rates across states declined and there was convergence across states in both rural and urban India.

Literacy among Social Groups across States: SC/ST illiterates concentrated in a few States

Five states—Rajasthan, Jharkhand, Orissa, Chhattisgarh, and Madhya Pradesh—together accounted for 48 per cent of the STs in India in 2007– 8 but together accounted for 55 per cent of the illiterate among STs. In case of SCs, 46 per cent of SCs in India were concentrated in Uttar Pradesh, Bihar, West Bengal, and Andhra Pradesh, and these four states together accounted for 52 per cent of the illiterate among SCs.

Across social groups, STs have remained the most marginalized, a fact refl ected in their having the lowest literacy rate in rural India in 2007– 8. Among STs, the literacy rate was particularly low in Uttar Pradesh, Rajasthan, Tamil Nadu, and Bihar (all below 50 per cent) (Table 6A.3). In all these states, with the exception of Rajasthan, the share of the ST population in the state' s total population was negligible. In Rajasthan however, STs accounted for 13 per cent of the population. So policy-makers in Rajasthan have a special responsibility to focus on literacy programmes for the ST population. In rural Rajasthan the literacy rate among the ST population increased by only 8 percentage points during the period 1999– 2000 and 2007– 8 (from 38 per cent in 1999–2000 to 46 per cent in 2007– 8). This increase was much lower than the average for the ST population in rural India as a whole, which witnessed an increase in literacy rate of 17 percentage points (from 42 per cent in 1999– 2000 to 59 per cent in 2007– 8) (Table 6A.3 for 2007– 8 and NSS Report No. 473 for 1999–2000).

Among SCs, STs and Muslims, the three most capability-deprived groups in India, SCs are doing slightly better than STs, but worse than Muslims, in terms of literacy. In 2007– 8, the lowest literacy rate among SCs was in Bihar (Table 6A.3) at 45 per cent. Even Uttar Pradesh, which has an equally high share of SCs in the total population, has a literacy rate of 57.8 per cent for SCs, almost 13 percentage points higher than Bihar, though this is the second lowest SC literacy rate for any state in the country. In other words, Bihar faces a major challenge in this regard, and although it has made remarkable progress in making its government schools functional by hiring a very large number of teachers within the last few years, the NSS literacy data for 2007– 8 suggests that a special focus on literacy programmes is needed for the SC population in Bihar. Andhra Pradesh too has a high share (20 per cent) of SCs in the total population (the same as Bihar), and like Bihar it also has a relatively low literacy rate among SCs compared to the rest of the states in the country.

In urban India, both male and female literacy were the lowest in the case of SCs in 2007– 8. In the majority of the states, the literacy rate was the highest among ' Others' , that is, among the general castes (Table 6A.4).

Literacy among Religious Communities across States: High concentration of Muslim illiterates in Bihar, West Bengal, and Uttar Pradesh

As has already been noted, the literacy rate among Muslims was lower than that of other religious communities in both rural and urban India (although better than that for STs and SCs), for both males and females (Table 6.1).

In rural India in 2007–8, the male literacy rate was higher than the female literacy rate for all religious communities across all states (with the exception of Himachal Pradesh in the case of Sikhs and Madhya Pradesh in the case of Christians). In the major states, the male advan- tage in literacy was particularly high in Goa, followed by Rajasthan (Table 6A.5).

In urban India in 2007–8, the male literacy rate was higher than the female literacy rate for all religious communities across all states with the exception of Meghalaya, where the female literacy rate was higher than the male literacy rate for Muslims. As in the case of rural India, gender disparity in literacy among Muslims was particularly high in Goa (Table 6A.6).

It may be noted here that in three states, namely Uttar Pradesh, Bihar, and West Bengal, the proportion of illiterates among Muslims was much higher in comparison to the share of the Muslim population in the total population. These three states together accounted for 46 per cent of the Muslim population in the age group seven years and above, but 58 per cent of the illiterates among Muslims in India resided in these three states. This fact acquires salience since Uttar Pradesh, West Bengal, and Bihar have higher share of Muslims in their total population (19.2 per cent, 14.8 per cent, and 13.4 per cent, respectively) among all the states of India. Unless policymakers focus their attention on these sections of the population, there is little hope of their overall educational indicators catching up with the rest of the country.

The problem of illiteracy was more acute in rural India than urban India, particularly among females. Female literacy rates were especially low among SCs, STs, and Muslims. Among the major states, Bihar and Rajasthan had the highest gender disparity (defi ned as the diff erence in literacy rates between males and females) in both rural and urban areas. Bihar had one of the highest concentrations of illiterates among Muslims and SCs, while Rajasthan had one of the highest concentrations of illiterates among STs.

ASPECTS OF SCHOOL EDUCATION

As already mentioned, literacy is only the fi rst step towards educational attainment. There are various other aspects of the school education system which determine the educational attainment of individuals. These can be classifi ed under two broad headings—access to education and educational progress. The diff erent measures pertaining to access to education and educational progress have been analysed in the following two sub-sections.

Measures of access to education

Achieving universal primary education and eliminating gender disparity at all levels of education are among the Millennium Development Goals (MDGs) laid down in the Millennium Declaration of the United Nations, the time line for which has been set for 2015. Keeping this in mind, the Government of India has set a target of ensuring that all children in the age group 6–11 years complete a full course in primary education by 2015. The State's commitment with regard to the provision of elementary education is well enshrined in the Constitution.[4]

Universal elementary education is not only a constitutional directive, but also a fundamental requirement for the well-being of individuals, and at the macro level, forms the basis of a well functioning democracy. The Right of Children to Free and Compulsory Education Act (RTE), 2009, came into force from April 2010. The RTE Act provides for free and compulsory education to all children in the age group 6–14 years. With the enforcement of the RTE Act, education has become a fundamental right, and therefore, education has become an entitlement of every child. In India, education comes under the 'concurrent list'.

Universal enrolment is one of the fi ve guiding parameters of Universalization of Elementary Education (UEE) as laid down in the Tenth Five Year Plan. Sarva Shiksha

[4] Article 21 (which basically states that education is a fundamental right which fl ows from the right to life), Article 21A (according to which the State shall provide free and compulsory education to all children in the age group 6–14 years), Article 86 (emphasizing childhood care and education which shall be provided by State up to the age of six years).

Abhiyan (SSA) is one of the major schemes introduced by the Government of India in the year 2002 (Box 6.1) to universalize elementary education, while maintaining a certain standard of quality. It aims at providing basic education to all children in the age group 6–14 years while endeavouring to bridge the social, regional, and gender gaps existing within the country, without any compromise in the quality of education. Universal enrolment is one of the specific objectives of SSA (Box 6.1).[5]

The two most important indicators of enrolment are gross enrolment ratio (GER) and net enrolment ratio (NER). GER is defined as the ratio of students enrolled in a particular level of education (regardless of age) to the population of official school age for that level of education. Since both the over-aged and under-aged population for a specific level of education are included in the calculation of GER, its value can exceed 100. NER on the other hand is the ratio of students belonging to the official age of enrolment (as required for a particular level of education) who are enrolled to the population of official school age for that level of education. The essential difference between GER and NER is that net enrolment excludes enrolled children who fall outside the official age range (as specified for a certain level of education), while they are included in the calculation of GER.

Gross Enrolment Ratio: Improving but declining at higher levels of education for all social groups

Between 2004–5 and 2007–8, GER improved at all levels of education. However, it was observed that GER subsequently declined at higher levels of education, from primary to upper primary to secondary/higher secondary (Table 6.4). This was true for SCs and STs as well. For the country as a whole, GER declined from 114.6 per cent at the primary level to 45.5 per cent at the secondary/higher secondary level in 2007–8.

Generally, across all the states (with very few exceptions), there has been an increase in GER at all levels of education between 2004–5 and 2007–8. This general trend of improvement in GER at all levels of school education between 2004–5 and 2007–8 was observed for SCs and STs as well (Tables 6A.7, 6A.8, and 6A.9). However, despite improvement in GER over the years, drop in GER at higher levels of education was a common feature across all states (with only two exceptions).[6]

Gender Parity Index: Comparable to international standards but considerable interstate variations

Eliminating gender disparity at all levels of education by 2015 is one of the MDGs laid down by the United

Box 6.1 Sarva Shiksha Abhiyan (SSA)

According to the 7th Educational Survey conducted by National Council of Educational Research and Training (NCERT) across India in 2002, approximately 13 per cent of all habitations had no primary school within one kilometre radius. In addition, 22 per cent had no upper primary schools within 3 kilometre radius. In the year 2004–5, the coverage of primary and upper primary schools increased to 96 per cent and 85 per cent of habitations, respectively. The Ministry of Human Resource Development reports that the number of out of school children declined from 32 million in 2001–2 to 7 million in 2007.

To focus on girls' education, several schemes have been incorporated within the SSA. These include the National Programme for Education of Girls at Elementary Level (NPEGEL) and Kasturba Gandhi Balika Vidyalaya Scheme (KGBVS). Both these schemes focus on primary education for girls, by setting up residential schools for girls belonging to the SC/ST/minority categories under KGBVS and through model schools being built with greater community participation under NPEGEL.

Despite certain drawbacks, monitoring data suggests that the SSA has shown definite progress. A study conducted by the Indian Institute of Management, Ahmedabad (2006), showed that over the years, SSA has been able to reduce the social and gender gap. The enrolment ratio for SCs and STs was higher than the share of the population itself for the year 2004–5. The gender gap in enrolment was also found to be 4.2 per cent at the primary level and 8.8 per cent at the upper primary level. This study indicated that SSA is making slow but steady progress towards attainment of its objectives.

[5] SSA, which was launched in 2001, schools get grants under four categories namely new classroom grant (up to Rs 200,000), school maintenance grant (Rs 10,000 per annum for schools which have more than three classrooms), school development grant, and teacher learning material grant. SSA is being merged with the REA, which came into force on 1 April 2010.

[6] For Himachal Pradesh and Andaman & Nicobar Islands GER at the upper primary level was higher than at the primary level in the year 2007–8.

Table 6.4 Gross Enrolment Ratio for School Education, by Social Groups, 2004–5 and 2007–8 (*per cent*)

Social Group	*Primary*		*Upper Primary*		*Secondary/Higher Secondary*	
	2004–5	*2007–8*	*2004–5*	*2007–8*	*2004–5*	*2007–8*
Scheduled Castes	115.3	124.9	70.2	76.3	34.7	39.0
Scheduled Tribes	121.9	129.3	67.0	74.4	27.7	30.8
All Social Groups	107.8	114.6	69.9	77.5	39.9	45.5

Source: Annual Reports, Ministry of Human Resource Development, Government of India.

Nations. The attainment of social justice is incomplete without achieving gender equality. In a country like India, where disparity between males and females is widespread (as revealed by various studies like PROBE 1999), attaining gender equality calls for better schooling opportunities for girls. The gender parity index (GPI) at the primary level improved from 0.91 in 2004–5 to 0.93 in 2007–8 (DISE 2010).[7] When subjected to international comparison, the GPI for India fares relatively well (Table 6.5). The increasing secondary, enrolment (Table 6.4) is explained by rising girls enrol- ment, which also underlies falling female workforce participation.

Net Enrolment Ratio: Considerable improvement at the primary level

As was observed in the case of GER, there was a general improvement in NER at the primary level between 2005–6 and 2007–8. For the country as a whole, NER increased to 96 per cent in 2007–8 from 84 per cent in 2005–6.[8] This is a major achievement and NER at the primary level for India was very much at par with those in other countries/regions of the world (Table 6.6). Therefore, as per the NER, the Government of India's target of ensuring that all children in the age group 6–11 years complete a full course in primary education by the year 2015 seems achievable.

Despite attaining internationally comparable levels of GPI, enrolment among girls belonging to Muslims and OBCs remains a major concern. For the country as a whole, the enrolment of girls belonging to Muslim and OBC communities at the primary and upper primary levels was less than 50 per cent (Table 6.7).

Table 6.5 Gender Parity Index at Primary Level, 2007

Country/Region	*GPI*
World	0.96
Developing Countries	0.95
Developed Countries	1.00
Sub-Saharan Africa	0.90
Arab States	0.90
Central Asia	0.98
East Asia and the Pacific	0.99
East Asia	0.99
Pacific	0.97
South and West Asia	0.95
Latin America and the Caribbean	0.97
Caribbean	0.99
Latin America	0.96
North America and Western Europe	1.00
Central and Eastern Europe	0.98
China	0.99
India	0.93

Source: *EFA Global Monitoring Report*, UNESCO 2010.
Note: Source for India is State Report Cards, 2007–8, NUEPA.

Net Attendance Ratio: Sharp decline at upper-primary level despite narrowing gender gap

As per the NSS, 'current attendance' refers to whether a person is currently attending any educational institution or not. Enrolment is necessary for attending any educational institution, while the reverse is not true. In other words,

[7] GPI at the primary level is defined as the ratio of GER for females to GER for males.
[8] DISE (2010).

Table 6.6 Net Enrolment Ratio at Primary Level, 2007 (*per cent*)

Country/Region	*NER (per cent)*
World	87
Developing Countries	86
Developed Countries	96
Sub-Saharan Africa	73
Arab States	84
Central Asia	92
East Asia and the Pacific	94
East Asia	94
Pacific	84
South and West Asia	86
Latin America and the Caribbean	93
Caribbean	72
Latin America	94
North America and Western Europe	95
Central and Eastern Europe	92
China	–
India	96

Source: *EFA Global Monitoring Report*, UNESCO 2010.
Note: Source for India is State Report Cards, 2007–8, NUEPA.

Table 6.7 Enrolment of Girls at Primary and Upper Primary Levels, 2007–8 (*per cent*)

Religious/Social Group	*Primary*	*Upper Primary*
Muslim	48.7	49.4
OBC	48.4	46.7

Source: DISE (2010).

' while every person, who is attending an educational in- stitution, is necessarily enrolled in that institution, it may so happen that a person, who is enrolled is not currently attending the institution' (Government of India 2010). Surveys (for instance, PROBE 1999) have identifi ed that even though children are enrolled in schools, they often do not attend school due to various socio-economic factors. Enrolment rates collected from educational institutions are therefore higher than attendance rates captured by NSSO through household surveys. Information on attendance captures the true educational opportunity of students better than information on enrolment. Accordingly, the net attendance ratio (NAR) is considered as a measure of current attendance status.[9]

As in the case of enrolment, school attendance at the primary and upper primary level improved considerably over the years. In both rural and urban India, NAR at the primary and upper primary levels was considerably higher in 2007–8 as compared to 1995–6 (Table 6.8).

In rural India there was a sharp fall in the gender gap in the NAR at both the primary and upper primary levels

Despite males having higher NARs, gender disparity was much less in 2007–8 compared to 1995–6. In rural India, at the primary level, gender disparity decreased to three percentage points in 2007–8 as compared to 14 percentage points in 1995–6 (Table 6.8). In urban India, the gender gap continued to be minimal.

The signifi cant improvement in NAR for females in rural areas is a regulation of the success of SSA. One of the important outcomes of greater participation in education is declining labour force participation rate and workforce participation rate. In rural-areas there has been a decline in female labour force participation rate by 7 percentage points (33.3 per cent in 2004–5 to 26.5 in 2009–10). While a similar decline could also be observed in case of workforce participation rate (32.7 per cent in 2004–5 to 26.1 per cent in 2009–10). This is a remarkable achievement for girl' s education in India. It may be noted here that gross enrolment ratio for girls increased from 34 per cent in 2003–4 to 41 per cent in 2007–8 at secondary and higher secondary level.

High enrolment but lower attendance

For the country as a whole, NAR during the year 2007–8 at the primary and upper primary levels was 82 and 60 per cent, respectively. Therefore, despite attaining a high NER (96 per cent) at the primary level, the NAR

[9] As per NSSO, net attendance ratio is defi ned as the ratio of the number of persons in the official age group attending a particular standard of education to the total number of persons in the age group.

Table 6.8 Net Attendance Ratio at Primary and Upper Primary Levels, 1995–6 and 2007–8 (*per cent*)

	Rural		*Urban*	
	1995–6	*2007–8*	*1995–6*	*2007–8*
Primary Level				
Males	68.0	83.3	80.0	82.2
Females	56.0	80.5	77.0	80.4
Upper-Primary Level				
Males	44.0	62.5	60.0	69.6
Females	32.0	58.1	57.0	66.6

Source: NSS 52nd round, Report No. 439 (for 1995–6), and calculated from NSS Database, 64th round (for 2007–8).

was much lower. Further, attendance at the upper primary level is much lower compared to the primary level.

NAR across social groups: Sharp decline in NAR for rural females from primary level to upper primary level

Among the social groups, NAR was lower for SCs and STs at both the primary and upper primary levels. There was a decline in NAR at the upper primary level as compared to the primary level, and this could be observed for all social groups in both rural and urban India. The decline was much sharper in rural India as compared to urban India, particularly for rural females, for whom NAR came down from 80 per cent at the primary level to 58 per cent at the upper primary level (Tables 6.9 and 6.10).

It was further observed that in all states, the gender disparity for females was generally greater in rural areas than urban areas, both at the primary and upper primary levels (Tables 6A.10 to 6A.13).

NAR was lower among SCs and STs as compared to other social groups in the case of secondary and higher secondary education as well. In rural India, across social groups, NAR was the lowest for STs, at both secondary and higher secondary levels (Tables 6.11 and 6.12). In urban India, NAR for SCs was the lowest among social groups.

Further, gender disparity in NAR was greater in rural India as compared to urban India, at both the secondary and higher secondary levels. In rural India, male NAR was higher than female NAR by 5 percentage points at both the secondary and higher secondary levels. In urban India on the other hand, male NAR was higher than female NAR by only 1 percentage point, at both the secondary and higher secondary levels.

Overall, for all social groups, NAR was biased against females at all levels of education. This gender disparity was much more pronounced in rural areas. Further, NAR for SCs and STs was lower than other social groups, and the disparity across social groups intensifi ed at higher levels of education. In other words, the declining trend in NAR at higher levels of education was sharper in the case of SCs and STs.

Table 6.9 Net Attendance Ratio at Primary Level, by Social Groups and Major Religious Communities, 2007–8 (*per cent*)

	Rural		*Urban*	
	Males	*Females*	*Males*	*Females*
By Social Group				
Scheduled Castes	81.5	77.4	80.1	80.9
Scheduled Tribes	82.4	78.7	82.3	82.8
Other Backward Classes	83.3	81.0	81.4	79.4
Others	85.6	83.8	84.0	80.9
All Social Groups	83.3	80.5	82.2	80.4
By Major Religious Community				
Hindus	84.2	81.5	83.3	83.2
Muslims	78.7	74.9	77.6	70.6
Christians	79.1	78.8	85.3	77.0
Sikhs	85.7	77.5	92.4	82.3

Source: Calculated from NSS Database 64th Round.

Table 6.10 Net Attendance Ratio at Upper Primary Level, by Social Groups and Major Religious Communities, 2007–8 (*per cent*)

	Rural		*Urban*	
	Males	*Females*	*Males*	*Females*
By Social Group				
Scheduled Castes	60.7	55.4	66.0	60.3
Scheduled Tribes	58.8	54.9	73.1	72.5
Other Backward Classes	62.0	55.7	68.0	63.3
Others	67.2	67.1	72.1	72.3
All Social Groups	62.5	58.1	69.6	66.6
By Major Religious Community				
Hindus	64.5	60.0	73.6	70.7
Muslims	48.7	45.3	49.1	50.8
Christians	63.9	70.9	77.6	71.6
Sikhs	63.3	57.3	75.2	78.5

Source: Calculated from NSS Database 64th Round.

Table 6.11 Net Attendance Ratio at Secondary Level, by Social Groups and Major Religious Communities, 2007–8 (*per cent*)

	Rural		*Urban*	
	Males	*Females*	*Males*	*Females*
By Social Group				
Scheduled Castes	33.3	30.0	41.7	45.4
Scheduled Tribes	25.5	25.9	54.0	38.8
Other Backward Classes	42.8	35.7	50.3	49.9
Others	47.1	43.4	57.7	54.3
All Social Groups	40.0	35.0	52.0	51.0
By Major Religious Community				
Hindus	41.7	36.9	55.9	56.3
Muslims	26.0	23.5	31.8	32.1
Christians	49.4	42.4	72.0	46.4
Sikhs	40.8	39.4	71.0	38.6

Source: Calculated from NSS Database 64th Round.

NAR across Religious Communities: Lowest in the case of Muslims at all levels of education

Among all religious communities, Muslims had the lowest NAR at all levels of education, in both rural and urban India (Tables 6.9, 6.10, 6.11, and 6.12). In fact, in rural India, low NAR among STs was comparable with that of the Muslims at the secondary and higher secondary levels. In urban India, NAR for Muslims was even lower than that for SCs and STs at all levels except at the higher secondary level, where they were similar.

Table 6.12 Net Attendance Ratio at Higher Secondary Level, by Social Groups and Major Religious Communities, 2007–8 (*per cent*)

	Rural		*Urban*	
	Males	*Females*	*Males*	*Females*
By Social Group				
Scheduled Castes	20.6	16.4	23.8	24.5
Scheduled Tribes	12.7	8.5	39.3	35.5
Other Backward Classes	26.4	19.9	38.8	36.5
Others	29.4	24.3	42.7	44.9
All Social Groups	25.0	20.0	40.0	39.0
By Major Religious Community				
Hindus	26.2	19.9	40.8	42.0
Muslims	10.9	11.3	24.4	25.8
Christians	32.5	36.5	40.6	61.0
Sikhs	24.6	20.9	42.4	41.7

Source: Calculated from NSS Database 64th Round.

In the case of Muslims, the sharpest decline in NAR was observed from the primary level to the upper primary level in rural areas. The decline was as high as 30 percentage points for both males and females in rural India. In urban India, this decline was in the range of 20–5 percentage points. This sharp decline at the upper primary level was, in fact, the starting point of the disparity in the NAR between Muslims and other religious communities.

The government introduced the Rashtriya Madhyamik Shiksha Abhiyan in March 2009, in order to enhance access to secondary education by removing all barriers— gender, socio-economic, and disability—and providing universal access to secondary education by 2017. Some of the features of this newly introduced scheme are the en- hancement of infrastructural facilities (opening of 11,000 new secondary schools and construction of 80,000 additional classrooms) and improving the quality of education (for example, increasing the teacher pupil ratio to 1:30 by appointing 0.2 million additional teachers, and ensuring in-service training of teachers, focusing on Science, Mathematics, and English).

Attendance in Diff erent Types of Institutions: Sharp increase in attendance at private unaided institutions

One of the important changes in the school education system in India during the past one-and-a-half decade has been the growing presence of private educational institutions. During the period 1995–6 to 2007–8, the proportion of students attending private unaided institutions increased by 8 percentage points at both the primary and upper primary levels (Table 6.13).[10] The phenomenal rise of private unaided institutions is of concern since enrolment in them is biased against girls and lower castes, leaving girls, SCs, STs to mostly in government schools. This rise in the share of private unaided schools in total attendance across all types of schools can partly be explained by rising levels of disposable income, but also by the fact that government schools lack infrastructure, and are characterized by signifi cant teacher absenteeism and limited time-on-task by teachers even when they are present (see later discussions).

[10] ASER (2011) noted that private school enrolment in rural India increased from 16 per cent in 2005 to 24 per cent in 2010.

Table 6.13 Distribution of Persons Attending Different Types of Educational Institutions, 1995–6 and 2007–8 (*per cent*)

Type of Institution	*Primary*		*Upper Primary*	
	1995–6	*2007–8*	*1995–6*	*2007–8*
Government	69	67	62	65
Local Body	9	6	8	5
Private Aided	10	7	21	12
Private Unaided	12	20	9	17
All	100	100	100	100

Source: NSS Report Nos. 439 and 532.

Table 6.14 Out of School Children by Social Groups and Major Religious Community (6 to 17 years), 2007–8 (*per cent*)

	Males	*Females*	*Persons*
By Social Group			
Scheduled Castes	21.0	25.0	22.8
Scheduled Tribes	21.7	28.4	24.8
Other Backward Classes	16.6	22.2	19.2
Others	12.7	16.3	14.3
All Social Groups	16.9	21.8	19.2
By Major Religious Community			
Hindus	15.5	20.2	17.7
Muslims	26.4	31.5	28.8
Christians	8.7	10.7	9.7
Sikhs	15.3	20.9	17.7

Source: Calculated from NSS Database 64th Round.

Out of School Children: One-fifth of the children in the age group 6–17 years are out of school

One of the important drawbacks of the school education system is the existence of a very large number of out of school children in the country.[11] If we consider the age group 6–17 years, close to one-fifth of the children have either never attended school or have attended school in the past but are currently not attending.[12] In simple terms, these children can be considered as out of school children. Though the proportion of out of school children has come down from 29 per cent in 1999–2000 to one-fifth in 2007–8, it poses a serious challenge to the success of SSA, which has universalization of elementary education as an important objective.

Across social groups, the incidence of out of school children was the highest among STs especially among females (Table 6.14). Across religious communities, the problem of out of school children was most pronounced among Muslims (Table 6.14). Remarkably, the proportion of out of school children among Muslims was much higher in 2007–8 than SC, ST or OBC children—for girls as well as boys. Unless this dire situation is corrected very quickly, the prospects for greater upward mobility of Muslims remain bleak. We have already noted that the incidence of poverty among Muslims was one-third, which was much higher than for India as a whole (about 26 per cent). A critical explanatory factor is the high proportion of Muslim children who are out of school.

For India as a whole, 19 per cent of the children in the age group 6–17 years are out of school. Across states, Bihar and Orissa has the highest incidence of out of school children in the country. In Bihar, more than one-third of the SC children in the age group 6–17 years are out of school (Table 6A.14). It may be noted here that Bihar alone accounted for 12 per cent of SCs in the country. Among STs, the highest proportion of out of school children is in Maharashtra, which accounted for 7 per cent of the STs in the country. At the other extreme, Kerala and Himachal Pradesh have the lowest proportion of out of school children in the age group of 6–17 years.

Across religious communities, it has already been pointed out that Muslims have the highest proportion of out of school children in the country. One-third of Muslim females in the age group 6–17 years are identified as out of school children (Table 6A.15). In Bihar, Gujarat, Haryana, and Uttar Pradesh, more than 40 per cent of Muslim females in the age group 6–17 years are categorized as out of school children, which suggest that even the next generation of young Muslim women will

[11] The estimate of out of school children is derived from the survey on 'Participation and Expenditure in Education' (NSS 64th Round). It is derived by adding up the number of children who have never attended an educational institution and the number of children who have attended an educational institution in the past but are currently not attending.

[12] In the calculation of NAR, the NSS 64th Round considered six years of age to correspond to grade one, and 17 years of age to correspond to grade 12.

remain severely deprived educationally. Policymakers in these states urgently need to address this situation.

As was observed in the case of literacy, regional concentration was noticeable in the case of out of school children as well. Six states, namely Rajasthan, Uttar Pradesh, Bihar, West Bengal, Gujarat, and Andhra Pradesh, accounted for 64 per cent of out of school children in the country in the age group 6–17 years, while they accounted for 56 per cent of all children in this age group. Clearly, the SSA has its task cut out in these states.

Financial constraint was an important reason for discontinuation

Among the various reasons for discontinuation or dropping out, the three most important reasons identified in the survey (NSS 64th Round) are lack of interest on the part of parents, lack of interest on the part of children, and financial constraints. These three factors together accounted for at least half of the cases of discontinuation or dropouts across all social groups and also among Hindus and Muslims in the case of religious communities (Table 6.15). By and large, financial constraint was the most important factor for discontinuation/dropping out for all other social groups and religious communities.

It may be pointed out here that the levels of public expenditure in education are extremely low compared to incomes and needs, and it has rarely approached four per cent of GDP. So if public expenditure itself is low and there are 300 million people living below the poverty line, discontinuation due to financial constraints will be a natural outcome.

Measures of Educational Progress

Educational progress implies the rate at which children advance through different levels in the school education system. In order to measure the extent to which the school education system can retain children, flow rates of students can be measured using the cohort survival method, and more specifically, the reconstructed cohort method.[13] In very simple terms, cohort survival at the primary level (for instance) measures the proportion of children who on entering the first grade together complete the primary level without repeating any grade.

The three most important indicators for assessing the flow rate of students are promotion rate, repetition rate, and dropout rate.[14] DISE uses the reconstructed cohort method to obtain average promotion, repetition and drop out rates.

Table 6.15 Major Reasons for Discontinuation/Dropping out 2007–8 (*per cent*)

	Parents not interested in studies	*Financial constraints*	*Child not interested in studies*
By Social Group			
Scheduled Castes	16	26	14
Scheduled Tribes	20	17	14
Other Backward Classes	16	20	14
Others	13	20	14
By Major Religious Community			
Hindus	16	20	14
Muslims	18	27	12
Christians	10	20	14
Sikhs	9	22	20

Source: Calculated from NSS Database 64th Round.

[13] For a detailed discussion on the reconstructed cohort method please refer to UNESCO (2009).

[14] The promotion rate is defined as the proportion of children (out of those enrolled) at any given grade of education who are promoted to the next grade at the end of the year. Repetition rate is defined as the proportion of students (out of those enrolled) who repeat a particular grade at the end of the year. Dropout rate at any particular grade of education is the ratio of children who did not complete the school year for that grade to the number of children who are enrolled at that grade.

Promotion, Repetition, and Dropout Rate: Rajasthan had the lowest promotion rate at the primary level among the major States

For the country as a whole, the average promotion rate at the primary level in 2006–7 was 84.5 per cent. Among the major states, the promotion rate at the primary level in 2006–7 was the highest in Tamil Nadu (97.6 per cent). It may be noted that Tamil Nadu is one of the best performing states in ICDS. Early childhood development clearly has a positive impact on better learning outcomes in the state. As can be expected, Tamil Nadu had the lowest repetition and dropout rates in the country (DISE 2010).

At the other extreme, Rajasthan (75.2 per cent) had the lowest promotion rates among the major states at the primary level. In Rajasthan, the low promotion rate at the primary level was accounted for by both a high repetition rate (9.4 per cent as against the national average of 6.1 per cent) and a high dropout rate (15.4 per cent as against the national average of 9.4 per cent) (Table 6A.16).

Lack of pre-primary school training and child malnutrition were important determinants of learning deficiency

Despite considerable improvement over the years in there literacy rate, enrolment ratio, and attendance ratio, remains much to be achieved in terms of the learning ability of students at different levels of education. The foundation of learning ability is laid at the primary level, which in turn is a vital determinant of educational progress at subsequently higher levels of education. However, the learning ability of a very large proportion of children in India at the primary level was much below what was expected at that grade. For instance, in rural India in 2009, 47 per cent of the children in grade 5 were unable to read even a grade 2 level of text (ASER 2010). This proportion was actually higher than what it was (44 per cent) in the previous year. Incompatibility between reading ability of children and the grade in which they are enrolled remains a major concern in rural India, which in turn poses a serious challenge to imparting quality education in the country.

One of the important determinants of deficiency in learning ability is the lack of access to pre-primary school education. Though the ICDS has been in existence in this country for over three decades, and though one of the six services to be delivered through this programme is pre-primary school education, it has largely been ignored. The major concern of ICDS seems to be the provision of cooked meals or meeting the health/nutritional requirements of children. The 'Anganwadi' workers do not have adequate training for imparting pre-primary school education to the children. Pre-primary school education, therefore, is the most neglected aspect of the six functions of the ICDS. Further, even though the coverage of ICDS has steadily increased since its inception in 1975, its effective coverage was barely one-fourth of all children under the age six until 2006 (*NFHS 3*). Although the coverage has improved remarkably since 2006, and the number of anganwadis has doubled since then, the quality of pre-school education remains unchanged.

National Family Health Survey 3 collected information on the existence of Anganwadi centres and on their utilization by children under the age of six. For the country as a whole, Anganwadi centres covered 72 per cent of the enumeration area in *NFHS 3*. Out of the total number of children under the age of six years residing in the enumeration area, 81 per cent were residing in areas covered by Anganwadi centres.[15] However, only 28 per cent of these children had received any service from Anganwadi centres during the year preceding the year of survey (Table 6A.17). Across states, coverage of children under six years by Anganwadi centres was the highest in Orissa (60.5 per cent), while among the major states, it was the lowest in Bihar (8.8 per cent). It is true that the coverage of Anganwadi centres has increased significantly since *NFHS 3* in 2005–6, and that it is nearly universal (thanks to a Supreme Court judgment in December 2006). However, the fact remains that the recruitment of Anganwadi workers leaves much to be desired, and they remain too poorly trained in early childhood development techniques to provide the quality pre-school education that children of functionally illiterate parents require. The result is that a majority of children are poorly prepared to enter school and study there. Hence, dropout rates in the early classes of primary school remain very high, and learning levels remain poor even when children progress to higher grades.

Dropout rates remain high and learning levels remain low for yet another fundamental reason. It was observed in

[15] The number of Anganwadi centres in India increased from 706,872 in 2004–5 to 1,195,256 in 2010 (Ministry of Women and Child Development, Government of India).

Chapter 4 (' Right to Food and Nutrition') that malnutri- tion levels among the under three year olds are extremely high in India, and showed hardly any signs of reduction during the 1990s and the 2000s. One lifelong result of child malnutrition that sets in before the age of three years is that children do not develop the neural connec- tions in their brain that would have developed had they been properly nourished (as discussed in Chapter 4). As a result, these children arrive in school ill-prepared to learn. This situation is not helped by the fact that many of them have functionally illiterate parents. Thus, the challenges to improving learning and reducing the drop out rate are not restricted to improving the training and motivation of teachers. The preparedness of poor children for learn- ing must also be addressed through state action. Their
' learnability' , both physical and mental, can be improved through improving the quality of early childhood inter- ventions through ICDS—but for that ICDS itself needs reform (see Chapter 4 for this discussion).

This situation is not helped by the relative neglect of pre-school education resulting from the faulty design of ICDS which sows the seeds of learning defi ciency in early childhood, a defi ciency which increases progressively.

In addition to malnutrition and the lack of proper early childhood care which are responsible for low learn- ing levels, the situation is often made worse by teacher incompetence. In rural Uttar Pradesh and Bihar during the year 2007– 8, 80 per cent of the teachers in 160 sam- ple schools admitted that they had problems with their students' mathematics queries (Kingdon and Banerji
2009b). The study also noted that only 25 per cent of teachers in these sample schools could do a percentage problem at the grade 5 level of difficulty.

Mean Years of Schooling: Below primary level for the country as a whole

It has already been pointed out that in India close to one-fi fth of the children in the age group 6– 17 years were out of school in 2007– 8. The incidence of out of school children was particularly high among STs, SCs, and the Muslim population in the country. The high incidence of poverty, malnutrition, and lack of eff ective childhood care has all resulted in high dropout rates. Hence, the average years of schooling for the population has remained very low. Even though there has been some improvement in the mean years of schooling in 2007– 8 as compared to 1999– 2000, on an average, mean years of schooling in the country remained below the primary level (Table 6.16).[16] Further, there was considerable diff erence in mean years of schooling between rural and urban India.

Table 6.16 Mean Years of Schooling, 1999–2000 and 2007–8

Year	*Rural*	*Urban*	*Combined*
1999–2000	2.7	5.5	3.4
2007–8	3.5	6.2	4.2

Source: Calculated from NSS 55th and 64th rounds.
Note: For population in the age group 7 years and above.

Across social groups, SCs and STs had lower mean years of schooling in both rural and urban India. Among major religious communities, Muslims had the lowest value for mean years of schooling in both rural and urban India (Table 6.17). This was not at all surprising given the fact that SCs, STs, and Muslims lagged behind the rest of the population in terms of several socio-economic indicators.

Table 6.17 Mean Years of Schooling by Social Groups and by Major Religious Communities, 2007–8

	Rural	*Urban*	*Combined*
By Social Group			
Scheduled Castes	2.9	4.6	3.2
Scheduled Tribes	2.6	5.2	2.8
Other Backward Classes	3.5	5.6	3.9
Others	4.6	7.3	5.7
All Social Groups	3.5	6.2	4.2
By Major Religious Community			
Hindus	3.6	6.5	4.3
Muslims	2.8	4.3	3.3
Christians	5.0	7.2	5.7
Sikhs	4.2	7.3	4.9

Source: Calculated from NSS 55th and 64th Rounds.
Note: For population in the age group 7 years and above.

[16] Mean years of schooling is derived from information on educational levels collected by NSSO through the employment and unemployment survey (for the year 1999– 2000) and expenditure on education survey (for the year 2007– 8). ' Educational level' here refers to the highest level successfully completed. So, for instance, if the educational level for an individual was reported to be primary, it was assumed that the individual had completed fi ve years of schooling.

The ratio of mean years of schooling for SCs, STs, and Muslims with respect to the mean years of schooling for the country as a whole were 0.76, 0.67, and 0.78, respectively. The ratio in the case of ' Others' was 1.35.

The mean years of schooling for adults (15 years and above) in India was 5.1 years in 2007, which was lower than that of China (6.4 years). However, mean years of schooling for adults in India was higher than that of Pakistan (3.9 years), Burma (2.8 years), Bangladesh (2.6 years), and Nepal (2.4 years).[17]

Signifi cant rural– urban disparity in mean years of schooling

In addition to inter-caste and inter-religion diff erences in mean years of schooling in rural and urban India, there were considerable diff erences within a particular caste or religion between rural and urban India. For instance, among STs, mean years of schooling in urban India was twice that in rural India. This rural– urban divide highlighted the huge disparity between rural and urban India in terms of the availability of educational infrastructure, in particular, physical infrastructure.

The gender disparity was very evident in mean years of schooling across all socio-religious groups in both rural and urban India. Mean years of schooling for males was higher than that of females as is evident from Figures 6.2 and 6.3. Across social groups, mean years of schooling was the lowest for ST females in rural India, and highest for males belonging to the ' Others' social group in urban India. Muslim females residing in rural India had the lowest value for mean years of schooling across religious communities.

PHYSICAL INFRASTRUCTURE

Number of Classrooms: *One classroom per class norm as per RTE will remain a major challenge*

There are various indicators related to the number of classrooms to measure the quality of infrastructure available for the education system. Three such commonly used indicators have been used to examine the infrastructure issue of education. They are ' Average Number of Class- rooms' , ' Average Student– Classroom Ratio' , and ' Single Classroom Schools' .

In 2007– 8, the average number of classrooms for all schools in India was only 4.3. The average number of classrooms was 7.2 for private schools and 3.6 for government schools (DISE 2010).

State-wise analysis confi rms the gloomy situation in terms of the average number of classrooms in government schools across all states except Delhi, Kerala, and some UTs (Table 6A.28). The situation in some backward states like Bihar, Chhattisgarh, and Jharkhand is really distressing and requires immediate attention (Table 6A.18).

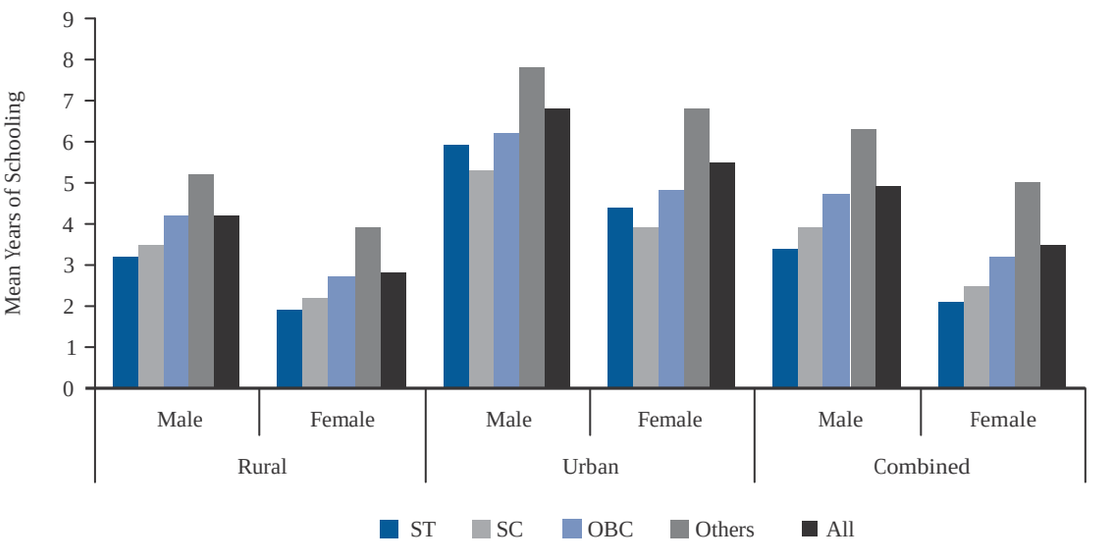

Figure 6.2 Mean Years of Schooling by Social Groups, 2007–8 for Population Aged 7 Years and Above

[17] UNESCO (2010).

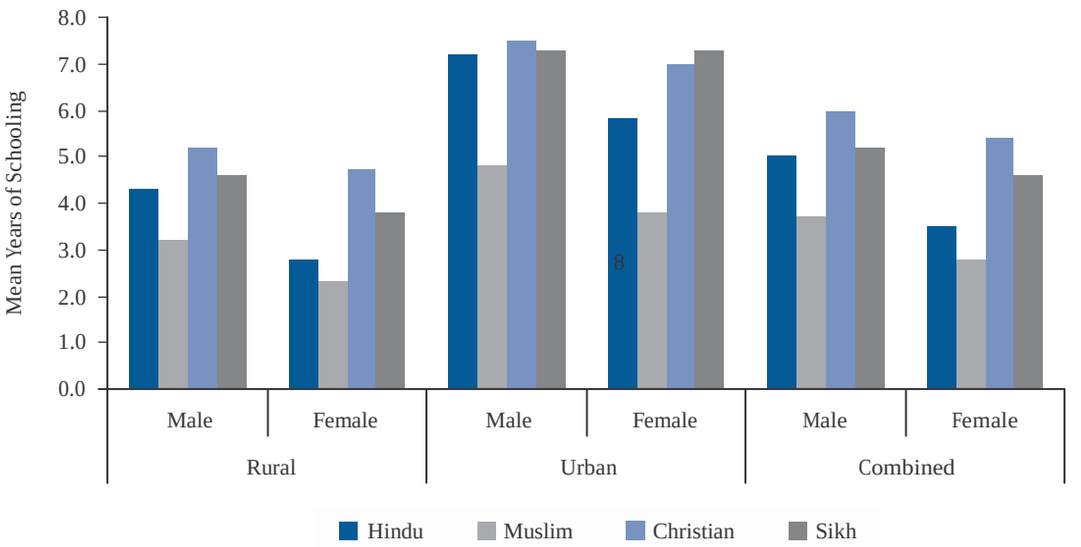

Figure 6.3 Mean Years of Schooling by Religious Communities, 2007–8 for Population Aged 7 Years and Above

The indicator 'Average Student–Classroom Ratio' (SCR) gives an idea as to how many students there are, on an average, in a classroom. According to DISE (2010), the average number of students in a classroom for the country as a whole was 35 in 2007–8. This ratio was even higher for primary classes. State-wise figures indicate high variation across states. Some states like Goa, Himachal Pradesh, Jammu and Kashmir, Uttarakhand, and some north-eastern states have a low student–classroom ratio. On the other hand, states like Bihar, Jharkhand and West Bengal have very high student-classroom ratios, with 97, 60 and 51 students per classroom respectively (DISE 2010).

Nine per cent of schools in India were one-classroom schools against the norm of one classroom-one class for all schools

There are still many areas where only one-classroom schools exist. Around 9 per cent of schools in India are one-classroom schools (Table 6A.19) while 23 per cent of schools had only two classrooms in 2007–8. In this regard the state of primary schools is even worse than upper primary schools. Close to half of all primary schools in India were run either in one or two classroom buildings (DISE 2010).

The RTE Act 2009 (guaranteeing all 6–14 year olds the right to full elementary schooling up to class 8) (Box 6.2) aims to achieve one classroom per class (Box 6.2), but it seems that even at the primary level we are very far from that goal. The number of primary schools having either two or less than two classrooms is quite high in some of the states, for instance, 86 per cent for Assam, 73 per cent for Goa, 66 per cent for Karnataka, and

Box 6.2 Right to Education

The Right of Children to Free and Compulsory Education Act was passed in the Indian Parliament in 2009, and came into force from 1 April 2010. It accords the right to education the same legal status as the right to life, as provided by Article 21A of the Indian Constitution. Not only does this Act provide for free and compulsory education to all children in the age group 6–14 years, it is also seen as a tool to reduce social inequality in terms of educational attainment. The Act stipulates a pupil–teacher ratio of 30 for every school at the primary level, and 35 at the upper primary level. In addition, the Act also has provision for improvements in school infrastructure (Government of India 2009b: 12–13).

As per the norms regarding school infrastructure, according to the Act it is necessary that there should be at least one classroom for every teacher, the school building should have separate toilet facilities for boys and girls, safe drinking water facilities should be in place, there should be a separate kitchen to cook the mid-day meals, and the school should have playgrounds and boundary walls.

ASER (2010) found that over 60 per cent of the 13,000 schools visited satisfied the infrastructure norms specified by RTE. However, teacher shortage remains an important bottleneck even in these schools.

60 per cent for Maharashtra. The situation was slightly better for private schools (Table 6A.19).

Conditions of Classrooms: *30 per cent of primary schools required repairs*

In addition to the number of rooms, the quality of the existing classrooms remained a major concern. Badly ventilated classrooms, leaking roofs, poor sanitation, and lack of materials were also signifi cant barriers to eff ective learning in many schools.

In 2007– 8, more than a quarter of the schools in India needed some kind of repair—either major or minor. In the case of primary schools, almost 30 per cent required repairs. The conditions are even worse in some states like Bihar, Orissa, and almost all the north-eastern states, where more than half to two-thirds of schools needed immediate repair. However, the developed states do not face this problem to the same extent (DISE 2010).

Water and Sanitation in Schools: *Half of the schools in India did not have separate toilets for girls*

Lack of adequate sources of drinking water and poor sanitation facilities (particularly for girls) were the other major concerns for school infrastructure.

As far as drinking water facilities are concerned, almost 87 per cent schools have drinking water facilities. However, the north-eastern states and hilly states have comparatively low coverage of drinking water facilities (Table 6A.20).

In a country like India, where girls have more social restrictions, the lack of separate toilets for girls makes parents hesitate to send their daughters to school, particularly beyond the primary classes. Only half of the schools in India have separate toilet facilities for girls. The situation was alarming in states like Arunachal Pradesh, Assam, and Meghalaya; where only 10 per cent of schools had toilet facilities for girls. Bihar, Jammu and Kashmir, Jharkhand, Mizoram, Orissa, Tripura, and West Bengal also had a lower proportion of schools with girls' toilet facilities
(Table 6A.20).

Electricity, Computers, Ramp and Playgrounds: *All woefully inadequate*

Only one-third of the schools in India had access to electricity in 2007– 8. The situation was particularly bad in some states. For instance, only 3 per cent of schools in Bihar, 6.5 per cent in Jharkhand and 7 per cent in Assam had electricity connections. Only a few states and UTs like Delhi, Goa, Haryana, and Chandigarh had electricity connection in more than 90 per cent of the schools (Table 6A.20).

Education in Information Technology and computer sciences can open up opportunities for employment, but in India only one out of seven schools has computer facilities. Given the fact that only 3 per cent of schools in Bihar had electricity connections, it was not surprising that less than 1 per cent of its schools had computer facilities (Table 6A.20).

As per the National Building Code of India, 1983 (Clause 12.21), building a ramp for the use of the physically challenged is a special requirement for public buildings. Yet, till 2007– 8 only one-third of the schools in India had ramps. Students with disabilities are mostly marginalized by the system and society. Getting such children into school is just the fi rst step. The north-eastern states are severely lacking in this regard (DISE 2010).

Provision of other infrastructural facilities like playgrounds in schools is necessary for the complete development of the child. Available data for 2007– 8 shows that half the schools in India did not have playgrounds. In some states like Arunachal Pradesh, Bihar, Jharkhand, Meghalaya, Orissa, and West Bengal, two-thirds to three- fourths of schools lacked playgrounds (DISE 2010).

INDICATORS RELATED TO TEACHERS

To a very large extent, what children learn from schools is what teachers teach them. The human resource development of a nation depends on the quality of its teachers. Along with long term vision, a sufficient supply of motivated teachers is crucial for the success of educational policies and reforms (UNESCO 2005). The distinction between a good school and a bad school is, to a very large extent, dependent on the commitment and initiative of the teachers.

Average number of teachers much lower in rural India

In India, out of 5.63 million school teachers in 2007– 8 (DISE 2010), primary schools only accounted for 2.42 million (43.4 per cent) of school teachers—which is a problem because 2.8 teacher per rural primary school in India means that though the number of classes in a primary school are fi ve, at least 2.2 teachers per school are

lacking. The number of teachers per school in urban India was twice that in rural India (Table 6.18)—and nearly comparable to the numbers required as per the norm of one teacher per class. For India as a whole, the average number of teachers per school in 2007–8 was 4.5.

In the school education system in India, there are two broad categories of teachers, namely, regular teachers and para-teachers. Regular teachers are permanent teachers, and are not appointed on a contractual basis. Para-teachers on the other hand are appointed on a contractual basis, mostly by school governing bodies—in other words there are no rigorous selection criteria.[18] The salaries of the para-teachers are usually much lower than that of regular teachers.

More than 10 per cent of teachers in India were para-teachers

In 2007–8, for the country as a whole, out of 5.63 million school teachers, 0.58 million (10.5 per cent) were para-teachers. Para-teachers were much more predominant in the rural areas as compared to the urban areas and the proportion of para-teachers was much higher at the primary level than at other levels of school education (Table 6.19). The phenomenon of para-teachers emerged partly as a response to the shortage of teachers that had resulted in the 1990s with state governments lacking funds to hire teachers at regular salaries and also because regular teachers would avoid a rural school posting.

Table 6.18 Distribution of Teachers, by Type of School, 2007–8 (*per cent*)

Type of School	*Percentage of Teachers*	*Number of Teachers Per School*		
		Rural	*Urban*	*Rural + Urban*
Primary Only	43.4	2.8	4.8	3.0
Primary with Upper Primary	27.5	6.6	8.9	7.1
Primary with Upper Primary & Secondary/Higher Secondary	7.3	9.7	14.4	11.5
Upper Primary Only	9.1	4.0	7.9	4.4
Upper Primary with Secondary/Higher Secondary	11.9	9.2	13.2	10.2
All Levels	100.0	4.0	7.9	4.5

Source: DISE (2010).

Table 6.19 Proportion of Para-Teachers to Total Teachers, 2007–8 (*per cent*)

Type of School	*Rural*	*Urban*	*Rural + Urban*
Primary Only	17.7	5.0	15.9
Primary with Upper Primary	8.9	2.9	7.4
Primary with Upper Primary & Secondary/Higher Secondary	3.4	1.9	2.7
Upper Primary Only	3.3	1.6	3.0
Upper Primary with Secondary/Higher Secondary	10.1	4.8	8.5
All Levels	12.4	3.6	10.5

Source: DISE (2010).

[18] Appointment of para-teachers has been a matter of debate in India primarily on two grounds: first, its impact on pupil–teacher ratio, which the proponents argue has come down as a result of the appointment of para-teachers; and second, its impact on the quality of education, which the detractors argue has deteriorated since the professional qualifications of para-teachers are lower than that of regular teachers (Kingdon and Sipahimalani 2010).

Poorer states more dependent on para-teachers

In certain states, the school education system was dependent on para-teachers to a considerable extent. In Rajasthan, Jharkhand, and Assam the proportion of schools which were entirely dependent on para-teachers in the year 2007–8 were 12.7 per cent, 39.1 per cent, and 18.6 per cent, respectively (DISE 2010). During the year 2006–7, seven states, namely, Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Rajasthan, and Uttar Pradesh accounted for 68 per cent of all para-teachers in the country. It was also observed that the presence of para-teachers was negligible in the south Indian states of Kerala, Karnataka, and Tamil Nadu which had relatively stable child population and less pressure to hire new teachers (Mehta 2008).

In terms of the qualifications of teachers, the DISE data indicated that there was not much of difference between the academic qualifications of regular teachers and para-teachers.[19] However, there were considerable differences in terms of professional qualifications which were important for school teaching. In particular, the proportion of teachers with Bachelor of Education (BEd) or equivalent degrees was much lower for para-teachers as compared to regular teachers (Table 6.20). This difference in professional qualifications could be seen in both rural and urban India.

Pupil–teacher ratio at primary level even higher than many least developed regions of the world

Teachers are the single most important education resource in any country (UNESCO 2010). In India, the shortage of teachers remains a serious concern. Various studies (cited in UNESCO 2010) found evidence of the fact that low pupil–teacher ratio was usually associated with higher learning outcomes. For the country as a whole, the pupil–teacher ratio at the primary level was 34 in the year 2007 was 4.7. Except for South and West Asia, and Sub-Saharan Africa, all other regions of the world had a lower pupil–teacher ratio than India (Table 6.21). In particular, the pupil–teacher ratio at the primary level in India was almost two-and-a-half times that of China. Recognizing the huge scarcity of teachers at various levels, 1.02 million school teachers have been recruited under SSA between its inception in 2002 and December 2010. It may be mentioned here that as per RTE Act, 2009, every school in India should have a pupil–teacher ratio not more than 30:1 at the primary level.

Across states at the primary level, Sikkim, Himachal Pradesh, Mizoram, and Andaman and Nicobar Islands had a low pupil–teacher ratio (below 20). At the other extreme, Dadra and Nagar Haveli, Bihar, Punjab, and Haryana had a very high pupil–teacher ratio (Table 6A.21). The pupil-teacher ratio at the upper primary level was lower than that at the primary level for a majority of the states. However the pupil–teacher ratio was particularly high at upper primary level in Uttar Pradesh, West Bengal, Bihar, Jharkhand, and Tamil Nadu.

Teacher absenteeism higher than many other developing countries

In addition to the problem of teacher shortages, there is problem of teacher absenteeism which aggravates the situation. Compared to other developing countries, the problem of teacher absenteeism is more acute in India. According to Rogers and Vegas (2009), 25 per cent of teachers were missing during surprise visits to schools in India. The proportion of absent teachers was much lower for other developing countries like Peru, Bangladesh and Indonesia at 11, 16, and 19 per cent, respectively. In In-

Table 6.20 Proportion of Teachers with BEd or Equivalent Degree, 2007–8 (*per cent*)

Type of Teacher	*Rural*		*Urban*		*Rural + Urban*	
	Males	*Females*	*Males*	*Females*	*Males*	*Females*
Regular Teachers	31.7	27.7	41.4	37.7	33.0	31.3
Para-Teachers	16.0	12.6	25.3	25.6	16.4	14.0

Source: DISE 2010.

[19] Kingdon and Sipahimalani (2010) observed that high graduate unemployment (which encouraged graduates to apply for para-teacher positions) resulted in academic qualifications of para-teachers being at least at par with regular teachers.

Table 6.21 Pupil–Teacher Ratio at Primary Level , 2007

Region/Country	*Pupil–Teacher Ratio*
Arab States	21
Central and Eastern Europe	18
Central Asia	18
East and the Pacific	19
Caribbean	21
Latin America	24
North America and West Africa	14
South and West Asia	39
Sub-Saharan Africa	44
World	25
China	18
India	47*

Source: *EFA Global Monitoring Report, 2010.*
Note: *Statistics of School Education, Ministry of Human Resource Development, 2007–8, Government of India.

dia, teacher absenteeism was lower among para-teachers than among regular teachers (Kingdon and Banerji 2009a; Sankar 2008). Lower teacher absenteeism among para-teachers was primarily on account of the insecure nature of contracts, which made para-teachers more cautious in absenting themselves. Teacher absenteeism reduces the quality of schooling for children. The adverse impact is much more pronounced in rural, remote, and poor areas.

Fewer female teachers in rural areas is an important factor behind lower school attendance among females

The presence of female teachers in schools is an inducement for the education of the girl child, and hence is an important factor in reducing gender disparity in educational attainment. Female teachers are often considered as role models for girls and are likely to have a positive impact on female enrolment (PROBE 1999). The PROBE survey also revealed that in rural areas, female teachers have the potential to play a lead role in showcasing the fact that education helps in improving the quality of life for girls. Many parents prefer their daughters be taught by female teachers (UNESCO 2010). It was also observed that the absence of female teachers often makes the school environment gender biased. *The Global Monitoring Report* (UNESCO 2006) notes that female teachers were fewest in countries where overall enrolment levels were the lowest and gender disparities in favour of boys were the highest.

The proportion of female teachers in the country as a whole was 43 per cent in 2007– 8. The proportion of female teachers in rural India was much lower than that in urban India (Table 6.22). Considering all levels of school education, the proportion of female teachers in urban India was 1.8 times that in rural India.

At the primary level, the proportion of female teachers in India was one of the lowest in the world, even lower than that in Sub-Saharan Africa (where female teachers constituted 44 per cent of teachers at the primary level).

Considering all levels of education across the states, Tripura, Jharkhand, Rajasthan, and Assam had the lowest proportion of female teachers, while Chandigarh had the highest proportion of female teachers (Table 6A.22). At the primary level less than one-third of the teachers were female in Tripura, Jharkhand, West Bengal, Rajasthan, Chhattisgarh, and Madhya Pradesh. These are also the states with the highest dropout rates for girls and also relatively lower enrolment/attendance rates for girls than boys.

Table 6.22 Proportion of Female Teachers in School Education, 2007–8 (*per cent*)

Type of School	*Rural*	*Urban*	*Rural + Urban*
Primary Only	37.7	69.6	42.3
Primary with Upper Primary	38.3	66.6	45.1
Primary with Upper Primary & Secondary/Higher Secondary	43.9	68.6	55.8
Upper Primary Only	29.8	62.5	35.4
Upper Primary with Secondary/Higher Secondary	30.9	53.6	37.9
All Levels	36.5	65.2	42.7

Source: DISE (2010).

Under-representation of SC teachers adversely aff ected participation of SC students in the education system

Not only was the proportion of male teachers higher than that of female teachers, the highest proportion of teachers belonged to the ' Others' social group (44.6 per cent). At the all India level, the proportion of teach- ers belonging to SC, ST, and OBC social groups were 12, 9, and 33 per cent, respectively (Table 6A.23). The proportion of teachers belonging to SCs and OBCs was lower than their share in the total population. It may be recalled that the share of SCs in the total population was 20 per cent and that of OBCs was 42.3 per cent (NSS 64th Round). In other words, it appears from this data that these social groups are under-represented among the teachers of the country. However, in case of the STs, the share of teachers is not very diff erent from the share of STs (8.6 per cent) in the total population.

Across states, the proportion of SCs among teachers was much lower than the share of the SC population in the states. For instance, in Punjab, SCs constituted 37 per cent of the population of the state, but SC teachers constituted only 20 per cent of all the teachers in the state. In Uttar Pradesh, SCs constituted one-fourth of the state' s population, while SC teachers comprised 14 per cent of all teachers in the state.

In the case of STs, the diff erence between the popula- tion share and their share among teachers within a state was comparatively much less. This was primarily due to the fact that STs constituted the bulk of the population in the north-eastern states, and their share among the teach- ers in the respective states was also high. It may be pointed out here that STs are in the mainstream of society in the north-eastern states, which is not the case in central and eastern India. In Chhattisgarh, for instance, STs consti- tuted 38 per cent of the state' s population, while the share of ST teachers in the state was only 29 per cent.

Due to their poor economic condition, SC/ST students mostly attended government schools where the teachers are mostly from higher castes. The under-representation of teachers belonging to SCs and STs, created a social distance between teachers and students. The PROBE (1999) survey noted that the social distance was one of the reasons why many teachers had limited commitment towards the educational advancement of their students.

In addition to the social distance, there was considerable economic distance between the teachers and their pupils. Kingdon (2010) calculated the ratio of the teachers' salary and per capita state GDP for nine states based on the NSS Employment and Unemployment Surveys for the year 2004– 5 and the per capita state GDP fi gures.[20] The ratio for the nine states combined was 5.1, implying that the teachers' salary on an average was fi ve times the per capita GDP for these states. So the distance between the teachers and the pupils was both social and economic.

EXPENDITURE ON EDUCATION

Investment in education has an impact on all types of human development outcomes. In chapter one we have shown that interventions in diff erent social sectors complement each other, and that any intervention in one sector is enhanced by investment in another. Cross coun- try experience clearly revealed that countries for which expenditure on primary education as a proportion of per capita income was higher, attained higher achievements in education (Mehrotra and Delamonica 2007). Further, high achieving countries spent relatively more on basic education as compared to higher education.

Public Expenditure on Education: *Continued low public expenditure on education*

Back in 1966, the Kothari Commission on education emphasised the importance of education in the social and economic development of the country. The Com- mission argued strongly in favour of large investment in education, and as cited in Tilak (2007b), the Kothari Commission noted that ' we should accord the highest priority to education and allocate the largest proportion of GNP possible to it' . The Commission suggested that 6 per cent of the national income should be spent on edu- cation (i.e., what OECD countries spend). It was felt that a large investment in education was necessary in order to ensure equity in educational attainment between diff erent socio-economic groups in the country. The objective of achieving a public expenditure of six per cent of national income on education has remained a distant dream in this country. In fact, the total public expenditure by the Central Government and state government on education has not crossed the 4 per cent mark during the fi rst decade

[20] The states included in this study were Andhra Pradesh, Bihar, Gujarat, Jammu & Kashmir, Madhya Pradesh, Maharashtra, Rajasthan, Uttar Pradesh, and West Bengal.

of the 21st century (Table 6.23). Education deserves to be given a much higher priority by both state and central governments.

Table 6.23 Public Expenditure on Education by Central and State Governments, 2000–1 to 2007–8 (*per cent*)

Year	*Public Expenditure on Education as Percentage of GDP*
2000–1	3.9
2001–2	3.5
2002–3	3.5
2003–4	3.3
2004–5	3.1
2005–6	3.2
2006–7	3.4
2007–8	3.4

Source: Compiled by Centre for Budget and Governance Accountability, from Indian Public Finance Statistics, 2007–8 and various issues of Analysis of Budgeted Expenditure on Education.

The Kothari Commission' s recommendation that 6 per cent of national/state income be spent on education is not being followed by majority of states in India. While states such as Tamil Nadu, Sikkim, Mizoram, Arunachal Pradesh, and Manipur had crossed this recommended benchmark with 10.2 per cent, 9.8 per cent, 9.1 per cent,
7.1 per cent, and 6.4 per cent, respectively, of their total state Domestic Product (SDP) being spent on education, several major states are not spending even 2 per cent of their SDP on education. For instance, Maharashtra spent only 1.3 per cent of its SDP on education, while Delhi, Gujarat, Haryana, Punjab, Andhra Pradesh, and Goa spent only 1.4 to 2.0 per cent of their total SDP on education in 2007– 8 (Table 6A.24).

Evidence from African countries like Malawi, Uganda, Tanzania, and Botswana clearly show that school enrol- ment jumped several times as a result of measures like eliminating school fees, providing free lunches, and pro- viding free school uniforms (Mehrotra and Delamonica
2007). When compared with the rest of the world, India was counted among the countries which spent the least on education. During the year 2007, public expenditure on education in India was 3.2 per cent of GNP, similar to that of Central Asia, which had the lowest percentage of GNP spent on education in the world (Table 6.24); however, Central Asian states have already achieved a relatively high level of secondary enrolment, while India is still to universalize elementary education. It was noteworthy that even Sub-Saharan Africa spent a higher proportion of its GNP on education. It may be noted here that East Asia achieved universalization of primary education much earlier—in the 1960s and 1970s. As a result, the demographic transition was faster in these countries and the population growth rate was lower (Mehrotra and Jolly 2000). This in turn resulted in a decline in child population, and therefore, public expenditure on education was not high. In India, however, the child cohort is much larger and this makes a higher proportion of GDP on education a necessary condition for overall human development.

The Kothari Commission also suggested sequencing of priorities in investment in the education sector, with

Table 6.24 Total Public Expenditure on Education as Percentage of GNP for Major Regions of the World, 2007 (*per cent*)

Region	*Highest*	*Lowest*
Arab States (4.0)	Djibouti (7.8)	United Arab Emirates (1.6)
Central and Eastern Europe (5.1)	Republic of Maldova (7.3)	Romania (3.6)
Central Asia (3.2)	Kyrgyzstan (5.4)	Georgia (2.6)
East Asia and the Pacific (3.6)	Marshall Islands (9.5)	Cambodia (1.7)
Latin America and the Caribbean (4.8)	Cuba (13.6)	Bermuda (1.2)
North America and Western Europe (5.5)	Denmark (8.2)	Andorra (2.6)
South and West Asia (3.8)	Maldives (8.3)	Bangladesh (2.4)
Sub-Saharan Africa (4.5)	Lesotho (11.0)	Central African Republic (1.3)

Source: *EFA Global Monitoring Report, 2010.*
Note: Figures in the brackets implies public expenditure on education as per cent of GNP.

more emphasis on school education at the beginning. With advancement in industrialization, a larger proportion of expenditure on education was to be devoted to higher education and research. However, it must be emphasized that the Commission was not in favour of increasing expenditure on primary education at the cost of higher education, and instead emphasized a 'balanced growth of education'. Tilak (2007a) observed that the Commission's emphasis on primary education was based on the grounds of social justice, while the logic of giving due importance to higher education was premised on de- velopmental programmes. Although elementary education has been receiving a higher share of public expenditure as compared to secondary education and higher education, public expenditure on elementary education as a percent- age of GDP has remained almost stagnant over the years, particularly from 1990– 1 onwards (Table 6.25).

Out-of-Pocket Expenditure on Education

Out-of-pocket expenditure on education includes expenditure on diff erent kinds of fees, purchase of stationery and books, expenses on conveyance, private coaching, and the like. The 64th Round of NSS (Participation and Expenditure on Education in India, 2007– 8) collected information on private expenditure on education for persons in the age group 5– 29 years who are currently attending educational institutions. For the country as a whole, 98 per cent of students in the age group 5– 29 years received education through general courses, while technical and vocational education constituted the rest.[21] Therefore, the analysis in this sub-section will focus on private expenditure on general education only.

For the country as a whole, during 2007– 8, the average annual expenditure on general education for currently attending students in the age group 5– 29 years was Rs 2,461, which was 2.7 times that in 1995– 6.[22] Across states, private expenditure on general education per student was the highest in Chandigarh followed by Delhi, while it was the lowest in the case of Lakshadweep and Chhattisgarh.

Across social groups private expenditure on general education per student was the lowest for STs—one-third that of 'Others' in 2007– 8. The diff erence was the greatest in Chhattisgarh and Madhya Pradesh. In Chhattisgarh, the average annual private expenditure per student in general education for 'Others' was seven times that for STs, while in Madhya Pradesh it was six times (Table 6A.25).

Across religious communities, average annual private expenditure per student in general education was the lowest for Muslims (Table 6A.26).

Among various components of private expenditure, fees and purchase of books and stationery together accounted for 65 per cent of the total private expenditure in rural areas, while in urban areas they constituted three-fourths of the total private expenditure on education.

Out-of-Pocket Expenditure on Higher Education

Higher education too requires greater public investment for ensuring greater participation from among the economically deprived socio-religious communities. For the present purpose, higher education is considered to be all diploma and certifi cate courses at the graduate level and

Table 6.25 Public Expenditure on Education as a Proportion of GDP

Level of Education	*1981–2*	*1990–1*	*1999–2000*	*2001–2*	*2003–4*	*2004–5*	*2005–6*	*2006–7*	*2007–8 (BE)*
Elementary Education	1.1	1.6	1.6	1.7	1.3	1.4	1.6	1.7	1.7
Secondary Education	0.8	1.1	0.9	1.0	0.8	0.8	0.9	0.9	0.9
Higher Education	0.4	0.4	0.5	0.4	0.3	0.3	0.7	0.7	0.7
All three combined	2.3	3.1	3.0	3.1	2.4	2.5	3.2	3.3	3.3

Source: Compiled by Centre for Budget and Governance Accountability, from Analysis of Budgeted Expenditure on Education, various issues.

[21] According to NSS 64th Round, general courses included school education, and university education at graduate and post-graduate level. Technical education included courses involving hands-on training in addition to theoretical classes (engineering, medicine etc.). Vocational educa- tion covered courses imparting training in specifi c fi elds through signifi cant hands-on exercises for acquiring necessary skills in order to create employment opportunity.

[22] NSS Report No. 532.

above. As per the NSS 64th Round, such courses include the following:

- Diploma or certifi cate courses in agriculture, engineer- ing, medicine, crafts, and other such subjects;
- Graduate level degree courses in agriculture, engineering, medicine, crafts, and other such subjects; and
- Post-graduate and above degree courses in agriculture, engineering, medicine, crafts, and other such subjects.

High out-of-pocket expenditure in private unaided institutions

In India, the above mentioned courses are off ered by diff erent types of institutions, namely government institutions, local body institutions, private aided institutions, and private unaided institutions. The private unaided institutions are the most expensive, while government institutions are the least expensive. The average annual expenditure per student in higher education in private unaided institutions was more than thrice that in government institutions (Table 6.25).

This variation in average annual out-of-pocket expenditure was considerable for all social groups and religious communities. In the case of social groups, the average annual expenditure per student in higher education was the lowest in the case of SCs and STs, while across religious communities Muslims had the lowest average annual expenditure per student in higher education (Table 6.26).

Among all social groups and religious communities, the average annual expenditure per student in higher education was the highest for Christians. This was primarily because of the fact that a very large proportion of Christians in higher education were enrolled in private unaided institutions (Table 6.26), which, as already mentioned, were much more expensive than other types of institutions. Further, it may be noted that the majority of SC and ST students were enrolled in government institutions, which was one of the reasons for the lower average annual expenditure per student in higher education (Table 6.27).

High cost was a deterrent to educational attainment for the economically disadvantaged (STs, SCs, and Muslims)

The high cost associated with higher education was an important deterrent to participation in higher education. This was particularly true for the SCs, STs, and Muslims, who were characterized by high incidence of poverty. The participation of STs in higher education was the lowest among all social groups followed by SCs, while Muslims had the least participation among major religious com- munities (Table 6.28).

As compared to the ' Others' social group, the participa- tion of SCs, STs, and OBCs in higher education was less

Table 6.26 Out-of-Pocket Expenditure Per Student (5–29 Years) in Higher Education, by Social Groups and Religious Communities, 2007–8 (*Rs*)

	Government	*Local Body*	*Private Aided*	*Private Un-Aided*	*All Types of Institutions*
By Social Group					
Scheduled Castes	5376	2468	11264	19390	8988
Scheduled Tribes	6744	1496	6406	24953	9896
Other Backward Classes	7668	5118	15521	20964	13148
Others	10526	14785	16832	36091	17898
All Social Groups	8650	9378	15247	28322	14710
By Major Religious Community					
Hindus	8531	9148	15600	27875	14561
Muslims	7131	5237	11673	20598	11277
Christians	8244	13394	12211	42723	23723
Sikhs	19631	–	23004	31681	22268

Source: Calculated from NSS Database 64th Round.

Table 6.27 Distribution of Students (5–29 years) by Social Groups and Major Religious Communities, 2007–8 (*per cent*)

	Government	*Local Body*	*Private Aided*	*Private Un-Aided*	*All Types of Institutions*
By Social Group					
Scheduled Castes	53.4	0.9	33.0	12.7	100.0
Scheduled Tribes	58.4	1.1	22.5	17.9	100.0
Other Backward Classes	43.4	1.3	32.2	23.1	100.0
Others	48.6	1.2	28.6	21.6	100.0
All Social Groups	47.7	1.2	30.3	20.8	100.0
By Major Religious Community					
Hindus	48.1	1.3	30.3	20.3	100.0
Muslims	48.4	0.5	29.8	21.3	100.0
Christians	27.0	0.5	31.2	41.3	100.0
Sikhs	58.7	0.5	27.9	12.9	100.0

Source: Calculated from NSS Database 64th Round.

Table 6.28 Participation in Higher Education by Social Groups and by Major Religious Communities, 2007–8 (*per cent*)

	Per cent of Students
By Social Group	
Scheduled Castes	3.9
Scheduled Tribes	2.4
Other Backward Classes	4.7
Others	8.9
All Social Groups	5.6
By Major Religious Community	
Hindus	5.8
Muslims	3.5
Christians	8.5
Sikhs	5.8

Source: Calculated from NSS Database 64th Round.

than half, one-fourth, and half respectively. In the case of Muslims, the participation in higher education was only 60 per cent that of Hindus (calculated from Table 6.28). Clearly, lower participation in higher education in the case of SCs, STs, and Muslims adversely affected their employability in terms of quality of jobs. Economic vulnerability, measured in terms of the higher incidence of poverty among SCs, STs, and Muslims, was therefore higher than other social groups.

High incidence of poverty and low participation in higher education feed on each other. This vicious cycle can only be broken by establishing publicly funded institutions of higher education which can ensure greater participation from among the economically disadvantaged communities.

CONCLUDING REMARKS

Despite making considerable progress during the last six decades, much remains to be achieved in the field of education. In line with the main theme of this report, the analysis presented in this chapter covers social groups and religious communities, in both rural and urban India.

The problem of illiteracy still looms large in India even six decades after Independence. Despite considerable improvement India is home to one-third of the world's illiterates. The incidence of illiteracy for the country as a whole was 30 per cent in 2007–8, and according to Census 2011, it was 26 per cent. The problem of illiteracy was particularly acute in rural India, especially among rural females, 43 per cent of whom were illiterate in 2007–8.

Across social groups and religious communities, the problem of illiteracy was much more acute among SCs, STs, and Muslims. More than half of the illiterates in the country were accounted for by SCs (25per cent), STs (12per cent), and Muslims (14per cent). In addition to the

diversity of locations (rural and urban), the gender gap, and disparities across socio-religious groups, an important feature of literacy in India was the concentration of illiterates within specifi c states. Of all states, Rajasthan had one of the highest concentrations of illiterates among the STs of the country, while Bihar had one of the highest concentrations of illiterates among Muslims and SCs of the country. Among Muslims, 58 per cent of the illiterates were concentrated in the states of Uttar Pradesh, Bihar, and West Bengal, which together accounted for 46 per cent of the Muslim population.

Even though GER and NER improved over the years, the declining enrolment ratio at successively higher levels of education remained a major concern for all the states. Similarly, a declining NAR at the upper primary level as compared to the primary level was observed for all social groups and religious communities, across all the states in India.

There was considerable diff erence between enrolment rate and attendance rate. At the primary level, even though NER was at par with international standards, NAR was considerably lower than NER.

Lower cohort survival rate (only 72 per cent at the primary level), and the existence of a fairly high proportion of out of school children suggests that quality issues remained a major concern in the school education system. Uttar Pradesh and Bihar together accounted for 37 per cent of out of school children in the country, while they accounted for 29 per cent of all children in the age group of 6–17 years. Financial constraint was the single most important limitation responsible for discontinuing education/dropping out. The persistence of a considerable degree of discontinuation/dropout particularly at higher levels of education has resulted in an extremely low value of mean years schooling in the country, which was below the primary level during 2007–8.

The discussion in this chapter compels us to rethink the prevailing circumstances of physical infrastructure within the education system in India. The indicators related to classrooms present a gloomy picture in terms of number of classrooms, condition of classrooms, sanitation facilities, and other infrastructure related indicators, which were far short of the RTE Act's guidelines. A quarter of the existing classrooms needed either minor or major repairs. Only half of the schools in India had separate girls' toilets. Only one-third of the schools had access to electricity. The situation in some states was even more pitiable. For example, only 3 per cent of the schools in Bihar had access to electricity, and less than 1 per cent had computer facilities.

The shortage of trained teachers remained a major barrier to achieving the goal of 'Education for All', especially among marginalized groups. Around 10 per cent of all schools in India were single-teacher schools. Primary schools were most aff ected by teacher shortage. In India, the pupil–teacher ratio at the primary level was
47, higher than that in Sub-Saharan Africa (44). The pupil–teacher ratio in China was 18, while for the world as a whole it was 25 (UNESCO 2010). It may be mentioned here that as per RTE norms, the pupil–teacher ratio at the primary level should not be greater than 30 for all schools. Further, one out of every seven primary schools was a single-teacher school. The appointment of para-teachers was seen as a way out of the problem of teacher shortage. In certain states, the dependence on para-teachers was extremely high. For instance, in Jharkhand, 39 per cent schools were entirely dependent on para-teachers. Given the diff erences in professional training between teachers and para-teachers, para-teachers can only be a part-time solution to the problem of teacher shortage.

Revamping the school education system with the objective of universalizing elementary education, and at the same time imparting quality education to the children, necessitates sufficient public investment, particularly at the elementary level. However, for the last several years public expenditure on education has remained at a little over 3 per cent of GDP. Clearly, there is a case for manifold increase in public investment in elementary education in India. However, it must be noted that public expenditure is needed not only at the elementary level, but at higher levels as well to ensure greater participation from among the economically deprived socio-religious communities.

In India, attendance in private unaided institutions increased signifi cantly, and out of pocket expenditure was higher in such institutions. The high cost acted as a deterrent to participation in higher education particularly for SCs, STs, and Muslims, for whom the incidence of poverty was higher. The participation of STs in higher education was the lowest among all social groups followed by SCs, while Muslims had the least participation among major religious communities.

Greater public investment in higher education can contribute to ending the vicious cycle of poverty and lack of education (both of which feed on each other) which particularly aff ects a signifi cant proportion of the socially disadvantaged population of this country.

7

Supporting Human Development

Housing, Electricity, Telephony, and Roads

INTRODUCTION

Poverty alleviation and human well-being are important goals in themselves, and should not be merely by-products of economic growth. But neither human well-being nor economic growth is possible only through the provision of economic infrastructure. It is social infrastructure—health and education—along with support infrastructure such as shelter, sanitation, power, telephony, and road connectivity that can give economic growth a human face. By improving the quality of human resources and enhancing capability, these indicators act as stimulants to growth.

Lack of Support Infrastructure: *a concern for the poorer States*

Infrastructure is a source of positive externalities in the development process. In fact, the absence of infrastructure is positively related to the incidence of poverty. Table 7.1 indicates that states which have a higher Index of Infrastructure, comprising economic, social, and administrative infrastructure indicators,[1] experience a lower Head Count Ratio of poverty.

Many studies have found a positive relationship between the level of economic development (measured by per capita income and other indicators), and the quality of housing and access to basic amenities like electricity,

Table 7.1 Index of Social and Economic Infrastructure

States	*Index of Infrastructure*	*Head Count Ratio of poverty*
Punjab	187.5	9.2
Kerala	178.7	13.3
Tamil Nadu	149.1	22.9
Haryana	137.5	13.6
Gujarat	124.3	19.1
Maharashtra	112.8	29.6
West Bengal	111.3	28.6
Karnataka	104.9	20.9
Andhra Pradesh	103.3	11.2
Uttar Pradesh	101.2	33.4
Bihar	81.3	42.1
Orissa	81.0	46.8
Assam	77.7	22.3
Madhya Pradesh	76.8	36.9
Rajasthan	75.9	18.7

Source: Eleventh Finance Commission Report and Poverty Estimates by Planning Commission as cited in Planning Commission 2008.

[1] The infrastructure indicators were constructed by the Eleventh Finance Commission. These were: (i) agriculture, (ii) banking, (iii) electricity, (iv) transport, (v) communication, (vi) health, and (vii) civil administration.

safe drinking water, and toilets (Kundu 2009). These not only reduce the incidence of poverty, but are also enabling factors that help reduce the 'risk of falling into poverty' (Krishna and Shariff 2011). Further, the paper showed that the households located in a village which was less than five kilometres away from the nearest city, and which had bus services, and denser telephone links, had better chances of 'breaking out of poverty' (Ibid.). It has also been found that lack of rural infrastructure affects farm and non-farm activity, thereby affecting alleviation of rural poverty (Pradhan 2009).

Provision of Support Infrastructure: *a more acute problem within rural areas*

Urban areas have a comparative advantage due to the presence of better social and economic infrastructure and therefore fare better in terms of human development outcomes. Lack of support infrastructure is a more acute issue in rural areas and urban slums. Since 23 per cent of our urban population lives in slums, their needs cannot be ignored.

Therefore lack of infrastructure, or for that matter progress in terms of provision of support infrastructure, can be judged in terms of narrowing rural–urban differentials over time. The widening rural–urban gap reflects greater disparities and greater exclusion of the poor in rural areas and prevents them from having an equal opportunity to improve economic and social infrastructure.

India's Five Year Plans have laid great emphasis on the development of rural India, in particular to enhance the potential of the rural populace and to ward off poverty. The Eleventh Five Year Plan outlined a comprehensive strategy for the development of both urban and rural infrastructure. The Planning Commission estimates that out of the total projected investment of Rs 14,365.6 billion to be incurred by the centre and states in the Eleventh Five Year Plan, Rs 4,353.5 billion (30 per cent) would be spent exclusively for the improvement of rural infrastructure (Planning Commission 2008). In addition, the Government of India launched the Bharat Nirman programme in 2005 and identified six sectors where achieving rapid breakthroughs was the key to rural development—roads, electricity, water supply, telephones, irrigation, and housing. Four of these six sectors are examined here, while the fifth (water supply) has already been addressed in the previous chapter. Table 7.2 spells out the targets under Bharat Nirman for each of the six sectors.

The present chapter focuses on the aspects of infrastructure that play a crucial role in supporting human development—housing conditions, electricity, telephony, and roads with special emphasis on Bharat Nirman schemes.

Housing is a basic physical need to sustain life. For the homeless, possessing a house provides a sense of identity, security, and safety. For a majority of the rural poor and urban slum dwellers, housing is their foremost necessity. Electricity and road connectivity can help the state achieve improved social development and faster economic growth. Availability of electricity is essential for modern agriculture and its allied activities, on which the majority of the rural population is dependent. It helps children to study after sunset and is also an important part of various health processes. Similarly, the use of telecommunications and better road connectivity aid mobility and provide a boost to market-based activities. Road networks also enable easier access to health and educational centres and better work opportunities. They in turn also support other

Table 7.2 Targets under Bharat Nirman

Component	*Targets to be achieved by 2009*
Irrigation	To create 10 million ha of additional irrigation capacity
Roads	To provide all-weather roads to every habitation with population 1000 and above (500 in hilly, desert and tribal areas); remaining 66,802 habitations to be covered
Electricity	To provide electricity to the remaining 125,000 villages and 23 million households
Housing	To construct 6 million houses
Drinking water	To provide drinking water to 55,067 uncovered habitations All habitations with failed sources and water quality problems will be addressed
Telephone connectivity	To connect remaining 66,822 villages with telephone by 2007

Source: Planning Commission (2008).

economic activities which can reinforce the establishment of better social infrastructure. All these are indicative of quality of life diff erentials in terms of income, health, and education outcomes across the poor and not so poor states.

A state-wise analysis shows that housing conditions, access to electricity, telephony, and road connectivity have all shown improvement over time. Further, the rural– urban gap is converging for most of the states, showing that the rural areas are catching up with their urban counterparts. However, despite signifi cant progress, the lack of support infrastructure is a concern for poor states like Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, and Uttar Pradesh.

When looking at socio-religious inequalities, it is found that compared to SCs and STs, Muslims have better housing conditions and access to electricity for domestic use, partly due to their concentration in urban areas. However, across major religious groups, Muslims fare the worst on these indicators.

As noted in the *Economic Survey 2010–11*, (GoI 2011a) infrastructure has been ' a mixed bag of performances' where some sectors like telecommunications have done remarkably well, while in others the achievement has been below targeted levels. Roads (National Highway Develop- ment Project) and power are examples of sectors where capacity addition has been below the target. However, there are also subsectors which have performed above or close to their targets, such as telecommunications and rural electrifi cation under the Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and new roads construction and upgradation/renewal of roads under Pradhan Mantri Grameen Sadak Yojana (PMGSY), as well as railway line electrifi cation and railway gauge conversion (GoI 2011a).

Our analysis suggests that certain key issues that still persist in the provision of support infrastructure are as follows:

- Housing
  - About 45 per cent of rural households still reside in *kutcha* or semi-*pucca* houses (or semi-permanent), as opposed to pucca houses
  - Around half the SC households and only one-third of the ST households reside in pucca houses in rural areas
- Access to electricity for domestic use
  - About one-third of the rural households still do not have access to electricity for domestic use; however this is a remarkable improvement from the Census 2001 position when only 42 per cent of all households had electricity
  - Access to electricity is a major challenge for poor states like Bihar, Jharkhand, Orissa, and Uttar Pradesh, especially in the rural areas.
- Telephony and road connectivity
  - Despite the remarkable increase in teledensity, a large rural-urban gap persists
  - There are large interstate variations in road coverage.

The following sections elaborate further on the state of support infrastructure in India. The next section discusses the status of shelter and quality of housing. The following sections examine access to electricity, telephony, and road connectivity (with greater emphasis on rural roads). The last section lists the conclusions reached.

The data for this chapter has been taken from diff erent sources like National Sample Survey (NSS) 58th round (2002) and 65th round (2008– 9), Census of India (2001) and Ministry of Road Transport and Highways (2004). Wherever feasible (for example in the case of housing conditions and electricity for domestic use), a socio-religious group analysis has been made for two points of time—2002 and 2008– 9. However, data for religion was not available in NSS 58th round so that analysis is done only for 2008– 9.

SHELTER AND QUALITY OF HOUSING

Shelter and quality of housing are important inputs for human development. Investments in shelter and housing not only expand and improve the stock of housing units, but also the working and living environments. This section describes the variations in shelter and quality of housing across Indian households by state as well as social and religious groups.

NSS provides data on the quality of houses based on the material used for the construction of walls and roof separately and the houses are classifi ed accordingly. According to NSS, a house is classifi ed as ' pucca' or ' permanent' if the walls and roof are made of pucca material.[2] If the walls and roof are made of kutcha

[2] Burnt brick, GI sheets or other metal sheets, stones or cement concrete, tiles, slate, lime and stone, or RBC/RCC concrete (Reinforced Cement

Concrete).

material,[3] the house is classified as 'kutcha' or 'temporary'. In all other cases, the house is classified as 'semi-pucca' or 'semi-permanent', that is, either the wall or the roof is made of pucca material and the other is made of kutcha material.

One third of Indian households still reside in kutcha or semi-pucca houses

Between 2002 and 2008–9, there has been an improvement in the condition of people's housing. There was an increase in the percentage of households living in pucca houses over this time period (from 47 per cent to 66 per cent), accompanied by a fall in the proportion of households living in kutcha or semi-pucca houses. This pattern was observed in rural as well as urban areas. More than 80 per cent of households in Delhi, Haryana, Himachal Pradesh, Punjab, Uttarakhand, and Kerala reside in pucca houses.

An interesting finding was that in poorer states like Rajasthan and Madhya Pradesh the proportion of households residing in pucca houses exceeded even the national average of 66 per cent in 2008–9. At the same time, in the north-eastern states (except for Mizoram) this proportion was less than the national average (Table 7A.1). However, in interpreting this data one also needs to keep in mind the local topographical and climatic conditions, as well as people's preferences. For example, in the case of the north-eastern states, local preferences may favour the use of bamboo/wood in the construction of houses.

Only around 50 per cent rural households reside in pucca houses

A rural–urban classification shows that in 2008–9 as many as 92 per cent of urban households resided in pucca houses (an increase from 77 per cent in 2002). As expected, urban India has a greater proportion of households living in pucca houses than rural India. However, the fact that the proportion of households living in pucca houses in the rural areas of poor states like Uttar Pradesh, Uttarakhand, and Rajasthan was well above the national average during both the time periods cannot be overlooked (Tables 7A.2 and 7A.3).

Rural-urban gap converging for most States

Households in rural areas in most states except Chhattisgarh, Jharkhand, and West Bengal, are catching up with urban areas in terms of housing conditions (Figure 7.1). However the absolute difference remains high due to the slow pace of convergence.

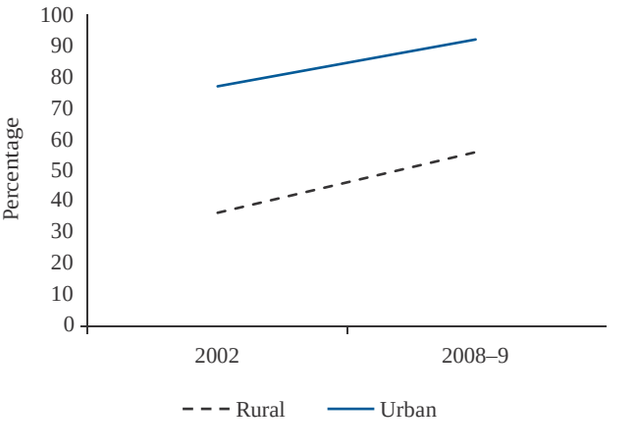

Figure 7.1 Rural–Urban Gap in Percentage of Households Living in Pucca Houses, 2002 and 2008–9

Source: NSS 58th and 65th Rounds.

Around half the SC households and one third of the ST households reside in pucca houses in rural areas

Over time, all the social groups registered an increase in the percentage of households living in pucca houses. The rural areas too saw an improvement in the housing conditions. STs even in the poor states of Madhya Pradesh, Uttar Pradesh, and Chhattisgarh experienced a sharp increase in the percentage of households residing in pucca houses (Table 7A.4a and b). However, OBCs are better placed in terms of housing conditions than SCs and STs.

SCs and STs diverging from national average for households residing in pucca houses

When looked at in absolute terms, as far as housing conditions are concerned, SC and ST households are below the national average for both points of time–2002 and 2008–9 (Figure 7.2). In addition, in terms of the

[3] Grass, leaves, reeds, bamboo, mud, un-burnt brick or wood, or thatch.

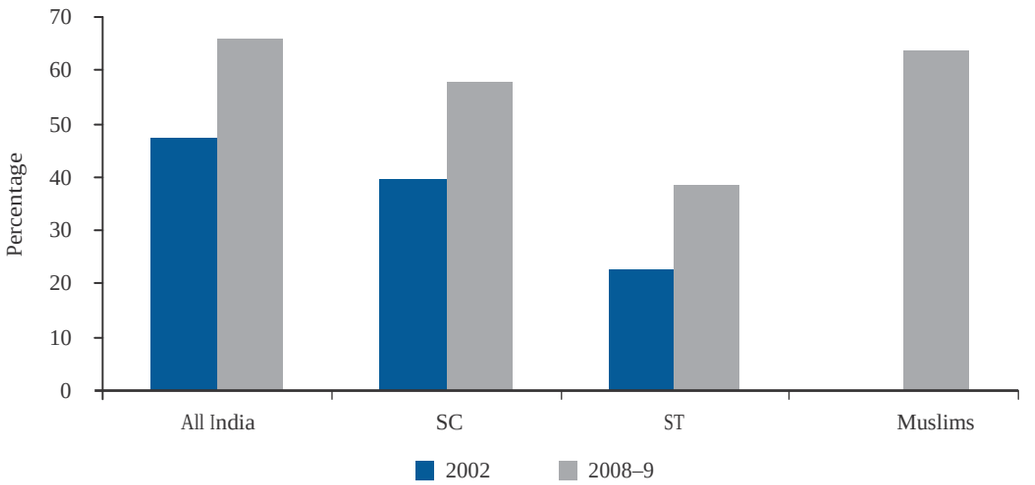

Figure 7.2 Percentage Distribution of Households Living in Pucca Houses by Socio-religious Groups, 2002 and 2008–9

Source: NSS 58th and 65th rounds.

percentage of households residing in pucca houses, this gap is widening with respect to the national average.

A greater proportion of Muslims than SCs and STs live in pucca houses

Among major religious communities, around 91 per cent of Sikh households lived in pucca houses in 2008– 9 compared to 60 per cent for the remaining three religious groups. Muslims had the lowest proportion of households residing in pucca houses among the four major religious groups. Hindus are better off than Muslims but only by a small margin (Table 7A.5). As expected, all religious groups had better living conditions in urban areas than rural areas.

It is worth noting that Indian households continue to grapple with housing shortages which stood at 14.86 million and 15.95 million houses, respectively, for 2001 and 2007 (Planning Commission 2008). In order to provide shelter to the homeless, various housing policies and programmes have been initiated by the government and NGOs. The Indira Awaas Yojana (IAY), one of the government's earliest rural housing programmes has been implemented as an independent scheme since 1996. A target of constructing 15 million houses under IAY had been proposed in the Eleventh Five Year Plan. Box 7.1

Box 7.1 Providing Homes to the Homeless

In the tiny hamlet of Medu Apal in the East Garo Hills district of Meghalaya, Wanje Marak, a tribal woman, lived alone with no one to look after her and no roof over her head. Under the Indira Awaas Yojana, the local Block Selection Committee sanctioned a grant for her to construct a house—a house she built with her own bare hands, without the services of a contractor. Today, she sleeps content under a roof of her own making.

Wanje Marak's plight—a poor, abandoned tribal woman struggling with homelessness and deprivation—is one that resonates on many levels across rural India. Shelter is essential for a dignified human existence and the Bharat Nirman programme seeks to address rural housing shortages, especially with respect to historically disadvantaged communities such as SCs, STs, widows, freed bonded labourers, the physically challenged, the elderly, and the rural poor in general. The centrepiece of this housing policy is IAY, which provides financial assistance to deserving households, with special provisions to target disadvantaged groups. The scheme mandates the sanctioning of Rs 35,000 to beneficiaries living in the plains and Rs 37,500 to those in tribal and hilly areas. The funds are released in instalments linked to the progress of work. Sixty per cent of the IAY funds are earmarked for SC and STs, 3 per cent for persons with disabilities, and 15 per cent for minorities.

Source: Low cost house under Songsak Development Block, East Garo Hills, Meghalaya, http://eastgarohills.nic.in/drda/success_stories.htm#Songsakpercent20LCH

highlights the difference that IAY's assistance has made to the lives of the poor.

In addition, there are a number of other housing policies such as the National Housing Policy (1994), National Housing and Habitat Policy (1998), and National Urban and Habitat Policy (2007). The National Urban Housing and Habitat Policy (2007) promotes the sustainable development of habitat in the country with a view to ensuring equitable supply of land, shelter and services at affordable prices to all sections of society. The policy lays special emphasis on vulnerable sections of society such as the SCs, STs, OBCs, minorities, and the urban poor, and seeks to promote a symbiotic development of rural and urban areas. It also promotes various types of public- private partnerships to realize its goals.

Various NGOs have also been taking initiatives in this direction and coming up with innovative schemes. Box 7.2 highlights one such innovative housing scheme.

In addition, to address the housing issue for the urban centres, the Jawaharlal Nehru National Urban Renewable Mission (JNNURM) was launched by the Government of India in December 2005 with the aim of creating 'economically productive, efficient, equitable and responsive cities'. The mission has three major objectives: (i) providing a major fillip to the economic and social infrastructure of 63 selected cities by funding projects related to water supply and sanitation, sewerage, solid waste management, road network, urban transport, and renewal of old city areas; (ii) ensuring basic services to the urban poor including health, education, social security, and security of tenure at affordable prices; and (iii) initiating wide-ranging reforms to establish linkages between asset-creation and asset- management for long term sustainable urban growth.[4]

More recently, the High-powered Committee on Urban Infrastructure suggested a New Improved Jawaharlal Nehru National Urban Renewal Mission (NIJNNURM) to scale up the extent of the existing JNNURM from 0.1 per cent of GDP to 0.25 per cent of GDP per annum (GoI 2011b).

The central government's Rajiv Awas Yojana is similar in intent and seeks to address the problem of housing in slums. It aims to reform the existing urban development systems to make cities inclusive and equitable. The preparatory phase of the Rajiv Awas Yojana commenced under the Slum-free City Planning Scheme in March 2010 and the states are being assisted to draw up their Slum-free Plans of Action to move towards the goal of Slum-free cities/states (Ministry of Housing and Urban Poverty

Box 7.2 Gram Vikas' Participatory Housing Programme

Gram Vikas, an NGO that has been working in Orissa since 1979, has a unique, participatory housing programme, integrating water and sanitation concerns. The programme's most significant feature is its 'all or none' approach, which means the programme is only implemented in a village if every household agrees to it. This is because unhygienic practices, like the practice of open defecation, by even a few non-participating families in the village can affect participating families adversely.

Gram Vikas directly reaches out to 20,000 households in 500 villages in fifteen districts of rural Orissa. The focus is on adivasis, dalits and small and marginal farmers. Gram Vikas has so far supported the construction of 3,479 houses across 169 villages/ habitations. Over 11,000 families in 143 villages have also been mobilised and supported for protected piped water supply and sanitation systems. (Jayapadma 2005).

Gram Vikas caters to two of the most important needs of the rural families—loans and technical support for construction. The programme involves setting up a 'village general body' with all the adults of the village as members. To show their intention to build a house, each family deposits an amount of Rs 3,000– 5,000 and another Rs 1,000 towards a corpus fund to extend water supply and sanitation facilities to all the families in the village. Of the total estimated cost of Rs 46,500 per house (50 sq. m. in area, having two rooms, a kitchen/dining room, a front verandah, a toilet, and a bathing room), Rs 31,500 (including the initial contribution) is accessed by Gram Vikas from donor agencies and housing finance corporations (like Housing Development Finance Corporation). The remainder of the cost is met by the beneficiaries themselves in the form of labour and locally available materials. A deadline of six months is set for the completion of construction, after which the loans are frozen. The entire loan is payable over 15 years at standard interest rates.

Source: Jayapadma 2005, Available at ://www.gramvikas.org/

[4] https://jnnurmmis.nic.in/jnnurm_hupa/jnnurm/Overview.pdf

Alleviation). A sum of Rs 12.7 billion has been allocated under the scheme during the financial year 2011–12 for states to prepare slum-free city plans (GoI 2011c).

ACCESS TO ELECTRICITY

In the discourse on development in India, an oft heard challenge is the provision of '*bijli, sadak, pani*' (electricity, roads, water). In this infrastructure triumvirate, electrification, particularly in rural areas, is possibly the most difficult goal to achieve; it also holds the greatest reward in terms of multiplier effects on human development. Electrification holds the key to increased productivity in agriculture and labour, improvement in the delivery of health and education, access to communications, improved lighting after sunset, the use of all sorts of machines and appliances to reduce drudgery, and increased public safety through outdoor lighting. In order to meet the aspirations of the rural population, therefore, it is essential to provide viable and reliable electricity services.

Access to electricity is a major challenge that the country is facing. As per Census 2001 estimates, there has been a rise, albeit at a slow pace,[5] in the percentage of households that have electricity connections. Lack of access to electricity is a more serious problem for the rural households.[6] As per NSS estimates, there was a rise in the proportion of households that had electricity for domestic use in 2008–9 (75 per cent) from 64 per cent in 2002.[7]

The state averages for some of the poor states like Bihar, Jharkhand, Uttar Pradesh, and Orissa, were far below the national average in both 2002 and 2008–9. Much of this deviation was explained by the dismal situation in the rural areas of these states. At the same time there are other poor states like Uttarakhand, Chhattisgarh, and Madhya Pradesh, which are above the national average, even in the rural areas. On the other hand, the performance of major states like Andhra Pradesh, Delhi, Haryana, Gujarat, Punjab, Himachal Pradesh, Jammu and Kashmir, Kerala, and Tamil Nadu as well as the north-eastern states of Nagaland, Manipur, and Sikkim is commendable with over 90 per cent of their households having access to electricity. Despite lower absolute proportions, states like Bihar, Chhattisgarh, Jharkhand, Orissa, and Rajasthan have seen dramatic improvement over time (Table 7A.6).

About one-third of rural households still do not have access to electricity for domestic use

In urban India, 96 per cent of households have electricity for domestic use. The proportion in rural areas was 66 per cent, well below the all India average of 75 per cent. However, in majority of the states, rural areas registered a performance well above the national average (Table 7A.10). As also shown in Figure 7.3, the rural–urban gap with respect to electricity for domestic use is narrowing over time.

In terms of electricity for domestic use, SC and ST households are converging with the all-India average

There has been an increase in the proportion of households that have electricity for domestic use across all social groups. Even poorer states like Rajasthan, Uttar Pradesh, Bihar, Jharkhand, Orissa, and Madhya Pradesh,

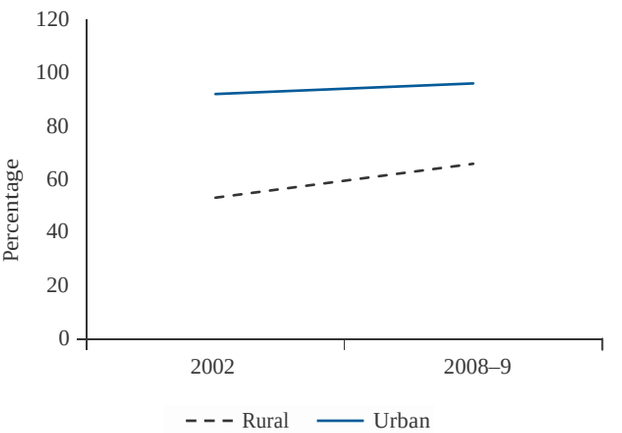

Figure 7.3 Rural–Urban Gap in Percentage of Households having Electricity for Domestic Use, 2002 and 2008–9

Source: NSS 58th and 65th Rounds.

[5] A gap of ten years (1991to 2001) saw a rise of 14 percentage points only, an average of around 1.4 per cent per annum.

[6] In 2001, about 44 per cent of rural households and 88 per cent of urban households had access to electricity.

[7] In the NSS 65th Round, the information was collected on availability of electricity to households for domestic use, whereas in the NSS 58th Round, information was collected separately on the primary source of energy for cooking and lighting. As the households' primary use of electricity would be for lighting purposes, only the use of electricity as the primary source of energy for lighting by the households during NSS 49th and 58th rounds has been considered (NSS 65th Round).

which account for over 40 per cent of country' s SCs as well STs, experienced a huge increase in this proportion. OBC households have relatively better access to electricity as compared to SCs and STs at the all India level (Table 7A.7).[8] Figure 7.4 compares how SC and ST households fare compared to Muslims as well as the national average with respect to the use of electricity.

A higher proportion of Muslim households use electricity for domestic use as compared to SCs and STs

In the case of major religious communities, Sikh households had the highest percentage of households with electricity connections (96 per cent), followed by Christian households and Hindu households. Christian and Sikh households perform better than the national average even in rural areas. The percentage of Muslim households with access to electricity was the lowest, even below the national average of 75 per cent (Table 7A.8).

In order to see the vision of an electrifi ed and vibrant India made real, the Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) was launched by the Power Ministry in 2005 and subsequently brought under the ambit of the Bharat Nirman programme. The aims of this programme are threefold: (i) electrifying all villages and habitations as per the new defi nition of an electrifi ed village,[9] (ii) providing access to electricity for all rural households, and (iii) providing electricity connections to BPL families free of charge.

RGGVY subsidises the capital cost by 90 per cent through grants from the Government of India.[10] Its stated objective was to electrify over 100,000 un-electrifi ed villages and to provide free electricity connections to 23.4 million rural BPL households by 2009 (out of the total 78 million households without electricity in the country).

An assessment of the progress of rural electrifi cation by the Ministry of Power shows that, as of June 2010, 84 per cent of villages in the country have been electrifi ed.

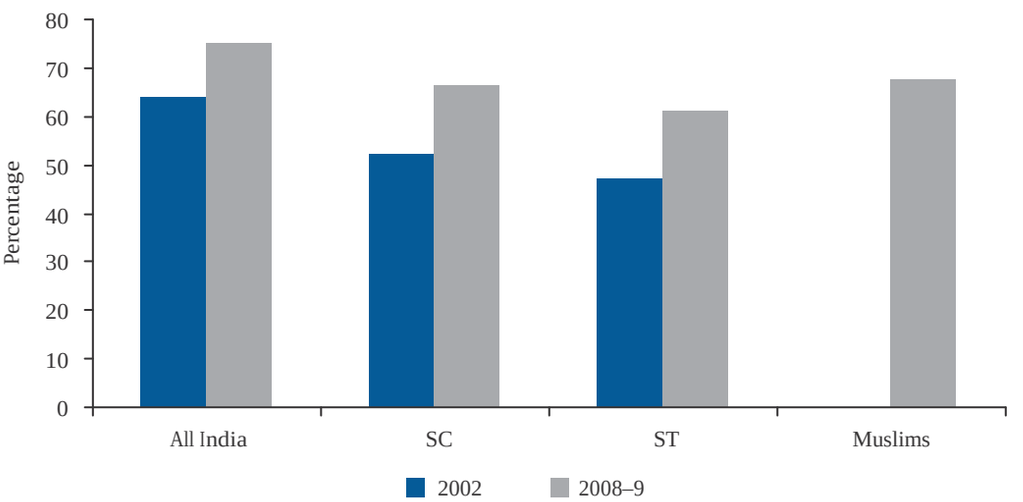

Figure 7.4 Percentage Distribution of Households with Electricity for Domestic Use by Socio-religious Groups, 2002 and 2008–9

Source: NSS 58th and 65th rounds.

[8] OBCs were relatively better placed with 75 per cent households having electricity in 2008– 9, while only 66 per cent of SC households and 61 per cent ST households had electricity for domestic use.

[9] As per the new defi nition, a village would be declared as electrifi ed, if:

1. Basic infrastructure such as Distribution Transformer and Distribution lines are provided in the inhabited locality as well as the Dalit Basti hamlet where it exists.

2. Electricity is provided to public places like Schools, Panchayat Office, Health Centers, Dispensaries, Community centres and such other places.

3. The number of households electrifi ed should be at least 10 per cent of the total number of households in the village.' (http://rggvy.gov.in/rggvy/rggvyportal/index.html)

[10] http://rggvy.gov.in/rggvy/rggvyportal/index.html

Many states reported a remarkable performance—all the villages in Andhra Pradesh, Delhi, Goa, Haryana, Punjab, Tamil Nadu, and West Bengal have been electrifi ed. Jharkhand has the lowest percentage of villages (only 31 per cent) which have been electrifi ed. Other states which were below the national average of 84 per cent were Arunachal Pradesh, Assam, Bihar, Meghalaya, Nagaland, Orissa, Rajasthan, and Tripura. Up to November 2010,
87,791 villages have been electrifi ed and connections released to 13.53 million BPL households under RGGVY (GoI 2011a).

Of late, harnessing renewable energy for generating electricity has caught the attention of many countries. India has also seen the wide application of wind power, small hydro, biomass, and solar power for generating electricity. There is a strong case for using electricity from off -grid sources—for example, micro/mini hydropower and solar power—and distributing it through localized power generating and distributing devices rather than through the grid. Box 7.3 highlights the example of China where renewable energy generated off -grid for localised use has ensured access to rural households.

MOBILE TELEPHONY

Modern means of communication are regarded not only as a springboard to an improved standard of living, but also to information and knowledge. Communicating via telephony increases the potential for economic growth, generates political awareness, breaks the digital-divide and creates social capital resulting from social networking, which strengthens economic opportunities, and improves social ties between migrant workers and their families (Sinha 2005). In addition, telephony leads to better informed decisions and renders freedom of choice to people. It has also been found that if a country has 1 per cent more mobile subscribers than another, its GDP per capita will be about $200 higher (TRAI 2008). In another analysis, it was reported that, ' in a typical developing country, an increase of 10 mobile phones per
100 people boosts GDP growth by 6 per cent' (Vodafone

Box 7.3 Renewable Energy for Electrifying Villages: Lessons from China

The need to increase the use of renewable energy sources for sustained energy development was recognized in the early 1970s. Since then, a great emphasis has been placed on renewable sources of energy, especially for electrifying villages. India' s aim is to electrify all un-electrifi ed villages by 2012, using renewable sources, while ensuring sustainable development.

An archetype of such a strategy is China, which ensured universal access to electricity for all rural households by using off -grid renewable energy sources, by the early 1990s, passed a law in 2005 to promote the use of renewable energy. The law provides a feed-in tariff for some technologies and establishes grid feed-in requirements and standard procedures. Any incremental cost has to be shared by the utility consumers. The law also supports rural uses of renewable energy. Today, China is the world' s largest manufacturer of wind turbines and solar panels. China intends for wind, solar, and biomass energy to represent 8 per cent of its electricity generation capacity by 2020 in order to meet the growing demand for energy.

India also has a few examples to its credit, which speak of the state governments' commitment to electrifying villages through hydropower, a renewable source of energy. These examples are given below:

- The Indushree Power Project, a 1 MW small hydel resources initiative, in Raksat, Himachal Pradesh has brought light to 700 homes in 12 villages in and around Raksat.
- A Pico-Hydro Power Project is coming up to meet the energy needs of the small communities in the hilly areas of Karnataka. (Pico-Hydro projects are hydroelectric projects with a power generation capacity of up to 10 KW, which convert the energy in water fl owing down a gradient into electrical energy).

However, in order to make the best use of renewable energy in India, particularly in rural areas, the grid system should be supplemented by ' distributed generation' of energy as did China. Distributed generation is defi ned as generation located at or near the load centres using small scale renewable energy technologies like wind energy, wave energy, and hydro electric energy. Not only is distributed generation cost saving and environmental friendly, it also helps in avoiding the inconvenience associated with load shedding.

Sources: http://www.energysavingnow.com/paper/dgindia/
http://www.martinot.info/china.htm#law

2005 as cited in Bhavnani *et al.* 2008). Figure 7.5 shows the scatter plot of per capita Net State Domestic Product (NSDP) at constant prices in 2008–9 with teledensity as on March 2008.[11] That there is a positive relation between the two is clearly visible through the linear trend line.

In an econometric analysis of the impact of mobile phones, Kathuria *et al.* (2009) found that

> 'Indian States with high mobile penetration can be expected to grow faster than those States with lower mobile penetration rates, by 1.2 per cent points a year more on average for every 10 per cent increase in the penetration rate. If Bihar were to enjoy the same mobile penetration rate as Punjab then, according to our results, it would enjoy a growth rate that is about 4 per cent higher.'

Access to telecommunication increases the chance to escape poverty

In the Indian context, the importance of telephony stems from the fact that by reducing information asymmetry it can make the gains of development available to even the rural masses (constituting 72 per cent of the country's popula- tion as per 2001 census). Conditions of perfect informa- tion availability rendered by telecommunication enables them to make decisions that are optimal, that is, maximize welfare.

Teledensity (phones—both fixed line as well as wireless, per 100 population) has increased at a very impressive pace over time, 26 per cent in 2008 to 66 per cent in December 2010. This growth has largely been led by urban teledensity (with an increase of over 80 percentage points), though the increase in rural teledensity is also commendable (over 20 percentage points) during this short span of time.

Across states, it has been found that teledensity was below 10 per cent in 2010 for Chhattisgarh and Jharkhand, reflecting a lack of access to telephones in these relatively poorer states. On the other hand, for states like Delhi and Himachal Pradesh and metropolitan cities like Kolkata, Mumbai, and Chennai, teledensity was over 100 per cent in 2010 implying that individuals have more than one telephone connection (Table 7A.9).

Inequality in access to telephony has led to a rural–urban divide, social as well as economic. Compared to urban areas, rural areas lag behind in telephone connections. Figure 7.6 shows that even though teledensity in rural areas has been increasing over time, the rural–urban gap is widening.

A state-wise analysis also highlights this huge rural–urban gap. Kerala and Himachal Pradesh had the highest rural–urban gaps due to very high teledensity in urban areas.

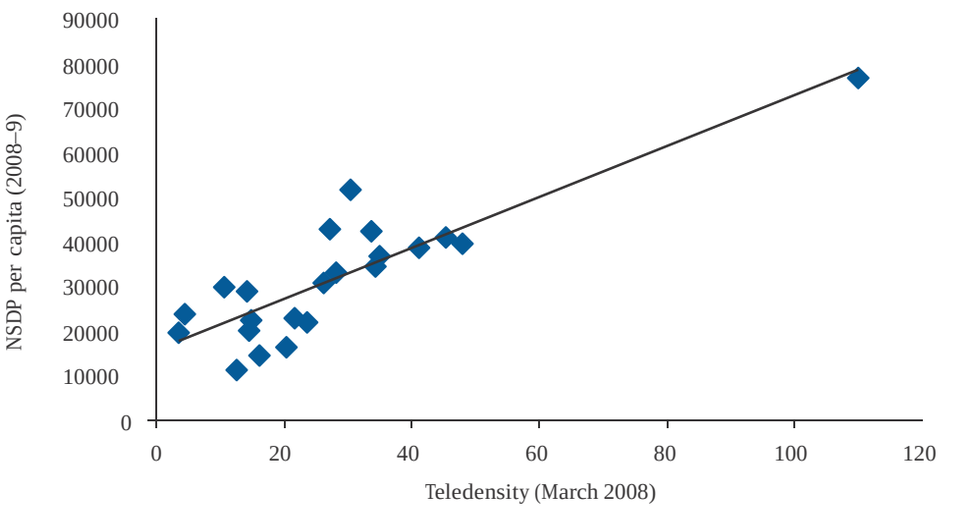

Figure 7.5 Relationship between Per Capita Net State Domestic Product and Teledensity

Source: Data for NSDP per capita from *Economic Survey 2009–10* and for Teledensity from TRAI (2009).

[11] Number of telephone connections per 100 population.

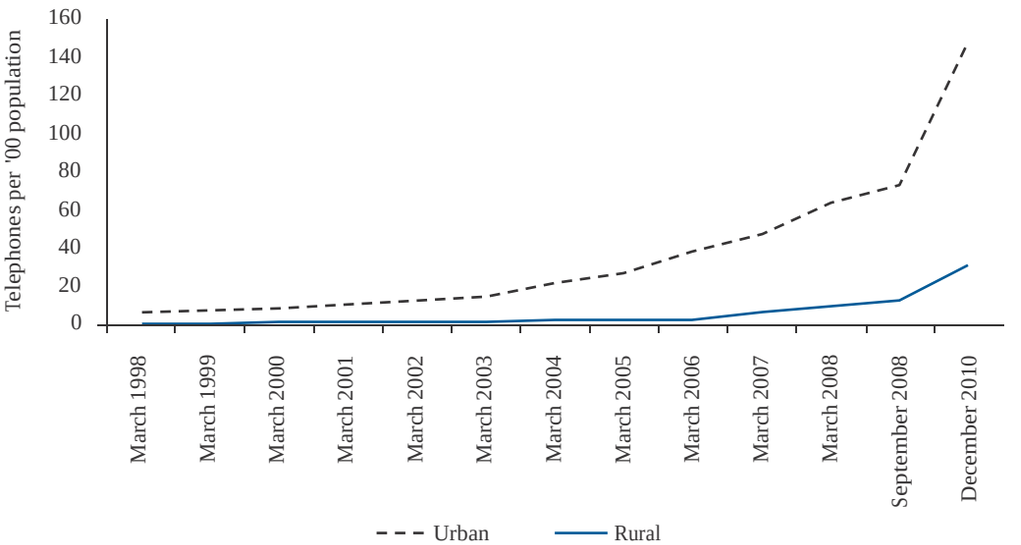

Figure 7.6 Rural–Urban Gap in Teledensity, 1998 and 2010

Source: TRAI (2008 and 2011).

With respect to rural teledensity, Kerala, Himachal Pradesh, Tamil Nadu, Haryana, and Punjab were well above the national average. By contrast, rural areas in Orissa, Madhya Pradesh, Jammu and Kashmir, Uttar Pradesh, Bihar, Chhattisgarh, Jharkhand, and Assam had a teledensity of less than 10 per cent in 2008. All these states, with the exception of Chhattisgarh, Jharkhand, and Uttarakhand showed signifi cant improvement in 2010 (Table 7A.9).

In order to improve teledensity in rural areas, it was envisaged that 66,822 revenue villages without telephone connectivity be provided with Village Public Telephone (VPT) facilities under Bharat Nirman. The target of the Eleventh Plan was to achieve 25 per cent rural density by 2012. It is commendable that All India rural teledensity as on June 2010 was 26.5, which exceeded the target. Teledensity in many states like Andhra Pradesh, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Maharashtra, Punjab, Rajasthan, Tamil Nadu, and West Bengal (including Sikkim) was also above 25 per cent (GoI 2010a).

The fl agship programme also aimed to reach a subscriber base of 600 million. During the fi nancial year 2009–10, the subscriber base exceeded this level, with the number of connections (fi xed as well as wireless) standing at 621.3 million (GoI 2010b).

What is to be noted is that out of this 621.3 million, the share of wireless subscribers was as high as 584.3 million that is, 94 per cent (GoI 2010b). Over time it has been observed that there is a preference for mobile telephony over fi xed line in the country (Figure 7.7)

Due to the high costs involved in the setting up of fi xed lines, rural areas are witnessing a greater demand for

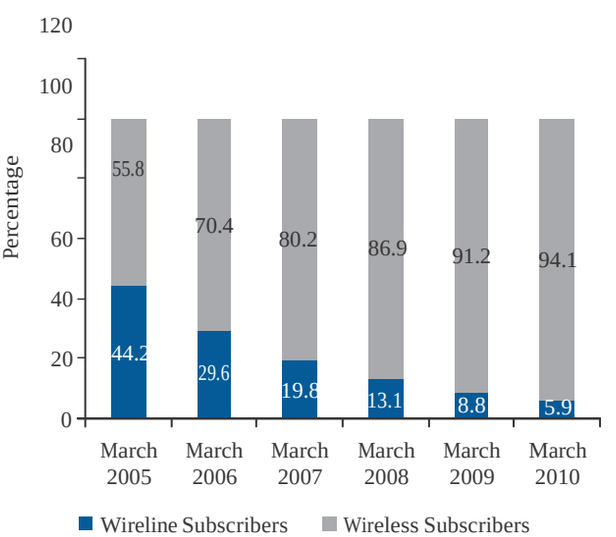

Figure 7.7 Percentage Distribution of Wire-line and Wireless Subscribers, 2005 and 2010

Source: TRAI (2010).

mobile telephony. Mobile telephony costs are one-fifth that of fixed line costs (Planning Commission 2008). In addition, the resulting competition among providers has led to low tariff rates.

The high cost of providing wired communication facilities, coupled with relatively low levels of purchasing power, is tantamount to high levels of demand being under-served with low levels of telecommunications service. As a result, rural areas that are often ill-equipped to handle wired communication tools can benefit by 'leapfrogging' to wireless tools. Over time, a new equilibrium between communications demand and its supply is emerging, which is at prices affordable to even the poor. (Sinha 2005).

It is easier for rural people who do not have a credit history, permanent address, or a stable source of income to purchase a cell phone rather than a fixed line. Another factor which can support the demand for mobiles in rural India, is that the majority of the people do not have bank accounts or access to other methods of payment. Mobile banking can help make banking and payment services available to them. Thus, it also enables financial inclusion in remote areas where it is not feasible for banks to open branches. In addition, mobile communication helps in times of medical emergencies as well as other emergencies and enables better governance.

In another study by Blixt (2005) on mobile telephony in rural India, it was concluded that mobile telephony empowers the rural population. The farmers need mobile phones to contact their clients even when they are out in the field. This cannot be done using a fixed line. Similarly, fishermen need mobile phones to know the supply and demand of fish in different markets and which market to go to when they reach land. Mobile phones also help entrepreneurs while they are establishing businesses in the countryside. Thus, mobile phones contribute to the income generation of the rural population, which can help in enhancing human capabilities in terms of better health and education.

In addition, livelihoods in rural areas, especially in remote areas, can be improved through the availability of accurate and timely information regarding prices of farm/non-farm produce, cropping patterns, crop husbandry and livestock, and off-farm and non-farm employment, minimum wages, rights of workers, and so on in areas where information from conventional sources rarely reaches. Box 7.4 shows examples of the application of mobile telephony in rural areas and how it benefits the rural population.

Box 7.4 Application of Mobile Telephony in Rural Areas: Fisher Friend in India

In Tamil Nadu and Puducherry, a pilot project called 'Fisher Friend' has been launched. Qualcomm's Wireless Reach 'Fisher Friend' project is a partnership with MSSRF, Tata Teleservices and Astute. Using 3G CDMA wireless and ICT technologies, the fishing communities are able to access vital information like height of waves, satellite data about fish shoals, and the like which serves the following purposes:

- It saves lives by providing timely weather alerts to survive danger on the high seas.
- It enhances livelihoods by providing real time data on fish migration and market prices.
- It increases knowledge base by providing updates on government schemes, policies and developments of interest to fishing communities.

China has a similar model in place—an integrated package consisting of text-messaging services, voice services, and an Internet portal for rural areas. Farmers and fishermen can access the service to get weather forecasts, price information, and employment opportunities outside the agricultural industry.

Source: TRAI (2008).

However, despite their utility, the coverage of mobile telephony in rural India is only 69 per cent. Only three states—namely Haryana, Kerala, and Tamil Nadu—had 100 per cent village coverage. Jammu and Kashmir, the North East, Assam, and Madhya Pradesh, Orissa and Maharashtra had very low coverage as compared to the national average (Table 7A.10).

Due to limited coverage in many parts of the country, there is a strong need to increase mobile penetration. The impediments faced in the penetration of rural telecom need special attention. Given below are some constraints.

- Land acquisition for towers takes a lot of time in villages.
- Setting up of a cell tower costs millions of rupees. In rural areas, cell sites are not shared by operators at the same rate as in urban areas.
- In many villages power supply is either not available or is available for only a limited time.
- Service providers are reluctant to venture into interior rural areas because average revenue per user is lower than in urban areas.

Thus, unless these constraints are overcome, the inclusion of the rural population in the development process would be a challenge.

ROAD CONNECTIVITY

An efficient road network is necessary both for national integration as well as for socio-economic development. India's road network of 3.3 million kilometres is the second largest in the world, carrying 65 per cent of freight and 80 per cent of passenger traffic. The country's road network consists of national highways, state highways, major/district roads and village/rural roads.

National highways constitute only about 2 per cent of the road network, but carry about 40 per cent of the total road traffic.[12] As an initiative to improve the physical infrastructure, the National Highways Development Project (NHDP), managed by the National Highways Authority of India (NHAI), Ministry of Road Transport & Highways, aims to upgrade, rehabilitate, and widen major highways in India. In its first phase, the NHDP started with the Golden Quadrilateral—a highway network of 5,846 kilometres, connecting the four metros—Delhi, Mumbai, Kolkata, and Chennai. Divided into phases, the second phase of NHDP comprises of building the North–South and East–West Corridors (7300 kilometres in length) connecting Kashmir to Kanyakumari and Silchar to Porbandar, respectively.

The government has approved various Public Private Partnership (PPP) projects on a Build, Operate, and Transfer (BOT) basis to upgrade the national highways and to convert single lane highways into two lanes with paved shoulders. In addition to the projects under NHDP, the NHAI is also currently responsible for about 1,000 km of highways connecting major ports.

At the national level, the road length per 100 square kilometres has increased consistently over time (Table 7.3).

Table 7.3 Coverage of Roads (*in km*)*

Year	*Per 100 square kilometre*	*Per Million Population*
1981	45.1	21.7
1991	61.3	23.9
2000	73.8	23.6
2001	75.1	24.0
2002	76.0	24.3
2003	79.2	25.3
2004	81.2	26.0

Source: Census of India, Transport Research Wing, Ministry of Road Transport and Highways.
Note: * excludes roads constructed under JRY and PMGSY.

Large interstate variations in road coverage

There are wide interstate variations in road coverage. It is noteworthy that among the 20 major states, Kerala had the highest road length (369 kilometres) per 100 square kilometres in 2004, followed by Orissa (137 kilometres) and Tamil Nadu (131 kilometres). The road length per 100 square kilometres was less than the national average of 81 kilometres per 100 square kilometres in Andhra Pradesh, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir,[13] Jharkhand, Madhya Pradesh, and Rajasthan. Among the north-eastern states, the road length per 100 square kilometres was less than the national average except for Assam, Tripura, and Nagaland. In general, the Union Territories, excluding Andaman & Nicobar Islands, had greater road length than the national average (Table 7A.11).

The road length per million population at the all India level did not change much from 1991 to 2001 even though the population increased by 21 per cent during this period. Thereafter however, road length has risen over time (Table 7.3). It should be noted that in 2004, two north-eastern states, Arunachal Pradesh and Nagaland, ranked the highest in this regard. Road coverage was less than the national average of 25.9 kilometres per million population in Bihar, Delhi, Haryana, Jammu and Kashmir, Jharkhand,[14] Rajasthan, Punjab, Uttar Pradesh, and West Bengal, largely on account of the high population in these states. Maharashtra, Andhra Pradesh, and Madhya Pradesh on the other hand, despite having large populations, had better road coverage as compared to the national average. The road length per million population in all the north-eastern states as well as the

[12] http://morth.nic.in/writereaddata/sublinkimages/overview_NH3244795788.htm
[13] It was as low as 10 kilometres per 100 square kilometres.
[14] Lowest coverage at 4.4 kilometres per million population.

Union Territories was well above the national average due to low population in these areas (Table 7A.11).

Rural Roads: A key to poverty reduction

Rural and other roads account for the maximum share in the road network at 2.65 million kilometres. The rural road network provides a crucial link with growth, employment, education, and healthcare facilities in rural areas. For many Indian villages, it is the lack of connectiv- ity that cripples their development—farmers cannot get their produce to markets on time, children cannot go to school, and health and other vital public services remain unreachable. ' Escaping poverty in rural areas requires developing a connection with the city' (Krishna and Shariff 2011).

A study (Fan *et al*. 1999) carried out by the International Food Policy Research Institute on linkages between government expenditure and poverty in rural India has revealed that an investment of Rs 10 million in roads lifts 1,650 poor persons above the poverty line. An NCAER study for Bhiwani district in the state of Haryana shows that road connectivity results in an increase in population density, literacy levels, work participation in industry sector, irrigated area, and electrical connections mainly leading to an increase in the use of pump sets, tractors, and tube wells (Chawla *et al*. 1981). Similarly, another NCAER study in Assam' s Karbi-Anglong district indicates that the accessibility of roads contributes to low birth and death rates, high literacy trends among both sexes, higher intensity of cropping, and modernization of agriculture (Chawla *et al*. 1986). It is for these multiplier eff ects that the government has given due priority to investment in rural roads via the Bharat Nirman programme. This in- vestment seeks to impact rural poverty through its eff ect on improved agricultural productivity, higher non-farm employment opportunities, and increased rural wages.

Government programmes for road-building

Through the earlier existing Pradhan Mantri Gram Sadak Yojana (PMGSY) scheme, the rural roads component of the Bharat Nirman programme had the ambitious target of connecting every habitation of 1,000 or more population (500 or more in hilly, tribal, and desert areas) with all-weather roads by 2009. The programme involves construction of about 368,000 kilometres of new roads and upgradation/repair of 370,000 kilometres of roads. It aims to connect 66,802 habitations with all-weather roads and to construct 146,185 kilometres of new rural roads.[15] In addition, a comprehensive online management, monitoring, and accounting system (OMMAS) was set up to monitor all aspects of road building and the data collected is uploaded online for public scrutiny.

So far, 298,809.72 kilometres of road have been completed and new connectivity has been provided to over 73,651 habitations. As of November 2010, 38,144 habitations have been provided connectivity to all-weather roads and over 24,411 kilometres of all-weather roads have been completed under PMGSY (GoI 2011a).

Other innovative strategies being implemented under PMGSY include using construction material that is commonly available in the vicinity of the planned road. For example, in an area where fl y ash is abundant, it is used for road construction, thus cutting construction costs. The scheme emphasizes building all-weather roads to withstand the vagaries of the monsoon and the harsh summer, thus ensuring long term gains in maintenance costs and unhindered road connectivity for the rural populace. An evaluation report by the Planning Commission in 2005 concluded that despite the slow pace of implementation in some states and only about 60 per cent of the physical targets being met on average, the PMGSY was found to have increased rural incomes and improved the accessibility of benefi ciary villages. The quality of the roads was also ensured by the unique three-tier quality monitoring system, the online management, monitoring and accounting system (OMMAS).

In addition to these, the Government of India is also taking initiatives with the help of foreign aid. The Asian Development Bank (ADB) Board approved a $400 million loan for PMGSY under the Rural Roads Sector I Investment Project (RRSP I) in 2003 (GoI 2006). The Multi-tranche Financing Facility (MFF), a new ADB fi nancing modality, was used to fi nance investments in the PMGSY states for the construction/upgradation of up to 30,000 kilometres of rural roads connecting about 19,000 villages (ADB 2005). The $750 million assistance under RRSP II is meant for the states of Assam, Orissa, and West Bengal. In 2004– 5, the World Bank contributed $ 399.5 million (Rs 17.6 billion) for the Rural Roads Project in Uttar Pradesh, Rajasthan, Jharkhand, and

[15] http://pmgsy.nic.in/

Himachal Pradesh. Additional loans of $500 million by the World Bank and $350 million by the ADB (for RRSP III) have been sought by the Ministry of Rural Development.

Besides the rural areas, due consideration is also being given to roads in urban areas, in order to support burgeoning urbanization. In view of this, the Report on Urban Infrastructure and Services recommended an investment of Rs 1.7 million (almost 44 per cent of the total Rs 3.9 million investment for urban infrastructure) for urban roads (GoI 2011b).

CONCLUDING REMARKS

The present analysis highlights the existing defi cit in the support infrastructure in the country. The inclusive growth agenda along with the target of 9 per cent GDP growth can only be achieved if this defi cit is overcome. The high incidence of poverty, which is reinforced by the lack of support infrastructure, is concentrated mainly in the states of Bihar (including Jharkhand), Orissa, Madhya Pradesh (including Chhattisgarh), and Uttar Pradesh (including Uttarakhand), which accounted for 60 per cent of the rural poor in 2004–5 (as noted in Chapter 3). This is highlighted in the current chapter by the inadequate infrastructure in states like Bihar, Uttar Pradesh, Rajasthan, and Jharkhand as opposed to states like Kerala, Delhi, and Goa with a lower incidence of poverty and better infrastructure. As already discussed in the context of Index of Infrastructure, the incidence of poverty can be reduced by improving the infrastructure.

The state-wise analysis showed that the lowest number of households living in pucca houses was found in poor states like Bihar, Jharkhand, Orissa, Chhattisgarh, and Uttar Pradesh. However, these states experienced a rise in this proportion over time. The north-eastern states in general had a higher proportion of households living in kutcha and semi-pucca houses, which is due to their topographical preferences.

Over time, access to electricity for domestic use has shown signifi cant improvement even in the poorer states of Uttar Pradesh, Bihar, Jharkhand, Orissa, Chhattisgarh, and Assam. This dramatic improvement has also been experienced by the SCs and STs in these states. However, in absolute terms, almost half of the households in Bihar, Jharkhand, Orissa, and Uttar Pradesh still do not have electricity for domestic use.

Among socio-religious groups, it is found that OBC households are better placed in terms of quality of housing and access to electricity as compared to SCs and STs, while Sikh households fare the best among major religious communities. Muslim households, though relatively bet- ter off as compared to SCs and STs, were the worst off amongst the major religious groups in terms of quality of housing and access to electricity.

There has been a remarkable increase in coverage of telephony. Urban teledensity stands at 148 per cent and rural teledensity at 31 per cent, primarily due to the high costs incurred by telephone providers for penetration in rural areas. Such constraints can be overcome with greater state involvement and partnerships with private players.

While the national average of road length and road coverage has increased over time, interstate variations and gaps still exist. The rural areas of states like Bihar, Chhattisgarh, Himachal Pradesh, Maharashtra, Rajasthan, Tamil Nadu, and Uttar Pradesh failed to meet their targets of constructing new roads under PMGSY. The road length per 100 square kilometres was less than the national average of 81 kilometres in Andhra Pradesh, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Madhya Pradesh, and Rajasthan, while Kerala had a road length more than four times the national average.

It is noteworthy that states like Kerala, Delhi, and Goa have consistently performed better than other states in all aspects of support infrastructure. This is also refl ected in their superior performance in outcome indicators, particularly for health and education. This consistent performance is true for SCs and OBCs residing in these states as well. Observations like these are indicative of state specifi c commitments towards social mobilization of their populace, especially the lower castes.

In addition the relatively poorer states are catching up with the better off states in terms of support infrastructure. This is refl ected in the high growth rates that these states have achieved in terms of health, education, and income indices as shown in Chapter 2 of this Report. However, the fact that the absolute levels—both in terms of support infrastructure and human development outcome indicators—still remain well below the national average, should not be ignored. Therefore, there is an urgent need for the state governments to increase their investments on these counts.

One of the important determinants of the investment climate in states is the state of infrastructure, that is, power and transport connectivity, including port to hinterland connectivity and port–rail–road interfaces.

This gives a boost to the rural economy by improving market linkages. Towards this end, rural electrifi cation through the RGGVY and rural road connectivity through the PMGSY have played a signifi cant role in triggering economic development and generating employment in rural areas.

Though relatively better off than rural India, the deplorable state of urban infrastructure cannot be ignored. The urban population, estimated to be around 30 per cent of the total population in 2011, is expected to contribute 65 per cent to the country' s GDP. Therefore, improving their productivity is essential to achieve the high growth targets. Higher productivity in urban economic activities in turn depends upon the availability of good quality infrastructure services like transportation, power, water supply, and telecommunications. As a part of its commitment to meet the MDGs, the Government of India aims to facilitate investments in the urban sector and strengthen the existing policies. The NIJNNURM are among the initiatives taken by the government to improve the living conditions of urban slum dwellers.

As stated earlier, the inclusion of the rural populace in the development process will require the provision of better support infrastructure. This in turn requires public investments to be scaled up in the Twelfth Five Year Plan (2012– 17), public and private investment in infrastructure will be about $1 trillion, double that planed for the Eleventh Five Year Plan. The present eff orts are in the right direction, but the challenge remains great.

8

Vulnerable Groups

INTRODUCTION

Vulnerable groups are defined as those who are subject to unfair treatment or are, relative to other age groups or sections of society, more dependent on others and therefore, find it difficult to maintain their subsistence on their own and protect their rights. Certain groups in society are also subject to discriminatory treatment and feel marginalized. They need special attention to avoid exploitation. This chapter focuses on three social groups: children (specifically those in the workforce), senior citizens, and the physically and mentally challenged. These groups are considered particularly important since:

1. Children are the future of any nation, and large numbers of children in the workforce at present implies fewer educated or skilled workers in the future. A high percentage of child labour also implies loss of welfare to society, as more young children have to enter the labour market.
2. Any society will consist of those citizens who are physically and/or mentally challenged. Some of them are born so, while others are in this condition due to accidents or illness. They too require support, both to play a meaningful, albeit limited, role in society (if possible), but above all, to live with dignity.
3. Senior citizens have worked during their younger days to support their families and contribute to building society, as it exists today. Surely, society owes them a decent living in their later years. This is particularly so as joint families are splitting up and traditional support systems to this cohort of the population are eroding.

This chapter throws light on the nature and issues concerning these vulnerable groups, that is, child labour, the differently-abled, and the elderly; and their development over the last decade.

The section on child labour analyses the magnitude of the problem, and looks into the inequalities across states, dissimilarities among social groups (SCs and STs) and the variations across religious groups. The major findings of the section are described briefly below.

Child Labour

- Child labour has fallen sharply, but around five million children are still working
- Children who are neither working nor attending schools (that is, nowhere children) are four times as many as child workers
- Gender disparity has declined, now fewer girls than boys are working, but girls figure more among the nowhere children
- Child labour among the SCs/STs has fallen, but is still higher than the national average. Child labour is higher among Muslims and the pace of decline is slow
- Child labour remains concentrated in four states
- Across sectors, child labour is predominant in agriculture followed by manufacturing.

The next section is on the differently-abled. It discusses measurement of disability and then describes the

prevalence of various kinds of disabilities. It also examines the educational and employment status of differently-abled persons along with the status of their living conditions. Its major findings are:

The Differently-abled

- The differently-abled have increased in absolute numbers, though the incidence remains more or less unchanged.
- Among the type of disabilities, the prevalence of locomotor disabilities is the highest followed by visual and hearing disabilities.
- Disability from accidents and non-communicable diseases is expected to increase.
- The differently-abled have a low literacy rate and high unemployment rate. Employed differently-abled are mostly self-employed or casual workers in the primary sector.
- There is a very large unmet need for professionals to help the differently-abled.

The last section examines the issues and concerns of the elderly and looks at the policy initiatives taken by the Government. The major findings of this section are:

The Elderly

- The share of elderly is rising and is expected to cross nine percent in 2016 and 10 per cent in 2021 from 7.5 per cent in 2001.
- There is an increasing gender gap: there is a escalation in female share of elderly.
- Very few of the elderly are covered under pension/insurance schemes, because of having worked in the unorganized sector.
- Their major healthcare needs remain unmet.

The multi-dimensional problems of these groups have a weak relationship with each other, but the underlying factors are very strongly intertwined. The factors impact the vulnerable groups in different ways, which are discussed in their respective sections along with the policy issues and initiatives taken by the Government.

While discussing issues of child labour, the differently-abled or the elderly, the biggest restriction is the availability of data. Without detailed or comprehensive data sources, the scope to deal with these issues is really very limited. In India, there are no comprehensive and updated data sets available related to these issues. Because of this, data with more than three to six years lag has been used in this chapter. Each section explains the data sources used while examining the issue.

CHILD LABOUR

A child is classified as a labourer if the child is in the age group 5–14 years and is 'economically active'. As per the ILO and Census of India (2001), a person is treated as economically active or gainfully employed if he/she does work on a regular basis for which he or she receives remuneration or if such labour results in output for the market. A large proportion of the world's child labourers live in India.

Magnitude: *Child Labour Sharply Dips*

There has been no comprehensive child labour survey in India to examine the depth of the problem. Although, the Census of India and NSSO capture a wide range of data such as nature of work, status and sector of employment, these estimates are mostly based on Labour Force Surveys. The major problem is that various types of work performed by children are not covered under the definition of 'work' adopted by these surveys[1] (Satpathy *et al.* 2010).

According to the latest available estimates from NSSO (2007–8), around five million children are economically active in the labour market, and account for more than two percent of the total child population of India in the age group 5–14 years. This proportion was more than three per cent in 2004–5 and more than six per cent in 1993–4 (Table 8.1), which was equal to nine million children in 2004–5. According to the Census of India, there were 5.4 per cent (11.28 million) and five per cent (12.6 million) child workers in India in 1991 and 2001 respectively[2] (Census 1991 and 2001). Thus the share of working children has been declining in all the states, and

[1] For example, a child engaged in household chores or sibling care is not considered a worker under these surveys.

[2] NSSO and Census of India deploy different definitions for child labour. According to NSSO, if a person works for more than 182 days in the reference year, it is considered as 'Usual Principal Activity Status (UPS)' and if he/she works for a shorter time, it is considered as 'Usual Subsidiary Activity Status (USS)'. Combining both the activity statuses makes it 'UPSS'. The Census defines a person as a 'main worker' if he/she spends 180 days or more in a year engaged in economic activities, and defines a 'marginal worker' as a person who works less than 180 days, these two together

decreased rapidly between 1993–4 and 2007–8 (Table 8A.1).

Nowhere Children: There are four times as many NWC as child workers

In addition to the population of child labourers, there is also the population of Nowhere Children (NWC). Nowhere children are children in the age group 5–14 years, who are categorized neither as child labourers nor as students enrolled or attending schools. This comprises children who, though generally working, are not counted as part of the workforce because of the sporadic nature of their engagement in the labour market. They are usually children who do not attend school for one reason or another, but are not in the labour market either. Girls who stay at home to look after younger siblings would account for a significant share of these children (Mehrotra and Biggeri 2002 and 2007). It is precisely for this reason that it is critical to ensure that special incentives are available to enable girls to continue their education to upper primary school and even beyond. In this context, the state of Bihar has achieved remarkable success in increasing girls' enrolment as well as retention after the Government of Bihar initiated a scheme in the last few years to give a cash transfer (to enable households with school-going age girls) to buy bicycles for girls so that they could continue in school.

Some of the NWC also work on the family farms. Most perspectives on child labour have significantly left out the large numbers of children working in agriculture and allied activities, either for an employer on a wage basis or having been trafficked to faraway, unfamiliar workplaces (NCPCR 2008).

Girls figure more among nowhere children

According to the NSSO (2007–8) estimates, the proportion of NWC to total child population (in the age group 5–14 years) is little over 13 per cent,[3] whereas the incidence of NWC was 25.6 per cent in 1993–4 (Figure 8.1). It has significantly declined in recent times, which clearly indicates the achievement of the SSA programme to bring NWC into the school/education system. As opposed to gender disparity in child labour, the proportion of girls who are neither working nor going to school is higher than that for boys. This is because girls are expected to perform more household chores and also to provide seasonal labour on farms.

According to the NSSO 1993–4 figures, the nowhere ratio for girls is higher vis-à-vis boys for all the states except Himachal Pradesh.

The percentage of NWC has always been greater in rural areas than in urban areas. However, the incidence of child labour along with NWC has also shown a downward trend both in rural and urban India during the period 1993–4 to 2007–8 (Table 8.1). Over time, the rural-urban gap is also decreasing.

Analysis across the states shows that in 2007–8, the percentage of NWC was highest for Bihar (28 per cent) followed by Rajasthan (17 per cent), Uttar Pradesh (17 per cent), Jharkhand (15 per cent) and Orissa (14 per cent),

Table 8.1 Child Workforce Participation Rate (Percentage), 1993-4, 2004–5, and 2007–8

Area	*1993–4*			*2004–5*			*2007–8*		
	Boys	*Girls*	*Children*	*Boys*	*Girls*	*Children*	*Boys*	*Girls*	*Children*
Rural	6.8	7.8	7.3	3.5	3.7	3.6	3.0	2.2	2.6
Urban	3.5	2.7	3.1	2.6	1.9	2.3	1.9	1.2	1.6
Combined	6.2	6.0	6.2	3.3	3.3	3.3	2.7	2.0	2.4

Source: NSSO 1993-4, 2004–5 and 2007–8.

constitute 'all workers' in a given year. In this chapter, both concepts of 'UPSS' as defined by the NSSO, and 'all workers' as defined by the Census have been used to define 'child labour'. Estimates of the work participation rate among children are, however, fairly close across the two sources for main workers.

[3] It is very close to the proportion of out of school children (15 per cent) in this age group. (For further discussion, please refer to Chapter 6 on 'Education').

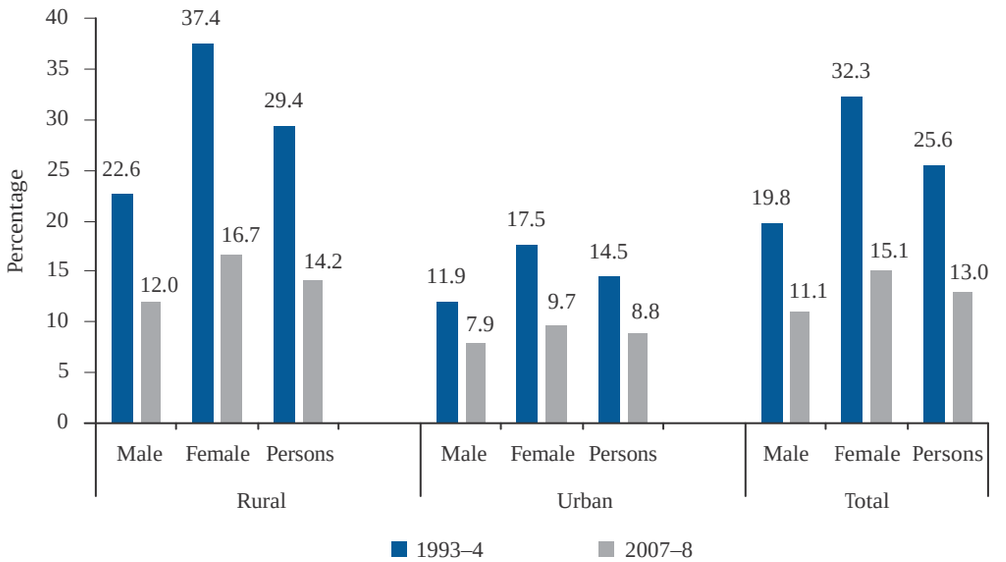

Figure 8.1 Nowhere Children as a Percentage of Total Child Population in India, 1993–4 and 2007–8

Source: NSS 50th and 64th Rounds.

Table 8.2 Aggregate Percentage of Working and Nowhere Children in India

Area/Year	1993–4	2007–8
Rural	36.7	16.8
Urban	17.6	10.4
Combined	31.8	15.4

Source: NSSO 1993-4 and 2007–8.

the states with the most dysfunctional government school system and having a high proportion of out of school children,[4] and lowest for Tamil Nadu (2 per cent), Kerala (3 per cent), Himachal Pradesh (4 per cent), Andhra Pradesh (6 per cent), and Uttarakhand (7 per cent)—the states with a better governed school system (Table 8A.2).

The state level information for 1993–4 reveals that NWC account for nearly 44 per cent of the total children (close to 55 per cent for girls) in Bihar, and close to 35 per cent in Uttar Pradesh, and Madhya Pradesh (Table 8A.2). However, looking at the relative positions across states for NWC, some states like Andhra Pradesh, Tamil Nadu, Assam, Madhya Pradesh, and Gujarat have improved their relative positions in 2007–8 as compared to 1993–4.

Child labour remains concentrated in four States

There are large variations across the states in their share of child labour in absolute terms. Uttar Pradesh has the highest child labour population followed by Andhra Pradesh, Rajasthan, and Maharashtra. In 2004–5, these four states accounted for 54 per cent of the total child labour population in India.[5] Uttar Pradesh alone contributes close to one-fourth of the child workforce, while Andhra Pradesh, Rajasthan, and Maharashtra contribute 13 per cent, 9 per cent, and 9 per cent, respectively.

Among the major states, child labour has declined in absolute terms over time in Andhra Pradesh, Madhya Pradesh, Kerala, Maharashtra, Karnataka, Gujarat, Orissa, and Tamil Nadu. All these states have shown remarkable improvement in their school attendance rates. In the case

[4] State-wise analysis of out of school children is given in the Chapter 'Education' of this Report.

[5] These four states account for around 40 per cent of the child population of India (in the age group 5–14 years). The proportion of the child population (in the age group 5–14 years) for Uttar Pradesh, Andhra Pradesh, Rajasthan, and Maharashtra are 18.65 per cent, 7 per cent, 6 per cent, and 8.5 per cent, respectively.

of Andhra Pradesh, one of the major factors for the decline in child labour was the increase in school attendance ratio by 25 per cent between 1991 and 2001, which had a feedback loop effect in reducing child labour.

The highest percentage of working children in 2007–8 was recorded in Andhra Pradesh (4 per cent), and the lowest percentage was in Kerala (0.3 per cent) (Table 8A.1). States such as Andhra Pradesh, Rajasthan, Orissa, Uttar Pradesh, and West Bengal have a high incidence of child labour. Unexpectedly, poor states like Assam, Bihar, Jharkhand, and Madhya Pradesh showed a decline in the proportion of child labour (Table 8A.1). In these states, work force participation rates for adults are low, reflecting low employment opportunities within the states (Satpathy *et al.* 2010).

Gender Disparity: Less girls now working than boys

In India, boys are economically more active in the labour market than girls. The gender gap for working children was apparent in 1993–4 (with 6.2 per cent male and 6.0 per cent female), which came down in 2004–5 (with 3.3 per cent male and 3.3 per cent female child workers). However, the latest estimates of the NSSO (2007–8) show that the gender gap is increasing again (with 2.7 per cent male and 2.0 per cent female) (Table 8.1).

As regards child labour in rural and urban areas (Table 8A.3 and 8A.4), the gender gap in the child workforce participation turned against the girl child for rural India in 2004–5, with the percentage of working girls being higher than boys. However, the recent estimates of the NSSO (2007–8) present a different picture, where the proportion of female child labour has fallen more rapidly than male child labour between 2004–5 and 2007–8 (Table 8.1). As a result, the incidence of child labour among girls was lower than for boys in 2007–8. This decline was more pronounced in rural India. This is the result of various policy initiatives, like the Sarva Shiksha Abhiyan, taken up by the central and state governments and also support from NGOs and other civil society organisations. As highlighted in the 'Education' chapter of this Report, various incentives like providing schools within a specified distance, free bicycles, books, uniforms, and mid-day meals have impacted positively on girls' enrolment in schools. As we noted in Chapter 6, there is near complete gender parity at primary level, and girls' enrolment has also increased at upper primary level.

A state-wise analysis shows a mixed picture. Some states have a lower proportion of girl child labour than boy child labour, and the scenario is the opposite for the rest of the states. Kerala, Delhi, Assam, Bihar, Goa, Tamil Nadu, and Uttarakhand[6] had the least proportion of girl child workers in 2004–5, whereas states like Andhra Pradesh (7.1 per cent), Rajasthan (6 per cent), Chhattisgarh (5.6 per cent), Karnataka (5 per cent), and Orissa (4.5 per cent) had a higher proportion of girl child labour than boy child labour.

Some states have shown a divergence from the national trend of declining girl child labour. For instance, Haryana, Rajasthan, Himachal Pradesh, Madhya Pradesh, Maharashtra, and Tamil Nadu have seen a higher participation of the girl child in the workforce as compared to their male counterparts (Table 8A.1).

SC/ST child labour drops, but is still higher than the national average

The incidence of working children among SCs and STs was higher than the average for all social groups which is again a reflection of the government school system is absorbing them. According to NSSO (2004–5 and 2007–8), children from STs are twice as likely to work as child labour than the children from the upper castes (Figure 8.2). However, it is important to note that the fall in child labour was faster among SCs and STs compared to OBCs and 'Other' castes for the first half of the decade. After that, the decline in child labour became stagnant for SCs and STs, and a very marginal dip has been observed for OBCs and 'Other' social groups. The STs largely live in forests, and remote and hilly areas, from where it takes longer than the average time to reach schools. To see a significant decline in child labour for the SCs and STs, there is need for concerted efforts like the 'Lok Sampark Abhiyan' started by the Madhya Pradesh government in the late 1990s, which should be facilitated by the government and NGOs, especially for states that have a high concentration of STs and SCs.

[6] The workforce participation rate in the Kerala, Delhi, Assam, and Bihar is less than one per cent for girl child labour, whereas Goa, Tamil Nadu, and Uttarakhand have a workforce participation rate of less than two per cent for girl child labour.

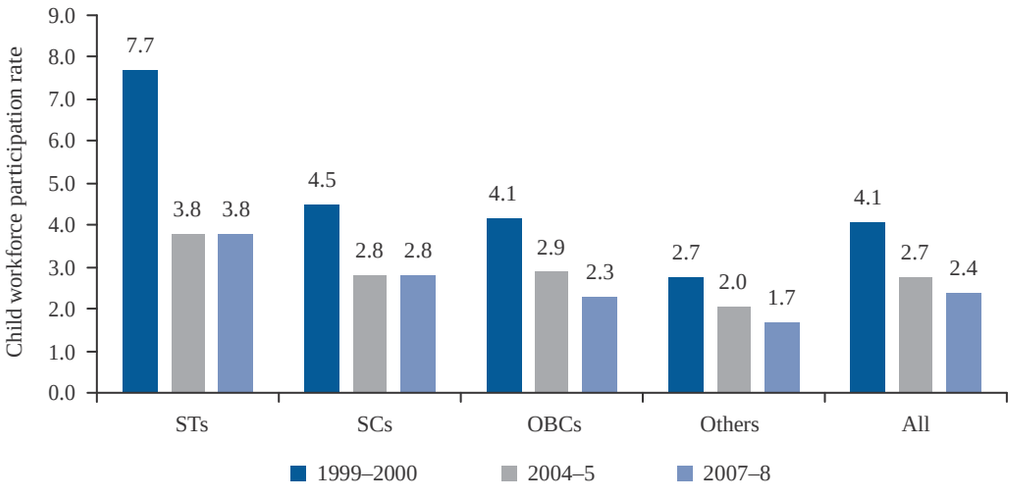

Figure 8.2 Child Workforce Participation Rate by Social Groups

Source: Derived from NSS Unit level data of 61st Round and 64th Round.

Across states, the percentage of working boys is higher both for SCs and STs except for a few states (Andhra Pradesh, Himachal Pradesh, Madhya Pradesh, Maharashtra and Rajasthan for STs; and Haryana, Jharkhand, Orissa, and Rajasthan for SCs) in 2004–5 (Tables 8A.5).

Child labour is higher among Muslims with a slow pace of decline

Among the major religious groups, Muslims had the highest child workforce participation rate (Figure 8.3). Among Muslims, the child workforce participation rate (3 per cent) was higher than the national average (2.4 per cent) in 2007–8. Child labour among the Hindus declined from 4.2 per cent in 1999–2000 to 2.3 per cent in 2007–8, whereas child labour among Muslims declined from four per cent to only three per cent during the same period (Table 8A.6). This is a reflection of the slower improvement in the literacy rate and net attendance rate in schools among Muslims for the same time period. Figures from Chapter 6 (on 'Education') clearly bring out the low literacy rate, high percentage of 'out of school children' and very low net attendance rate, particularly for Muslim girls. The net attendance rate among Muslim girls declines very sharply after the primary level and dips to as low as 24 per cent at the secondary level for rural areas. The trend is similar for Muslim boys, which results in stagnation in the proportion of child labour among Muslims.

Technology too has an impact on child labour. Small-scale trade/industry largely uses traditional technologies. The possible reason for the slower pace of decline in child labour among Muslims is their historically larger engagement as households in industries like carpet weaving, which use traditional methods where children are in demand because of the so-called 'nimble fingers' factor. However, modern technology has the potential to replace child labour in these trades. Similarly, in other trades/sectors, technology can also help reduce the dependency on child labour, because it requires more skilled labour. Hence, adult skilled labour can substitute for child labour. For instance, the green revolution in India led to reduced child labour and increased school attendance. By implication, changes in technology can have a profound impact on the incidence of child labour. Parents using these technologies are more likely to appreciate the benefits of education (Grootaert and Kanbua 1995).

Sectoral Distribution: Agriculture predominant, followed by manufacturing

A majority of the child labour in India is engaged in agriculture, which accounts for more than half of the total child labour. The manufacturing sector is the next biggest employer of child labour in India, followed by trade and hotels, community and social services, and construction. Figure 8.4 illustrates the distribution of child labour.

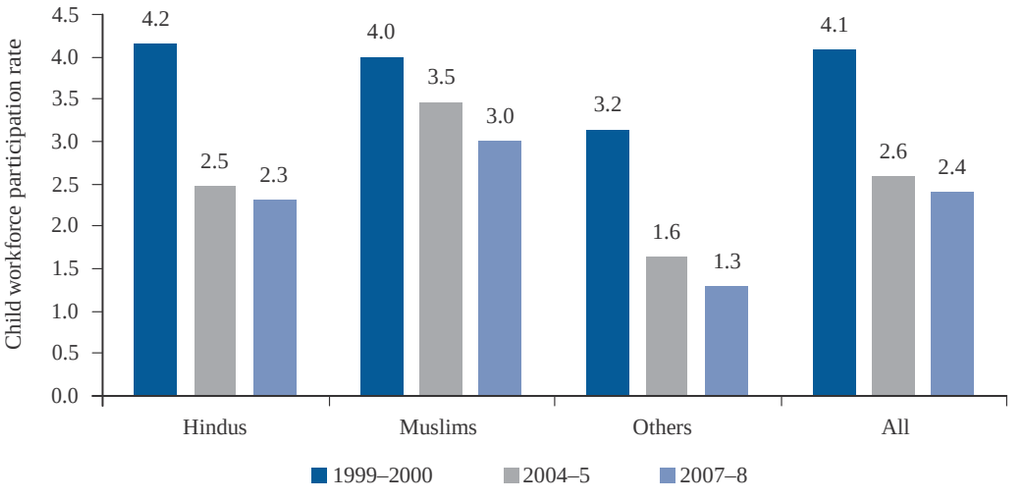

Figure 8.3 Child Workforce Participation Rate by Religious Groups

Source: NSS 55th, 61st, and 64th Round.

The analysis of the state-wise sectoral distribution of child labour reveals that the agriculture sector employed the majority of child labour across the states in 2004– 5. However, there are a few states, where the sectoral distribution for child labour is diff erent. For instance, Kerala, Tamil Nadu, West Bengal, and Uttar Pradesh have a large share of child labour in the manufacturing sector[7] (ranging from 25 per cent to 45 per cent compared to the all India fi gure of 17 per cent), while Delhi and Kerala employ the majority of their child labour in the trade and hotel sector (58 per cent and 32 per cent, respectively compared to the all India fi gure of 9 per cent) and community and social services sector (31 per cent and 16 per cent, respectively as compared to the all India fi gure of 3 per cent) (Table 8A.7).

Migration from rural areas to urban areas too has had an impact on child labour. The migration of adults, particularly of males, from households results in an additional burden on the women as, apart from their normal duties like fetching water and fi rewood, they have to take on the duties usually performed by males. This phenomenon has led to the increasing feminization of agriculture and pressurizes women into taking the children with them to the fi elds. Hence, children who should be going to school, end up helping the women on the farm even though schooling opportunities have grown.

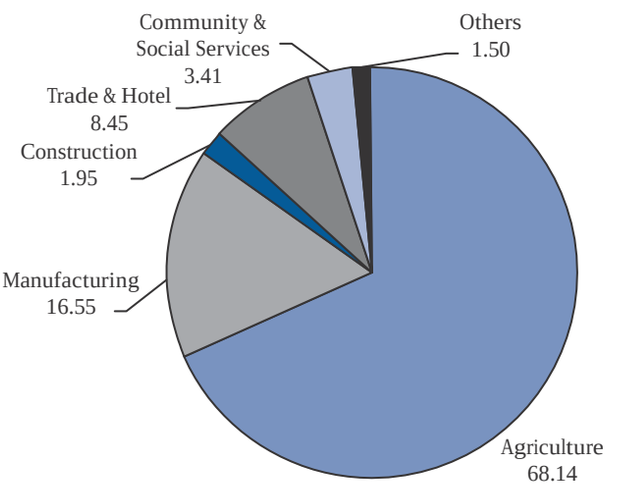

Figure 8.4 All India Distribution of Child Labour by Sector of Employment, based on NSSO Estimates, 2004–5

Source: NSS 61st Round.

This is one of the major reasons why the problem of child labour is more prevalent in rural areas than in

[7] In each of these states, there are few specifi c trades/businesses, which are concentrated/clustered in some particular areas. For instance, carpet weaving and glassware in Firozabad, locksmiths in Aligarh, and brassware in Muradabad of Uttar Pradesh; similarly jute and weaving in West Bengal and cracker manufacturing in Shivkashi of Tamil Nadu. In Uttar Pradesh and West Bengal, the incidence of child labour among Muslims is high vis-à-vis other communities.

urban areas. The proportion of child labour in rural areas was 2.6 per cent in comparison to 1.6 per cent in urban areas in 2007–8—and given that 72 per cent of India's population lives in rural areas, the absolute number of child labourers in rural areas is quite significant. The corresponding figures for the year 2004–5 were 3.6 per cent and 2.3 per cent, respectively. However, the rural–urban gap has reduced over time. Another issue of concern is the sustained inflow of children from rural areas coming to urban areas in search of employment opportunities, which has resulted in a higher number of child labourers (in absolute terms) in urban India.

A third of all child workers were in hazardous occupations

Despite stringent legislation to stop child labour, especially in hazardous industries, children are still working in significant numbers in these industries. The Registrar General of Census has published data on the occupation-wise distribution of children in the age group 5–14 years working in the non-agricultural sector. The Working Group on Child Labour for the Eleventh Five Year Plan has done a tentative segregation of data into hazardous and non-hazardous occupations. However, the classification of occupations in the Census data does not exactly match the occupations listed as hazardous[8] under the Child Labour (Prohibition & Regulation) Act. About 3.64 million children in the age group 5–14 years are working in the non-agricultural sector in the country, of which 1.22 million (33.47 per cent) are working in hazardous occupations. The distribution of children in different hazardous occupations is given in Figure 8.5. About 53 per cent of the total number of children working in hazardous occupations is employed in the *pan*, *bidi*, and cigarette industry, and in construction and as domestic help.

Issues and Determinants of Child Labour

A number of factors have been found to influence the extent of child labour. These factors can broadly be categorized into two groups, that is, demand side and supply side. These factors affect child labour through various mechanisms/channels. Some of them are illustrated below.

Demand side factors:

- Labour Market Inefficiencies

  Low paying and low quality work for adults compel households to send children out to earn, thus supporting the family. These children command lower wages. *Child labour* participation is inversely proportional to wage inequality between adults and child labourers, that is, the *lower the difference* between adult and child wages, the *less likely* that children will substitute for adults (Contreras 2007). Effectively implemented minimum wages for adults can thus, in principle, deter child labour.

  The large share of the unorganized sector becomes a reason for drawing children into the workforce,

[8] The Government has issued a notification to include children working as domestic workers and in dhabas/restaurants, hotels, and so on, in the list of hazardous occupations w.e.f. 10 October 2006. In the last decade, the number of hazardous processes listed in the Schedule of the Act has increased from 18 to 65, and hazardous occupations from 7 to 16. The list of hazardous occupations is as follows:

1. Transport of passengers, goods, or mails by railways;
2. Cinder picking, clearing of an ash pit, or building operation in the railway premises;
3. Work in a catering establishment at a railway station, involving the movement of a vendor or any other employee of the establishment from the one platform to another or in to or out of a moving train;
4. Work relating to the construction of a railway station or with any other work where such work is done in close proximity to or between the railway lines;
5. A port authority within the limits of any port;
6. Work relating to selling of crackers and fireworks in shops with temporary licenses;
7. Abattoirs/slaughter Houses;
8. Automobile workshops and garages;
9. Foundries;
10. Handling of toxic or inflammable substances or explosives;
11. Handloom and power loom industry;
12. Mines (underground and under water) and collieries;
13. Plastic units and fibre glass workshops;
14. Domestic workers or servants;
15. Dhabas (roadside eateries), restaurants, hotels, motels, tea shops, resorts, spas, or other recreational centres; and
16. Diving.

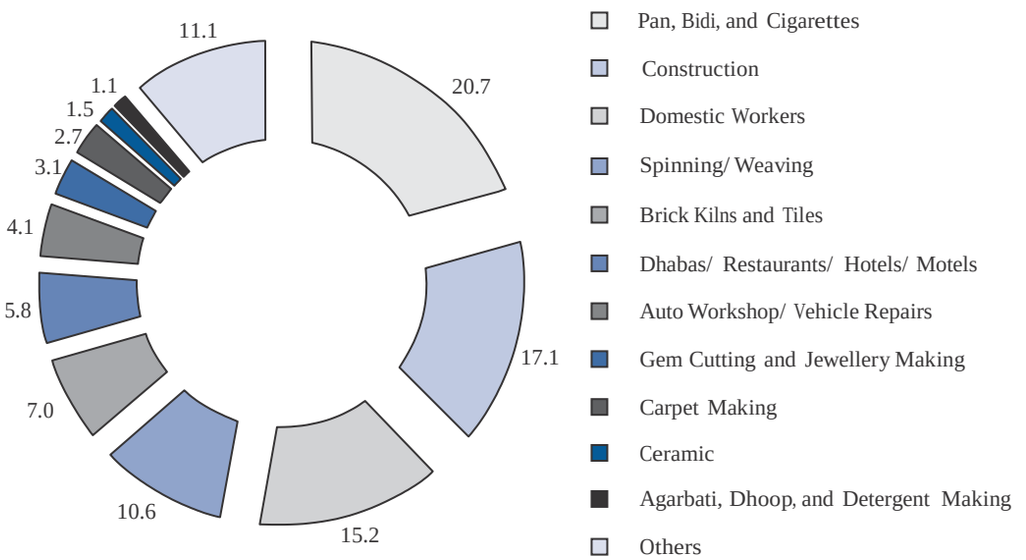

Figure 8.5 Distribution of Child Workers Engaged in Hazardous Occupations in India as per the Census 2001

Source: Report of the Working Group on Child Labour for the Eleventh Five Year Plan, Government of India, Planning Commission, New Delhi.

since exit and entry are difficult to monitor there. The unorganized sector accounts for around 93 per cent of the labour force.

Poor working conditions, such as the lack of safety and unrestricted working hours, results in adults quitting some jobs, which are fi lled by children.

- Technology: Some traditional trades draw in child labour; for instance, employment of boys in mines (because the tunnels are too small for adults to crawl through). Similarly, there is the so-called requirement of nimble fi ngers for traditional carpet weaving (Self and Grabowski 2009 and Grootaert and Kanbur 1995).

Supply side factors:

- *Poverty*: It is a compelling cause for child labour (Basu *et al.* 1998).
- *High fertility rate*: A household with more children is much more likely to send a child to work than a household with fewer children (Grootaert and Kanbur 1995). In cases where the household is large, older girl children have the responsibility of taking care of the younger siblings. Some states which have a high total fertility rate[9] (Bihar, Uttar Pradesh, Jharkhand, Rajasthan, Madhya Pradesh, and Chhattisgarh), also have a high incidence of child labour and NWC.
- *Non-responsive education system*: Schools are not able to attract and retain children in schools. As highlighted in the ' Education' chapter, the poor quality of school infrastructure, lack of teachers, and high teacher absenteeism have resulted in high dropout rates. Also, the failure of the education system to provide enough employment opportunities has led many parents to view work as the preferred option for their children.
- *Poor access to fi nancial services*: Non-availability of credit for school education can adversely aff ect invest- ment in children as it eff ectively reduces household incomes (Chakrabarty and Grote 2009, Endmonds and Sharma 2005).

Policy Issues

Policies that reduce wage distortions between adult and child labour; eff ective minimum wage laws (which will lead to an increase in adult incomes), improved working conditions, increased parental human capital through

[9] For further discussion on Fertility Rate in the states, please refer to Appendix table number 5A.22 of Chapter on ' Health and Demography' .

adult literacy programmes and vocational training and improved credit access will have a positive spillover effect on child development, and thus deter child labour in principle. Measures and initiatives, such as 'Social Labelling' or 'Codes of Conduct', have been proposed and developed in the recent past to curb child labour (Chakrabarty and Grote 2009).

Special emphasis should be given to fertility reduction—

the prerequisites for which were all presented in Chapter 5. Chapter 6 makes the case for reducing the costs of school attendance, along with a combination of school attendance with part-time work, which work will be more feasible for poor households to sustain themselves. Basu (2003) emphasizes that child labour should gradually be eliminated as a result of the trickle-down effect of growth,

because reducing child labour by imposing a complete ban/prohibition may not increase child welfare. But much more important is the effective implementation of the Right to Education Act, as Chapter 6 in this Report rightly argues.

Policy Initiatives

The Government of India has been adopting various measures to tackle the problems related to child labour. Based on the Gurupadaswamy Committee's recommen- dations, the Child Labour (Prohibition & Regulation) Act was enacted in 1986. The Act prohibits the employ- ment of children below 14 years in hazardous occupations and processes, and regulates the working conditions in other occupations. The list of hazardous occupations[10] and processes is progressively being expanded on the recommendations of the Child Labour Technical Advi- sory Committee constituted under the Act. Any person who employs a child in contravention of the provisions of Section 3 of the Act is liable for punishment with imprisonment for a term, which shall not be less than three months, but which may extend to one year or with a fine, which shall not be less than Rs 10,000, but which may extend to Rs 20,000, or both.

The Government of India has adopted a holistic approach to eliminate child labour from the country in a phased manner, beginning with children working in hazardous occupations and progressively covering the children working in other occupations. The government's strategy to eliminate the problem of child labour involves the strict enforcement of the existing Act with simultaneous efforts for the rehabilitation of both parents and children through linkages with poverty eradication and income generation programmes (Government of India 2005).

In India, a blanket ban on all kinds of child labour has not been enforced. This is because working children are from poor families and such a ban, without providing an alternate means of financial support, is likely to

punish parents who are already trapped in the vicious circle of poverty. In consonance with the above approach, the National Policy on Child Labour was formulated in 1987. The Policy seeks to adopt a gradual and sequential approach, with a focus on the rehabilitation of children working in hazardous occupations and processes in the first instance. It envisages a legislative action plan, convergence of general development programmes to benefit children wherever possible, and a project-base plan of action for the launching of projects for the welfare of working children in areas with a high concentration of child labour.

In order to translate the above Policy into action, the government launched the National Child Labour Project (NCLP) Scheme in 1988 to rehabilitate working children, beginning with 12 child labour endemic districts of the country. NCLP has been the Government of India's single largest project-based and action-oriented

programme to eliminate child labour. Under the Scheme, working children are identified through a child labour survey, withdrawn from work and put into special bridge schools. Yet the progress so far is not satisfactory. Till date, only 4 lakh[11] (that is, 0.4 million) child labourers in the country have been rehabilitated under this Project though crores[12] of rupees have been spent. Many districts do not show any signs of eradicating child labour even now, so many years after the implementation of NCLP. The selection of districts has also been biased to some extent in the sense that many child labour endemic districts were covered very late under NCLP (Satpathy *et al.* 2010).

The Supreme Court of India has taken a proactive role in addressing the problem of child labour. The programme received a major thrust with the Supreme Court's

[10] The list of hazardous process and occupations and information related to its expansion has been discussed in Footnote 5 of this chapter.
[11] 1 Lakh = 0.1 million.
[12] 1 Crore = 10 million.

Box 8.1 ILO-IPEC

The International Programme on the Elimination of Child Labour (IPEC) is a global programme launched by the International Labour Organization (ILO) in December 1991. India was the first country to join when it signed a Memorandum of Understanding (MoU) with ILO in 1992. IPEC's long-term objective is to contribute to the effective abolition of child labour. Its immediate objectives are:

- To enhance the capability of ILO constituents and NGOs to design, implement, and evaluate programmes for child labour;
- To identify interventions at community and national levels which could serve as models for replication;

and

- To create awareness and social mobilization for securing the elimination of child labour.

At the international level, IPEC has a Programme Steering Committee consisting of representatives of the ILO, donors, and participating countries. At the national level in India, there is a National Steering Committee and the Chairman of this Committee is the Secretary, Ministry of Labour and Employment. This Committee is tripartite in composition with representation from NGOs as well. Currently, there are three projects in the country under this programme, namely, the INDUS Project, Andhra Pradesh Phase-II and the Karnataka Project.

Source: Ministry of Labour and Employment, http://labour.nic.in/ilas/indiaandilo.htm

landmark judgment in December 1996 in the case of *M.C. Mehta* v. *State of Tamil Nadu*. The Supreme Court gave certain directions regarding the manner in which children working in hazardous occupations were to be withdrawn from work and rehabilitated, as also the manner in which the working conditions of the children employed in non-hazardous occupations were to be regulated and improved upon. The Supreme Court has since then been continuously monitoring the directions issued in this judgment. Based on the reports received from the state/UT governments, the Ministry of Labour and Employment has been regularly filing affidavits to apprise the Supreme Court of the progress in this regard. A Child Labour Cell has been formed in most of the states to implement the directions of the Supreme Court. This Cell has also been instrumental in monitoring the Scheme. The progress of implementation of the NCLP Scheme is monitored in the Ministry through the prescribed periodic reports and regular visits from the officials of the Ministry, State Government, and Audit Departments.

Initially, the NCLP Scheme covered children working in the hazardous occupations/processes in the age group 5–14 years, but after the launch of the SSA in 2001–2, this Scheme was confined to children in the age group 9–14 years. At present, children in the age group 5–9 years are covered under SSA. During the Tenth Five Year Plan, this Scheme was extended over 250 districts. The Working Group on Child Labour for the Eleventh Five Year Plan stated that

- There is a need to cover all children engaged in hazardous sectors across the country under the NCLP Scheme during the Eleventh Plan.
- The Government's approach to their rehabilitation, apart from education, should also include providing vocational skills, which could help them earn a livelihood later in their lives.
- Experience of implementing the INDUS Project (Indo-US Child Labour Project) has shown that there is also a great need to provide employable vocational skill training to adolescents to prepare them to enter the workforce with skills. It has also shown that providing vocational skills to this age group would also attract families with child labourers to positively change their behaviour and withdraw their young children from work and motivate them to complete their primary education and then acquire technical skills.

The National Commission for the Protection of Child Rights (NCPCR) was set up in March 2007 under the Commission for Protection of Child Rights Act, 2005, an Act of Parliament (December 2005). The Commission's mandate is to ensure that all laws, policies, programmes, and administrative mechanisms are in consonance with the child rights perspective as enshrined in the Constitution of India and also the UN Convention on the Rights of the Child.

The Commission visualizes a rights-based perspective flowing into national policies and programmes, along

with nuanced responses at the state, District and Block levels, taking into account the specifi cities and strengths of each region. The Commission sees an indispensable role for the state, sound institution-building processes, respect for decentralization at the community level through local bodies and larger societal concern for children and their well-being.

The Commission also recommends broadening the defi nition of child labour and making it more inclusive. It must consider all children in the workforce, whether the work done is paid or unpaid, part of family labour or for an outside employer, whatever the working conditions imposed on the child. From a rights-based perspective all forms of work are bad for children and there can be little scope for compromise on this issue.

THE DIFFERENTLY□ABLED

Inclusive development must include all the sections of society, particularly the vulnerable groups and weaker sections. Disability, whether mental or physical, may be either a congenital condition or because of accidents or illness. The diff erently-abled require support, both to be able to contribute to society (if possible), albeit in a limited manner, but above all, because they too deserve to live with dignity.

Official estimates of disability in India (Census 2001 and NSSO 2003)[13] are low (around 2 per cent), while alternative estimates using more inclusive defi nitions[14] suggest a higher incidence of disability (at least 5– 8 per cent). The Government of India' s Eleventh Five Year Plan acknowledges that at least 5– 6 per cent of the population has disabilities. WHO' s estimates of India' s diff erently-abled population are considerably higher.

This section will present the distribution of the diff erently-abled across India, followed by information on the prevalence of various kinds of disability, the educational and employment status of the diff erently-abled, as well as the status of their living conditions. Present and future human resource requirements in terms of trained personnel for the diff erently-abled population have also been discussed as well as policies and preventive interventions.

Nature and Magnitude: *Increase in absolute numbers, while incidence remains similar*

Disability refers to any restriction or lack of ability in the manner, or within the range, considered normal for a human being. The measurement of the prevalence of disability has always been an issue of debate. There are two kinds of sources available to provide information on the magnitude of disability across the world, i.e. Censuses and surveys. Censuses and surveys take very diff erent approaches to measuring disability. ' The heterogeneity of the conceptual framework and insufficient recognition of the importance of indicator accuracy, the age factor and the socio-economic characteristics of the studied populations impede reliable international comparison' (Mont 2007).

An international comparison of the magnitude of disability for various countries based on both Censuses and surveys shows that developed countries have a higher prevalence of disability as compared to developing countries. Mont (2007) says that developing countries tend to report the lowest rates of disability. While some factors would lead to higher rates of disability in richer countries namely, more elderly people and higher survival rates for people with disabling conditions, whereas the wide range of factors operating in the opposite direction in developing countries for example, poor healthcare, poor nutrition, and unsafe living conditions makes the breadth of this gap highly questionable.

Prevalence of disability in India is high but its database is poor. There are only two sources which provide data on disability i.e. the NSSO and the Registrar General of India (Census of India). So far, the NSSO has carried out three special rounds of survey in 1981, 1991, and 2002. The most recent data available is from the 2002 round. The Registrar General of India included ' disability' for the fi rst time in its Census in 2001.

For a detailed analysis on disability, this Report has used NSSO estimates. Apart from the magnitude of disability in India, the NSSO estimates also provide information on various other aspects of disability, i.e. educational status, information about employment

[13] The defi nition of disability diff ers in the Census of India and NSSO.

[14] If we add less severe disabilities such as delayed learning, cerebral palsy, leprosy, mild mental illness and so on, then the number of diff erently-abled will increase. Various disabilities due to ageing are also not counted. Actual disability is higher than the empirical evidence available.

conditions, and time of onset of disability along with other relevant insights.

As per the NSSO survey, the number of diff erently-abled persons increased from nearly 12 million in 1981 to 18.49 million in 2002.[15] It increased from 1.8 per cent of the population in 1981 to 1.9 per cent in 1991, but declined to 1.8 per cent in 2002 (Tables 8.3 and 8.A.8). India has a population of approximately 2 per cent with disability, and this has barely changed in the last 20 years.

Table 8.3 Prevalence of Disabilities in India

Year	*Rural*			*Urban*		
	Male	*Female*	*Person*	*Male*	*Female*	*Person*
1981	2.0	1.6	1.8	1.5	1.3	1.4
1991	2.3	1.7	2.0	1.8	1.4	1.6
2002	2.1	1.6	1.9	1.7	1.3	1.5

Source: NSS 36th, 47th, and 58th Rounds.

Types of Disability: Prevalence of locomotor disability is the highest, followed by visual and hearing disability

The NSSO (2003) report on disabilities contains information on mentally diff erently-abled persons together with information on persons with physical disabilities. Information on mental disability is presented for those with mental retardation and mental illness. Among the physical disabilities covered in the report are visual, hearing, speech, and locomotor disabilities. Locomotor disability refers to an individual' s inability to execute distinctive activities associated with moving both self and objects from one place to another.

The prevalence of locomotor disability was the highest in the country followed by visual disability and hearing disability.

- For the period 1981 to 2002, the prevalence of locomotor disability showed an increase between 1981 and 1991. It remained steady during the period 1991 to 2002 in the rural sector but showed a very marginal dip in the urban sector.
- In the case of visual and hearing disabilities, the prevalence rate showed a decrease during the period 1981 to 2002. The decrease is more marked between 1991 and 2002, along with a decreasing rural– urban gap.
- Though the prevalence rate of speech disability declined during the two decades in each sector, the decrease was more in the rural areas.

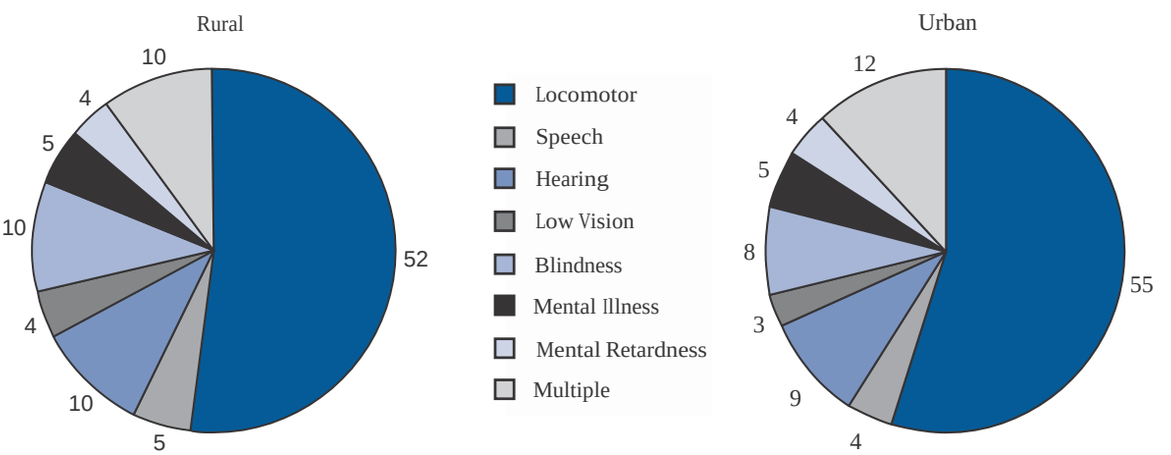

Figure 8.6 Percentage Distribution of Differently-abled Persons by Type of Disability in India

Source: NSS 58th Round.

[15] The previous two surveys were conducted during the NSS 36th round (July– December, 1981) and the NSS 47th Round (July– December, 1991). The NSS 58th Round (July– December, 2002) report contains for the fi rst time, information on mentally diff erently-abled persons together with information on persons with physical disabilities, and the age restrictions (of 5+ years) for hearing and speech disability was also done away with in this round. Information on mental disability is presented for those with mental retardation and mental illness. Therefore, the results of the 58th Round are not strictly comparable with previous rounds.

- At the same time, about 10.63 per cent of the diff erently-abled suff ered from more than one type of disability in 2002 (Figure 8.6).

Mental and speech disability usually begins at birth

Looking at the distribution of the time of onset of disability, the NSSO Report highlighted that about 84 per cent of the mentally retarded persons and 82 per cent of those with a speech disability were born with the disability. For persons with other types of disability, the disability was acquired later in life and was largely associated with older people. A defi cient intake of micronutrients such as iron, vitamin A, ribofl avin, and folic acid also lead to various kinds of disabilities. For instance, iron defi ciency causes anaemia and poor concentration, and iodine defi ciency causes mental retardation (a detailed discussion on micronutrients defi ciency is in the Chapter on ' The Right to Food and Nutrition'). The elderly are more prone to disabilities like mental illness, blindness, poor vision, loss of hearing, and locomotion. The NSSO data shows that more than 6 per cent of the elderly have at least one disability, while it is only 1.5 per cent for children below the age of 15.

Disability from accidents and non-communicable diseases to increase

Although most diff erently-abled people in India have mild to moderate disabilities, the medical causes for such disabilities are rapidly changing. It is estimated that between 1990 and 2020, half of the disabilities will be due to communicable diseases; disabilities due to injuries/ accidents will double and there will be an increase of more than 40 per cent in the share of disabilities due to non-communicable diseases. This refl ects long-term trends in fertility reduction and aging, increased road congestion, poor safety practices in the workplace, stubbornly poor nutritional outcomes, and slow progress in the reduction of communicable diseases. In terms of age of onset, there is a ' double hump' of disability onset—fi rst, shortly after birth and then in the 50– 60 year old cohort. In addition, the age profi le of disability onset varies sharply by category of disability (World Bank 2009).

The prevalence rate of disability varies signifi cantly across states. In rural areas, it ranged from 0.67 per cent in Delhi to 2.71 per cent in Himachal Pradesh while in the urban areas, it ranged from 0.52 per cent in Delhi to 2.61 per cent in Lakshadweep. In Arunachal Pradesh, the rate was only 27 per 100,000, that is, 0.027 per cent. Disability is higher among males across all the states.

Low literacy and high unemployment among diff erently-abled

Disability in India has been neglected for a long time. No serious eff ort was made by the Government of India for physical and vocational rehabilitation of the diff erently-abled. In fact, there were only a few schools for educating diff erently-abled children and most of them were located in urban areas (Sharma 2009).

The NSSO Report (2003) also mentions the poor status of education and employment of the diff erently-abled. It reported that nearly 55 per cent of the diff erently-abled in India were illiterate, against 35 per cent for the general population. Illiteracy is high across all categories of disability, and extremely so for children with visual, multiples and mental disabilities (and for severely diff erently-abled children of all categories). Similarly, the share of out of school diff erently-abled children is around fi ve-and-a-half times the general rate and around four times than that of the ST population.

Even the diff erently-abled, who are literate, do not have a very high level of education. About 9 per cent of them have completed their education up to the ' secondary level and above. Out of every 1,000 diff erently-abled persons, only 15– 35 have completed any vocational course and
74– 80 per cent of these were in the non-engineering stream. The current enrolment ratio per 1,000 diff erently-abled persons in the age group 5– 18 years in ordinary school was higher in the rural areas than in the urban areas, 475 and 444, respectively. About 11 per cent of diff erently-abled persons in the age group 5– 18 years were enrolled in special schools in the urban areas as compared to less than 1 per cent in rural areas.

The situation of employment among the diff erently-abled is very distressing in India. Only about 26 per cent of the diff erently-abled persons were employed, despite the reservation policy of employment for diff erently- abled both in the public (3 per cent) and private (5 per cent) sectors. As on 2003, only 10 per cent of the posts in the public sector had been identifi ed as ' suitable' for diff erently-abled. As a result, the share of diff erently-abled in all posts remains negligible, at 0.44 per cent. Among multinational companies, the situation was far worse,

with only 0.05 per cent of the positions being filled by the differently-abled (World Bank 2009). Around 37 per cent of differently-abled persons (age 5+) were working before the onset of their disability. Out of them, 55 per cent lost their jobs and 13 per cent had to change their work.

The employed differently-abled are mostly self-employed or casual workers in the primary sector

Looking at the distribution of the employed differently-abled as per their activity status, it is seen that the majority of differently-abled persons are either self-employed or casual workers. Of the 26 per cent who are employed, around 15 per cent are self-employed and 8 per cent are casual workers. Only 3 per cent of the differently-abled persons have regular jobs (Table 8.4).

There are very few employment opportunities for differently-abled women. Only 10 per cent of differently- abled women have jobs, where they are either mostly self- employed or casual workers.

The sector-wise distribution of differently-abled workers is quite different from the usual labour force. The majority of differently-abled persons work in the primary sector (around 56 per cent) and more than a quarter of the employed differently-abled work in the tertiary sector (around 27 per cent)—which is not very different for the shares in the primary and tertiary sectors for the whole population (Table 8.5). However, the distribution in the rural areas and the urban areas is completely different. A large proportion of differently-abled persons in the urban areas work in the tertiary sector, followed by the secondary sector and the primary sector, while their counterparts in rural areas are mostly employed in the primary sector.

Very large unmet need for professionals to help the differently-abled

Human resource development deals with creating conditions that enable people to get the best out of themselves. Rehabilitating differently-abled persons is a long process

Table 8.4 Distribution of Differently-abled* by Broad Activity Status, July–December 2002 (*per cent*)

Activity Status	*Rural*			*Urban*			*Total*		
	Male	*Female*	*Person*	*Male*	*Female*	*Person*	*Male*	*Female*	*Person*
1. Employed	36.9	10.9	26.3	34.7	8.8	23.8	36.4	10.4	25.7
(a) Self- Employed in Agriculture	16.3	2.3	10.6	14.4	2.6	9.4	15.9	2.4	10.3
(b) Self-Employed in Non-Agriculture	6.5	3.0	5.1	3.0	1.0	2.2	5.8	2.6	4.5
(c) Regular Employee	2.6	0.7	1.8	10.5	2.9	7.3	4.3	1.2	3.0
(d) Casual Employee	11.5	4.8	8.8	6.7	2.3	4.9	10.5	4.2	7.9
2. Unemployed	0.8	0.2	0.6	1.8	0.4	1.2	1.1	0.3	0.7
3. Not in Labour Force	62.3	88.9	73.1	63.5	90.8	75.0	62.5	89.3	73.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources: NSS 58th Round, Report No. 485.
Notes: * Data relates to 5 + age group.

Table 8.5 Distribution of Differently-abled Workers by Usual Activity Status in Broad Industrial Sectors, July–December 2002

Industry Sector	*Rural*			*Urban*			*Total*		
	Male	*Female*	*Person*	*Male*	*Female*	*Person*	*Male*	*Female*	*Person*
Primary Sector	667	730	678	99	137	105	548	616	560
Secondary Sector	132	117	130	303	323	306	168	156	166
Tertiary Sector	193	146	185	587	531	578	276	220	266
Total*	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

Sources: NSS 58th Round, Report No. 485.
Notes: *Includes the category 'not reported'.

and it requires early intervention, special education, vocational training, and employment. For rehabilitating the differently-abled, a team of experts is needed to help them at different stages of their development.

A major constraint in expanding the rehabilitation services in India was the lack of trained manpower. Training programmes in this field were isolated and most of these were run on an ad hoc basis. Some of them were being run by the Ministry of Social Welfare and the others by the Ministry of Labour and Ministry of Health. There was no uniformity in the teaching curriculum and syllabus (Sharma 2009).

The Rehabilitation Council of India (RCI) Act, 1992 was passed by Parliament with the main objective of improving the quality of trained manpower in the field of disability by bringing uniformity in the various training programmes being conducted in the country. At present, about 232 training institutes, including five national institutes, apex institutes, and universities are recognized by the RCI.

According to Sharma (2009) estimates, there are very few training institutes, which provide training to turn out trained personnel for handling the problems of the differently-abled at different stages. This has resulted in a huge gap between demand and supply. Till 2007, this field was suffering from a shortage of about 186,565 personnel, of which about 88 per cent, that is, 163,350 are required as teachers for different disabilities. If the outflow of training institutions remains the same, then by the end of the Eleventh Plan, there will be a shortage of 158,598 persons, which may come down to 104,531 by the end of the Twelfth Plan (Figure 8.7).

Living Conditions of the Differently-abled

Improving the living conditions of differently-abled persons is always an important concern for society and policymakers. About 13 per cent of the physically differently-abled were observed to be severely disabled as they could not take care of themselves even with aid/appliances. The situation is the worst among the mentally retarded. The NSSO Report (2002) also pointed out that even though a large majority of the differently-abled were living with their spouse and/or other family members, about 3 per cent were living alone and 5 per cent were living only with their spouse.

Although the Government of India, various state governments and NGOs (Box 8.2) have made some arrangements to improve the living conditions of the differently-abled by providing them education, vocational training, aid/appliances and corrective surgery, or government jobs, nevertheless, these arrangements help only a very small proportion, and more focused policies are required for the differently-abled in India.

Policies and Preventive Interventions

India has one of the more progressive disability policy frameworks in the developing world. The Government of India has enacted three legislations for persons with

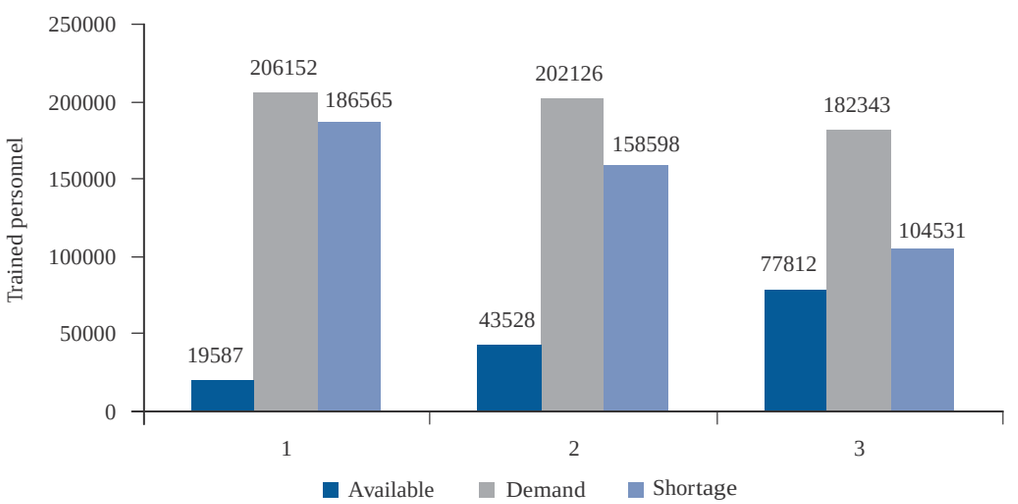

Figure 8.7 Mismatch in the Number of Trained Personnel for the Differently-abled

Source: Sharma (2009).

Box 8.2 Jaipur Foot: A Ray of Hope for the Differently-abled

The Jaipur Foot, also known as the Jaipur Leg, is a rubber based prosthetic leg for people with below the knee amputations. These were produced in 1969 for victims of landmine explosions under the guidance of Dr P.K. Sethi by Masterji Ram Chander. Now Bhagwan Mahaveer Viklang Sahayata Samiti (BMVSS), Jaipur (a formally registered society) is helping the handicapped to become mobile again by providing artifi cial limbs, polio callipers, wheelchairs, hand-paddled tricycles, and crutches. All this assistance is provided free of charge to the benefi ciaries.

The BMVSS' s main objectives is the physical, economic and social rehabilitation of the physically challenged, particularly those who have no resources, enabling them to regain their mobility, self-respect and, dignity so that they become self-reliant, normal and productive members of the community.

The Society fi ts about 20,000 artifi cial limbs and about 30,000 polio callipers, and other aids and appliances every year in their centres and through mobile camps in India and abroad. Since its inception, BMVSS has helped more than 1.1 million handicapped people to become mobile again. It has also helped more than 16,000 diff erently-abled persons from abroad.

BMVSS is the largest organization for the handicapped in the world, in terms of fi tting of artifi cial limbs and callipers and the like, for the handicapped.

Source: www.jaipurfoot.org

disabilities: (i) The Rehabilitation Council of India Act, 1992 which deals with the development of manpower for providing rehabilitation services; (ii) The Persons with Disability (Equal Opportunities, Protection of Rights, and Full Participation) Act, 1995, which provides for education, employment, creation of a barrier free environment, social security, and the like (iii) The National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disability Act, 1999 which has provisions for legal guardianship of the four categories and creation of an enabling environment for as much independent living as possible.

In addition to the legal framework, extensive infrastructure has been developed. Seven national institutes[16] are working for the development of manpower in diff erent areas. There are fi ve Composite Rehabilitation Centres, four Regional Rehabilitation Centres, and 120 District Disability Rehabilitation Centres (DDRCs) providing various kinds of rehabilitation services to persons with disabilities. There are also several national institutions[17] under the Ministry of Health & Family Welfare working in the fi eld of rehabilitation. In addition, some state government institutions provide rehabilitation services. Besides all these, 250 private institutions conduct training courses for rehabilitation professionals.

The National Handicapped and Finance Development Corporation (NHFDC), through state channelizing agencies, has been providing loans to persons with disabilities on concessional terms so that they can undertake self-employment ventures. Panchayati Raj Institutions at the village, intermediary, and district level have been entrusted with the welfare of persons with disabilities.

India is a signatory to the Declaration on the Full Participation and Equality of People with Disabilities in the Asia Pacifi c Region. India is also a signatory to the Biwako Millennium Framework for Action towards an inclusive, barrier, free and rights-based society. India is currently participating in negotiations on the UN Convention on Protection and Promotion of the Rights and Dignity of Persons with Disabilities.

Policy Implementation

The policy framework on disability is poorly implemented and virtually disappears at the panchayat or village level. India' s action in providing help to the

[16] These institutes are (i) Institute for the Physically Handicapped, New Delhi; (ii) National Institute of Visually Handicapped, Dehradun; (iii) National Institute for Orthopedically Handicapped, Kolkata; (iv) National Institute for Mentally Handicapped, Secunderabad; (v) National Institute for Hearing Handicapped, Mumbai; (vi) National Institute of Rehabilitation Training & Research, Cuttack; and (vii) National Institute for Empowerment of Persons with Multiple Disabilities, Chennai.

[17] Some of these institutes are the National Institute of Mental Health and Neuro Sciences, Bangalore; All India Institute of Physical Medicine

and Rehabilitation, Mumbai; All India Institute of Speech and Hearing, Mysore; and Central Institute of Psychiatry, Ranchi.

diff erently-abled has generally been weak, and there was a lack of awareness of available services among the differently-abled. Apart from the poor functioning of the current disability identifi cation and certifi cation system, there are three main challenges in accessing benefi ts and services: (i) physical access problems; (ii) problems with procedures and officials; and (iii) communication dif- fi culties in approaching providers. People with disabilities are subject to deprivation in many dimensions of their lives. Social attitudes and stigma play an important role in limiting the opportunities for diff erently-abled people.

Some serious limitations like low coverage, lack of funds, lack of awareness programmes, non-cooperation of local authorities, loopholes in the system of selection and certifi cation of benefi ciaries, and services confi ned only to urban areas have also been observed at the delivery end of the services.

There are substantial diff erences in socio-economic outcomes and access to services by disability type, with those suff ering from mental illness and mental retardation being in a particularly bad situation. Around 50 per cent of households saw the cause of disability as a 'curse of God' (World Bank 2009). However, despite the approval of a national policy for the diff erently-abled in 2006, only two states out of 28, Chhattisgarh and Karnataka, have draft disability policies. The National Policy for Disabled Persons (2006) recognizes that persons with disabilities are a valuable human resource for the country and seeks to create an environment that provides them equal opportunities, protection of their rights, and full participation in society. There is need for a multi-sectoral and multifaceted approach so that the full potential of India's diff erently-abled population is realized. Improving the status and social and economic participation of people with disabilities would have a positive eff ect on everyone.

With better education and greater access to jobs, India's diff erently-abled people would generate higher growth and thus benefi t the country as a whole. Many of these points were confi rmed by the World Bank's Report (2009) on

'*People with Disabilities in India: From Commitments to Outcomes*'.

THE ELDERLY

Nature and Magnitude: *Slowly rising share of elderly*

India began to reap the 'demographic dividend'[18] around 1980. Observed demographic trends suggest that both the size and age structure of the population (and therefore the 'dependency ratio'[19]) in all countries tend to change over time, because of the nature of 'demographic transition'.[20] India is in the midst of a process where it faces a window of opportunity created by the demographic dividend. In the process, the 'dependency ratio' has declined from 0.8 in 1991 to 0.73 in 2001, and it is expected to further decline[21] sharply to 0.59 by 2011 (Government of India 2008). The trends of declining birth rate, slow improvement in life expectancy and the baby-boomers generation having now crossed the age of 20 years is resulting in the demographic bulge occurring in the age group 15–29 years. Due to these trends, India has the youngest population in the world with a median age of less than 24 years in 2000 compared to 38 for Europe and 41 for Japan. Even China had a median age of 30 years.[22]

On the other hand, India now has the second largest aged population in the world. It is important to note that though the total dependency ratio has declined in the last two decades, the proportion of the elderly[23] in the population has increased over the same period. The rate at which the size of the elderly population is increasing is

[18] 'Demographic dividend' is defined as a population 'bulge' in the working age group (15–64 years).

[19] 'Dependency ratio' is defined as the proportion of working (economically active) people to non-working (non-economically active) people in a country.

[20] 'Demographic Transition' is characterized by the fact that death rates tend to decline before declines in birth rates set in. The initial fall in infant mortality and improvement in child survival results in a boom generation, with a larger number of people in the younger ages. After some time, the lagged fall in fertility rates reverses the baby boom, resulting in a bulge in the younger ages. The bulge created by the baby boom moves up the age structure resulting in the fact that at some point the population in the working age (15–64 years) is much higher than it was previously and would be subsequently. Finally, the bulge enters the old age bracket.

[21] Modernization and new social processes have also led to more women entering the workforce, further lowering the dependency ratio (Government of India 2008).

[22] In 2010, the share of persons 65 years and above to the total population for United Kingdom, China, Japan and India were 16.2 per cent, 8.1 per cent, 22.2 per cent, and 5.2 per cent, respectively.

[23] In India, the elderly are defi ned as persons in the age group 60 years and above.

higher than that of the general population. The percentage of elder persons has increased from 6.49 per cent in 1981 to 7.45 per cent in 2001, and the upsurge was higher between 1991 and 2001.[24]

As per the projections based on the Census of India (2001), the proportion of the elderly in the population is expected to be 9.2 per cent in 2016. The projected proportion of aged people in the total population will further rise to 10.7 per cent in 2021 and 12.5 per cent in 2026 (Table 8.6). The OASIS Report[25] (2000) expected the number of elderly to increase by 107 per cent and projected that the number of aged persons will rise to
113 million in 2016. Based on the expected demographic profi le, Nagarajan and Mitra (2005) see that the window of demographic opportunity will be open till 2035, that is, the share of the labour force is expected to increase until 2035, and after that the dependency ratio will start increasing once again. The proportion of the middle-aged group will also decline to 59.7 per cent by the end of 2050. We need to take advantage of the demographic dividend within the limited time available, and, at the same time, to eff ectively take care of the increasing proportion of the elderly population.

The demographic pattern of the elderly population is explained below.

Gender Gap: Escalation in female share

A gender gap has been observed in terms of the high proportion of elderly females to elderly males. This is partly a biological phenomenon, since women live longer than men. Even though there is an adverse sex-ratio in India, with women being outnumbered by men (931 women to 1,000 men)—which is the exact opposite of the situation prevailing in developed economies—women are surviving longer, as one might expect because of their biological advantage. A steep rise in the number of elderly people was seen for both sexes (that is, male and female) in urban India. Moreover, there was a sharp escalation in the gender gap among the elderly during the period

Table 8.6 Distribution of Projected Population by Age Groups and Gender in India

Age group (in years)		*0–14*	*15–59*	*60+*	*Total*
2001	Persons	35.3	57.2	7.5	100
	Males	35.6	57.3	7.1	100
	Females	35.1	57.1	7.8	100
2016	Persons	26.8	63.9	9.2	100
	Males	27.4	63.8	8.7	100
	Females	26.2	63.9	9.8	100
2021	Persons	25.1	64.0	10.7	100
	Males	25.7	64.1	10.2	100
	Females	24.5	64.4	11.3	100
2026	Persons	23.4	64.3	12.5	100
	Males	23.9	64.4	11.8	100
	Females	22.8	64.1	13.1	100

Source: Census of India (2001).
Note: Projection is as on 1 March 2016, 2021, and 2026.

1981– 2001, which resulted in a higher number of elderly women than men in 2001[26] in India (Table 8.7). This situation is expected to continue in the future.

However, the discrimination against women throughout their life-cycle results in multiple indignities for them and makes their life even more difficult in their later years, when they are more likely to be living without their spouses. Looking at the trends, the problem of lonely elderly women is likely to increase in the future.

Rural– Urban Gap of Proportion of Elderly Population

Although the proportion of the elderly to the total population in rural areas (7.7 per cent) is higher than in urban areas (6.7 per cent) in 2001, the rural– urban gap in terms of proportion of elderly population has declined over time due to the decline in the elderly population of rural India in 1991 as compared to 1981 and a moderate growth of

[24] The most reliable and widely used data on the demographic pattern of India is the Census of India. Till date, its most recent available data is based on 2001. Most of the Ministries and the Planning Commission use Census of India data only for planning purposes and projections. However, NSSO has published a report on the health conditions of the elderly in 2006 using the data of 2004. Most of its fi ndings are close to the Census 2001 results. This report has used the Census 2001 as the base data and has also added the NSSO fi ndings wherever there is additional information.

[25] This report was produced by the Dave Committee (instituted by the Ministry of Social Justice and Empowerment, Government of India).

[26] According to Census (2001), the sex-ratio among the aged was 1,029 (that is, 1,029 females per 1,000 males), whereas as per NSSO (2006), the ratio was 999 in 2004.

Table 8.7 Percentage of Persons Aged 60 Years and Above in India[27]

States/UTs	Males			Females			Persons		
	1981	1991	2001	1981	1991	2001	1981	1991	2001
Rural	7.6	7.1	7.4	6.9	7.0	8.1	7.2	7.0	7.7
Urban	5.1	5.5	6.3	5.7	5.9	7.2	5.4	5.7	6.7
Combined	6.4	6.7	7.1	6.6	6.7	7.8	6.5	6.7	7.5

Source: Census of India 1981, 1991, and 2001.

elderly population of rural India between 1991 and 2001. There were two key reasons behind this change. First, the proportion of rural males has declined between 1981 and 2001, and second, the proportion of rural females has seen a sudden increase in the same time period, particularly between 1991 and 2001. Interestingly, these changes also turned the male–female gap around in rural India. During 1981–91, there was a higher proportion of elderly males to elderly females in rural areas. However, this was reversed in the next decade.

At the state level, the proportion of the elderly to the total population is the highest in Kerala followed by Himachal Pradesh, Punjab, and Tamil Nadu, the states which also have the highest life expectancy. In general, the share of elderly in the population is higher in the southern states and relatively lower in the eastern and north-eastern states (Census 2001).

Old Age Dependency Ratio

The old age dependency ratio, defined as the number of persons in the age group 60 years and above per 100 persons in the age group 15–59 years, is a useful indicator for looking at the elderly within the population (Table 8.8). The old age dependency ratio increased during the period 1981 to 2001.

This ratio is much higher in rural areas as compared to urban areas. However, the ratio is increasing both in rural and urban areas (Table 8.8).

The old age dependency ratio is higher for females than for males. This indicates that women are more likely to be dependent on others, because of the lower literacy and higher incidence of widowhood among them.

At the state level, Kerala has a high old age dependency ratio. Other states, which have a dependency ratio higher than the national average are Punjab, Himachal Pradesh, Maharashtra, Orissa, Tamil Nadu, Uttarakhand, Uttar Pradesh, Haryana, and Madhya Pradesh. It is relatively lower in the north-eastern region and the Union Territories (Census 2001).

Issues and Concerns: *Very few elderly are covered under pension/insurance schemes*

India has enjoyed a high GDP growth rate for the last decade. This has resulted in the gradual migration of the younger population to cities and towns, and erosion of

Table 8.8 Old Age Dependency Ratio in India[28]

States/UTs	Males			Females			Persons		
	1981	1991	2001	1981	1991	2001	1981	1991	2001
Rural	13.1	13.3	13.6	12.9	13.0	14.7	13.0	13.2	14.1
Urban	8.5	9.2	9.9	10.1	10.2	11.7	9.2	9.7	10.8
Combined	11.8	12.2	12.5	12.2	12.2	13.8	12.0	12.2	13.1

Source: Census of India 1981, 1991, and 2001.

[27] According to NSSO (2006) report, the share of elderly in the total population in the year 2004 was fairly close to the Census 2001 figures for urban areas, but was slightly lower for rural areas.

[28] NSSO (2006) estimates for 'Old Age Dependency Ratio' also illustrates similar trends as Census 2001, but NSSO estimates are marginally lower than Census results.

kinship systems, which have produced a decline in the traditional system of assigning responsibility in the family. Hence, there has been a decline in the care for elderly people. A majority of India's elderly population faces issues such as financial dependence (either pension or support from family), poor health, and impaired functional status. Moreover, only about one in 10 workers in India is covered by a formal pension scheme and state coverage levels vary widely. The percentage of elderly persons who are working is declining, particularly in the case of women. Their reliance on transfer income, particularly on subsidies and transfer of public money, is therefore expected to be higher. Factors like household income, education, and number of working adults in the household have a significant positive effect on the probability of seeking care.

Another important issue is the rapid growth in the elderly population. The developed world became rich before its people started living longer; in developing countries people are getting older before the countries have become rich. For example, while France took 120 years for the elderly population to double, it took India just 25 years. This makes the issue of pensions critical.

The Dave Committee (2000), instituted by the Ministry of Social Justice and Empowerment, in its report (also known as the OASIS[29] Report), examined old age income security in general, but its prime focus was on '*the great mass of individuals who are working outside the pension provisions that presently exist in the organized sector*' (Ibid.: 39). The Committee perceived 'a serious threat that a majority of these workers, who may not be below the poverty line in their working lives, might sink below the poverty line in their old age, simply because they have not accumulated enough savings during their years in the workforce' (Ibid.: 7). The committee also notes that focus on these workers would be a huge cost.[30]

The OASIS Report (2000) recommends: (i) devising a new pension provision for excluded workers who are capable of saving even a modest amount during their working career, (ii) converting these modest contributions into reasonably large sums in an almost risk-free manner, and (iii) buying annuity plans upon retirement from the accumulated account. The central assumption in the committee's prescription, and also in the new pension system, is that the unorganized workers can themselves contribute towards their retirement income provided they are encouraged to do so. In view of these recommendations, the Government of India recently launched a new pension scheme for the unorganized sector, named Swavalamban (Box 8.3).

Major healthcare needs remain unmet

For the elderly, pension is not the only issue, healthcare is equally important. The health-related quality of elderly people's life, especially women from rural areas, is considerably lower in India when compared to other countries. The OASIS Report recognizes the link between

Box 8.3 Swavalamban—A pension scheme for the unorganized sector

The Swavalamban pension scheme was announced by the Finance Minister, Government of India, in the Budget 2010–11 and launched on 26 September 2010. The scheme is administered by the Pension Fund Regulatory and Development Authority. LIC (Life Insurance Corporation) is the facilitator.

The Swavalamban pension scheme aims to cover workers in the unorganized sector under the New Pension System (NPS) from the age of 60 years. The Scheme is open to workers in the unorganized sector aged 18 years to 55 years and will be applicable to all those who join the NPS, subject to their meeting the eligibility criteria. To be eligible, a person will have to make a minimum contribution of Rs 1,000 and maximum contribution of Rs 12,000 per annum. The central government will contribute Rs 1,000 per year to each NPS account opened in the year 2010–11 and for the next three years, that is, 2011–12, 2012–13 and 2013–14. The Scheme will be funded by grants from the Government of India, and targets over 300 million workers in the unorganised sector workers with the aim of inculcating the habit of saving among them.

Source: Pension Fund Regulatory and Development Authority, Government of India 2010 (www.pfrda.org.in)

[29] OASIS stands for 'Old Age Social and Income Security' Project.

[30] Committee mentions that '*providing a Rs 100 per month old-age pension to the projected 175 million population of the elderly in 2025 would translate into an unusual outflow of over Rs 21,000 crore for the government*' (p. 12).

pension and health and notes that the problem is further compounded as the elderly have to incur heavier expenditure on health during old age, neglect of which would worsen their quality of life.

Co-residence with children cannot by itself be regarded as sufficient means of old age insurance. In particular, the likelihood of co-residence is lower for disadvantaged elderly persons who have no spouse and also lack health, wealth, or both. This necessitates social protection.

Policies and Interventions

Income security for the aged in India is currently being implemented at the national and state levels—the National Public Assistance Scheme by the central government, and the welfare activities funded by the states themselves.

The National Social Assistance Scheme (NSAS) includes five components out of which three[31] components
are for the elderly, widows, and differently-abled, viz.

i. Indira Gandhi National Old Age Pension Scheme[32] (IGNOAPS)
ii. Indira Gandhi National Widow Pension Scheme[33] (IGNWPS)
iii. Indira Gandhi National Disability Pension Scheme[34] (IGNDPS)

These schemes are fully centrally sponsored to ensure a minimum national standard of social assistance in addition to the benefits from the states. The schemes are mostly implemented through panchayats and municipal bodies with provisions to seek assistance from voluntary agencies.

Other schemes initiated by the centre include subsidies provided to the aged on rail fares and air fares. Lastly, the National Policy on Older Persons has empowered the aged to seek legal redressal against personal misdemeanour or parental abuse. In 2007, the 'Senior Citizens Act' was enacted but it did not cover senior citizens in the agricultural sector. In 2010, the Government of India unveiled a health plan for the elderly called the 'National Programme for the Health Care of the Elderly (NPHCE)', which is set to roll out in 21 states by the year 2012. This programme is designed to be preventive, curative, and rehabilitative health services for the elderly. The Government of India has also taken various steps to strengthen the public health system, which by default takes care of the aged too. Programmes like the National Rural Health Mission (NRHM) (launched in 2005 with the objective of bridging the gaps in the existing capacities of rural health infrastructure) and Rashtriya Swasthya Bima Yojana (RSBY) (introduced in 2007 to provide social health protection against the burden of high out-of-pocket expenditure on healthcare and the consequent debt-trap) have helped to improve the services available to the elderly. A detailed discussion on health schemes is given in the chapter 5 on 'Health and Demography' in this Report.

At the state level, special schemes, in addition to the destitute pension, have been initiated to help poor widows and widowers. One such scheme is the Sanjay Gandhi Niradhar Anudan Yojana by the Maharashtra government. Similar schemes are also available in Karnataka, West Bengal, and Kerala.

In 2003–4, the Finance Minister announced a defined contribution pension system featuring individual retirement accounts, multiple product choice for account holders, professional fund managers with participation from private financial institutions, a regulatory authority and portability through a centralized system of record keeping and administration. A new and completely dedicated Pension Fund Regulatory and Development Authority was also set up to regulate the functioning of the new pension system.

The new pension system is very much along the lines recommended by the OASIS Committee Report, having a defined contribution scheme creating an individual retirement account. To cater to a large proportion of labour force, which is working in the unorganized sector,

[31] The other two components of the schemes are not specifically for the elderly, widows or the differently-abled. The other two components are: (i) National Family Benefit Scheme (NFBS) and (ii) Annapurna.

[32] For this scheme, the age of the applicant (male or female) shall be 60 years or higher, and the applicant must be below poverty line. Earlier, the age eligibility for this scheme was 65 years.

[33] For this scheme, the age of the widow shall be between 40–64 years and she must belong to a household below poverty line.

[34] For this scheme, the age of the applicant shall be between 18–64 years and the applicant must belong to a household below poverty line. Moreover, the applicant should be suffering from severe or multiple disabilities as defined in 'Persons with Disabilities Act, 1995 (PWD Act 1995)' and the 'National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999 (National Trust Act 1999)' revised from time to time and any other guidelines issued by the Ministry of Social Justice and Empowerment in this regard.

the Government of India recently launched the pension scheme for the unorganized sector, Swavalamban.

CONCLUDING REMARKS

The major findings and policy recommendations of the chapter are summarized below.

Child Labour

Around five million children are working and four times this number are neither in schools nor working (NWC). The two categories together are out of school children. The children who are working must be withdrawn from work and parents need to be given incentives to encourage them to send their children to school. In the case of NWC, there is need for a variety of collaborative policies to encourage them to go to school. However, many policies can be relevant for both categories of children.

As discussed in the chapter, states that have a lower fertility rate and better schooling infrastructure have low incidence of child labour and NWC. Hence, special emphasis should be given to fertility reduction as part of the public health system through NRHM and to reducing the cost of school attendance. Emphasizing the 'Right to Education (RTE)' through a combination of school attendance with part-time work will be a more feasible and fruitful policy to help poor households sustain themselves. If RTE norms like minimum pupil–teacher ratio and adequate physical infrastructure are implemented properly, it will certainly have a positive impact on reducing both child labour and NWC on a sustainable basis. From the perspective of child rights, there is a need for broadening the definition of child labour and making it more inclusive. It should also cover children in the age group 15–18 years. However, a complete ban/prohibition of child labour may not increase child welfare.

The Differently-abled

Around 2 per cent (that is, 23 million) of the India's population has some kind of disability. Locomotor disability is the most prevalent followed by visual and hearing disability. Disability due to accidents and non-communicable diseases is expected to increase. The differently-abled in India lack access to the fundamental facilities, which is clear from the low literacy rate and high unemployment rate. The living conditions of the differently-abled are also a matter of serious concern.

Government supported measures for the differently-abled cover a very meagre proportion of the differently-abled population; hence, more focused policies are required for the differently-abled in India. Civil society and NGOs can also facilitate the process for providing services to this group, and the 'Jaipur Foot' is an example of this. Some serious limitations (low coverage, lack of funds, lack of awareness programmes, non-cooperation of local authorities, loopholes in the system of selection and certification of beneficiaries, and services confined only to urban areas) need to be overcome at the earliest.

The Elderly

In spite of enjoying high growth and demographic dividends, India is facing an impending problem due to the growing population of the elderly (whose numbers will rise to 113 million in 2016). The issue becomes more urgent as many elderly have a low literacy rate and were working in the unorganized sector during their productive years—and therefore are unlikely to have savings to meet even their subsistence living expenses after they stop working. However, in India only about one in 10 workers is covered by a formal pension scheme. Hence, in the future, the pension coverage of the vulnerable elderly will need to expand.

The health of the elderly is another important issue of concern. The government has launched various initiatives (NRHM, NPHCE, RSBY, NSAS, NOAPS, and Swavalamban) to provide health and insurance facilities to the elderly, who have contributed to building society, as it exists today. Yet, major healthcare needs remain unmet.

Inclusive development requires the government to take action targeted at these vulnerable groups of our society, which constitute roughly around 11 per cent of the population, that is, around 129 million people.

Technical Appendix

Technical Appendix

Technical Appendix

The Human Development Index is a composite representation of the status of human development in a country or a region. In theory, human development covers vast ground and as such, it might be difficult to capture all of its dimensions in a single index. While human development includes many dimensions other than human well-being like empowerment, democracy, and so on, for brevity, a composite of the following variables constitutes the HDI as per global HDRs:

- Per capita income for measuring the standard of living
- A linear geometric combination of mean years of schooling and expected years of schooling to measure the extent of human attainment (education), and
- Life expectancy, to measure the health status of the population

(Unit less) indices for each of the above are separately computed. HDI is then calculated as a simple arithmetic mean of the three component indices.

An index for a single variable is calculated from cross-sectional data, pertaining to either countries or regions/provinces within a country:

$$Dimension\ Index\ of\ X_i = \frac{Observed\ Value\ of\ X_i - Min\ X_i}{Max\ X_i - Min\ X_i} \quad (1)$$

Minimum (maximum) values for indicators are derived by scaling down (up) the observed minimum (maximum) by 25 per cent. This is done so as to avoid a value of zero or one for the State having the observed maximum and minimum value respectively.

Human Development Indices are calculated for a state, country or a group entity—they are *not* meant to measure household/individual wellbeing. In this report, the indices are calculated for each major state (and group of states in the North-East, excluding Assam).

Income Index

In this report, the Monthly Per Capita Expenditure (MPCE) adjusted for inflation and inequality, substitutes for measuring the income, keeping in view the extant reality that per capita income is not too accurate a measure of the standard of living. The Gini coefficient (G) of inequality of MPCE is calculated for each state to capture inequality in income (consumption), and each of the four variables in Equation (1) above is then multiplied by corresponding equality coefficient (1-G). Thus, for calculating the income index, the following formula is used:

$$Income\ Index\ of\ State_1 = \frac{MPCE_1(1-G) - MPCE_{min}(1-G)}{MPCE_{max}(1-G) - MPCE_{min}(1-G)}$$

Where, the minimum (and maximum) MPCE adjusted for inequality is the average of inequality and inflation adjusted observed minimum (and maximum) MPCE in 2007-8 and inequality adjusted observed minimum (and maximum) MPCE in 1999-2000.

Education Index

The education index has been measured through two variables, literacy 7+ and 'mean years of schooling'. An index of each of these has been separately calculated as per the formula mentioned above in Equation (1). The two (unit-less) numbers are then added, with literacy having a weight of 1/3, and mean years of schooling having a weight of 2/3.

In terms of definition, literacy is the (self) reported literacy for population of age 7 years and more. The 'mean years of schooling' is the average number of years of school education of

population aged 7 years and above, adjusted for out of school children in the school going age 6– 17 years by multiplying mean years of schooling with one minus the proportion of out of school children.

Mean Years of Schooling is derived from information on ' level of education' collected by the NSSO in Employment-
Unemployment Survey (1999– 2000) and Expenditure on
Education Survey (2007– 8). ' Level of Education' refers to the
highest level successfully completed. Years of schooling assigned to an individual dependent on his/her ' level of education' . For
instance

- If ' level of education' is primary then ' years of schooling'
  assigned is 5 years
- If ' level of education' is upper-primary then ' years of school-
  ing' assigned is 8 years
- If ' level of education' is below-primary then ' years of school-
  ing' assigned is 2 years

Similarly, Out of School children have been derived by information on children in the age group 6– 17 years who ' never attended school' or ' ever attended, but currently not attending' from the above mentioned NSS Rounds.

Health Index

For measuring the health status, life expectancy at birth is used as the measure. Using the maximum and minimum life expec- tancy at birth as stated below, the health index is calculated using equation (1).

DATA SOURCES

The index has been calculated at two points of time, 1999-2000 and 2007– 8 for temporal comparison. The unit at which calcu- lations have been made is the State.

1. MPCE is calculated from the primary records of the NSS from the 55th Round (1999– 2000) and 64th Round (2007– 8). All calculations are made at 1999– 2000 prices. The consumer price index for agricultural labourers (CPIAL) prepared by the Labour Bureau for each major state has been used as the price defl ator for rural areas. Similarly, an urban state level price series has been prepared from the Labour Bureau' s series for consumer price index for industrial work- ers (CPIIW) for select urban centres.
2. All the three variables pertaining to education, e.g. the literacy, the number of years of education, and children out of school are calculated from the primary records of the NSS from its 55th Round (1999– 2000) and 64th Round (2007– 8) surveys.
3. The life expectancy fi gures have been calculated for 2000 and 2008 from the Survey Registration Scheme (SRS) data and the population forecast estimates produced by the Registrar General of India.

Table below states the scaling norms for computing component indices for both points of time.

Table Scaling Norms for HDI Computation

Indicator	*Minimum*	*Maximum*
Life expectancy at birth	50 years	80 years
Literacy 7+	0 per cent	100 per cent
Adjusted mean yrs of schooling	0	7
Per capita real consumption expenditure adjusted for inequality	Rs. 255	Rs. 1091

Appendix Tables

Appendix Tables

Table 2A.1 Percentage Distribution of Population within a State by Social Groups, 2007–8

Non Special Category States	*SCs*	*STs*	*OBCs*	*Others*	*All*
Andhra Pradesh	19.8	7.1	48.4	24.8	100
Assam	9.2	14.0	27.0	49.7	100
Bihar	20.2	0.9	60.7	18.2	100
Chhattisgarh	13.7	37.5	41.8	7.0	100
Delhi	27.8	0.6	17.0	54.5	100
Goa	7.2	1.8	14.8	76.3	100
Gujarat	11.3	16.5	43.0	29.2	100
Haryana	25.0	0.1	28.1	46.8	100
Jharkhand	19.1	20.8	31.8	28.4	100
Karnataka	18.4	6.8	41.1	33.7	100
Kerala	10.3	1.1	61.5	27.0	100
Madhya Pradesh	17.6	22.0	41.2	19.3	100
Maharashtra	13.1	8.4	27.1	51.4	100
Orissa	18.9	23.6	36.7	20.8	100
Punjab	36.7	0.1	14.0	49.3	100
Rajasthan	19.2	13.0	47.5	20.3	100
Tamil Nadu	22.8	0.8	70.7	5.7	100
Uttar Pradesh	25.8	0.8	52.5	20.9	100
West Bengal	29.2	5.2	5.8	59.8	100
Special Category States					
Arunachal Pradesh	2.8	70.1	1.8	25.2	100
Himachal Pradesh	28.4	5.3	9.8	56.4	100
Jammu & Kashmir	11.9	3.3	11.3	73.5	100
Manipur	3.1	37.7	48.2	11.1	100
Meghalaya	0.6	88.5	1.1	9.8	100
Mizoram	0.4	98.9	0.4	0.4	100
Nagaland	0.5	96.7	1.7	1.1	100
Sikkim	8.1	36.0	43.2	12.7	100
Tripura	18.6	30.1	20.9	30.4	100
Uttarakhand	20.7	2.5	22.4	54.3	100
Union Territories					
Andaman & Nicobar Islands	—	6.5	19.1	74.4	100
Chandigarh	19.8	0.2	15.2	64.9	100
Dadra & Nagar Haveli	0.5	75.8	7.9	15.8	100
Daman & Diu	6.6	15.6	31.7	46.0	100
Lakshadweep	0.1	95.4	1.6	2.9	100
Puducherry	23.6	—	70.8	5.6	100
All India	19.9	8.6	42.3	29.2	100

Source: Calculated from NSS 64th Round.
Note: — Not available.

Table 2A.2 Percentage Distribution of Social Groups among States, 2007–8

Non Special Category States	*SCs*	*STs*	*OBCs*	*Others*
Andhra Pradesh	9.3	7.7	10.7	7.9
Assam	1.2	4.0	1.6	4.2
Bihar	11.7	1.2	16.6	7.2
Chhattisgarh	1.6	10.0	2.3	0.6
Delhi	1.7	0.1	0.5	2.3
Goa	—	—	—	0.4
Gujarat	3.7	12.5	6.6	6.5
Haryana	2.7	—	1.4	3.4
Jharkhand	3.8	9.6	3.0	3.9
Karnataka	4.6	3.9	4.8	5.7
Kerala	1.5	0.4	4.3	2.7
Madhya Pradesh	3.9	11.1	4.3	2.9
Maharashtra	4.8	7.0	4.6	12.8
Orissa	3.4	9.7	3.1	2.5
Punjab	4.5	—	0.8	4.1
Rajasthan	5.6	8.7	6.5	4.0
Tamil Nadu	7.1	0.5	10.3	1.2
Uttar Pradesh	17.0	1.2	16.3	9.4
West Bengal	9.2	3.8	0.9	12.7
Special Category States				
Arunachal Pradesh	—	0.8	—	0.1
Himachal Pradesh	0.9	0.4	0.1	1.2
Jammu & Kashmir	0.5	0.3	0.2	2.0
Manipur	—	0.9	0.2	0.1
Meghalaya	—	2.3	—	0.1
Mizoram	—	0.9	—	—
Nagaland	—	1.1	—	—
Sikkim	—	0.2	0.1	—
Tripura	0.3	1.2	0.2	0.4
Uttarakhand	0.9	0.2	0.4	1.6
Union Territories				
Andaman & Nicobar Islands	—	—	—	0.1
Chandigarh	0.1	—	—	0.2
Dadra & Nagar Haveli	—	0.2	—	—
Daman & Diu	—	—	—	—
Lakshadweep Islands	—	0.1	—	—
Puducherry	0.1	—	0.1	—
All India	100.0	100.0	100.0	100.0

Source: Calculated from NSS 64th Round.
Note: — Not available.

Table 2A.3 Percentage Distribution of Population within a State by Major Religious Communities, 2007–8

Non Special Category States	*Hindus*	*Muslims*	*Christians*	*Sikhs*
Andhra Pradesh	88.5	7.7	1.6	—
Assam	66.9	30.4	2.3	0.2
Bihar	84.7	14.9	0.1	0.1
Chhattisgarh	96.7	0.9	2.0	0.2
Delhi	82.9	12.1	0.6	3.5
Goa	75.1	9.8	14.2	—
Gujarat	90.7	7.9	0.6	—
Haryana	86.1	7.7	0.1	5.9
Jharkhand	81.3	11.1	3.1	0.1
Karnataka	85.9	11.6	1.8	—
Kerala	57.3	24.1	18.6	—
Madhya Pradesh	91.8	7.2	0.2	0.1
Maharashtra	82.9	11.2	1.1	0.2
Orissa	96.5	2.2	1.3	—
Punjab	37.5	1.2	1.4	59.7
Rajasthan	90.5	7.9	0.1	1.0
Tamil Nadu	89.5	5.0	5.4	—
Uttar Pradesh	80.7	18.8	0.1	0.3
West Bengal	68.4	30.6	0.7	—
Special Category States				
Arunachal Pradesh	21.8	1.7	25.9	0.1
Himachal Pradesh	95.6	2.2	0.1	0.4
Jammu & Kashmir	42.8	55.7	0.2	1.4
Manipur	51.0	8.0	37.6	—
Meghalaya	6.6	5.8	79.6	—
Mizoram	0.6	0.4	88.2	—
Nagaland	2.6	0.6	96.6	—
Sikkim	65.4	1.1	3.5	—
Tripura	87.6	9.2	0.8	—
Uttarakhand	79.6	18.8	0.6	0.7
Union Territories				
Andaman & Nicobar Islands	69.7	8.8	21.3	0.2
Chandigarh	81.7	4.3	0.4	13.0
Dadra & Nagar Haveli	97.7	1.0	1.2	—
Daman & Diu	89.8	7.5	2.4	—
Lakshadweep Islands	3.3	95.3	1.4	—
Puducherry	83.2	11.3	5.5	—
All India	82.2	12.9	2.1	1.8

Source: Calculated from NSS 64th Round.
Note: — Not available.

Table 2A.4 Percentage Distribution of Major Religious Communities among States, 2007–8

Non Special Category States	*Hindus*	*Muslims*	*Christians*	*Sikhs*
Andhra Pradesh	10.1	5.6	7.2	—
Assam	2.0	5.8	2.6	0.3
Bihar	11.9	13.4	0.5	0.4
Chhattisgarh	2.7	0.2	2.2	0.3
Delhi	1.3	1.2	0.4	2.5
Goa	0.1	0.1	0.9	—
Gujarat	7.2	4.0	1.9	0.2
Haryana	2.2	1.3	0.1	7.2
Jharkhand	3.9	3.4	5.9	0.1
Karnataka	5.1	4.5	4.2	0.1
Kerala	2.1	5.5	25.8	—
Madhya Pradesh	4.9	2.4	0.4	0.2
Maharashtra	7.3	6.3	3.9	0.6
Orissa	4.2	0.6	2.1	—
Punjab	1.1	0.2	1.6	80.7
Rajasthan	6.3	3.5	0.2	3.3
Tamil Nadu	6.7	2.4	15.6	—
Uttar Pradesh	12.9	19.2	0.5	2.5
West Bengal	5.2	14.8	2.0	—
Special Category States				
Arunachal Pradesh	—	—	1.2	—
Himachal Pradesh	0.7	0.1	—	0.1
Jammu & Kashmir	0.4	3.5	0.1	0.6
Manipur	0.1	0.1	3.5	—
Meghalaya	—	0.1	8.5	—
Mizoram	—	—	3.4	—
Nagaland	—	—	4.3	—
Sikkim	—	—	0.1	—
Tripura	0.4	0.3	0.1	—
Uttarakhand	0.8	1.2	0.3	0.3
Union Territories				
Andaman & Nicobar Islands	—	—	0.3	—
Chandigarh	0.1	—	—	0.6
Dadra & Nagar Haveli	—	—	—	—
Daman & Diu	—	—	—	—
Lakshadweep Islands	—	—	—	—
Puducherry	0.1	0.1	0.2	—
All India	100.0	100.0	100.0	100.0

Source: Calculated from NSS 64th Round.
Note: — Not available.

Table 2A.5 Human Development Index and its Components by States, 1999–2000 and 2007–8

Non Special Category States	*Health Index 2000*	*Health Index 2008*	*Income Index 1999–2000*	*Income Index 2007–8*	*Education Index 1999–2000*	*Education Index 2007–8*	*HDI 1999–2000*	*HDI 2007–8*
Andhra Pradesh	0.521	0.580	0.197	0.287	0.385	0.553	0.368	0.473
Assam	0.339	0.407	0.152	0.288	0.516	0.636	0.336	0.444
Bihar	0.506	0.563	0.100	0.127	0.271	0.409	0.292	0.367
Chhattisgarh	0.341	0.417	0.127	0.133	0.365	0.526	0.278	0.358
Delhi	0.735	0.763	0.800	0.678	0.816	0.809	0.783	0.750
Goa	0.363	0.650	0.672	0.443	0.751	0.758	0.595	0.617
Gujarat	0.562	0.633	0.323	0.371	0.512	0.577	0.466	0.527
Haryana	0.576	0.627	0.417	0.408	0.512	0.622	0.501	0.552
Jharkhand	0.434	0.500	0.100	0.142	0.271	0.485	0.268	0.376
Karnataka	0.567	0.627	0.260	0.326	0.468	0.605	0.432	0.519
Kerala	0.782	0.817	0.458	0.629	0.789	0.924	0.677	0.790
Madhya Pradesh	0.363	0.430	0.127	0.173	0.365	0.522	0.285	0.375
Maharashtra	0.601	0.650	0.297	0.351	0.606	0.715	0.501	0.572
Orissa	0.376	0.450	0.076	0.139	0.372	0.499	0.275	0.362
Punjab	0.632	0.667	0.455	0.495	0.542	0.654	0.543	0.605
Rajasthan	0.520	0.587	0.293	0.253	0.348	0.462	0.387	0.434
Tamil Nadu	0.586	0.637	0.285	0.355	0.570	0.719	0.480	0.570
Uttar Pradesh	0.398	0.473	0.179	0.175	0.371	0.492	0.316	0.380
West Bengal	0.600	0.650	0.210	0.252	0.455	0.575	0.422	0.492
Special Category States								
Himachal Pradesh	0.681	0.717	0.426	0.491	0.636	0.747	0.581	0.652
Jammu & Kashmir	0.457	0.530	0.431	0.459	0.507	0.597	0.465	0.529
NE (excluding Assam)	0.567	0.663	0.316	0.386	0.535	0.670	0.473	0.573
Uttarakhand	0.465	0.530	0.179	0.302	0.371	0.638	0.339	0.490
All India	0.497	0.563	0.223	0.271	0.442	0.568	0.387	0.467

Source: Authors' computation.

Table 3A.1 Labour Force Participation Rate by Usual Principal and Subsidiary Status, by Social Groups (Rural), 1993–4 and 2004–5 (*per cent*)

Non Special Category States	*Scheduled Castes*		*Scheduled Tribes*		*Other Backward Classes*		*Others*	
	1993–4	*2004–5*	*1993–4*	*2004–5*	*1993–4*	*2004–5*	*1993–4*	*2004–5*
Andhra Pradesh	86.3	79.6	90.6	86.8	—	77.4	79.0	67.9
Assam	58.2	61.3	58.0	64.5	—	66.6	57.4	58.6
Bihar	66.4	63.7	71.6	63.3	—	55.1	53.2	45.1
Chhattisgarh	—	77.2	—	84.6	—	77.3	—	63.1
Delhi	51.4	58.9	100.0	0.0	—	56.7	66.6	51.2
Goa	66.4	68.8	54.9	29.6	—	58.3	57.1	49.8
Gujarat	71.8	77.8	81.7	83.3	—	76.7	71.9	68.3
Haryana	63.3	65.1	79.8	57.2	—	65.5	62.5	64.9
Jharkhand	—	65.7	—	78.2	—	66.4	—	59.4
Karnataka	78.3	78.5	74.9	80.9	—	73.7	74.9	72.0
Kerala	68.1	67.7	68.9	70.7	—	57.0	56.2	61.8
Madhya Pradesh	78.5	75.8	87.3	83.4	—	71.6	70.8	59.3
Maharashtra	78.9	75.4	85.1	82.1	—	74.7	77.3	72.0
Orissa	71.0	70.9	85.2	81.9	—	64.3	56.5	56.5
Punjab	59.5	64.3	72.3	67.7	—	66.7	59.2	67.8
Rajasthan	78.9	72.3	87.4	84.4	—	75.3	75.2	61.0
Tamil Nadu	81.7	75.3	79.4	89.6	—	73.6	73.7	53.7
Uttar Pradesh	69.8	68.3	65.7	70.3	—	62.8	60.0	53.6
West Bengal	62.3	58.6	80.7	67.7	—	56.5	56.1	55.2
Special Category States								
Arunachal Pradesh	93.1	82.5	66.3	73.4	—	69.4	72.7	71.6
Himachal Pradesh	79.5	74.4	86.2	78.7	—	77.1	80.4	76.9
Jammu & Kashmir	68.9	68.8	82.3	68.0	—	59.9	74.4	59.5
Manipur	50.0	53.9	73.0	66.3	—	58.8	54.9	54.3
Meghalaya	33.3	82.3	83.2	83.5	—	79.9	81.3	70.5
Mizoram	50.0	0.0	66.9	75.2	—	68.0	62.4	62.2
Nagaland	0.0	0.0	53.6	78.6	—	76.0	36.4	65.3
Sikkim	52.2	57.7	59.7	65.7	—	64.5	60.1	69.1
Tripura	53.0	52.3	59.5	54.0	—	51.3	50.5	50.6
Uttarakhand	—	78.7	—	79.2	—	65.2	—	74.2
Union Territories								
Andaman & Nicobar	73.6	0.0	88.8	50.0	—	0.0	77.4	63.6
Chandigarh	61.5	45.2	0.0	50.0	—	67.7	56.5	61.1
Dadra & Nagar Haveli	66.5	0.0	88.4	79.3	—	72.6	64.9	89.2
Daman & Diu	0.0	19.6	71.6	64.6	—	54.5	63.7	59.9
Lakshadweep	54.8	100.0	51.8	56.5	—	100.0	100.0	0.0
Puducherry	58.7	69.1	0.0	0.0	—	65.5	66.1	59.5
All India	71.8	69.8	81.9	79.8	—	67.8	65.8	61.4

Source: NSS 50th and 61st Round.
Note: For population with age 15 years and above.
— Not available.

Table 3A.2 Labour Force Participation Rate by Usual Principal and Subsidiary Status, by Social Groups (Urban), 1993–4 and 2004–5 (*per cent*)

Non Special Category States	*Scheduled Castes*		*Scheduled Tribes*		*Other Backward Classes*		*Others*	
	1993–4	*2004–5*	*1993–4*	*2004–5*	*1993–4*	*2004–5*	*1993–4*	*2004–5*
Andhra Pradesh	62.6	54.7	65.0	47.0	—	60.3	54.6	50.0
Assam	43.2	59.9	39.6	48.3	—	46.3	49.1	50.7
Bihar	55.3	55.8	51.9	50.7	—	46.9	44.6	36.8
Chhattisgarh	—	59.3	—	49.4	—	55.7	—	43.9
Delhi	59.9	52.0	38.8	40.3	—	54.1	48.9	45.0
Goa	66.6	50.7	70.4	30.0	—	57.2	53.2	52.7
Gujarat	55.1	64.7	70.3	70.2	—	55.9	51.4	49.0
Haryana	62.7	57.9	45.6	69.2	—	52.0	54.9	47.5
Jharkhand	—	50.7	—	50.8	—	48.5	—	44.1
Karnataka	63.8	59.2	62.6	66.8	—	56.8	53.4	50.0
Kerala	62.3	67.3	60.7	95.5	—	56.0	55.7	60.0
Madhya Pradesh	55.9	59.1	59.7	55.6	—	57.5	51.2	47.9
Maharashtra	58.0	56.4	59.2	58.0	—	55.4	52.9	53.0
Orissa	55.3	59.3	63.3	63.5	—	53.3	50.2	50.2
Punjab	55.7	56.4	58.4	48.4	—	57.5	50.3	48.8
Rajasthan	58.0	61.1	55.3	56.8	—	54.7	51.2	49.7
Tamil Nadu	65.2	61.3	66.6	65.9	—	57.3	57.4	47.2
Uttar Pradesh	57.0	53.7	66.1	53.9	—	54.3	48.8	46.7
West Bengal	63.5	55.7	45.5	50.8	—	54.2	52.4	50.6
Special Category States								
Arunachal Pradesh	50.0	61.2	45.2	42.6	—	43.7	50.7	51.0
Himachal Pradesh	54.8	72.6	45.6	56.0	—	74.2	52.0	61.3
Jammu & Kashmir	53.2	50.0	27.9	64.1	—	47.1	48.5	46.7
Manipur	45.9	40.9	51.6	45.2	—	52.5	50.1	57.7
Meghalaya	66.2	40.9	56.6	54.7	—	41.5	51.3	53.3
Mizoram	78.9	71.4	57.2	55.2	—	53.7	76.5	78.4
Nagaland	61.5	50.0	41.0	56.2	—	70.9	54.0	63.9
Sikkim	60.3	39.0	42.5	57.2	—	51.0	57.9	53.4
Tripura	52.3	52.5	46.5	55.3	—	55.8	49.6	54.2
Uttarakhand	—	56.5	—	50.1	—	53.2	—	46.3
Union Territories								
Andaman & Nicobar	78.5	33.3	71.0	39.8	—	—	62.5	55.5
Chandigarh	68.0	48.5	—	42.9	—	41.2	63.9	48.5
Dadra & Nagar Haveli	49.0	70.0	83.5	72.0	—	70.8	61.5	58.2
Daman & Diu	—	45.0	66.7	60.7	—	35.4	44.8	59.8
Lakshadweep	—	—	50.5	51.9	—	86.7	48.9	84.6
Puducherry	53.5	65.8	—	—	—	49.9	50.4	49.5
All India	59.4	57.1	59.3	56.7	—	55.7	52.2	49.4

Source: NSS 50th and 61st Round.
Note: For population with age 15 years and above.
— Not available.

Table 3A.3 Unemployment Rate by Usual Principal and Subsidiary Status, by Gender (Rural), 1993–4 and 2004–5 (*per cent*)

(As a percentage of labour force)

Non Special Category States	*Males*		*Females*		*Persons*	
	1993–4	*2004–5*	*1993–4*	*2004–5*	*1993–4*	*2004–5*
Andhra Pardesh	0.8	1.0	0.1	0.4	0.4	0.7
Assam	4.5	2.4	8.1	2.9	5.4	2.5
Bihar	2.0	1.7	0.7	0.2	1.7	1.4
Chhattisgarh	—	0.8	—	0.3	—	0.6
Delhi	—	2.0	—	—	—	1.9
Goa	6.9	9.3	13.0	14.5	9.2	10.9
Gujarat	1.2	0.8	0.3	0.2	0.8	0.5
Haryana	1.6	2.8	0.5	1.0	1.1	2.2
Jharkhand	—	2.0	—	0.1	—	1.3
Karnataka	0.9	0.7	0.3	0.8	0.8	0.7
Kerala	5.4	5.0	9.8	20.1	7.0	10.7
Madhya Pradesh	0.7	0.6	0.2	0.1	0.5	0.4
Maharashtra	1.2	1.5	0.3	0.3	0.8	1.0
Orissa	1.7	3.1	0.9	8.5	1.4	5.1
Punjab	1.3	3.1	1.2	4.8	1.3	3.7
Rajasthan	0.3	1.2	0.1	0.1	0.3	0.7
Tamil Nadu	1.8	1.2	0.6	1.2	1.3	1.2
Uttar Pradesh	0.8	0.7	—	0.3	0.8	0.6
West Bengal	1.8	2.1	2.1	3.4	1.7	2.4
Special Category States						
Arunachal Pradesh	1.4	1.1	0.3	0.6	0.8	0.9
Himachal Pradesh	0.9	1.6	0.1	2.0	0.6	1.8
Jammu & Kashmir	0.9	1.7	0.5	1.3	0.8	1.6
Manipur	1.2	1.4	0.4	0.7	1.0	1.1
Meghalaya	0.4	0.1	—	0.5	0.2	0.3
Mizoram	1.5	0.5	0.4	0.1	1.1	0.3
Nagaland	2.2	2.3	—	1.4	1.5	1.9
Sikkim	0.6	2.8	1.4	1.6	0.8	2.4
Tripura	1.5	9.4	6.4	32.3	2.5	13.1
Uttarakhand	—	2.0	—	0.4	—	1.3
Union Territories						
Andaman & Nicobar	2.5	3.6	1.8	12.4	2.2	6.1
Chandigarh	2.7	2.5	4.5	3.4	2.9	2.5
Dadra & Nagar Haveli	0.8	3.1	0.8	3.6	0.8	3.3
Daman & Diu	1.5	0.2	—	—	1.1	0.2
Lakshadweep	5.8	0.7	40.7	56.4	17	7.2
Puducherry	3.4	9.3	—	3.3	2.4	7.0
All India	1.4	1.6	0.6	1.8	1.2	1.7

Source: NSS 50th and 61st Round.
Note: For population with age 15 years and above.
— Not available.

Table 3A.4 Unemployment Rate by Usual Principal and Subsidiary Status, by Gender (Urban), 1993–4 and 2004–5 (*per cent*)

(As a percentage of labour force)

Non Special Category States	*Males*		*Females*		*Persons*	
	1993–4	*2004–5*	*1993–4*	*2004–5*	*1993–4*	*2004–5*
Andhra Pardesh	2.9	3.5	3.8	3.8	3.1	3.6
Assam	5.5	6.9	27.8	9.3	8.9	7.3
Bihar	6.9	6.6	9.2	4.1	7.2	6.3
Chhattisgarh	—	3.9	—	2.4	—	3.6
Delhi	0.9	4.5	6.4	6.4	1.6	4.7
Gujarat	3.0	2.3	4.6	2.9	3.2	2.4
Goa	8.0	7.6	15.9	12.1	10.2	8.8
Haryana	2.5	3.3	3.3	7.6	2.7	4.0
Jharkhand	—	7.6	—	2.4	—	6.6
Karnataka	3.0	1.9	5.8	5.8	3.6	2.8
Kerala	6.6	6.2	18.5	33.4	10.3	15.6
Madhya Pradesh	5.3	3.1	3.9	1.6	5.0	2.8
Maharashtra	4.2	3.4	4.7	3.7	4.5	3.5
Orissa	6.7	9.0	6.1	26.9	6.5	13.5
Punjab	3.1	2.7	5.4	14.1	3.3	4.8
Rajasthan	1.8	2.9	0.4	3.0	1.5	2.9
Tamil Nadu	4.1	2.8	6.8	4.8	5.0	3.4
Uttar Pradesh	3.3	3.1	0.6	2.7	3.0	3.0
West Bengal	6.3	5.6	15.1	8.8	8.0	6.2
Special Category States						
Arunachal Pradesh	0.8	1.1	5.5	2.5	1.6	1.4
Himachal Pradesh	3.5	1.7	0.4	10.2	2.7	3.8
Jammu & Kashmir	5.7	3.7	9.0	12.8	6.4	5.1
Manipur	4.8	5.2	2.4	6.3	4.2	5.6
Meghalaya	1.1	3.6	3.6	3.6	1.6	3.6
Mizoram	0.4	1.6	0.5	2.5	0.5	1.9
Nagaland	6.9	4.7	5.9	7.3	6.8	5.5
Sikkim	1.5	3.3	8.2	5.6	2.6	3.7
Tripura	5.9	16.6	17.6	57.7	8.4	28.1
Uttarakhand	—	4.1	—	10.3	—	5.3
Union Territories						
Andaman & Nicobar	4.0	6.0	10.1	17.9	5.5	8.5
Chandigarh	3.3	3.1	20.5	7.5	6.8	4.0
Dadra & Nagar Haveli	—	1.1	1.4	10.3	0.4	3.0
Daman & Diu	4.5	3.0	11.2	3.2	6.0	3.0
Lakshadweep	14.8	11.8	33.3	52.8	19.0	24.7
Puducherry	5.7	4.1	10.0	19.5	6.9	8.1
All India	4.1	3.7	6.3	6.9	4.5	4.4

Source: NSS 50th and 61st Rounds.
Note: For population with age 15 years and above.
— Not available.

Table 3A.5 Unemployment Rate by Current Daily Status, by Social Groups (Rural), 2004–5 and 2007–8 (*per cent*)

(As a percentage of labour force)

Non Special Category States	*Scheduled Castes*		*Scheduled Tribes*		*Other Backward Classes*		*Others*		*All Social Groups*	
	2004–5	*2007–8*	*2004–5*	*2007–8*	*2004–5*	*2007–8*	*2004–5*	*2007–8*	*2004–5*	*2007–8*
Andhra Pradesh	17.1	12.8	12.0	8.2	10.1	9.7	7.4	5.6	11.2	9.5
Assam	9.4	9.5	4.9	7.7	4.3	6.9	7.3	6.4	6.4	7.0
Bihar	10.6	10.0	11.2	7.7	5.2	7.0	5.9	5.3	6.8	7.4
Chhattisgarh	12.5	4.3	4.2	5.8	10.2	8.2	8.1	9.0	8.2	6.7
Delhi	—	—	—	—	1.5	4.8	2.6	2.9	1.9	3.8
Goa	19.2	0.3	—	—	34.1	4.6	17.1	5.9	19.2	4.9
Gujarat	5.4	3.6	4.4	3.5	4.7	3.4	3.4	3.0	4.5	3.4
Haryana	10.4	12.2	—	—	5.9	9.2	3.9	2.6	6.2	6.9
Jharkhand	5.9	16.7	6.9	10.5	6.4	8.9	7.2	10.9	6.6	11.2
Karnataka	9.8	8.5	4.7	4.9	6.4	6.1	5.3	3.9	6.7	6.0
Kerala	35.0	27.2	36.5	29.0	26.3	20.2	18.4	13.1	25.6	19.3
Madhya Pradesh	12.8	10.2	3.3	9.0	5.2	7.2	2.2	5.1	5.6	8.0
Maharashtra	17.6	10.5	11.2	12.2	9.3	6.9	4.4	5.0	8.4	7.3
Orissa	11.1	9.8	6.3	6.4	10.0	8.4	16.3	9.3	10.2	8.3
Punjab	14.1	13.1	—	—	10.4	9.0	5.0	3.4	9.7	8.2
Rajasthan	9.1	8.7	2.3	4.5	3.4	4.0	3.8	5.0	4.4	5.1
Tamil Nadu	22.9	25.1	26.4	26.9	12.3	14.1	3.9	7.9	15.1	17.3
Uttar Pradesh	5.3	8.4	8.4	11.1	3.2	4.6	2.8	5.1	3.7	5.9
West Bengal	12.5	13.5	14.4	14.3	9.4	8.7	10.2	10.3	11.1	11.6
Special Category States										
Arunachal Pradesh	—	—	1.6	3.4	—	—	0.8	0.9	1.4	2.8
Himachal Pradesh	8.4	8.8	3.2	4.1	5.5	5.8	4.7	6.5	5.7	6.8
Jammu & Kashmir	2.9	5.2	3.3	10.1	8.9	5.2	5.4	6.0	5.6	5.9
Manipur	—	—	0.2	3.4	3.4	5.2	1.9	3.6	1.7	4.2
Meghalaya	—	—	0.4	1.4	—	—	—	—	0.4	1.5
Mizoram	—	—	0.6	0.6	—	—	—	—	0.6	0.6
Nagaland	—	—	3.3	7.1	—	—	6.3	13.4	3.3	7.1
Sikkim	8.0	10.3	2.3	3.1	2.6	4.4	1.7	4.5	2.7	4.2
Tripura	15.3	19.7	16.4	18.2	17.6	16.6	15.5	18.5	16.1	18.3
Uttarakhand	6.0	11.0	—	—	2.4	9.2	4.1	8.3	4.1	8.9
Union Territories										
Andaman & Nicobar	—	—	—	—	—	—	13.4	11.0	13.4	10.7
Chandigarh	13.4	4.2	—	—	—	—	—	—	3.7	5.9
Dadra & Nagar Haveli	—	—	7.1	8.4	—	—	—	—	6.0	6.2
Daman & Diu	—	—	—	—	—	—	—	—	1.6	1.7
Lakshadweep	—	—	25.1	17.0	—	—	—	—	22.5	16.7
Puducherry	36.0	28.7	—	—	22.2	22.8	—	—	27.4	25.2
All India	12.0	11.9	6.5	7.5	7.7	7.9	6.6	6.4	8.2	8.4

Source: Calculated from NSS 61st and 64th Rounds.
Note: For population with age 15 years and above.
— Not available.

Table 3A.6 Unemployment Rate by Current Daily Status, by Social Groups (Urban), 2004–5 and 2007–8 (*per cent*)

(As a percentage of labour force)

Non Special Category States	*Scheduled Castes*		*Scheduled Tribes*		*Other Backward Classes*		*Others*		*All Social Groups*	
	2004–5	*2007–8*	*2004–5*	*2007–8*	*2004–5*	*2007–8*	*2004–5*	*2007–8*	*2004–5*	*2007–8*
Andhra Pradesh	12.3	10.8	6.6	13.6	8.8	7.7	6.6	5.7	8.5	7.7
Assam	7.1	11.2	8.8	13.7	10.6	7.7	9.1	11.5	9.0	10.8
Bihar	5.0	6.5	—	—	10.1	6.0	13.0	5.7	10.0	6.0
Chhattisgarh	6.9	11.6	12.9	19.9	7.2	2.7	5.2	7.5	7.1	8.1
Delhi	5.7	4.9	2.4	—	5.3	0.4	6.7	2.4	6.2	2.6
Goa	23.7	0.4	9.5	33.8	19.0	9.8	13.6	7.3	15.2	7.7
Gujarat	8.8	6.9	7.8	6.2	4.7	3.1	3.6	3.4	4.7	3.9
Haryana	11.7	8.2	—	—	6.0	4.2	5.8	2.1	6.9	3.5
Jharkhand	12.7	15.6	3.1	13.4	7.4	8.5	10.2	9.6	8.8	10.4
Karnataka	8.8	12.3	7.7	4.6	5.8	5.2	5.2	3.4	6.0	5.2
Kerala	32.3	15.2	55.2	33.8	25.9	20.3	21.3	13.7	25.2	18.2
Madhya Pradesh	9.9	9.4	12.5	12.5	6.7	5.6	5.8	7.0	6.8	7.2
Maharashtra	11.7	11.4	8.3	4.3	8.6	3.5	7.5	5.4	8.4	5.8
Orissa	22.7	6.8	11.8	24.0	14.8	7.3	13.1	8.4	15.0	8.9
Punjab	7.3	4.6	—	—	7.6	9.0	7.7	3.5	7.5	4.7
Rajasthan	8.3	6.7	3.9	7.3	5.2	5.1	6.0	4.8	6.1	5.3
Tamil Nadu	13.5	19.0	0.5	14.1	8.1	10.2	4.2	6.6	8.6	11.2
Uttar Pradesh	11.1	10.3	1.0	0.4	5.9	8.1	5.0	7.6	6.2	8.2
West Bengal	15.0	6.8	9.1	8.1	9.7	11.3	9.4	9.9	10.5	9.4
Special Category States										
Arunachal Pradesh	—	—	5.6	7.4	—	—	5.0	2.1	4.7	4.8
Himachal Pradesh	4.2	9.6	—	—	3.5	6.3	4.9	5.4	4.9	6.4
Jammu & Kashmir	3.3	8.7	—	—	10.0	4.0	6.1	7.2	6.0	7.1
Manipur	—	—	2.4	9.9	6.9	3.0	1.4	11.0	6.3	5.7
Meghalaya	—	—	4.4	5.2	—	—	1.5	5.4	3.8	5.6
Mizoram	—	—	1.6	4.9	—	—	—	—	1.6	4.8
Nagaland	—	—	6.6	19.5	—	—	8.8	2.7	6.4	17.4
Sikkim	—	—	2.2	5.7	6.6	12.2	1.7	4.5	3.7	7.3
Tripura	36.3	31.2	40.3	14.1	35.2	28.0	23.0	25.1	30.0	26.6
Uttarakhand	6.7	14.0	11.9	11.0	9.9	12.1	5.7	5.9	6.8	9.3
Union Territories										
Andaman & Nicobar	—	—	—	—	—	—	13.8	9.6	13.7	9.6
Chandigarh	6.3	7.9	—	—	1.2	4.5	5.3	8.7	5.2	7.9
Dadra & Nagar Haveli	—	—	8.4	4.9	—	—	1.4	0.7	5.1	1.5
Daman & Diu	—	—	—	—	16.0	3.7	4.7	1.5	6.2	2.5
Lakshadweep	—	—	—	—	—	—	—	—	28.2	16.0
Puducherry	—	—	—	—	17.1	18.9	5.3	2.6	16.8	17.5
All India	11.4	10.1	7.5	10.0	8.5	7.7	7.1	6.0	8.3	7.4

Source: Calculated from NSS 61st and 64th Rounds.
Note: For population with age 15 years and above.
— Not available.

Table 3A.7 Unemployment Rate by Current Daily Status, by Religious Communities (Rural), 2004–5 and 2007–8 (*per cent*)

(As a percentage of labour force)

Non Special Category States	*Hindus*		*Muslims*		*Christians*		*Sikhs*	
	1993–4	*2004–5*	*1993–4*	*2004–5*	*1993–4*	*2004–5*	*1993–4*	*2004–5*
Andhra Pradesh	11.0	9.3	10.9	8.5	17.0	8.3	—	—
Assam	6.4	7.5	6.5	5.5	8.5	10.1	—	—
Bihar	6.9	7.2	4.9	8.8	43.9	15.5	—	—
Chhattisgarh	8.4	6.9	4.5	6.8	2.2	0.4	—	—
Delhi	2.2	3.6	—	—	—	—	—	—
Goa	18.9	4.6	3.9	18.6	21.0	5.9	—	—
Gujarat	4.4	3.3	5.5	4.6	4.7	2.8	—	—
Haryana	6.2	7.2	3.0	4.3	—	—	7.4	5.3
Jharkhand	6.3	11.5	6.9	8.6	15.9	12.3	—	—
Karnataka	6.6	5.6	7.9	12.9	4.4	3.6	—	—
Kerala	26.6	21.6	27.2	18.0	21.1	13.4	—	—
Madhya Pradesh	5.6	7.9	6.0	11.9	—	—	—	—
Maharashtra	8.2	7.0	6.7	10.0	2.5	29.6	—	—
Orissa	10.4	8.4	3.7	5.2	4.1	6.1	—	—
Punjab	9.4	10.7	10.0	10.6	7.7	18.5	9.8	7.0
Rajasthan	3.9	5.0	5.9	5.5	—	—	21.9	16.6
Tamil Nadu	15.2	17.2	10.3	16.6	14.0	18.7	—	—
Uttar Pradesh	3.6	5.8	4.5	6.3	—	—	—	—
West Bengal	11.4	12.1	10.6	10.7	13.1	8.6	—	—
Special Category States								
Arunachal Pradesh	1.3	1.7	—	—	1.0	2.5	—	—
Himachal Pradesh	5.7	7.0	7.1	2.6	—	—	—	—
Jammu & Kashmir	40.0	6.0	6.7	5.9	—	—	—	—
Manipur	3.5	5.6	0.9	2.5	0.2	3.4	—	—
Meghalaya	—	—	—	—	0.5	1.5	—	—
Mizoram	—	—	—	—	0.4	0.6	—	—
Nagaland	5.1	12.4	—	—	3.2	7.1	—	—
Sikkim	2.5	4.8	—	—	1.5	4.9	—	—
Tripura	16.5	19.0	14.5	15.0	—	—	—	—
Uttarakhand	4.2	9.4	2.7	5.2	—	—	—	—
Union Territories								
Andaman & Nicobar	12.5	11.7	25.1	22.7	14.8	6.6	—	—
Chandigarh	2.5	7.3	—	—	—	—	—	—
Dadra & Nagar Haveli	6.1	6.2	—	—	—	—	—	—
Daman & Diu	1.5	1.7	3.1	—	—	—	—	—
Lakshadweep	—	—	25.1	17.0	—	—	—	—
Puducherry	27.6	25.3	—	—	—	—	—	—
All India	8.0	8.3	8.4	8.8	12.0	9.8	10.3	6.9

Source: Calculated from NSS 61st and 64th Rounds.
Note: For population with age 15 years and above.
— Not available.

Table 3A.8 Unemployment Rate by Current Daily Status, by Religious Communities (Urban), 2004–5 and 2007–8 (*per cent*)

(As a percentage of labour force)

Non Special Category States	*Hindus*		*Muslims*		*Christians*		*Sikhs*	
	2004–5	*2007–8*	*2004–5*	*2007–8*	*2004–5*	*2007–8*	*2004–5*	*2007–8*
Andhra Pradesh	8.6	7.3	6.6	8.4	11.0	10.4	—	—
Assam	8.2	11.0	12.4	9.4	18.9	12.8	—	—
Bihar	10.3	6.2	8.6	5.1	—	—	—	—
Chhattisgarh	7.2	8.5	9.6	5.8	2.4	5.0	—	—
Delhi	5.8	2.8	6.8	2.4	—	—	10.8	0.4
Goa	14.2	8.1	25.0	1.5	12.4	11.7	—	—
Gujarat	4.7	3.7	5.6	5.0	8.2	5.4	—	—
Haryana	6.9	3.3	0.2	9.0	—	—	3.4	6.6
Jharkhand	9.5	11.1	6.0	7.2	1.0	5.7	19.4	11.5
Karnataka	5.9	4.9	6.2	6.0	9.1	5.8	—	—
Kerala	26	16.5	27.1	25.2	20.7	17.7	—	—
Madhya Pradesh	6.9	7.3	6.5	9.1	2.4	0.4	—	—
Maharashtra	7.7	5.2	9.8	7.0	15.7	6.0	—	—
Orissa	15.4	9.2	7.9	3.8	13.5	6.0	—	—
Punjab	6.9	3.9	3.8	5.4	7.0	—	9.3	6.2
Rajasthan	5.2	5.5	9.9	5.5	—	—	12.0	1.8
Tamil Nadu	8.4	11.4	8.8	6.9	12.6	11.7	—	—
Uttar Pradesh	5.9	8.3	6.8	8.1	—	—	—	—
West Bengal	11.1	9.6	7.4	8.1	—	—	—	—
Special Category States								
Arunachal Pradesh	3.5	2.7	16.3	—	—	—	—	—
Himachal Pradesh	4.0	6.2	12.2	9.2	—	—	5.8	0.8
Jammu & Kashmir	8.2	4.9	4.4	8.6	—	—	18.3	3.7
Manipur	6.9	5.3	—	—	2.5	10.0	—	—
Meghalaya	2.0	6.3	—	—	—	—	—	—
Mizoram	—	—	—	—	—	—	—	—
Nagaland	6.7	3.0	—	—	6.7	19.6	—	—
Sikkim	4.0	4.8	—	—	5.3	17.2	—	—
Tripura	30.6	27.1	3.2	8.8	—	—	—	—
Uttarakhand	7.0	11.3	6.2	3.6	—	—	—	—
Union Territories								
Andaman & Nicobar	11.4	8.9	21.0	23.0	—	—	14.8	10.1
Chandigarh	4.4	8.1	—	—	—	—	15.4	9.3
Dadra & Nagar Haveli	5.2	1.2	—	—	—	—	—	—
Daman & Diu	6.5	2.5	—	—	—	—	—	—
Lakshadweep	—	—	—	—	—	—	—	—
Puducherry	—	—	—	—	—	—	—	—
All India	8.1	7.3	8.1	7.3	12.6	10.2	8.7	5.1

Source: Calculated from NSS 61st and 64th Rounds.
Note: For population with age 15 years and above.
— Not available.

Table 3A.9 Monthly Per Capita Consumption Expenditure, 1983, 1993–4, and 2004–5 (*Rs*)

Non Special Category States	*1983*	*1993–4*	*2004–5*
Andhra Pradesh	126.27	322.28	704.49
Assam	117.87	280.42	613.67
Bihar	99.53	236.78	446.38
Chhattisgarh	—	—	545.15
Delhi	228.64	777.01	1047.54
Goa	187.2	501.4	1406.02
Gujarat	133.59	356.87	872.47
Haryana	157.03	407.67	970.59
Jharkhand	—	—	568.72
Karnataka	132.81	318.47	627.36
Kerala	152.13	419.08	1111.06
Madhya Pradesh	111.61	289.83	558.89
Maharashtra	138.57	371.54	724.16
Orissa	104.06	245.94	460.68
Punjab	174.26	456.59	921.91
Rajasthan	134.5	346.6	724.27
Tamil Nadu	129.43	344.31	659.23
Uttar Pradesh	110.45	297.62	726.02
West Bengal	122.03	333.36	712.19
Special Category States			
Arunachal Pradesh	—	343.75	798.76
Himachal Pradesh	158.51	386.23	980.2
Jammu & Kashmir	134.02	406.84	821.62
Manipur	133.25	305.59	663.5
Meghalaya	—	390.00	795.57
Mizoram	142.73	472.59	862.78
Nagaland	—	454.48	1259.59
Sikkim	—	321.12	787.2
Tripura	—	367.43	734.79
Uttarakhand	—	—	706.07
Union Territories			
Andaman & Nicobar	—	608.07	1275.68
Chandigarh	—	975.18	1180.68
Dadra & Nagar Haveli	—	253.4	1322.13
Daman & Diu	187.2	463.33	1134.76
Lakshadweep	—	515.17	1356.02
Puducherry	132.0	396.53	929.39
All India	125.13	328.18	700.33

Source: NSS 38th, 50th, and 61st Rounds.
— Not available.

Table 3A.10 Incidence of Poverty (Rural and Urban Combined), 1983, 1993–4, and 2004–5 (*per cent*)

Non Special Category States	*1983*	*1993–4*	*2004–5*
Andhra Pradesh	28.9	22.2	15.8
Assam	40.5	40.9	19.7
Bihar	62.2	55.0	41.4
Chhattisgarh	—	—	40.9
Delhi	26.2	14.7	14.7
Goa	18.9	14.9	13.8
Gujarat	32.8	24.2	16.8
Haryana	21.4	25.1	14.0
Jharkhand	—	—	40.3
Karnataka	38.2	33.2	25.0
Kerala	40.4	25.4	15.0
Madhya Pradesh	49.8	42.5	38.3
Maharashtra	43.4	36.9	30.7
Orissa	65.3	48.6	46.4
Punjab	16.2	11.8	8.4
Rajasthan	34.5	27.4	22.1
Tamil Nadu	51.7	35.0	22.5
Uttar Pradesh	47.1	40.9	32.8
West Bengal	54.9	35.7	24.7
Special Category States			
Arunachal Pradesh	40.9	39.4	17.6
Himachal Pradesh	16.4	28.4	10.0
Jammu & Kashmir	24.2	25.2	5.4
Manipur	37.0	33.8	17.3
Meghalaya	38.8	37.9	18.5
Mizoram	36.0	25.7	12.6
Nagaland	39.3	37.9	19.0
Sikkim	39.7	41.4	20.1
Tripura	40.0	39.0	18.9
Uttarkhand	—	—	39.6
Union Territories	—	—	—
Andaman & Nicobar Islands	52.1	34.5	22.6
Chandigarh	23.8	11.4	7.1
Dadra & Nagar Haveli	15.7	50.8	33.2
Daman & Diu	—	15.8	10.5
Lakshadweep	42.4	25.0	16.0
Puducherry	50.1	37.4	22.4
All India	44.5	36.0	27.5

Source: Planning Commission, Government of India.
Note: Based on URP.
— Not available.

Table 3A.11 Distribution of Population and Incidence of Poverty, by Religious Communities, 1993–4 and 2004–5 (*per cent*)

Religious Groups	*1993–4*				*2004–5*			
	Rural		*Urban*		*Rural*		*Urban*	
	Population	*Poor*	*Population*	*Poor*	*Population*	*Poor*	*Population*	*Poor*
Hindus	83.4	84.1	76.0	70.3	82.3	84.1	75.6	68.9
Muslims	11.1	12.3	17.1	25.4	12.0	12.4	17.3	27.9
Christians	2.2	1.8	2.8	1.9	2.1	1.2	2.9	1.4
Sikhs	2.0	0.3	1.8	0.7	1.9	0.3	1.8	0.4
Buddhists	0.7	1.0	1.0	1.4	0.7	0.9	1.1	1.2
Jains	0.2	0.1	1.1	0.2	0.1	—	1.1	0.1
Other Religious Groups	0.5	0.4	0.1	0.1	0.8	1.0	0.2	0.2
All Religious Groups	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Census, 1991 and 2001 for population share. NSS 50th and 61st Round for poverty.
Note: — Not available.

Table 4A.1 Percentage of Adult Population with BMI<18.5, 1998–9 and 2005–6

Non Special Category States	*Women*		*Men*
	1998–9	*2005–6*	*2005–6*
Andhra Pradesh	37.4	33.5	30.8
Assam	27.1	36.5	35.6
Bihar	39.3	45.1	35.3
Chhattisgarh	—	43.4	38.5
Delhi	12	14.8	15.7
Goa	27.1	27.9	24.6
Gujarat	37	36.3	36.1
Haryana	25.9	31.3	30.9
Jharkhand	—	43	38.6
Karnataka	38.8	35.5	33.9
Kerala	18.7	18	21.5
Madhya Pradesh	38.2	41.7	41.6
Maharashtra	39.7	36.2	33.5
Orissa	48	41.4	35.7
Punjab	16.9	18.9	20.6
Rajasthan	36.1	36.7	40.5
Tamil Nadu	29	28.4	27.1
Uttar Pradesh	35.8	36	38.3
West Bengal	43.7	39.1	35.2
Special Category States			
Arunachal Pradesh	10.7	16.4	15.2
Himachal Pradesh	29.7	29.9	29.7
Jammu & Kashmir	26.4	24.6	28
Manipur	18.8	14.8	16.3
Meghalaya	25.8	14.6	14.1
Mizoram	25.8	14.4	9.2
Nagaland	22.6	17.4	14.2
Sikkim	18.4	11.2	12.2
Tripura	11.2	36.9	41.7
Uttarakhand	—	30.3	28.4
All India	35.8	33	34.2

Source: *NFHS 2 and 3.*
Note: — Not available.

Table 4A.2 Percentage of Women with BMI<18.5, by Major Religious Communities, 1998–9 and 2005–6

Non Special Category States	*Hindus*		*Muslims*		*Christians*		*Sikhs*	
	1998–9	*2005–6*	*1998–9*	*2005–6*	*1998–99*	*2005–6*	*1998–9*	*2005–6*
Andhra Pradesh	38.5	34.5	24.1	27.6	36.4	31	—	33.3
Assam	24.6	33.3	32.2	45.7	30	37.8	—	—
Bihar	38.7	44	43.3	49.7	38.1	—	—	—
Chhattisgarh	48.4	44	—	29.4	—	32.2	—	40
Delhi	12.1	14.9	17.5	18.6	—	9.2	4.5	8.8
Goa	31.1	29.8	28.5	25.7	17.8	23.5	—	—
Gujarat	38.2	36.4	38.2	37.3	—	57	—	24.8
Haryana	25.7	31.5	36.5	47.7	—	—	22.3	17.1
Jharkhand	40.9	41.8	44.2	47	—	43	—	20.8
Karnataka	40.2	36.7	33.3	26.8	16.4	24.3	—	—
Kerala	21.6	20	17.1	15.6	12.4	14.3	—	—
Madhya Pradesh	38.6	42.3	32.9	37.2	—	15.4	—	14.3
Maharashtra	42	37.8	27.7	23.7	28.2	11.3	—	18.8
Orissa	48.3	41.2	39.1	64.1	40.3	42.3	—	14.3
Punjab	17.2	21.3	9.8	22.1	—	9.6	16.9	17.2
Rajasthan	35.9	37.1	40.7	36.1	—	19.3	—	41.5
Tamil Nadu	30.3	29.3	15.9	20.7	20.8	21.9	—	—
Uttar Pradesh	35.6	36	38.6	36.6	—	44.8	10.7	19.4
West Bengal	42.2	38.1	47.6	42.8	—	34.3	—	13.9
Special Category States								
Arunachal Pradesh		22.2		30.8	—	15.8	—	—
Himachal Pradesh	30.2	30.4	28.8	21.1	—	—	31.2	37.6
Jammu & Kashmir	37	32.1	18.3	21	—	—	21.6	8.9
Manipur	—	15	—	22.6	—	12.7	—	—
Meghalaya	—	23.3	—	40.9	—	11.2	—	—
Mizoram	—	9.5	—	39	—	14.6	—	—
Nagaland	—	21.3	—	32.5	—	16.2	—	—
Sikkim	13.4	12.2	—	25.3	8.3	11.5	—	—
Tripura	—	36.8	—	48.2	—	—	—	—
Uttarakhand	33.1	30.1	—	30.1	—	32	—	29.4
Union Territories								
Andaman & Nicobar Islands	—	—	—	—	—	—	—	—
Chandigarh	—	—	—	—	—	—	—	—
Dadra & Nagar Haveli	—	—	—	—	—	—	—	—
Daman & Diu	—	—	—	—	—	—	—	—
Lakshadweep	—	—	—	—	—	—	—	—
Puducherry	—	—	—	—	—	—	—	—
All India	36.9	36.4	34.1	35.2	24.6	23.3	16.4	17.7

Source: *NFHS 2 and 3.*
Note: — Not available.

Table 4A.3 Percentage of Women with BMI<18.5, by Social Groups, 1998–9 and 2005–6

Non Special Category States	*SCs*		*STs*		*OBCs*		*Others*	
	1998–9	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*
Andhra Pradesh	44.8	37.5	44.2	43.6	40.6	35.8	26.9	24.5
Assam	25.7	45.1	19.1	20.2	22.1	31.2	31.1	37.2
Bihar	46.7	58.1	41	63.5	38.8	42.8	32.1	40.1
Chhattisgarh	48.8	38.6	55.2	50.5	46	44.2	27.5	26.7
Delhi	17	23.3	—	34.6	20.9	21.1	8.2	11.5
Goa	35.9	38.5	—	41.8	40.2	26.5	25.4	27.8
Gujarat	45	42.2	55	61	40.4	39.5	23.9	24.7
Haryana	35.4	36.5	—	47.4	28.3	35.5	21.6	27.8
Jharkhand	45	39.4	40.9	47	43.5	45.8	30.9	33.3
Karnataka	44.2	40.4	49	48.6	40.1	33.7	32.8	29.5
Kerala	27.6	22.6	29.4	41.7	19.8	17.5	15.8	17.7
Madhya Pradesh	39.9	46.9	49.2	49	37.4	42.3	27.4	28.6
Maharashtra	38.1	40.2	54.8	51.6	40.7	35.4	36.8	31.7
Orissa	54.6	51	55.5	51.6	48.2	39.1	37.9	31.9
Punjab	26.2	26.7	—	—	18.1	19.5	11.9	14.4
Rajasthan	43.7	40.7	39.6	50.9	38.3	33.1	31.5	33.6
Tamil Nadu	38.1	34.7	56.1	61.2	26.3	26.7	12.4	5.3
Uttar Pradesh	41.3	42.8	32.6	45.1	37.3	36.3	31.9	29.6
West Bengal	49.4	42.9	64.2	56	35.3	37.6	39.9	35.4
Special Category States								
Arunachal Pradesh	—	33.2	—	12.6	—	22.1	—	21.3
Himachal Pradesh	36.6	31.6	—	29.9	37.4	35.5	24.6	28.2
Jammu & Kashmir	43.8	33.8	43.4	28.8	32.5	31.9	22	26.9
Manipur	—	14.8	—	12.1	—	15.6	—	16.6
Meghalaya	—	21.7	—	12.1	—	20.9	—	38.6
Mizoram	—	11.4	—	14.5	—	—	—	40.7
Nagaland	—	28.9	—	16	—	17.4	—	24.1
Sikkim	15.6	9.7	4.8	9.5	8.8	11.7	17.7	14.9
Tripura	—	43.9	—	24.3	—	39.6	—	37.1
Uttarakhand	35.6	38.1	—	49	57.4	28.9	28.6	26.2
Union Territories								
Andaman & Nicobar Islands	—	—	—	—	—	—	—	—
Chandigarh	—	—	—	—	—	—	—	—
Dadra & Nagar Haveli	—	—	—	—	—	—	—	—
Daman & Diu	—	—	—	—	—	—	—	—
Lakshadweep	—	—	—	—	—	—	—	—
Puducherry	—	—	—	—	—	—	—	—
All India	42.1	41.2	46.	46.6	35.8	35.7	30.5	29.3

Source: *NFHS 2 and 3.*
Note: — Not available.

Table 4A.4 Percentage of Women with Anaemia, 1998–9 and 2005–6

Non Special Category States	*Any Anaemia*		*Moderate Anaemia*		*Severe Anaemia*	
	1998–9	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*
Andhra Pradesh	49.8	62.9	14.9	20.6	2.4	3.3
Assam	69.7	69.5	25.6	21.2	0.9	3.4
Bihar	63.4	67.4	19	15.9	1.5	1
Chhattisgarh	—	57.5	—	15.7	—	1.9
Delhi	40.5	44.3	9.6	8.8	1.3	0.2
Goa	36.4	38	8.1	7.8	1	0.6
Gujarat	46.3	55.3	14.4	16.5	2.5	2.6
Haryana	47	56.1	14.5	16.7	1.6	1.7
Jharkhand	—	69.5	—	18.6	—	1.3
Karnataka	42.4	51.5	13.4	15.1	2.3	2
Kerala	22.7	32.8	2.7	6.5	0.5	0.6
Madhya Pradesh	54.3	56	15.6	14.1	1	1
Maharashtra	48.5	48.4	14.1	13.9	2.9	1.7
Orissa	63	61.2	16.4	14.9	1.6	1.5
Punjab	41.4	38	12.3	10.4	0.7	1.4
Rajasthan	48.5	53.1	14.1	15.4	2.1	2.5
Tamil Nadu	56.5	53.2	15.9	13.6	3.9	2.2
Uttar Pradesh	48.7	49.9	13.7	13.2	1.5	1.6
West Bengal	62.7	63.2	15.9	16.4	1.5	1
Special Category States						
Arunachal Pradesh	62.5	50.6	11.3	12.5	0.6	1.6
Himachal Pradesh	40.5	43.3	8.4	10.5	0.7	1.2
Jammu & Kashmir	58.7	52.1	17.6	13.1	1.9	1.6
Manipur	28.9	35.7	6.3	5.1	0.8	0.5
Meghalaya	63.3	47.2	27.5	12.6	2.4	1.8
Mizoram	48	38.6	12.1	8.8	0.7	0.7
Nagaland	38.4	0	9.6	0	1	0
Sikkim	61.1	60	21.4	16.3	2.4	1.7
Tripura	—	65.1	—	14.8	—	1.3
Uttarakhand	—	55.2	—	13.3	—	1.5
Union Territories						
Andaman & Nicobar Islands	—	—	—	—	—	—
Chandigarh	—	—	—	—	—	—
Dadra & Nagar Haveli	—	—	—	—	—	—
Daman & Diu	—	—	—	—	—	—
Lakshadweep	—	—	—	—	—	—
Puducherry	—	—	—	—	—	—
India	51.8	55.3	14.8	15	1.9	1.8

Source: *NFHS 2 and 3*.
Note: — Not available.

Table 4A.5 Percentage of Women with any Anaemia, by Major Religious Communities, 1998–9 and 2005–6

Non Special Category States	*Hindus*		*Muslims*		*Christians*		*Sikhs*	
	1998–9	*2005–6*	*1998–9*	*2005–6*	*1998–99*	*2005–6*	*1998–9*	*2005–6*
Andhra Pradesh	49.6	63.1	39.3	58.1	64.1	68.5	—	—
Assam	66.7	71.6	75.1	59.2	76.1	89.7	—	—
Bihar	63.1	67.3	63.1	68.1	76.9	0	—	—
Chhattisgarh	67.8	58		48.1	—	49.3	——	—
Delhi	40.7	44.5	36.4	46.6	—	42.1	38.8	37.5
Goa	39.7	38.6	52.3	47.4	26.1	31.6		—
Gujarat	46.8	55.1	39.2	56.5	—	69	—	50.1
Haryana	46.6	55.7	56.4	63.4	—	—	46.7	54.7
Jharkhand	73.8	68.2	60.3	61.8	—	89	—	54.2
Karnataka	42.6	51.5	41.5	52.2	36.6	45.9	—	—
Kerala	25.9	32.9	19.4	37.9	18.9	21.9	—	—
Madhya Pradesh	54.5	57.2	46.6	47.7	—	17.9	—	46.5
Maharashtra	50.4	48.9	37.1	43.1	41.4	42.2	—	25.5
Orissa	63.1	61	50.4	57.6	72.7	73.4	—	75
Punjab	43.8	39.7	51.2	42.4	—	49.8	39	36.5
Rajasthan	48.3	52.7	52	56.3	—	25.2	—	91.5
Tamil Nadu	56.8	54	59.3	54.2	48	42.1	—	—
Uttar Pradesh	49.1	49.7	47.3	51.5	—	33.7	35.1	32.3
West Bengal	63.3	63.8	59.2	61.3	—	75.8		71.3
Special Category States								
Arunachal Pradesh	—	67.1		58.5	—	44		
Himachal Pradesh	39.9	42.9	40.6	49.7	—	80	40.3	51.4
Jammu & Kashmir	55.9	60.5	60.7	48	—	0	63.7	53.2
Manipur	—	37.9	—	40.8	—	28.4	—	—
Meghalaya	—	46.5	—	50.4	—	49.7	—	—
Mizoram	—	32	—	39	—	37.6	—	—
Nagaland	—		—		—		—	—
Sikkim	61.8	61.1	67.9	54.8	—	53	—	—
Tripura		66.4	—	49.7	—	70.9	—	—
Uttarakhand	45	54.3	—	64.6	—	50	—	57.8
Union Territories								
Andaman & Nicobar Islands	—	—	—	—	—	—	—	—
Chandigarh	—	—	—	—	—	—	—	—
Dadra & Nagar Haveli	—	—	—	—	—	—	—	—
Daman & Diu	—	—	—	—	—	—	—	—
Lakshadweep	—	—	—	—	—	—	—	—
Puducherry	—	—	—	—	—	—	—	—
All India	52.4	55.9	49.6	54.7	47.1	50.4	39.6	39.2

Source: *NFHS 2 and 3.*
Note: — Not available.

Table 4A.6 Percentage of Women with any Anaemia, by Social Groups, 1998–9 and 2005–6

Non Special Category States	*SCs*		*STs*		*OBCs*		*Others*	
	1998–9	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*
Andhra Pradesh	56.0	65.6	48.6	69.1	48.5	63.6	47.9	58.5
Assam	68.1	71.5	65.3	74.1	59.9	70.4	73.3	68.1
Bihar	67.0	71.8	82.1	75.3	60.9	67.4	58.5	64.1
Chhattisgarh	68.8	51.9	75.2	74.0	65.1	52.0	58.8	42.5
Delhi	49.7	49.2	—	59.5	44.0	45.1	37.3	42.7
Goa	32.8	42.1	—	39.5	39.8	41.6	36.5	37.0
Gujarat	48.4	56.3	55.5	74.2	45.0	55.3	42.1	49.9
Haryana	52.5	60.9	—	55.6	41.9	59.0	47.0	52.9
Jharkhand	75.5	72.6	85.6	85.0	67.8	64.3	59.8	57.6
Karnataka	46.6	52.3	45.9	56.8	41.9	51.0	40.3	48.9
Kerala	26.8	37.7	34.1	51.9	22.3	33.4	22.1	31.5
Madhya Pradesh	50.5	56.5	70.3	73.9	52.2	51.1	44.0	46.3
Maharashtra	49.7	52.0	64.2	58.9	48.6	46.8	45.2	45.8
Orissa	66.3	64.2	74.7	73.8	61.3	58.6	54.4	53.4
Punjab	47.7	42.6	—	39.5	42.1	32.8	37.9	36.3
Rajasthan	47.6	54.9	58.4	65.0	46.6	52.4	47.2	46.4
Tamil Nadu	64.2	58.7	61.4	36.0	54.2	52.0	49.4	38.4
Uttar Pradesh	51.9	53.5	53.6	35.2	51.0	48.8	45.2	49.2
West Bengal	67.1	66.8	80.6	78	61.7	56.6	59.1	60.5
Special Category States								
Arunachal Pradesh		69.6		41.6		64.5		69.3
Himachal Pradesh	37.1	44.4		54.6	51.1	56.2	38.4	39.4
Jammu & Kashmir	57.9	60.6	62.6	54.1	63.7	54.8	58.0	56.7
Manipur	—	47.6	—	28.4	—	34.8	—	38.0
Meghalaya	—	38.2	—	47.9	—	47.8	—	52.3
Mizoram	—	21.0	—	38.6	—	56.7	—	59.4
Nagaland	—	—	—	—	—	—	—	—
Sikkim	64.1	61.8	60.2	58.7	60.8	60.0	61.1	62.6
Tripura		65.6	—	74.0	—	66.2	—	61.7
Uttarakhand	44.4	60.0	—	71.4	32.7	62.1	47.0	50.8
Union Territories								
Andaman & Nicobar Islands	—	—	—	—	—	—	—	—
Chandigarh	—	—	—	—	—	—	—	—
Dadra & Nagar Haveli	—	—	—	—	—	—	—	—
Daman & Diu	—	—	—	—	—	—	—	—
Lakshadweep	—	—	—	—	—	—	—	—
Puducherry	—	—	—	—	—	—	—	—
All India	56.0	58.3	64.9	68.5	50.7	54.4	47.6	51.2

Source: *NFHS 3.*
Note: — Not available.

Table 4A.7 Nutritional Status of Children (0–5 years), 2005–6

Non Special Category States	*Height—for age*		*Weight—for height*		*Weight—for age*	
	Percentage below-3 SD	*Percentage below-2 SD*	*Percentage below-3 SD*	*Percentage below-2 SD*	*Percentage below-3 SD*	*Percentage below-2 SD*
Andhra Pradesh	18.7	42.7	3.5	12.2	9.9	32.5
Assam	20.9	46.5	4	13.7	11.4	36.4
Bihar	29.1	55.6	8.3	27.1	24.1	55.9
Chhattisgarh	24.8	52.9	5.6	19.5	16.4	47.1
Delhi	20.4	42.2	7	15.4	8.7	26.1
Goa	10.2	25.6	5.6	14.1	6.7	25
Gujarat	25.5	51.7	5.8	18.7	16.3	44.6
Haryana	19.4	45.7	5	19.1	14.2	39.6
Jharkhand	26.8	49.8	11.8	32.3	26.1	56.5
Karnataka	20.5	43.7	5.9	17.6	12.8	37.6
Kerala	6.5	24.5	4.1	15.9	4.7	22.9
Madhya Pradesh	26.3	50	12.6	35	27.3	60
Maharashtra	19.1	46.3	5.2	16.5	11.9	37
Orissa	19.6	45	5.2	19.5	13.4	40.7
Punjab	17.3	36.7	2.1	9.2	8	24.9
Rajasthan	22.7	43.7	7.3	20.4	15.3	39.9
Tamil Nadu	1	30.9	8.9	22.2	6.4	29.8
Uttar Pradesh	32.4	56.8	5.1	14.8	16.4	42.4
West Bengal	17.8	44.6	4.5	16.9	11.1	38.7
Special Category States						
Arunachal Pradesh	21.7	43.3	6.1	15.3	11.1	32.5
Himachal Pradesh	16	38.6	5.5	19.3	11.4	36.5
Jammu & Kashmir	14.9	35	4.4	14.8	8.2	25.6
Manipur	13.1	35.6	2.1	9	4.7	22.1
Meghalaya	29.8	55.1	19.9	30.7	27.7	48.8
Mizoram	17.7	39.8	3.5	9	5.4	19.9
Nagaland	19.3	38.8	5.2	13.3	7.1	25.5
Sikkim	17.9	38.3	3.3	9.7	4.9	19.7
Tripura	14.7	35.7	8.6	24.6	15.7	39.6
Uttarakhand	23.1	44.4	5.3	18.8	15.7	38
All India	23.7	48	6.4	19.8	15.8	42.5

Source: *NFHS 3*.

Table 4A.8 Percentage of Children with any Anaemia (0–5 years), 2005–6

Non Special Category States	*Moderate Anaemia*	*Severe Anaemia*	*Any anaemia*
Andhra Pradesh	43.5	3.6	70.8
Assam	38.7	2.2	69.6
Bihar	46.8	1.6	78
Chhattisgarh	45.2	2	71.2
Delhi	30.3	0.7	57
Goa	17.1	1.5	38.2
Gujarat	41.1	3.6	69.7
Haryana	42.2	4.3	72.3
Jharkhand	39.1	1.9	70.3
Karnataka	38.6	3.2	70.4
Kerala	20.5	0.5	44.5
Madhya Pradesh	43.6	3.4	74.1
Maharashtra	39.6	1.8	63.4
Orissa	34.5	1.6	65
Punjab	38.4	6.6	66.4
Rajasthan	40.2	6.7	69.7
Tamil Nadu	34.6	2.6	64.2
Uttar Pradesh	45	3.6	73.9
West Bengal	29.4	1.5	61
Special Category States			
Arunachal Pradesh	29.1	0.8	56.9
Himachal Pradesh	26.8	2.2	54.7
Jammu & Kashmir	30.4	2.4	58.6
Manipur	15.2	0.3	41.1
Meghalaya	31.7	1	64.4
Mizoram	20	0.6	44.2
Sikkim	29.5	0.8	59.2
Tripura	34.6	0.7	62.9
Uttarakhand	30.6	2.3	61.4
All India	40.2	2.9	69.5

Source: *NFHS 3.*

Table 4A.9 Percentage of Children with Anaemia, by Major Religious Communities, and by Social Groups 2005–6

Non Special Category States	*Major Religious Communities*				*Social Groups*			
	Hindus	*Muslims*	*Christians*	*Sikhs*	*SCs*	*STs*	*OBCs*	*Others*
Andhra Pradesh	71.8	61.4	74.6	–	69.1	76	71	69.7
Assam	68.6	67.1	84	–	75.7	78.5	67.5	64.9
Bihar	76.8	82.7		–	81.9	77.8	77.5	75.3
Chhattisgarh	72.3	74.5	33.3	–	69	78.1	71.6	55.1
Delhi	57.3	56	41.2	63.6	63.6	83.4	56	54.1
Goa	39.9	45.7	32.2	–	50	24.1	39.2	40
Gujarat	70.2	67.1	50	83.4	69.6	83.3	71.7	63.3
Haryana	71.8	78.5		72.3	79	75.6	72.8	69.1
Jharkhand	68	69.4	78	60	76.4	80.5	66.8	56.7
Karnataka	70.6	71.9	67	–	76.4	81.9	69.1	64
Kerala	41.2	50.9	39.8	–	50	43.8	44.1	43.8
Madhya Pradesh	73.7	77.7	31.7	78.2	75.6	82.5	70.6	68.4
Maharashtra	64	58.9	40.8	50	64.8	67.4	62.1	62.3
Orissa	65.5	50.2	63.3	–	63.9	80.8	59.1	58.6
Punjab	69.2	58	83.5	64.3	73.3	0	65.2	61.5
Rajasthan	70.7	72.6	39.4	85.5	70.8	74.3	70.4	67.9
Tamil Nadu	64.5	53.6	56.7	–	70.4	75	60.8	71.4
Uttar Pradesh	73.1	78.3	50.7	29.7	75.2	80.9	73.8	72.6
West Bengal	60.8	61.3	63.4	–	66	85.9	49.3	53.6
Special Category States								
Arunachal Pradesh	67.6	64.4	49	–	74.2	53.5	75	64.9
Himachal Pradesh	54.3	50.8	–	42.2	53.9	65.4	65.9	50.2
Jammu & Kashmir	65.7	56.1	–	30	66.9	63.4	59.6	59.8
Manipur	39.5	51.7	40.5	–	49.6	41	46.5	40.4
Meghalaya	60	66.7	63.6	–	46.6	65.8	42	63.1
Mizoram	33.6	66.7	42.5	–	34.3	44.2	100	100
Nagaland	0	0	0	–	0	0	0	0
Sikkim	57.8	73	61.6	–	59.6	60.1	54.5	66.4
Tripura	64.8	46.8	100	–	61.8	77.1	61.4	56.5
Uttarakhand	61	71.2	–	59.5	73.5	72.3	66.6	55
Union Territories								
Andaman & Nicobar Islands.	–	–	–	–	–	–	–	–
Chandigarh	–	–	–	–	–	–	–	–
Dadra & Nagar Haveli	–	–	–	–	–	–	–	–
Daman & Diu	–	–	–	–	–	–	–	–
Lakshadweep	–	–	–	–	–	–	–	–
Puducherry	–	–	–	–	–	–	–	–
All India	69.8	69.7	60.4	63.9	72.4	77.2	70.4	63.8

Source: *NFHS 3*.
Note: — Not available.

Table 5A.1 Infant Mortality Rate—Rural, Urban, and Combined, 2000 and 2009

Non Special Category States	*Rural*		*Urban*		*Total*	
	2000	*2009*	*2000*	*2009*	*2000*	*2009*
Andhra Pradesh	74	54	36	35	65	49
Assam	78	64	35	37	75	61
Bihar	63	53	53	40	62	52
Chhattisgarh	95	55	49	47	79	54
Delhi	32	40	32	31	32	33
Goa	24	11	21	10	23	11
Gujarat	69	55	45	33	62	48
Haryana	69	54	57	41	67	51
Jharkhand	74	46	48	30	70	44
Karnataka	68	47	24	31	57	41
Kerala	14	12	14	11	14	12
Madhya Pradesh	93	72	54	45	87	67
Maharashtra	56	37	33	22	48	31
Orissa	99	68	66	46	95	65
Punjab	56	42	38	31	52	38
Rajasthan	82	65	58	35	79	59
Tamil Nadu	56	30	38	26	51	28
Uttar Pradesh	87	66	65	47	83	63
West Bengal	54	34	37	27	51	33
Special Category States						
Arunachal Pradesh	45	35	11	14	44	32
Himachal Pradesh	62	46	37	28	60	45
Jammu & Kashmir	51	48	45	34	50	45
Manipur	23	18	25	11	23	16
Meghalaya	61	61	32	40	58	59
Mizoram	23	45	17	19	21	36
Nagaland	NA	27	23	23	NA	26
Sikkim	49	36	36	21	49	34
Tripura	42	33	32	20	41	31
Uttarakhand	73	44	26	27	50	41
Union Territories						
Andaman & Nicobar Islands	27	31	10	20	23	27
Chandigarh	38	25	26	25	28	25
Dadra & Nagar Haveli	62	41	14	24	58	37
Daman & Diu	38	21	57	30	48	24
Lakshadweep	25	22	29	28	27	25
Puducherry	33	28	15	19	23	22
All India	74	55	44	34	68	50

Note: Infant mortality rates for smaller states and Union Territories are based on a three-year period 1998–2000 for the year 2000.
Source: *SRS Bulletin,* April 2002, January 2011, Registrar General, India.

Table 5A.2 Infant Mortality Rate by Gender, 2000 and 2009

Non Special Category States	*Males*		*Females*		*Persons*	
	2000	*2009*	*2000*	*2009*	*2000*	*2009*
Andhra Pradesh	66.4	48	64.2	50	65.4	49
Assam	65.9	58	82.9	64	74.5	61
Bihar	61.8	52	61.4	52	61.6	52
Chhattisgarh	92.3	50	66.1	57	79.9	54
Delhi	30.1	31	33.8	34	31.8	33
Goa	27.1	7	14.7	14	21	11
Gujarat	58.8	47	66.8	48	62.4	48
Haryana	63	48	70.9	53	66.6	51
Jharkhand	59.4	42	78.8	46	68.4	44
Karnataka	65.4	41	47.3	42	56.5	41
Kerala	14.5	10	13.3	13	13.9	12
Madhya Pradesh	81.4	66	93.2	68	87	67
Maharashtra	45.8	28	50	33	47.8	31
Orissa	98.3	65	92.4	66	95.5	65
Punjab	45	37	61.5	39	52.3	38
Rajasthan	76.4	58	81.2	61	78.7	59
Tamil Nadu	48.5	27	53.7	29	51	28
Uttar Pradesh	80.7	62	86.5	65	83.4	63
West Bengal	54.3	33	47	33	50.7	33
Special Category States						
Arunachal Pradesh	41.3	31	38.8	34	40.1	32
Himachal Pradesh	56.7	44	44.5	45	51	45
Jammu & Kashmir	59.2	41	46.1	51	53.1	45
Manipur	20.5	14	24	18	22.2	16
Meghalaya	65.1	59	67.2	59	66.2	59
Mizoram	18.3	33	16.8	38	17.5	36
Nagaland	N.A	23	N.A.	28	N.A.	26
Sikkim	49.8	35	44.1	33	47	34
Tripura	30.7	33	38.9	30	34.8	31
Uttarakhand	54	41	42.5	42	49	41
Union Territories						
Andaman & Nicobar Islands	19.4	29	13	25	16.4	27
Chandigarh	24	26	30.6	23	26.7	25
Dadra & Nagar Haveli	52.9	38	60.8	37	56.8	37
Daman & Diu	73.3	21	29	28	54.2	24
Lakshadweep	14.5	21	29	29	22.3	25
Puducherry	14	25	24.9	20	19.7	22
All India	66.8	49	68.9	52	67.8	50

Source: Sample Registration System, Registrar General, India.

Table 5A.3 Infant Mortality Rate by Major Religious Communities, 1998–9 and 2005–6

Non Special Category States	*Hindus*		*Muslims*		*Christians*		*Sikhs*	
	1998–9	*2005–6*	*1998–9*	*2005–6*	*1998–99*	*2005–6*	*1998–9*	*2005–6*
Andhra Pradesh	75.5	71	29.7	52.2	—	—	—	—
Assam	57.1	—	68.4	—	—	—	—	—
Bihar	76.5	63.2	71.3	72.1	—	—	—	—
Chhattisgarh	—	80.2	—	—	—	—	—	—
Delhi	49.2	37.6	40.2	43.1	—	—	—	—
Goa	—	33.2	—	—	—	5.8	—	—
Gujarat	68.3	65.6	34	40.4	—	—	—	—
Haryana	61.3	42.3	51.8	58.7	—	—	38.6	—
Jharkhand	—	72.6	—	61.2	—	—	—	—
Karnataka	65.5	55	49.5	45.3	—	—	—	—
Kerala	22.3	16.5	18.9	17.2	21.9	17.1	—	—
Madhya Pradesh	94.2	84.3	77.9	59.6	—	—	—	—
Maharashtra	58.3	49	28.2	25.9	—	—	—	—
Orissa	—	—	—	—	—	—	—	—
Punjab	57	45.2	—	—	—	—	51.5	46.6
Rajasthan	90.5	73.8	73.9	67.8	—	—	—	—
Tamil Nadu	50.1	40.2	51.1	—	—	15.2	—	—
Uttar Pradesh	100.2	85.2	75.9	76.5	—	—	—	—
West Bengal	49.8	48.5	51.9	59.5	—	—	—	—
Special Category States								
Arunachal Pradesh	—	65.6	—	—	—	74.8	—	—
Himachal Pradesh	—	37.2	—	—	—	—	—	—
Jammu & Kashmir	63.1	45	63.3	46.2	—	—	—	—
Manipur	—	22.2	—	59.8	—	50.3	—	—
Meghalaya	—	—	—	—	—	48.6	—	—
Mizoram	—	—	—	—	—	35.1	—	—
Nagaland	—	59.5	—	46.4	—	47.1	—	—
Sikkim	—	32	—	—	—	—	—	—
Tripura	—	53	—	—	—	—	—	—
Uttarakhand	—	58.7	—	48.3	—	—	—	—
Union Territories								
Andaman & Nicobar Islands	—	—	—	—	—	—	—	—
Chandigarh	—	—	—	—	—	—	—	—
Dadra & Nagar Haveli	—	—	—	—	—	—	—	—
Daman & Diu	—	—	—	—	—	—	—	—
Lakshadweep	—	—	—	—	—	—	—	—
Puducherry	—	—	—	—	—	—	—	—
All India	77.1	58.5	58.8	52.4	49.2	41.7	53.3	45.6

Source: *NFHS 2 and 3.*
Note: — Not available.

Table 5A.4 Infant Mortality Rate by Social Groups, 1998–9 and 2005–6

Non Special Category States	*Scheduled Castes*		*Scheduled Tribes*		*Other Backward Classes*		*Others*	
	1998–9	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*
Andhra Pradesh	95.4	88.1	103.6	94.1	69.7	62.8	47.1	54.0
Assam	44.8	—	59.3	—	46.7	—	68.2	—
Bihar	86.3	71.0	81.9	—	75.3	57.2	61.2	82.2
Chhattisgarh	—	63.1	—	90.6	—	79.4	—	83.1
Goa	—	—	—	—	—	26.3	—	22.2
Gujarat	80.1	65.4	60.3	86.0	74.2	66.5	53.7	47.3
Haryana	67.5	53.3	—	—	55.3	52.1	56.5	36.1
Jharkhand	—	76.7	—	93.0	—	66.9	—	75.5
Karnataka	69.9	57.2	85.0	45.8	60.6	53.0	56.4	43.5
Kerala	—	—	—	—	17.3	11.5	20.5	19.9
Madhya Pradesh	101.5	81.9	101	95.6	92.3	79.0	72.4	66.8
Maharashtra	52.6	45.2	73.6	51.4	52.8	50.6	48.9	40.5
Orissa	83.9	73.7	98.7	78.7	95.6	66.0	79.1	53.1
Punjab	73.7	46.2	—	—	57.6	—	44.3	44.1
Rajasthan	98.9	96.4	94.7	73.2	87.5	66.9	81.6	58.1
Tamil Nadu	41.8	37.4	—	—	52.7	38.2	—	—
Uttar Pradesh	110.0	90.7	83.3	—	105.7	84.1	82.3	71.4
West Bengal	55.4	38.8	85.1	—	—	—	45.0	56.6
Special Category States								
Arunachal Pradesh	—	—	—	67.6	—	—	—	48.7
Himachal Pradesh	43.7	56.4	—	—	38.0	36.9	39.1	28.2
Jammu & Kashmir	44.3	62.6	—	34.3	85.7	45.3	62.3	44.7
Manipur	—	—	—	51.2	—	45.9	—	25.8
Meghalaya	—	—	—	49.3	—	—	—	—
Mizoram	—	—	—	—	—	—	—	—
Nagaland	—	—	—	45.8	—	58.1	—	33.8
Sikkim	—	—	—	28.9	—	32.3	—	48.7
Tripura	—	57.4	—	—	—	—	—	53.4
Uttarakhand	—	70.2	—	—	—	64.0	—	43.8
Union Territories								
Andaman & Nicobar Islands	—	—	—	—	—	—	—	—
Chandigarh	—	—	—	—	—	—	—	—
Dadra & Nagar Haveli	—	—	—	—	—	—	—	—
Daman & Diu	—	—	—	—	—	—	—	—
Delhi	73.8	37.4	—	—	49.9	38.5	34.4	37.4
Lakshadweep	—	—	—	—	—	—	—	—
Puducherry	—	—	—	—	—	—	—	—
All India	83.0	66.4	84.2	62.1	76.0	56.6	61.8	48.9

Source: *NFHS 2 and 3.*
Note: — Not available.

Table 5A.5 Under-five Mortality Rate (U5MR) by Gender, 1998–9 and 2005–6

Non Special Category States	*Males*		*Females*		*Persons*	
	1998–9	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*
Andhra Pradesh	88.2	85.6	94.5	71.1	85.5	63.2
Assam	86.8	90.3	71.5	100.3	89.5	85.0
Bihar	104.6	82.7	116.0	108.3	105.1	84.8
Chhattisgarh	—	107.7	—	103.3	—	90.3
Delhi	61.4	47.2	53.2	45.5	55.4	46.7
Goa	—	32.9	—	31.4	46.8	20.3
Gujarat	92.4	72.2	89.0	82.5	85.1	60.9
Haryana	66.0	55.2	94.2	63.0	76.8	52.3
Jharkhand	—	111.1	—	113.7	—	93
Karnataka	89.7	71.4	76.6	60.6	69.8	54.7
Kerala	30.6	22.3	21.1	16.6	18.8	16.3
Madhya Pradesh	141.7	103.6	148.0	112.7	137.6	94.2
Maharashtra	69.4	55.8	70.6	50.7	58.1	46.7
Orissa	121.3	103.7	109.9	84.4	104.4	90.6
Punjab	55.4	51.3	87.4	58.9	72.1	52.0
Rajasthan	115.7	87.7	134.9	99.4	114.9	85.4
Tamil Nadu	62.3	42.3	66.8	47.9	63.3	35.5
Uttar Pradesh	120.9	100.9	144.2	124.7	122.5	96.4
West Bengal	74.7	74.8	67.1	55.7	67.6	59.6
Special Category States						
Arunachal Pradesh	89.7	109.1	81.1	86.4	98.1	87.7
Himachal Pradesh	53.4	49.3	42.8	35.8	42.4	41.5
Jammu & Kashmir	76.6	53.9	80.7	53.7	80.1	51.2
Manipur	66.0	56.7	56.2	43.3	56.1	41.9
Meghalaya	143.3	86.2	110.4	61.0	122.0	70.5
Mizoram	66.5	49.5	52.3	47.5	54.7	52.9
Nagaland	72.5	74.8	62.8	65.0	63.8	64.7
Sikkim	82.1	44.1	85.7	40.2	71.0	40.1
Tripura	73.5	79.5	63.4	67.0	—	59.2
Uttarakhand	—	67.6	—	72.9	—	56.8
Union Territories						
Andaman & Nicobar Islands	—	—	—	—	—	—
Chandigarh	—	—	—	—	—	—
Dadra & Nagar Haveli	—	—	—	—	—	—
Daman & Diu	—	—	—	—	—	—
Puducherry	—	—	—	—	—	—
Lakshadweep	—	—	—	—	—	—
All India	97.9	69.7	105.2	79.2	94.9	74.3

Source: *NFHS 2 and 3*.
Note: — Not available.

Table 5A.6 Under-five Mortality Rate (U5MR) by Gender, 2008

Non Special Category States	*Total*			*Rural*			*Urban*		
	Persons	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*
Andhra Pradesh	58	55	61	64	62	67	40	36	45
Assam	88	81	96	93	85	101	50	50	51
Bihar	75	69	82	77	70	84	56	52	59
Chhattisgarh	71	65	78	74	68	80	56	49	64
Delhi	40	38	43	40	39	40	41	38	44
Gujarat	60	58	63	72	70	76	38	38	39
Haryana	65	60	71	70	66	75	50	43	59
Jharkhand	65	58	72	69	61	77	44	41	46
Karnataka	55	54	56	62	61	64	40	40	40
Kerala	14	12	15	14	13	15	12	8	16
Madhya Pradesh	92	90	93	98	95	101	62	65	59
Maharashtra	41	39	42	49	48	51	28	26	29
Orissa	89	87	91	93	91	95	59	56	63
Punjab	49	45	55	55	48	63	39	38	41
Rajasthan	80	72	88	88	80	97	49	44	55
Tamil Nadu	36	36	36	39	38	40	31	33	30
Uttar Pradesh	91	83	100	97	89	106	63	57	71
West Bengal	42	42	42	45	45	44	32	30	35
Special Category States									
Himachal Pradesh	50	37	64	50	37	65	39	38	41
Jammu & Kashmir	55	55	55	58	57	58	41	41	42
All India	69	64	73	76	71	81	43	41	46

Source: Sample Registration System—Registrar General, India.

Table 5A.7 Under-five Mortality Rate (U5MR) by Major Religious Communities, 1998–9 and 2005–6

Non Special Category States	*Hindus*		*Muslims*		*Sikhs*		*Christians*	
	1998–9	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*
Andhra Pradesh	97.1	82.0	40.3	60.0	—	—	—	—
Assam	75.6	83.3	87.2	114.7		—	—	—
Bihar	112.2	91.5	98.7	108.9		—	—	—
Chhattisgarh	—	105	—			—	—	—
Delhi	59.9	46.4	58.1	48.0		—	—	—
Goa	—	38.7	—				—	10.3
Gujarat	96.2	80.7	50.2	48.0		—	—	—
Haryana	79.9	55.9	90.0	86.3	61.3	—	—	—
Jharkhand	—	105	—	91.4			—	
Karnataka	88	68.8	65.6	57.2		—	—	—
Kerala	27.8	19.1	25.7	18.6	—	—	21.9	17.1
Madhya Pradesh	148.6	110.5	98.6	89.3		—	—	—
Maharashtra	76.4	57.8	41.5	28.6		—		—
Orissa	—	—	—			—	—	—
Punjab	71.0	56.3			63.6	55.0	—	
Rajasthan	126.2	95.8	122.2	77.5		—	—	—
Tamil Nadu	64.2	48.3	56.0	—	—		—	15.8
Uttar Pradesh	137.8	115.8	108.4	101.1	—	—	—	—
West Bengal	68.3	57.6	77.0	80.0	—	—	—	—
Special Category States								
Arunachal Pradesh	—	81.1	—				—	105.1
Himachal Pradesh	—	41.8	—			—	—	—
Jammu & Kashmir	80.8	55.2	78.4	53.9		—	—	—
Manipur	—	30.1	—	85.0			—	71.1
Meghalaya	—	—	—			—	—	72.8
Mizoram	—	—	—			—	—	50.6
Nagaland	—	77.9	—	54.9			—	69.8
Sikkim	—	37.0	—	—	—	—	—	—
Tripura	—	66.4	—	—	—	—	—	—
Uttarakhand	—	72.4	—	80.9	—	—	—	—
Union Territories								
Andaman & Nicobar Islands	—	—	—			—	—	—
Chandigarh	—	—	—			—	—	—
Dadra & Nagar Haveli	—	—	—			—	—	—
Daman & Diu	—	—	—			—	—	—
Puducherry	—	—	—			—	—	—
Lakshadweep	—	—	—			—	—	—
All India	107.0	76.0	82.7	70.0	64.9	52.1	68.0	52.8

Source: *NFHS 2 and 3.*
Note: — Not available.

Table 5A.8 Under-five Mortality Rate (U5MR) by Social Groups, 1998–9 and 2005–6

Non Special Category States	*Scheduled Castes*		*Scheduled Tribes*		*Other Backward Classes*		*Others*	
	1998–9	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*
Andhra Pradesh	122.4	96.1	115.9	112.0	89.5	73.1	64.7	63.2
Assam	56.3	110.7	73.5	83.2	72.4	76.4	86.9	100.9
Bihar	133.8	113.1	116.6	—	106.8	84.7	89.3	108.9
Chhattisgarh	—	78.1	—	128.5	—	98.3	—	109.3
Delhi	94.7	51.3			62.4	47.5	42.1	43.2
Goa	—	—	—	—	—	33.6	—	29.2
Gujarat	123	86.6	94.6	115.8	96	78.1	70.3	55.7
Haryana	92.1	73.9	—	62.3	74.7	49.7	74.8	
Jharkhand		121.3	—	138.5	—	100.8	—	92.7
Karnataka	104.6	65.4	120.6	77.9	78.2	63.8	69.8	60.4
Kerala	—	—	—	—	24.5	12.9	23.9	20.7
Madhya Pradesh	156	110.1	179.6	140.7	139.8	97.6	94.8	79.9
Maharashtra	66.1	50.2	92.3	69.8	69.2	57.8	65.9	47.4
Orissa	122.7	91.8	138.4	136.3	113.8	83.5	92.9	64.2
Punjab	94.6	61.5	—		72.5	50.5	51.4	
Rajasthan	140.7	123.1	155	113.8	123.2	80.8	109.3	69.9
Tamil Nadu	63.3	48.3	—	—	63	44.6	—	
Uttar Pradesh	158.1	135.1	124.5	—	142.2	111	112.1	87.7
West Bengal	81.5	46.6	100.1	—		—	63.4	70.4
Special Category States								
Arunachal Pradesh	—	—	—	100.9	—	—	—	78.6
Himachal Pradesh	57.9	63.4	—	—	47.2	36.9	45.6	33.1
Jammu & Kashmir	62.8	72.2	—	—	107.7	55.1	76.7	53.3
Manipur	—	—	—	71.4	—	60.7	—	37.9
Meghalaya	—	—	—	74	—		—	
Mizoram	—	—	—	—	—	—	—	—
Nagaland	—	—	—	65.8	—	91	—	53.5
Sikkim	—	—	—	35.9	—	36.7	—	59.9
Tripura	—	83.9	—	—	—		—	56.9
Uttarakhand	—	97.3	—	—	—	83.9	—	52.2
Union Territories								
Andaman & Nicobar Islands	—	—	—	—	—	—	—	—
Chandigarh	—	—	—	—	—	—	—	—
Dadra & Nagar Haveli	—	—	—	—	—	—	—	—
Daman & Diu	—	—	—	—	—	—	—	—
Lakshadweep	—	—	—	—	—	—	—	—
Puducherry	—	—	—	—	—	—	—	—
All India	119.3	88.1	126.6	95.7	103.1	72.8	82.6	59.2

Source: *NFHS 2 and 3.*
Note: — Not available.

Table 5A.9 Death Rate by Gender, 1991, 1997, and 2009

Non Special Category States	*Males*			*Females*			*Persons*		
	1991	*1997*	*2009*	*1991*	*1997*	*2009*	*1991*	*1997*	*2009*
Andhra Pradesh	10.4	9.3	8.4	9	7.4	6.9	9.7	8.3	7.6
Assam	11.6	9.8	9.3	11.3	9.9	7.4	11.5	9.9	8.4
Bihar	9.4	9.9	7.2	10.3	10.2	6.8	9.8	10	7.0
Chhattisgarh			9.0			7.2			8.1
Delhi	6.5	5.8	4.7	6.1	5	4.0	6.3	5.4	4.4
Goa	8.5	8.8	8.1	6.5	6.6	5.4	7.5	7.7	6.7
Gujarat	8.9	7.8	7.3	8.1	7.5	6.4	8.5	7.6	6.9
Haryana	8.4	8	7.4	7.9	8	5.7	8.2	8	6.6
Jharkhand			7.0			6.9			7.0
Karnataka	9.4	8.1	8.1	8.5	7	6.4	9	7.6	7.2
Kerala	6.9	7.6	7.8	5.2	4.9	5.8	6	6.2	6.8
Madhya Pradesh	13.6	11.2	8.5	14	10.9	8.4	13.8	11	8.5
Maharashtra	8.5	7.9	7.5	7.9	6.7	5.8	8.2	7.3	6.7
Orissa	13.2	11	9.4	12.5	10.7	8.3	12.8	10.9	8.8
Punjab	8.7	8	7.6	6.8	6.8	6.4	7.8	7.4	7.0
Rajasthan	10.1	9	7.1	10.1	8.7	6.0	10.1	8.9	6.6
Tamil Nadu	9.7	8.8	8.5	8	7.2	6.8	8.8	8	7.6
Uttar Pradesh	11.1	10	8.5	11.6	10.6	7.8	11.3	10.3	8.2
West Bengal	8.2	8.1	6.7	8.3	7.3	5.6	8.3	7.7	6.2
Special Category States									
Arunachal Pradesh	14.2	6.1	7.3	12.8	5.4	4.9	13.5	5.8	6.1
Himachal Pradesh	9.8	9.3	8.4	8	7	6.0	8.9	8.1	7.2
Jammu & Kashmir			6.3			5.2			5.7
Manipur	5.7	7	5.3	5.2	4.9	4.1	5.4	5.9	4.7
Meghalaya	8.9	9	8.8	8.7	8.6	7.3	8.8	8.8	8.1
Mizoram			5.1			4.0			4.5
Nagaland			3.7			3.4			3.6
Sikkim	7.6	6.5	5.9	7.5	6.4	5.6	7.5	6.5	5.7
Tripura	8.1	7.4	5.7	7.1	6	4.5	7.6	6.8	5.1
Uttarakhand	—	—	7.0	—	—	6.1	—	—	6.5
Union Territories									
Andaman & Nicobar Islands	7	6	5.3	4.4	4.1	2.9	5.8	5.1	4.1
Chandigarh	4.5	4.5	4.7	4.7	3.9	3.0	4.6	4.2	3.9
Dadra & Nagar Haveli	12	9.7	5.5	10.9	6.7	4.1	11.5	8.2	4.8
Daman & Diu	10.2	6.8	5.2	7.8	5.1	4.9	9	5.9	5.1
Lakshadweep	5.3	6.4	6.3	4.1	6.1	5.4	4.7	6.2	5.8
Puducherry	7.5	9.3	7.9	5.7	6.7	6.1	6.6	8	7.0
All India*	10	9.2	7.8	9.7	8.6	6.7	9.8	8.9	7.3

Source: Compendium of India's Fertility and Mortality Indicators, Registrar General, India.
Note: — Not available.

Table 5A.10 Life Expectancy at Birth by Gender, 1992–6 and 2004

Non Special Category States	*Males*		*Females*		*Persons*	
	1992–6	*2004*	*1992–6*	*2004*	*1992–6*	*2004*
Andhra Pradesh	60.8	62.9	63.0	65.5	62.0	64.4
Assam	56.1	58.6	56.6	59.3	56.2	58.9
Bihar	60.2	62.2	58.2	60.4	59.4	61.6
Chhattisgarh	—	—	—	—	—	—
Delhi	—	—	—	—	—	—
Goa	—	—	—	—	—	—
Gujarat	60.5	62.9	62.5	65.2	61.4	64.1
Haryana	63.4	65.9	64.3	66.3	63.8	66.2
Jharkhand	—	—	—	—	—	—
Karnataka	61.1	63.6	64.5	67.1	62.9	65.3
Kerala	70.2	71.4	75.8	76.3	73.1	74.0
Madhya Pradesh	55.1	58.1	54.7	57.9	55.2	58.0
Maharashtra	63.8	66.0	66.2	68.4	65.2	67.2
Orissa	56.9	59.5	56.6	59.6	56.9	59.6
Punjab	66.4	68.4	68.6	70.4	67.4	69.4
Rajasthan	58.6	61.5	59.6	62.3	59.5	62.0
Tamil Nadu	62.8	65.0	64.8	67.4	63.7	66.2
Uttar Pradesh	57.7	60.3	56.4	59.5	57.2	60.0
West Bengal	61.8	64.1	63.1	65.8	62.4	64.9
Special Category States						
Arunachal Pradesh	—	—	—	—	—	—
Himachal Pradesh	—	66.5	—	67.3	—	67.0
Jammu & Kashmir	—	—	—	—	—	—
Manipur	—	—	—	—	—	—
Meghalaya	—	—	—	—	—	—
Mizoram	—	—	—	—	—	—
Nagaland	—	—	—	—	—	—
Sikkim	—	—	—	—	—	—
Tripura	—	—	—	—	—	—
Uttarakhand	—	—	—	—	—	—
Union Territories						
Andaman & Nicobar Islands	—	—	—	—	—	—
Chandigarh	—	—	—	—	—	—
Dadra & Nagar Haveli	—	—	—	—	—	—
Daman & Diu	—	—	—	—	—	—
Lakshadweep	—	—	—	—	—	—
Puducherry	—	—	—	—	—	—
All India	60.1	62.6	61.4	64.2	60.7	63.5

Source: Compendium of India's Fertility and Mortality Indicators, based on Sample Registration System, Register General India.
Note: — Not available.

Table 5A.11 Projected Life Expectancy at Birth by Gender, 2006–10

Non Special Category States	*Males*	*Females*	*Persons**
Andhra Pradesh	65.4	69.4	67.4
Assam	61.6	62.8	62.2
Bihar	67.1	66.7	66.9
Chhattisgarh	61.0	64.0	62.5
Delhi	71.4	74.8	72.9
Goa	—	—	69.5
Gujarat	67.2	71.0	69.0
Haryana	67.9	69.8	68.8
Jharkhand	66.0	64.0	65.0
Karnataka	66.5	71.1	68.8
Kerala	72.0	76.8	74.5
Madhya Pradesh	62.5	63.3	62.9
Maharashtra	67.9	71.3	69.5
Orissa	62.3	64.8	63.5
Punjab	68.7	71.6	70.0
Rajasthan	66.1	69.2	67.6
Tamil Nadu	67.6	70.6	69.1
Uttar Pradesh	64.0	64.4	64.2
West Bengal	68.2	70.9	69.5
Special Category States			
Arunachal Pradesh	68.1	71.8	69.9
Himachal Pradesh	69.8	73.3	71.5
Jammu & Kashmir	65.0	67.0	65.9
Manipur	68.1	71.8	69.9
Meghalaya	68.1	71.8	70.0
Mizoram	68.1	71.8	70.0
Nagaland	68.1	71.8	69.9
Sikkim	68.1	71.8	69.8
Tripura	68.1	71.8	69.9
Uttarakhand	64.0	68.0	65.9
Union Territories			
Andaman & Nicobar Islands	—	—	69.0
Chandigarh	—	—	69.9
Dadra & Nagar Haveli	—	—	—
Daman & Diu	—	—	—
Union Territories			
Lakshadweep	—	—	—
Puducherry	—	—	69.0
All India	65.8	68.1	66.9

Source: Report of the Technical Group on Population Projections 2006–10, Ministry of Health and Family Welfare.
Note:* Persons have been calculated by weighted average with weights, respectively, being the projected male/female population for the year 2008. —: Not available.

Table 5A.12 Life Expectancy at Age 1 by Gender, 1992–6 and 2004

Non Special Category States	*Males*		*Females*		*Persons*	
	1992–6	*2004*	*1992–6*	*2004*	*1992–6*	*2004*
Andhra Pradesh	64.3	66.2	65.9	68.7	65.2	67.6
Assam	60.6	62.5	61.0	62.9	60.6	62.7
Bihar	64.0	64.9	62.0	63.2	63.2	64.3
Chhattisgarh	—	—	—	—	—	—
Delhi	—	—	—	—	—	—
Goa	—	—	—	—	—	—
Gujarat	63.9	65.8	66.3	68.7	65.1	67.2
Haryana	66.9	69.1	68.4	70.7	67.6	70.0
Jharkhand	—	—	—	—	—	—
Karnataka	64.9	66.4	68.1	70.1	66.6	68.3
Kerala	70.3	71.2	75.8	76.2	73.2	73.9
Madhya Pradesh	61.5	62.5	60.5	62.6	61.2	62.6
Maharashtra	66.8	67.5	68.9	70.3	68.1	68.9
Orissa	62.6	63.7	62.2	63.6	62.6	63.6
Punjab	69.2	70.4	72.2	73.6	70.5	72.0
Rajasthan	63.7	65.9	64.9	66.9	64.6	66.5
Tamil Nadu	65.1	66.8	67.3	69.1	66.1	68.0
Uttar Pradesh	62.5	64.5	61.6	64.1	62.2	64.4
West Bengal	65.2	66.2	66.4	67.6	65.8	66.9
Special Category States						
Arunachal Pradesh	—	—	—	—	—	—
Himachal Pradesh	—	69.1	—	70.0	—	69.6
Jammu & Kashmir	—	—	—	—	—	—
Manipur	—	—	—	—	—	—
Meghalaya	—	—	—	—	—	—
Mizoram	—	—	—	—	—	—
Nagaland	—	—	—	—	—	—
Sikkim	—	—	—	—	—	—
Tripura	—	—	—	—	—	—
Uttarakhand	—	—	—	—	—	—
Union Territories						
Andaman & Nicobar Islands	—	—	—	—	—	—
Chandigarh	—	—	—	—	—	—
Dadra & Nagar Haveli	—	—	—	—	—	—
Daman & Diu	—	—	—	—	—	—
Lakshadweep	—	—	—	—	—	—
Puducherry	—	—	—	—	—	—
All India	64.3	64.9	65.6	66.8	64.9	65.9

Source: Compendium of India's Fertility and Mortality Indicators, based on Sample Registration System, Register General, India.
Note: — Not available.

Table 5A.13 Percentage of Persons not Expected to Survive Beyond the Age of 40 Years, 1991 and 2004

Non Special Category States	*Males*		*Females*		*Persons*	
	1991	*2004*	*1991*	*2004*	*1991*	*2004*
Andhra Pradesh	15.0	17.5	14.9	15.6	14.9	16.4
Assam	21.1	21.0	22.5	23.9	21.8	22.4
Bihar	17.3	19.8	22.1	22.7	19.5	20.8
Delhi	—	—	—	—	—	—
Goa	—	—	—	—	—	—
Gujarat	16.0	15.8	17.6	15.7	16.7	15.7
Haryana	14.3	14.4	16.6	17.7	15.4	15.8
Karnataka	15.4	15.2	16.0	13.9	15.7	14.6
Kerala	6.0	7.5	4.4	4.2	5.1	5.6
Madhya Pradesh	23.5	22.9	27.3	27.1	25.3	24.2
Maharashtra	12.1	13.6	12.5	12.0	12.3	12.8
Orissa	21.6	—	23.0	—	22.3	—
Punjab	13.8	13.8	13.5	12.2	13.8	13.0
Rajasthan	18.3	19.2	21.7	21.0	19.9	19.7
Tamil Nadu	13.4	13.7	13.4	11.8	13.4	12.7
Uttar Pradesh	19.8	20.1	25.0	24.1	22.2	21.9
West Bengal	14.2	—	15.4	—	14.8	—
Special Category States						
Arunachal Pradesh	—	—	—	—	—	—
Himachal Pradesh	12.9	13.1	13.2	12.8	13.0	12.8
Jammu & Kashmir	—	—	—	—	—	—
Manipur	—	—	—	—	—	—
Meghalaya	—	—	—	—	—	—
Mizoram	—	—	—	—	—	—
Nagaland	—	—	—	—	—	—
Sikkim	—	—	—	—	—	—
Tripura	—	—	—	—	—	——
Union Territories						
Andaman & Nicobar Islands	—	—	—	—	—	—
Chandigarh	—	—	—	—	—	—
Dadra & Nagar Haveli	—	—	—	—	—	—
Daman & Diu	—	—	—	—	—	—
Lakshadweep	—	—	—	—	—	—
Puducherry	—	—	—	—	—	—
All India	16.9	17.2	19.1	18.5	18.0	17.7

Source: From Sample Registration System based Abridged Life Tables.
Note: — Not available.

Table 5A.14 Total Fertility Rate (TFR), 1990–2, 1995–7, and 2008

Non Special Category States	*TFR*		
	1990–2	*1995–7*	*2008*
Andhra Pradesh	3.0	2.8	1.8
Assam	3.4	3.3	2.6
Bihar	4.6	4.5	3.9
Chhattisgarh	—	—	3.1
Delhi	—	—	2.0
Goa	1.6	1.5	—
Gujarat	3.2	3.1	2.5
Haryana	3.9	3.5	2.5
Jharkhand	—	—	3.2
Karnataka	3.1	2.6	2.0
Kerala	1.8	1.8	1.7
Madhya Pradesh	4.7	4.1	3.3
Maharashtra	3.0	2.8	2.0
Orissa	3.3	3.1	2.4
Punjab	3.1	2.8	1.9
Rajasthan	4.5	4.2	3.3
Tamil Nadu	2.2	2.1	1.7
Uttar Pradesh	5.2	4.9	3.8
West Bengal	3.2	2.7	1.9
Special Category States			
Arunachal Pradesh	4.1	2.8	—
Himachal Pradesh	3.0	2.5	1.9
Jammu & Kashmir	—	—	2.2
Manipur	2.5	2.4	—
Meghalaya	4.1	4.0	—
Mizoram	—	—	—
Nagaland	2.3	1.5	—
Sikkim	3.0	2.5	—
Tripura	5.9	2.1	—
Uttarakhand	—	—	—
Union Territories			
Andaman & Nicobar Islands	2.5	1.9	—
Chandigarh	1.5	2.1	—
Dadra & Nagar Haveli	4.5	3.5	—
Daman & Diu	3.7	2.5	—
Lakshadweep	3.9	2.8	—
Puducherry	1.8	1.8	—
All India*	3.7	3.4	2.6

Source: Compendium of India's Fertility and Mortality Indicators, Registrar General, India.
Note: — Not available.

Table 5A.15 Total Fertility Rate (Rural) , 1990–2, 1995–7, and 2008

Non Special Category States	*TFR*		
	1990–2	*1995–7*	*2008*
Andhra Pradesh	3.1	3.1	2.0
Assam	3.6	3.5	2.8
Bihar	4.7	4.6	4.0
Chhattisgarh	—	—	3.2
Delhi	—	—	2.1
Goa	1.7	1.6	—
Gujarat	3.4	3.3	2.8
Haryana	4.2	3.8	2.7
Jharkhand	—	—	3.5
Karnataka	3.3	2.8	2.2
Kerala	1.8	1.8	1.7
Madhya Pradesh	3.9	4.4	3.6
Maharashtra	3.4	3.2	2.1
Orissa	3.4	3.3	2.5
Punjab	3.3	3.0	2.0
Rajasthan	4.8	4.5	3.6
Tamil Nadu	2.4	2.2	1.7
Uttar Pradesh	5.5	5.1	4.0
West Bengal	3.6	3.0	2.1
Special Category States			
Arunachal Pradesh	4.2	2.9	—
Himachal Pradesh	3.1	2.6	2.0
Jammu & Kashmir	—	—	2.4
Manipur	2.6	2.6	—
Meghalaya	4.8	4.5	—
Mizoram	—	—	—
Nagaland	2.4	—	—
Sikkim	3.2	2.6	—
Tripura	5.9	1.0	—
Uttarakhand	—	—	—
Union Territories			
Andaman & Nicobar Islands	2.5	2.0	—
Chandigarh	2.3	2.6	—
Dadra & Nagar Haveli	4.0	3.6	—
Daman & Diu	4.0	2.7	—
Lakshadweep	3.2	2.9	—
Puducherry	2.0	2.0	—
All India*	4.0	3.7	2.9

Source: Compendium of India's Fertility and Mortality Indicators, Registrar General, India.
Note: — Not available.

Table 5A.16 Total Fertility Rate (Urban), 1990–2, 1995–7, and 2008

Non Special Category States	*TFR*		
	1990–2	*1995–7*	*2008*
Andhra Pradesh	2.5	2.3	1.6
Assam	2.1	2.1	1.5
Bihar	3.4	3.2	2.8
Chhattisgarh	—	—	2.1
Delhi	—	—	2.0
Goa	1.5	1.3	—
Gujarat	2.9	2.9	2.2
Haryana	2.9	2.8	2.2
Jharkhand	—	—	2.1
Karnataka	2.5	2.2	1.7
Kerala	1.8	1.8	1.7
Madhya Pradesh	3.3	2.6	2.2
Maharashtra	2.5	2.4	1.7
Orissa	2.4	2.3	1.6
Punjab	2.8	2.3	1.8
Rajasthan	3.5	3.0	2.5
Tamil Nadu	2.0	1.8	1.6
Uttar Pradesh	3.8	3.8	3.0
West Bengal	2.0	1.8	1.3
Special Category States			
Arunachal Pradesh	2.8	1.2	—
Himachal Pradesh	1.9	1.8	1.4
Jammu & Kashmir	—	—	1.5
Manipur	1.9	2.1	—
Meghalaya	1.7	1.7	—
Mizoram	—	—	—
Nagaland	1.7	1.5	—
Sikkim	2.1	1.4	—
Tripura	5.9	0.6	—
Uttarakhand	—	—	—
Union Territories			
Andaman & Nicobar Islands	2.3	1.6	—
Chandigarh	1.4	2.1	—
Dadra & Nagar Haveli	—	2.4	—
Daman & Diu	3.4	2.4	—
Lakshadweep	4.7	2.7	—
Puducherry	1.7	1.6	—
All India*	2.7	2.5	2.0

Source: Compendium of India's Fertility and Mortality Indicators, Registrar General, India.
Note: — Not available.

Table 5A.17 Sex-Ratio, 2001 and 2011

Non Special Category States	*Combined*	*Rural*	*Urban*	*Combined*
	2001	*2001*	*2001*	*2011**
Andhra Pradesh	978	983	965	992
Assam	932	940	878	954
Bihar	921	927	869	916
Chhattisgarh	990	1,005	932	991
Delhi	821	806	822	866
Goa	960	988	933	968
Gujarat	921	946	880	918
Haryana	861	867	847	877
Jharkhand	941	963	870	—
Karnataka	964	976	940	968
Kerala	1,058	1,059	1,058	1,084
Madhya Pradesh	920	927	899	930
Maharashtra	922	959	874	925
Orissa	972	986	895	978
Punjab	874	887	848	893
Rajasthan	922	932	890	926
Tamil Nadu	986	992	980	995
Uttar Pradesh	898	904	879	908
West Bengal	934	950	893	947
Special Category States				
Arunachal Pradesh	901	915	850	920
Himachal Pradesh	970	991	797	974
Jammu & Kashmir	900	927	822	883
Manipur	978	969	1,009	987
Meghalaya	975	972	985	986
Mizoram	938	925	951	975
Nagaland	909	932	809	931
Sikkim	875	881	828	889
Tripura	950	948	962	961
Uttarakhand	964	1,007	850	963
Union Territories				
Andaman & Nicobar Islands	846	862	815	878
Chandigarh	773	620	792	818
Dadra & Nagar Haveli	811	850	691	775
Daman & Diu	709	585	983	618
Lakshadweep	947	957	936	946
Puducherry	1,001	990	1,006	1,038
All India	933	946	901	940

Source: Census of India, 2001, 2011—Provisional Population Totals.
Note: Overall Sex-Ratio is defined as females per 1,000 males for the entire population.
Census not held; '—' data not available due to administrative reorganization.
* — Provisional.

Table 5A.18 Sex-Ratio in the Age Group 0–6 years, 2001 and 2011

Non Special Category States	*2001*	*2011**
Andhra Pradesh	961	943
Assam	965	957
Bihar	942	933
Chhattisgarh	975	964
Delhi	868	866
Goa	938	920
Gujarat	883	886
Haryana	819	830
Jharkhand	—	—
Karnataka	946	943
Kerala	960	959
Madhya Pradesh	932	912
Maharashtra	913	883
Orissa	953	934
Punjab	798	846
Rajasthan	909	883
Tamil Nadu	942	946
Uttar Pradesh	916	899
West Bengal	960	950
Special Category States		
Arunachal Pradesh	964	960
Himachal Pradesh	896	906
Jammu & Kashmir	941	859
Manipur	957	934
Meghalaya	973	970
Mizoram	964	971
Nagaland	964	944
Sikkim	963	944
Tripura	966	953
Uttarakhand	908	886
Union Territories		
Andaman & Nicobar Islands	957	966
Chandigarh	845	867
Dadra & Nagar Haveli	979	924
Daman & Diu	926	909
Lakshadweep	959	908
Puducherry	967	965
All India	927	914

Source: Census of India.
Note: * Provisional.
— Not available.

Table 5A.19 Sex-Ratio at Birth, by Major Religious Communities, 2001

Non Special Category States	*Hindus*	*Muslims*	*Christians*	*Sikhs*
Andhra Pradesh	951	950	951	986
Assam	952	943	946	672
Bihar	914	931	858	763
Chhattisgarh	928	917	928	867
Delhi	847	894	971	789
Goa	897	902	993	1,000
Gujarat	830	871	898	784
Haryana	778	895	892	709
Jharkhand	903	908	949	715
Karnataka	935	945	942	773
Kerala	973	960	972	938
Madhya Pradesh	902	919	885	801
Maharashtra	870	911	943	837
Orissa	926	934	975	1,010
Punjab	808	866	850	770
Rajasthan	864	887	823	761
Tamil Nadu	932	961	966	787
Uttar Pradesh	898	916	963	831
West Bengal	977	971	1,066	921
Special Category States				
Arunachal Pradesh	996	1,127	987	400
Himachal Pradesh	845	839	892	838
Jammu & Kashmir	916	966	—	842
Manipur	990	917	978	889
Meghalaya	992	922	950	1,053
Mizoram	849	859	1,005	—
Nagaland	1,015	861	985	250
Sikkim	930	675	859	1,667
Tripura	979	891	1,003	—
Uttarakhand	853	864	925	752
Union Territories				
Andaman & Nicobar Islands	965	1,013	1,003	1,000
Chandigarh	862	916	935	729
Dadra & Nagar Haveli	964	774	914	—
Daman & Diu	855	842	897	500
Lakshadweep	625	969	500	—
Puducherry	996	943	957	—
All India	901	931	963	770

Source: Calculated from Census of India (2001 Table F 10).
Note: — Not available.

Table 5A.20 Sex-Ratio at Birth by Social Groups, 2001

Non Special Category States	*Combined*			*Rural*			*Urban*		
	SCs	*STs*	*Non SC/STs*	*SCs*	*STs*	*Non SC/STs*	*SCs*	*STs*	*Non SC/STs*
Andhra Pradesh	964	948	948	961	945	942	979	979	966
Assam	931	945	949	932	942	946	923	1024	986
Bihar	946	904	910	946	904	910	949	903	913
Chhattisgarh	921	949	917	916	950	920	942	923	907
Delhi	921		921	967	—	947	889	—	895
Goa	844	917	815	847	920	826	839	865	797
Gujarat	854		772	834	—	771	829	—	777
Haryana	884	884	827	886	892	824	847	—	826
Jharkhand	959	635	924	957	933	945	966	947	921
Karnataka	973	983	968	975	985	970	964	—	962
Kerala	903	935	889	903	936	891	903	926	881
Madhya Pradesh	911	926	866	913	927	852	909	912	886
Maharashtra	—	979	967	1,090	978	958	—	—	986
Orissa	845	—	757	847	—	747	839	—	776
Punjab	882	909	849	886	910	852	860	877	836
Rajasthan	—	979	922	1,006	966	919	867	—	953
Tamil Nadu	972	1,005	950	987	1,006	943	901	—	980
Uttar Pradesh	975	994	974	973	993	963	990	1,021	1,010
West Bengal	—	—	982	—	961	1,002	—	—	942
Special Category States									
Arunachal Pradesh		998	988	—	999	966		990	1,054
Himachal Pradesh	970	996	941	980	994	935	909	—	969
Jammu & Kashmir	931	925	894	927	925	902	959	920	863
Manipur	—	960	941	—	959	943	—	971	936
Meghalaya	—	998	887	—	983	800	—	1,018	941
Mizoram	—	988	950	—	990	962	—	975	940
Nagaland	934	955	914	931	955	908	962	959	951
Sikkim	946	948	932	941	966	910	960	—	961
Tripura	911	885	898	911	886	894	911	—	914
Uttarakhand	876	914	844	864	917	845	969	—	839
Union Territories									
Andaman & Nicobar Islands	868	—	845	966	—	872	—	—	840
Chandigarh	—	996	862	—	1,003	929	—	—	817
Dadra & Nagar Haveli	—	—	837	—	—	797	—	—	917
Daman & Diu	877	—	847	885	—	813	876	—	850
Lakshadweep	—	963	—	—	1,132	1,500	—	—	—
Puducherry	955	—	998	952	—	999	960	—	997
All India	920	940	897	921	940	896	917	934	901

Source: Calculated from Census of India (2001 Table F 10).
Note: — Not available.

Table 5A.21 Distribution of Live Births by Place of Delivery, 2005–6 (*per cent*)

Non Special Category States	*Health facility/institution*				*Home*				
	Institutional	*Public Sector*	*NGO/ Trust*	*Private Sector*	*Home*	*Own Home*	*Parent's Home*	*Other Home*	*Others*
Andhra Pradesh	64.4	24.0	0.6	39.8	35.2	22.4	12.5	0.3	0.4
Assam	22.4	13.0	0.0	9.5	77.5	73.7	3.5	0.3	0.1
Bihar	19.9	3.5	0.1	16.3	79.7	69.2	10.4	0.2	0.5
Chhattisgarh	14.3	6.9	0.5	6.9	85.7	77.4	7.8	0.5	0.0
Delhi	58.9	30.2	0.2	28.6	41.1	40.9	—	0.2	0.0
Goa	92.4	43.2	0.5	48.6	7.6	3.2	4.1	0.2	0.1
Gujarat	52.7	13.9	2.0	36.8	47.0	38.5	8.1	0.4	0.3
Haryana	35.7	13.9	—	21.8	64.3	59.7	4.2	0.4	0.0
Jharkhand	18.3	3.4	1.8	13.2	81.1	68.5	11.5	1.1	0.5
Karnataka	64.7	34.8	1.1	28.9	34.8	19.3	14.8	0.8	0.5
Kerala	99.3	35.6	0.2	63.5	0.6	0.5	0.1	—	0.1
Madhya Pradesh	26.2	18.4	—	7.8	73.5	65.5	7.9	0.1	0.3
Maharashtra	64.6	26.5	0.5	37.6	35.1	21.0	13.8	0.4	0.3
Orissa	35.6	28.8	0.1	6.7	63.8	57.2	6.5	0.1	0.6
Punjab	51.3	12.3	1.2	37.9	48.6	38.9	9.6	0.2	0.1
Rajasthan	29.6	19.0	—	10.6	70.3	59.8	10.0	0.5	0.1
Tamil Nadu	87.8	48.1	0.8	38.9	12.1	8.9	2.6	0.6	0.2
Uttar Pradesh	20.6	6.6	0.2	13.8	79.3	70.8	7.6	0.9	0.2
West Bengal	42.0	31.8	0.3	10.0	57.7	42.0	15.5	0.2	0.3
Special Category States									
Arunachal Pradesh	28.6	19.5	5.1	3.9	69.9	67.1	2.4	0.5	1.5
Himachal Pradesh	43.1	37.1	0.6	5.4	56.6	51.4	4.6	0.6	0.4
Jammu & Kashmir	50.2	41.1	0.8	8.4	49.5	38.9	9.1	1.5	0.3
Manipur	45.9	36.1	0.3	9.5	54.1	53.2	0.4	0.6	0.1
Meghalaya	29.0	19.7	0.3	9.0	70.9	66.6	3.9	0.5	0.1
Mizoram	59.8	51.6	1.7	6.5	40.1	36.4	3.6	0.1	0.1
Nagaland	11.6	7.3	0.2	4.1	88.3	87.2	0.9	0.2	0.2
Sikkim	47.2	44.5	—	2.7	52.5	49.8	2.5	0.2	0.4
Tripura	46.9	43.0	—	3.9	52.7	47.3	5.0	0.3	0.5
Uttarakhand	32.7	15.7	0.9	16.1	66.9	65.0	1.7	0.2	0.4
All India	38.7	18.0	0.4	20.2	61.1	51.4	9.3	0.5	0.3

Source: *NFHS 3.*
Note: — Not available.

Table 5A.22 Distribution of Live Births (Rural) by Place of Delivery, 2005–6 (*per cent*)

Non Special Category States	*Health Facility/Institution*				*Home*				
	Institu-tional	*Public Sector*	*NGO/ Trust*	*Private Sector*	*Home*	*Own Home*	*Parent's Home*	*Other Home*	*Others*
Andhra Pradesh	55.9	21.1	0.5	34.4	43.5	28.0	15.1	0.4	0.6
Assam	17.9	10.7	—	7.2	82.1	78.1	3.7	0.3	0.1
Bihar	16.7	2.7	—	14.0	82.9	72.4	10.4	0.1	0.4
Chhattisgarh	6.3	3.9	0.5	1.9	93.7	84.9	8.3	0.6	—
Delhi	47.0	31.0	1.0	15.0	53.0	53.0	—	—	—
Goa	91.8	50.0	0.4	41.4	8.0	3.5	4.3	0.2	0.2
Gujarat	39.2	10.3	0.9	28.0	60.4	50.0	9.9	0.5	0.4
Haryana	26.7	10.0	—	16.7	73.3	68.4	4.5	0.4	—
Jharkhand	10.3	1.9	1.7	6.7	89.2	76.2	12.0	1.1	0.5
Karnataka	54.8	33.0	1.1	20.6	44.7	25.0	18.7	1.1	0.5
Kerala	99.0	35.7	0.3	63.0	0.9	0.7	0.2	—	0.2
Madhya Pradesh	17.1	12.9	—	4.3	82.7	73.4	9.2	0.1	0.2
Maharashtra	48.9	21.4	0.2	27.4	50.8	29.7	20.6	0.5	0.3
Orissa	31.3	26.7	0.1	4.5	68.1	61.3	6.7	0.1	0.6
Punjab	47.6	11.3	0.2	36.1	52.3	41.4	10.8	0.1	0.1
Rajasthan	20.8	14.5	—	6.3	79.1	67.4	11.4	0.3	0.1
Tamil Nadu	84.0	49.0	1.2	33.8	15.7	11.6	3.5	0.6	0.4
Uttar Pradesh	15.8	5.9	0.1	9.8	84.0	75.0	8.2	0.9	0.2
West Bengal	32.2	26.2	0.1	5.9	67.5	49.6	17.7	0.1	0.4
Special Category States									
Arunachal Pradesh	17.7	14.1	0.7	3.0	80.9	79.4	1.0	0.5	1.5
Himachal Pradesh	39.8	34.1	0.5	5.1	59.8	54.6	4.6	0.7	0.4
Jammu & Kashmir	44.4	37.6	0.8	5.9	55.4	43.8	10.4	1.2	0.2
Manipur	37.0	29.2	0.3	7.6	62.9	62.0	0.4	0.5	0.1
Meghalaya	20.1	14.0	0.3	5.8	79.9	75.4	4.0	0.5	—
Mizoram	35.7	33.4	1.1	1.3	64.0	58.7	5.1	0.2	0.2
Nagaland	6.7	4.8	—	1.9	93.2	92.0	1.0	0.2	0.2
Sikkim	40.4	38.6	—	1.8	59.2	56.1	2.9	0.2	0.4
Tripura	42.9	39.9	—	3.0	56.7	51.4	4.9	0.4	0.4
Uttarakhand	25.1	13.1	0.7	11.4	74.4	72.1	2.1	0.2	0.4
All India	28.9	14.4	0.3	14.2	70.8	59.8	10.6	0.5	0.3

Source: *NFHS 3*.
Note: — Not available.

Table 5A.23 Distribution of Live Births (Urban) by Place of Delivery, 2005–6 (*per cent*)

Non Special Category States	*Health Facility/institution*				*Home*				
	Institutional	*Public Sector*	*NGO/ Trust*	*Private Sector*	*Home*	*Own Home*	*Parent's Home*	*Other Home*	*Others*
Andhra Pradesh	81.5	30.0	0.8	50.7	18.5	11.0	7.2	0.2	—
Assam	58.0	30.6	—	27.4	42.0	39.4	1.9	0.6	—
Bihar	44.0	9.4	0.6	34.0	55.5	44.8	10.2	0.4	0.6
Chhattisgarh	54.5	22.0	0.7	31.7	45.6	39.9	5.5	0.3	—
Delhi	60.1	30.1	0.1	29.9	39.9	39.7	0.1	0.2	—
Goa	92.8	38.0	0.6	54.1	7.2	3.0	4.0	0.2	—
Gujarat	75.7	20.1	3.9	51.8	24.3	19.1	5.1	0.2	—
Haryana	64.0	26.1	—	37.9	36.0	32.6	3.0	0.4	—
Jharkhand	53.4	9.6	2.1	41.7	46.0	35.3	9.6	1.1	0.6
Karnataka	81.8	37.9	0.9	43.0	17.8	9.6	8.1	0.1	0.4
Kerala	100.0	35.4	—	64.6	—	—	—	—	—
Madhya Pradesh	57.2	37.1	0.2	19.9	42.4	38.6	3.6	0.2	0.4
Maharashtra	83.3	32.6	0.9	49.9	16.4	10.5	5.6	0.3	0.3
Orissa	63.1	42.0	0.5	20.6	36.5	30.7	5.5	0.2	0.5
Punjab	57.9	14.1	2.9	41.0	42.1	34.4	7.5	0.2	—
Rajasthan	63.7	36.5	0.2	27.0	36.3	30.4	4.9	1.0	—
Tamil Nadu	92.4	47.0	0.3	45.1	7.6	5.7	1.4	0.5	—
Uttar Pradesh	39.5	9.1	0.6	29.9	60.4	54.4	5.2	0.8	0.1
West Bengal	79.7	53.2	0.9	25.6	20.3	12.8	7.0	0.5	—
Special Category States									
Arunachal Pradesh	58.5	34.5	17.4	6.6	39.9	33.3	6.2	0.4	1.6
Himachal Pradesh	76.2	66.7	1.6	7.9	23.8	19.1	4.8	—	—
Jammu & Kashmir	74.0	55.2	0.4	18.4	25.3	18.8	3.6	2.9	0.7
Manipur	69.2	54.3	0.5	14.4	30.8	30.0	0.1	0.7	—
Meghalaya	73.6	48.1	0.3	25.2	25.8	22.4	3.1	0.3	0.6
Mizoram	87.3	72.5	2.4	12.4	12.7	10.9	1.9	—	—
Nagaland	29.2	16.5	1.0	11.7	70.7	69.8	0.8	0.1	0.1
Sikkim	85.3	77.2	—	8.1	14.7	14.2	0.5	—	—
Tripura	69.9	60.9	—	9.0	29.3	24.1	5.3	—	0.8
Uttarakhand	57.1	24.4	1.6	31.1	42.5	41.9	0.6	0.0	0.3
All India	67.5	28.6	0.9	37.9	32.4	26.6	5.3	0.5	0.2

Source: *NFHS 3.*
Note: — Not available.

Table 5A.24 Maternal Mortality Ratio in India, 2001–3, 2004–6, and 2007–9

Non Special Category States	*MMR 2001–3*	*MMR 2004–6*	*MMR 2007–9*
Andhra Pradesh	195	154	134
Assam	490	480	390
Bihar	371	312	261
Chhattisgarh	379	335	269
Delhi	—	—	—
Goa	—	—	—
Gujarat	172	160	148
Haryana	162	186	153
Jharkhand	371	312	261
Karnataka	228	213	178
Kerala	110	95	81
Madhya Pradesh	379	335	269
Maharashtra	149	130	104
Orissa	358	303	258
Punjab	178	192	172
Rajasthan	445	388	318
Tamil Nadu	134	111	97
Uttar Pradesh	517	440	359
West Bengal	194	141	145
Special Category States			
Arunachal Pradesh	—	—	—
Himachal Pradesh	—	—	—
Jammu & Kashmir	—	—	—
Manipur	—	—	—
Meghalaya	—	—	—
Mizoram	—	—	—
Nagaland	—	—	—
Sikkim	—	—	—
Tripura	—	—	—
Uttarakhand	517	440	359
Union Territories			
Andaman & Nicobar Islands	—	—	—
Chandigarh	—	—	—
Dadra & Nagar Haveli	—	—	—
Daman & Diu	—	—	—
Lakshadweep	—	—	—
Puducherry	—	—	—
All India	301	254	212

Source: Registrar General of India, Ministry of Home Affairs (SRS Estimates).
Note: — Not available.

Table 5A.25 Percentage of Live Births by Place of Delivery for Population with No Education, 2005–6

Non Special Category States	*Health Facility/Institution*				*Home*				
	Institutional	*Public Sector*	*NGO/ Trust*	*Private Sector*	*Home*	*Own Home*	*Parent's Home*	*Other Home*	*Others*
Andhra Pradesh	43.1	19.1	—	24.0	56.5	37.7	18.4	0.4	0.4
Assam	10.3	5.9	—	4.5	89.5	85.3	3.7	0.5	0.2
Bihar	11.3	2.0	0.1	9.2	88.3	77.9	10.4	—	0.5
Chhattisgarh	4.4	3,0	0.1	1.3	95.6	88.2	6.9	0.6	—
Delhi	24.6	17.2	—	7.3	75.4	75.3	0.1	—	—
Goa	66.0	52.5	—	13.5	33.4	16.8	15.1	1.4	0.6
Gujarat	33.9	9.8	1.1	23.0	65.8	57.3	7.9	0.6	0.3
Haryana	12.8	4.5	—	8.3	87.2	82.5	4.5	0.2	—
Jharkhand	8.0	1.7	0.9	5.5	91.3	79.0	11.3	1.0	0.7
Karnataka	33.9	23.9	0.7	9.3	65.2	37.0	27.4	0.8	1.0
Kerala	100.0	77.8	—	22.3	—	—	—	—	—
Madhya Pradesh	14.4	12.2	—	2.2	85.4	77.1	8.2	0.1	0.2
Maharashtra	34.8	18.3	—	16.4	65.0	45.5	18.7	0.7	0.3
Orissa	14.8	13.1	0.2	1.5	84.9	78.4	6.4	0.1	0.4
Punjab	28.3	8.2	—	20.1	71.5	58.1	13.2	0.2	0.2
Rajasthan	19.1	13.4	—	5.6	80.9	69.7	10.7	0.5	0.1
Tamil Nadu	74.9	56.3	0.4	18.2	25.2	20.4	4.0	0.8	—
Uttar Pradesh	12.7	4.4	—	8.3	87.1	79.2	7.0	1.0	0.2
West Bengal	22.1	19.4	0.2	2.6	77.5	58.1	19.1	0.3	0.4
Special Category States									
Arunachal Pradesh	16.5	11.6	3.9	1.0	82.0	78.7	2.9	0.4	1.5
Himachal Pradesh	19.2	18.8	0.2	0.2	80.0	78.0	2.0	—	0.8
Jammu & Kashmir	36.9	33.6	0.3	3.0	62.9	49.8	11.4	1.7	0.2
Manipur	21.3	19.1	—	2.1	78.5	78.1	—	0.4	0.2
Meghalaya	13.3	10.2	0.5	2.5	86.6	82.5	3.7	0.4	0.1
Mizoram	16.6	16.6	—	—	83.4	82.1	1.4	—	—
Nagaland	4.9	2.9	—	2.0	94.9	94.7	—	0.2	0.3
Sikkim	25.3	24.8	—	0.5	74.7	71.0	3.7	—	—
Tripura	13.4	12.7	—	0.7	85.5	77.7	7.9	—	1.1
Uttarakhand	14.0	6.7	0.4	6.9	85.6	83.2	2.4	—	0.4
All India	18.4	9.7	0.2	8.6	81.3	70.4	10.4	0.5	0.3

Source: Calculated from *NFHS 3* unit level data.
Note: — Not available.

Table 5A.26 Percentage of Live Births by Place of Delivery for Population with More than 12 Years of Education, 2005–6

Non Special Category States	*Health Facility/Institution*				*Home*				
	Institutional	*Public Sector*	*NGO/ Trust*	*Private Sector*	*Home*	*Own Home*	*Parent's Home*	*Other Home*	*Others*
Andhra Pradesh	92.8	18.0	3.4	71.3	7.2	2.0	5.3	—	—
Assam	78.1	26.4	—	51.7	21.9	20.0	1.9	—	—
Bihar	72.5	5.2	—	67.3	27.5	22.9	4.6	—	—
Chhattisgarh	71.1	21.3	1.9	47.8	28.9	28.3	0.6	—	—
Delhi	96.2	34.8	0.6	60.7	3.8	3.5	—	0.4	—
Goa	100.0	15.9	—	84.1	—	—	—	—	—
Gujarat	88.4	11.7	4.1	72.6	11.6	7.5	3.4	0.7	—
Haryana	74.8	21.3	—	53.5	25.2	23.0	2.3	—	—
Jharkhand	83.1	11.0	9.5	62.6	16.9	16.1	0.8	—	—
Karnataka	96.7	23.9	1.6	71.2	3.3	2.4	0.9	—	—
Kerala	99.7	20.8	—	78.9	—	—	—	—	0.3
Madhya Pradesh	88.0	28.8	0.3	58.9	12.1	12.1	—	—	—
Maharashtra	93.5	14.9	1.8	76.7	6.5	4.2	2.3	—	—
Orissa	89.7	49.3	—	40.5	9.2	5.9	2.2	1.1	1.1
Punjab	85.8	19.1	2.7	63.9	14.2	12.0	1.8	0.5	—
Rajasthan	91.3	38.8	1.0	51.5	8.7	5.5	2.3	1.0	—
Tamil Nadu	97.3	27.4	0.5	69.5	2.7	2.7	—	—	—
Uttar Pradesh	67.8	13.6	1.9	52.4	31.7	26.1	5.4	0.2	0.5
West Bengal	99.0	34.4	2.4	62.2	1.0	1.0	—	—	—
Special Category States									
Arunachal Pradesh	93.1	40.5	19.4	33.2	3.5	3.5	—	—	3.5
Himachal Pradesh	68.8	59.0	0.5	9.3	31.2	25.9	4.8	0.5	—
Jammu & Kashmir	89.8	58.6	0.7	30.5	9.4	8.5	0.9	—	0.7
Manipur	77.9	52.2	1.0	24.7	22.1	21.8	—	0.3	—
Meghalaya	81.3	31.9	—	49.4	18.7	15.4	3.3	—	—
Mizoram	92.5	59.3	5.1	28.1	7.5	7.5	—	—	—
Nagaland	39.3	18.4	1.5	19.5	60.7	60.7	—	—	—
Sikkim	99.1	79.4	—	19.7	0.9	0.9	—	—	—
Tripura	100.0	67.4	—	32.6	—	—	—	—	—
Uttarakhand	77.0	33.1	1.6	42.4	22.1	20.3	1.3	0.4	0.9
All India	86.4	22.1	1.7	62.7	13.5	11.0	2.3	0.2	0.2

Source: Calculated from *NFHS 3* unit level data.
Note: — Not available.

Table 5A.27 Prevalence of Contraception, 2005–6 (*per cent*)

Non Special Category States	*All*			*Urban*			*Rural*		
	Any Method	*Any Traditional Method*	*Any Modern Method*	*Any Method*	*Any Traditional Method*	*Any Modern Method*	*Any Method*	*Any Traditional Method*	*Any Modern Method*
Andhra Pradesh	67.6	0.6	67.0	67.7	0.5	67.2	67.6	0.6	67.0
Assam	56.5	29.5	27.0	66.0	28.8	37.2	54.5	29.7	24.8
Bihar	34.1	5.2	28.9	50.6	9.3	41.3	31.4	4.5	26.8
Chhattisgarh	53.2	4.1	49.1	65.4	6.5	58.9	49.9	3.5	46.4
Delhi	66.9	10.4	56.5	67.1	10.6	56.5	64.4	8.5	55.9
Goa	48.2	11.0	37.2	51.3	12.6	38.6	44.1	8.8	35.3
Gujarat	66.6	10.1	56.5	67.6	9.9	57.7	65.9	10.4	55.5
Haryana	63.4	5.1	58.3	66.6	6.9	59.7	62.1	4.3	57.8
Jharkhand	35.7	4.7	31.1	60.0	10.1	49.9	28.2	2.9	25.2
Karnataka	63.6	1.1	62.5	60.8	1.6	59.2	65.4	0.7	64.7
Kerala	68.6	10.7	57.9	68.9	10.4	58.5	68.5	10.8	57.6
Madhya Pradesh	55.9	3.2	52.8	61.1	4.8	56.3	54.1	2.6	51.5
Maharashtra	66.9	1.9	64.9	66.7	2.7	64.0	67.1	1.3	65.8
Orissa	50.7	6.1	44.7	59.4	9.4	50.1	49.0	5.4	43.6
Punjab	63.3	7.2	56.1	61.7	10.0	51.8	64.2	5.6	58.6
Rajasthan	47.3	2.8	44.4	65.8	3.8	62.0	40.5	2.5	38.0
Tamil Nadu	61.4	1.4	60.0	60.8	1.6	59.2	62.0	1.3	60.7
Uttar Pradesh	43.6	14.3	29.3	56.3	13.9	42.4	39.7	14.4	25.3
West Bengal	71.2	21.3	49.9	75.5	25.7	49.9	69.5	19.6	49.9
Special Category States									
Arunachal Pradesh	43.2	6.0	37.3	47.3	7.9	39.4	41.6	5.2	36.4
Himachal Pradesh	72.6	1.6	71.0	73.7	2.6	71.2	72.5	1.5	71.0
Jammu & Kashmir	52.6	7.7	44.9	68.3	12.4	55.8	46.2	5.8	40.4
Manipur	48.7	25.1	23.6	54.5	29.7	24.8	46.0	23.0	23.0
Meghalaya	24.3	5.7	18.5	43.7	7.0	36.7	18.4	5.3	13.0
Mizoram	59.9	0.3	59.6	64.3	0.4	64.0	54.8	0.2	54.6
Nagaland	29.7	7.2	22.5	41.9	10.1	31.8	24.8	6.0	18.8
Sikkim	57.6	9.0	48.7	63.1	11.5	51.7	56.4	8.4	48.0
Tripura	65.7	20.8	44.9	66.8	22.4	44.4	65.5	20.5	45.0
Uttarakhand	59.3	3.8	55.5	65.3	6.1	59.2	57.2	3.0	54.2
All India	56.3	7.8	48.5	64.0	8.1	55.8	53.0	7.7	45.3

Source: *NFHS 3.*

Table 5A.28 Antenatal Care, 2005–6

Non Special Category States	*Percentage Who Had at Least One ANC Visit*	*Percentage Who Had Three or More ANC Visits*	*Percentage Who Had Received Two or More TT Injections during the Pregnancy*
Andhra Pradesh	94.3	85.4	85.3
Assam	70.7	39.3	65.4
Bihar	34.1	17.0	73.2
Chhattisgarh	88.5	54.2	74.6
Delhi	88.8	75.1	90.3
Goa	97.3	94.9	86.8
Gujarat	86.7	67.5	80.4
Haryana	88.3	59.2	83.4
Jharkhand	58.9	35.9	67.6
Karnataka	89.3	79.5	78.6
Kerala	94.4	93.6	88.7
Madhya Pradesh	79.5	40.7	70.6
Maharashtra	90.8	75.1	85.1
Punjab	88.9	74.8	83.8
Rajasthan	74.9	41.2	65.2
Tamil Nadu	98.6	95.9	95.9
Uttar Pradesh	66.0	26.6	64.5
West Bengal	91.9	62.0	90.9
Special Category States			
Arunachal Pradesh	52.6	35.5	40.1
Himachal Pradesh	86.4	62.6	72.1
Jammu & Kashmir	84.6	73.5	81.0
Manipur	86.3	68.6	79.2
Meghalaya	67.6	54.0	51.8
Mizoram	74.3	59.3	51.4
Nagaland	57.8	32.7	50.7
Sikkim	89.3	70.1	81.1
Tripura	78.3	60.0	74.9
Uttarakhand	69.4	44.9	68.5
All India	76.4	52.0	76.3

Source: NFHS 3.
Note: TT=Tetanus toxoid, IFA=Iron, and Folic acid tablets or syrup.

Table 5A.29 Percentage of Children Immunized, 1998–9 and 2005–6

Non Special Category States	*All Vaccinations*		*No Vaccinations*	
	1998–9	*2005–6*	*1998–9*	*2005–6*
Andhra Pradesh	58.7	46.0	4.5	3.8
Assam	17.0	31.4	33.2	15.2
Bihar	11.0	32.8	16.8	7.0
Chhattisgarh	—	48.7	—	2.5
Delhi	69.8	63.2	5.1	9.1
Gujarat	53.0	45.2	6.6	4.5
Haryana	62.7	65.3	9.9	7.8
Jharkhand	—	34.2	—	4.4
Karnataka	60.0	55.0	7.7	6.9
Kerala	79.7	75.3	2.2	1.8
Madhya Pradesh	22.4	40.3	13.9	5.0
Maharashtra	78.4	58.8	2.0	2.8
Orissa	43.7	51.8	9.4	11.6
Punjab	72.1	60.1	8.7	6.6
Rajasthan	17.3	26.5	22.5	5.5
Tamil Nadu	88.8	80.9	0.3	—
Uttar Pradesh	21.2	23	29.5	3.2
West Bengal	43.8	64.3	13.6	5.9
Special Category States				
Arunachal Pradesh	20.5	28.4	28.7	24.1
Himachal Pradesh	83.4	74.2	2.8	1.9
Jammu & Kashmir	56.7	66.7	10.4	4.5
Manipur	42.3	46.8	17.2	6.5
Meghalaya	14.3	32.9	42.3	16.5
Mizoram	59.6	46.5	10.5	7.0
Nagaland	14.1	21.0	32.7	18.4
Sikkim	47.4	69.6	17.6	3.2
Tripura	—	49.7	—	14.7
Uttarakhand		60		8.7
All India	42.0	43.5	14.4	5.1

Source: *NFHS 2 and 3.*
Note: — Not available.

Table 5A.30 Percentage of Children Immunized (Rural and Urban), 2005–6

Non Special Category States	*Urban*		*Rural*	
	All Vaccinations	*No Vaccinations*	*All Vaccinations*	*No Vaccinations*
Andhra Pradesh	51.2	4.5	42.9	3.4
Assam	29.3	15.5	31.7	15.1
Bihar	45.6	5.1	31.1	7.2
Chhattisgarh	74.7	2.7	43.1	2.5
Delhi	63.2	9.7	—	—
Goa	83.5	—	73.0	—
Gujarat	54.7	—	40.1	6.9
Haryana	82.2	6.7	60.3	8.2
Jharkhand	51.0	2.1	29.5	5.0
Karnataka	59.6	4.6	52.2	8.2
Kerala	87.5	—	69.4	2.7
Madhya Pradesh	68.7	1.1	31.5	6.2
Maharashtra	68.0	0.5	49.8	5.0
Orissa	52.7	16.5	51.6	10.7
Punjab	64.4	2.7	58.1	8.4
Rajasthan	44.3	5.7	22.1	5.4
Tamil Nadu	77.8	—	83.7	—
Uttar Pradesh	33.0	3.2	20.5	2.6
West Bengal	70.3	4.0	62.8	6.4
Special Category States				
Arunachal Pradesh	51.2	25.6	21.1	23.7
Himachal Pradesh	80.0	—	73.6	2.1
Jammu & Kashmir	73.0	3.2	64.9	4.9
Manipur	59.6	7.0	42.8	6.3
Meghalaya	33.8	12.3	32.6	17.4
Mizoram	57.1	1.4	36.6	12.2
Nagaland	36.0	7.9	17.1	21.0
Sikkim	85.4	2.4	66.7	3.3
Tripura	—	—	47.9	15.6
Uttarakhand	67.2	10.8	57.4	8.4
All India	57.6	3.4	38.6	5.6

Source: *NFHS 3*.
Note: — Not available.

Table 5A.31a Percentage of Children Immunized by Major Religious Communities, 1998–9 and 2005–6

Non Special Category States	*Hindus*				*Muslims*			
	All vaccinations		*No vaccinations*		*All vaccinations*		*No vaccinations*	
	1998–9	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*
Andhra Pradesh	57.5	45.1	4.1	4.1	72.0	48.3	2.9	3.6
Assam	21.0	38.2	29.2	7.1	12.3	19.9	36.9	24
Bihar	12.5	35.8	16.3	6.9	4.6	18.5	17.6	7.5
Chhattisgarh	—	47.7	—	2.6	—	60.0	—	—
Delhi	70.9	64	5.3	6.0	60.4	54.8	7.3	28.8
Goa	87.4	77.3	—	—	—	79.5	—	—
Gujarat	53.1	45.9	7.1	4.7	48.6	40.0	3.0	3.3
Haryana	—	73.5	—	2.8	—	10.2	—	42
Jharkhand	—	38.1	—	3.6	—	26.1	—	7.4
Karnataka	62.0	56.0	5.5	6.5	46.1	47.2	19.1	7.7
Kerala	85.7	88.0	—	1.0	67.6	56.6	5.6	3.3
Madhya Pradesh	20.2	38.2	14.6	5.5	42.2	56.2	10.0	0.1
Maharashtra	79.7	59.8	2.6	3.3	71.6	54.8	—	2.1
Orissa	—	52.5	—	10.1	—	71.6	—	28.4
Punjab	75.1	60.4	5.0	4.0	—	33.1	—	10.3
Rajasthan	18.6	26.7	20.9	4.4	4.7	20.3	33.9	15.4
Tami Nadu	88.1	79.6	0.3	—	95.9	86.3	—	—
Uttar Pradesh	22.4	24.9	27.8	2.3	14.8	14.8	37.0	4.3
West Bengal	51.9	67.9	8.7	4.2	24.4	58.1	25.5	8.6
Special Category States								
Arunachal Pradesh	—	40.8	—	14.4	—	33.3	—	
Himachal Pradesh	—	73.9	—	2.0	—	60.0	—	—
Jammu & Kashmir	63.4	79.3	7.9	2.4	52.5	60.1	12.3	5.6
Manipur	—	66.1	—	3.3	—	32.6	—	14.9
Meghalaya	—	—	—	—	—	—	—	—
Mizoram	—	—	—	—	—	—	—	—
Nagaland	—	36.8	—	5.3	—	5.8	—	
Sikkim	42.8	66.4	—	1.7	—	66.7	—	9.8
Tripura	—		—	13.5	—	20.0	—	26.2
Uttarakhand	—	60.9	—	7.3	—	42.7	—	22.0
Union Territories								
Andaman & Nicobar Islands	—	—	—	—	—	—	—	—
Chandigarh	—	—	—	—	—	—	—	—
Dadra & Nagar Haveli	—	—	—	—	—	—	—	—
Daman & Diu	—	—	—	—	—	—	—	—
Lakshadweep	—	—	—	—	—	—	—	—
Puducherry	—	—	—	—	—	—	—	—
All India	42.4	44.4	13.3	4.3	32.7	36.3	21.0	7.6

Source: *NFHS 2* and unit level data *NFHS 3*.
Note: — Not available.

Table 5A.31b Percentage of Children Immunized, by Major Religious Community, 1998–9 and 2005–6

Non Special Category States	*Christians*				*Sikhs*			
	All vaccinations		*No vaccinations*		*All vaccinations*		*No vaccinations*	
	1998–9	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*
Andhra Pradesh	57.4	57.8	10.4	—	—	—	—	—
Assam	—		—		—	—	—	—
Bihar	—	—	—	—	—	—	—	—
Chhattisgarh	—	—	—	—	—	—	—	—
Delhi	—	—	—	—	—	—	—	—
Goa	86.8	81.6	—	—	—	—	—	—
Gujarat	—	—	—	—	—	—	—	—
Haryana	—	—	—	—	—	82.4	—	—
Jharkhand	—	33.3	—	—	—	50.0	—	—
Karnataka	—	62.7	—	14.3	—	—	—	—
Kerala	92.9	89.3	—	0.0	—	—	—	—
Madhya Pradesh	—	—	—	—	—	—	—	—
Maharashtra	—	—	—	—	—	—	—	—
Orissa	—	43.3	—	13.2	—	—	—	—
Punjab	—	—	—	—	69.6	61.4	11.3	8.3
Rajasthan	—	—	—	—	—	—	—	—
Tami Nadu	90.6	89.2	—	—	—	—	—	—
Uttar Pradesh	—	65.7	—	—	—	—	—	—
West Bengal	—	—	—	—	—	—	—	—
Special Category States								
Arunachal Pradesh	—	8.6	—	46.1	—	—	—	—
Himachal Pradesh	—	—	—	—	—	—	—	—
Jammu & Kashmir	—	—	—	—	—	—	—	—
Manipur	—	23.4	—	9.5	—	—	—	—
Meghalaya	—	31.0	—	17.3	—	—	—	—
Mizoram	—	48.3	—	4.0	—	—	—	—
Nagaland	—	20.3	—	18.5	—	—	—	—
Sikkim	—	57.5	—	—	—	—	—	—
Tripura	—	—	—	—	—	—	—	—
Uttarakhand	—	—	—	—	—	88.8	—	—
Union Territories								
Andaman & Nicobar Islands	—	—	—	—	—	—	—	—
Chandigarh	—	—	—	—	—	—	—	—
Dadra & Nagar Haveli	—	—	—	—	—	—	—	—
Daman & Diu	—	—	—	—	—	—	—	—
Lakshadweep	—	—	—	—	—	—	—	—
Puducherry	—	—	—	—	—	—	—	—
All India	61.1	56.4	11.0	9.3	69.5	67.3	11.1	6.4

Source: *NFHS 2* and unit level data *NFHS 3*.
Note: — Not available.

Table 5A.32a Percentage of Children Immunized, by Social Groups, 1998–9 and 2005–6

Non Special Category States	*Scheduled Castes*				*Scheduled Tribes*			
	All vaccinations		*No vaccinations*		*All vaccinations*		*No vaccinations*	
	1998–9	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*
Andhra Pradesh	60.7	44.3	6.5	5.0	—	26.7	—	12.0
Assam	20.4	31.3	29.0	—	14.4	36.1	39.1	30.6
Bihar	9.5	23.6	21.5	11.7	4.0	100.0	38.1	—
Chhattisgarh	—	46.9	—	—	—	42.2	—	4.0
Delhi	53.1	68.6	10.7	6.3	—	100.0	—	—
Goa	—	58.2	—	—	—	80.4	—	—
Gujarat	52.8	51.2	8.9	2.1	40.6	39.5	8.9	13.1
Haryana	56.4	66.9	14.7	3.5	—	—	—	—
Jharkhand	—	25.1	—	11.1	—	28.9	—	3.9
Karnataka	55.2	56.0	7.0	7.7	31.5	39.7	13.7	10.1
Kerala	—	75.0	—	5.0	—	79.9	—	—
Madhya Pradesh	17.9	40.5	11.7	2.6	11.1	22.3	26.2	7.8
Maharashtra	79.8	59.0	—	1.7	62.2	39.3	9.6	14.0
Orissa	44.5	59.5	8.6	3.7	26.4	30.4	18.2	22.3
Punjab	54.6	47.6	17.6	12.7	—	—	—	—
Rajasthan	13.4	35.8	21.9	2.8	10.3	3.3	34.5	6.3
Tamil Nadu	84.2	72.3	—	—	—	66.7	—	—
Uttar Pradesh	21.7	15.9	30.8	4.5	14.1	7.1	55.6	—
West Bengal	50.9	61.4	9.7	5.2	—	70.9	—	16.5
Special Category States								
Arunachal Pradesh	—	18.8	—	17.2	—	22.4	—	30.0
Himachal Pradesh	82.5	72.3	1.8	2.8	—	66.7	—	7.7
Jammu & Kashmir	55.4	64.6	11.0	3.1	—	34.7	—	17.3
Manipur	—	53.0	—	4.4	—	23.3	—	9.1
Meghalaya	—	27.7	—	—	—	33.1	—	16.9
Mizoram	—	—	—	—	—	46.8	—	7.8
Nagaland	—	18.2	—	30.6	—	21.3	—	16.6
Sikkim	—	100.0	—	—	—	77.3	—	2.7
Tripura	—	43.3	—	14.5	—	36.9	—	16.9
Uttarakhand	—	54.1	—	11.5	—	41.9	—	14.5
Union Territories								
Andaman & Nicobar Islands	—	—	—	—	—	—	—	—
Chandigarh	—	—	—	—	—	—	—	—
Dadra & Nagar Haveli	—	—	—	—	—	—	—	—
Daman & Diu	—	—	—	—	—	—	—	—
Lakshadweep	—	—	—	—	—	—	—	—
Puducherry	—	—	—	—	—	—	—	—
All India	40.2	39.7	15.1	5.4	26.4	31.3	24.2	10.9

Source: *NFHS 2* and unit level data *NFHS 3*.
Note: — Not available.

Table 5A.32b Percentage of Children Immunized, by Social Groups, 1998–9 and 2005–6

Non Special Category States	*Other Backward Classes*				*Others*			
	All vaccinations		*No vaccinations*		*All vaccinations*		*No vaccinations*	
	1998–9	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*	*1998–9*	*2005–6*
Andhra Pradesh	59.3	43.5	4.1	3.9	62.3	58.2	1.8	0.1
Assam		42.5		6.9	18.2	27.6	32.5	19.4
Bihar	11.1	35.4	13.5	5.4	15.3	36.4	12.6	5.6
Chhattisgarh		46.7		2.3		77.2		—
Delhi	73.7	59.3	9.5	7.9	74.2	61.9	2.3	10.7
Goa		86.2		—		78.0	—	—
Gujarat	50.1	42.2	8.5	5.7	61.6	48.6	3.4	1.0
Haryana	59.8	50.8	11.6	13.5	67.7	71.2	6.3	7.7
Jharkhand	—	38.3	—	3.7	—	40.5	—	2.4
Karnataka	65.8	49.8	3.9	6.3	63.2	75.4	9.4	7.3
Kerala	77.9	83.5	1.1	1.4	83.5	69.9	3.7	1.7
Madhya Pradesh	23.6	41.0	10.0	6.7	40.1	62.4	7.0	—
Maharashtra	85.3	61.1	—	—	78.5	62.5	1.7	1.5
Orissa	—	59.4	8.1	3.1	49.3	58.0	5.3	15.9
Punjab	80.9	63.7	1.8	3.9	82.3	70.1	4.4	1.7
Rajasthan	14.4	24.3	23.7	6.0	22.8	40.0	18.6	6.2
Tamil Nadu	90.6	84.6	0.4	—	—	92.0	—	—
Uttar Pradesh	16.9	23.6	29.4	2.1	24.7	30.0	26.7	2.3
West Bengal	—	72.9	—	—	40.4	65.3	15.7	4.9
Special Category States								
Arunachal Pradesh	—	43.4	—	21.7	—	40.3	—	13.4
Himachal Pradesh	87.4	79.9	2.0	4.0	82.9	74.4	2.7	—
Jammu & Kashmir	58.9	69.4	13.9	10.2	56.5	72.6	9.2	1.2
Manipur	—	59.0	—	8.7	—	58.4	—	4.6
Meghalaya	—	—	—	—	—	24.3	—	—
Mizoram	—	—	—	—	—	—	—	—
Nagaland	—	14.9	—	31.9	—	31.5	—	—
Sikkim	—	65.6	—	2.0	—	61.1	—	7.6
Tripura	—	65.2	—	3.0	—	52.5	—	20.8
Uttarakhand	—	51.5	—	13.3	—	66.2	—	5.8
Union Territories								
Andaman & Nicobar Islands	—	—	—	—	—	—	—	—
Chandigarh	—	—	—	—	—	—	—	—
Dadra & Nagar Haveli	—	—	—	—	—	—	—	—
Daman & Diu	—	—	—	—	—	—	—	—
Lakshadweep	—	—	—	—	—	—	—	—
Puducherry	—	—	—	—	—	—	—	—
All India	43.0	40.7	11.6	3.9	46.8	53.8	13.3	4.1

Source: *NFHS 2* and unit level data *NFHS 3*.
Note: — Not available.

Table 5A.33 Public Expenditure on Health, 2004–5

Non Special Category States	*Public Exp. as Share of GSDP*	*Per Capita Public Expenditure (in Rs)*	*Per Capita Private Expenditure (in Rs)*
Andhra Pradesh	0.72	191	870
Assam	0.86	162	612
Bihar	1.12	93	420
Chhattisgarh	0.7	146	626
Delhi	0.94	560	170
Goa	1.07	861	1,437
Gujarat	0.57	198	755
Haryana	0.49	203	875
Jharkhand	0.78	155	345
Karnataka	0.87	233	597
Kerala	0.88	287	2,663
Madhya Pradesh	0.87	145	644
Maharashtra	0.55	204	1,008
Orissa	0.98	183	719
Punjab	0.65	247	1,112
Rajasthan	0.98	186	575
Tamil Nadu	0.71	223	1,033
Uttar Pradesh	0.92	128	846
West Bengal	0.69	173	1,086
Special Category States			
Arunachal Pradesh	3.46	841	613
Himachal Pradesh	1.74	630	881
Jammu & Kashmir	2.26	512	489
Manipur	1.32	294	379
Meghalaya	1.75	430	464
Mizoram	3.28	867	266
Nagaland	2.49	639	180
Sikkim	3.82	1082	425
Tripura	1.32	328	1158
Uttarakhand	1.11	280	538
Union Territories			
Puducherry	2.02	1014	1639

Source: National Health Profile 2009, Ministry of Health & Family Welfare.
Note: — Not available.

Table 5A.34 Private & Public Health Expenditure as Share of Total Expenditure, 2004–5 (*per cent*)

Non Special Category States	*Private Expenditure as Share of Total Expenditure*	*Public Expenditure as Share of Total Expenditure*
Andhra Pradesh	82.0	18.0
Assam	79.1	20.9
Bihar	81.9	18.2
Gujarat	79.2	20.8
Haryana	81.2	18.8
Karnataka	71.9	28.1
Kerala	90.3	9.7
Madhya Pradesh	81.6	18.4
Maharashtra	83.2	16.8
Orissa	79.7	20.3
Punjab	81.8	18.2
Rajasthan	75.6	24.5
Tamil Nadu	82.3	17.7
Uttar Pradesh	86.9	13.1
West Bengal	86.3	13.7
Special Category States		
Himachal Pradesh	58.3	41.7

Source: National Health Profile 2009, Ministry of Health & Family Welfare.

Table 5A.35 Composition of Out-of-Pocket Expenditure in Public Inpatient Care (Rural), 2004–5

Non Special Category States	*Doctor's Fee*	*Diagnostic Test*	*Other Services, Bed*	*Medicine*	*Blood, etc.*	*Food*
Andhra Pradesh	7.6	7.2	2.3	69.7	3.0	10.3
Assam	9.7	11.7	5.0	57.0	10.7	5.9
Bihar	2.8	28.3	2.3	51.3	4.2	11.1
Chhattisgarh	37.8	6.9	—	53.9	—	1.4
Gujarat	0.7	10.6	0.7	66.1	10.8	11.1
Haryana	2.9	8.2	3.4	82.1	0.4	3.1
Jharkhand	4.2	7.8	4.2	68.6	0.1	15.1
Karnataka	12.8	12.1	2.2	62.3	0.7	10.0
Kerala	4.1	20.6	4.7	56.4	1.7	12.6
Madhya Pradesh	2.9	4.5	1.8	78.2	2.1	10.5
Maharashtra	5.0	3.0	3.9	59.6	9.5	19.0
Orissa	5.2	7.3	2.3	72.6	1.9	10.7
Punjab	7.2	1.5	9.1	66.3	1.8	10.1
Rajasthan	1.8	15.9	1.4	72.7	2.5	5.8
Tamil Nadu	5.9	7.8	10.6	40.0	0.4	35.3
Uttar Pradesh	12.8	13.7	10.6	54.0	3.7	5.2
West Bengal	1.3	11.2	8.2	68.3	5.7	5.4
All India	4.2	11.9	4.4	66.5	3.8	9.3

Source: Select Health Parameters: A Comparative Analysis across the National Sample Survey Organization 42nd, 52nd, and 60th Rounds, (2007), Ministry of Health & Family Welfare, Government of India.
Note: — Not available.

Table 5A.36 Composition of Out-of-Pocket Expenditure in Public Inpatient Care (Urban), 2004–5 (*per cent*)

Non Special Category States	*Doctor's Fee*	*Diagnostic Test*	*Other Services, Bed*	*Medicine*	*Blood etc.*	*Food*
Andhra Pradesh	11.3	9.7	6.3	62.3	4.5	5.9
Assam	3.2	25.1	3.4	60.3	0.2	10.9
Bihar	—	16.0	—	81.5	—	2.6
Chhattisgarh	—	2.6	—	75.0	4.6	17.9
Gujarat	9.4	7.6	4.6	64.9	7.1	6.5
Haryana	1.1	11.4	20.1	62.9	0.4	4.2
Jharkhand	3.4	16.5	5.5	70.3	0.2	4.1
Karnataka	0.7	15.6	5.3	59.9	10.7	7.9
Kerala	4.1	15.6	4.2	54.7	5.5	16.9
Madhya Pradesh	1.9	8.4	2.5	77.6	0.4	9.9
Maharashtra	3.4	8.5	4.7	62.4	15.0	6.1
Orissa	0.8	10.7	1.0	77.1	1.1	9.4
Punjab	17.2	7.4	6.6	64.2	1.5	3.2
Rajasthan	2.4	15.3	5.4	62.3	8.4	6.3
Tamil Nadu	2.7	9.8	3.9	53.9	6.3	23.4
Uttar Pradesh	10.9	15.4	6.0	59.4	2.9	5.3
West Bengal	2.3	24.3	7.8	58.6	2.7	4.4
All India	4.6	15.1	5.8	62.3	4.6	7.5

Source: Select Health Parameters: A Comparative Analysis across the National Sample Survey Organization 42nd , 52nd, and 60th Rounds, (2007), Ministry of Health & Family Welfare, Government of India.
Note: — Not available.

Table 5A.37 Composition of Out-of-Pocket Expenditure in Private Inpatient Care (Rural), 2004–5 (*per cent*)

Non Special Category States	*Doctor's Fee*	*Diagnostic Test*	*Other Services, Bed*	*Medicine*	*Blood, etc.*	*Food*
Andhra Pradesh	29.8	11.2	14.5	37.1	2.2	5.3
Assam	25.1	18.0	16.7	32.7	3.4	4.2
Bihar	21.4	11.7	13.3	46.2	0.9	6.5
Chhattisgarh	17.7	18.4	11.8	39.3	1.4	11.3
Gujarat	40.5	5.4	12.2	36.0	3.2	2.7
Haryana	20.4	6.7	20.2	45.2	2.0	5.5
Jharkhand	25.0	6.3	15.5	47.4	0.7	5.1
Karnataka	28.9	6.5	23.3	35.6	1.0	4.7
Kerala	15.6	12.8	23.1	34.8	7.0	6.7
Madhya Pradesh	23.7	9.0	13.9	47.8	0.6	5.0
Maharashtra	30.1	8.6	12.0	40.7	5.5	3.0
Orissa	27.3	4.2	17.8	37.7	1.9	11.1
Punjab	20.7	18.0	15.3	43.1	1.4	1.4
Rajasthan	19.2	9.9	15.3	46.5	2.9	6.2
Tamil Nadu	27.2	7.6	20.5	39.9	0.4	4.4
Uttar Pradesh	21.7	7.4	18.7	47.0	1.3	3.8
West Bengal	31.1	11.7	19.1	32.1	2.6	3.4
All India	25.8	9.4	16.6	40.4	2.9	4.9

Source: Select Health Parameters: A Comparative Analysis across the National Sample Survey Organization 42nd, 52nd, and 60th Rounds, (2007), Ministry of Health & Family Welfare, Government of India.

Table 5A.38 Composition of Out-of-Pocket Expenditure in Private Inpatient Care (Urban), 2004–5 (*per cent*)

Non Special Category States	*Doctor's Fee*	*Diagnostic Test*	*Other Services, Bed*	*Medicine*	*Blood etc.*	*Food*
Andhra Pradesh	32.1	11.6	13.9	36.3	2.5	3.6
Assam	27.5	29.5	11.5	30.0	—	1.5
Bihar	19.6	12.0	15.6	43.1	3.0	6.6
Chhattisgarh	2,386.0	5.0	1,071.0	57.3	3.1	—
Gujarat	37.5	8.7	14.3	36.6	1.5	1.5
Haryana	35.9	11.2	18.5	27.9	3.0	3.5
Jharkhand	42.8	3.0	9.8	39.6	2.6	2.1
Karnataka	37.9	10.4	19.8	27.8	1.3	2.9
Kerala	16.9	14.8	19.9	43.7	1.1	3.7
Madhya Pradesh	34.4	9.7	14.3	37.2	1.0	3.4
Maharashtra	24.1	11.7	17.1	36.6	9.3	1.1
Orissa	29.7	7.7	15.7	30.1	8.2	8.6
Punjab	21.2	7.2	17.1	49.8	1.2	3.6
Rajasthan	22.6	10.0	15.2	44.5	4.9	2.8
Tamil Nadu	27.1	11.4	18.2	32.8	6.1	4.5
Uttar Pradesh	27.3	5.2	14.4	47.0	0.5	5.6
West Bengal	16.9	13.2	16.8	45.8	4014.0	3.3
All India	27.3	10.8	16.6	37.8	4.4	3.1

Source: Select Health Parameters: A Comparative Analysis across the National Sample Survey Organization 42nd, 52nd, and 60th Rounds, (2007), Ministry of Health & Family Welfare, Government of India.
Note: — Not available.

Table 5A.39 Number of Sub-Centres, PHCs and CHCs, March 2008

Non Special Category States	*Sub-Centres*	*PHCs*	*CHCs*
Andhra Pradesh	12,522	1,570	167
Assam	4,592	844	103
Bihar	8,858	1,641	70
Chhattisgarh	4,741	721	136
Delhi	41	8	0
Goa	172	19	5
Gujarat	7,274	1,073	273
Haryana	2,433	420	86
Jharkhand	3,958	330	194
Karnataka	8,143	2,195	323
Kerala	5,094	909	107
Madhya Pradesh	8,834	1,149	270
Maharashtra	10,579	1,816	407
Orissa	6,688	1,279	231
Punjab	2,858	484	126
Rajasthan	10,742	1,503	349
Tamil Nadu	8,706	1,215	206
Uttar Pradesh	20,521	3,690	515
West Bengal	10,356	924	349
Special Category states			
Arunachal Pradesh	592	116	44
Himachal Pradesh	2,071	449	73
Jammu & Kashmir	1,907	375	85
Manipur	420	72	16
Meghalaya	401	103	26
Mizoram	366	57	9
Nagaland	397	86	21
Sikkim	147	24	4
Tripura	579	76	11
Uttarakhand	1,765	239	55
Union Territories			
Andaman & Nicobar Islands	114	19	4
Chandigarh	14	0	2
Dadra & Nagar Haveli	38	6	1
Daman & Diu	22	3	1
Lakshadweep	14	4	3
Puducherry	77	39	4
All India	1,46,036	23,458	4,276

Source: National Health Profile 2009, Ministry of Health Family Welfare.

Table 5A.40 Number of Government Hospitals and Beds*

Non Special Category States	*Rural Hospitals (Govt)*		*Urban Hospitals (Govt)*		*Total Hospitals (Govt)*		*Projected Population as on Reference Period (in thousand)*	*Average Population Served per Govt Hospital*	*Average Population Served per Govt Hospital Bed*	*Reference Period*
	No.	*Beds*	*No.*	*Beds*	*No.*	*Beds*				
Andhra Pradesh	167	6,220	192	28,113	359	34,333	80,712	224,825	2,351	01.01.2007
Assam	108	3,240	45	4,382	153	7,622	29,814	19,486	3,911	01.01.2010
Bihar	—	—	NR	—	1717	22,494	93,633	54,533	4,163	01.09.2008
Chhattisgarh	119	3,270	99	6,158	218	9,428	22,934	105,202	2,433	01.01.2008
Delhi	21	972	109	22,886	130	23,858	16,955	130,423	711	01.01.2009
Goa	9	552	11	2,436	20	2,988	1,655	82,750	554	01.01.2010
Gujarat	282	9,619	91	19,339	373	28,958	57,434	153,979	1,983	01.01.2010
Haryana	61	1212	93	6,667	154	7,879	24,597	159,721	3,122	01.01.2010
Jharkhand	—	—	—	—	500	5,414	29,745	59,490	5,494	01.01.2008
Karnataka	468	8,010	451	55,731	919	63,741	58,181	63,309	913	01.01.2010
Kerala	281	1,375,666	105	17,529	386	31,285	34,063	88,246	1,089	01.01.2010
Madhya Pradesh	275	8,179	102	11,739	377	19,918	67,569	179,228	3,392	01.01.2008
Maharashtra	376	11,280	389	38,299	765	49,579	109,553	143,207	2,210	01.01.2010
Orissa	1,629	9,055	80	5,708	1709	14,763	40,025	23,420	2,711	01.01.2010
Punjab	72	2,180	159	8,440	231	10,620	26,391	114,247	2,485	01.01.2008
Rajasthan	347	11,850	128	20,217	475	32,067	63,408	133,491	1,977	01.01.2008
Tamil Nadu	533	25,078	48	22,120	581	47,198	65,629	112,959	1,391	01.01.2008
Uttar Pradesh	397	11,910	528	20,550	925	32,460	183,282	198,143	1,194	01.01.2009
West Bengal	14	2,399	280	52,360	294	54,759	87,839	298,772	1,604	01.01.2010
Special Category States										
Arunachal Pradesh	146	1,356	15	862	161	2,218	1,184	5,920	533	01.01.2009
Himachal Pradesh	95	2,646	47	5,315	142	7,961	6,662	4,692	837	01.01.2010
Jammu & Kashmir	61	1,820	31	2,125	92	3,945	11,099	120,641	2,813	01.01.2008

(*contd*)

Table 5A.40 (*contd*)

	Rural Hospitals (Govt)		*Urban Hospitals (Govt)*		*Total Hospitals (Govt)*		*Projected Population as on Reference Period (in thousand)*	*Average Population Served per Govt Hospital*	*Average Population Served per Govt Hospital Bed*	*Reference Period*
	No.	*Beds*	*No.*	*Beds*	*No.*	*Beds*				
Manipur	24	669	4	1,574	28	2,243	2,336	83,429	1067	01.01.2009
Meghalaya	28	840	10	1,742	38	2,582	2,560	67,368	991	01.01.2010
Mizoram	10	320	10	904	20	1,224	958	47,900	783	01.01.2008
Nagaland	23	705	25	1,445	48	2,150	2,197	45,771	1,022	01.01.2010
Sikkim	29	700	1	300	30	1,000	598	19,933	598	01.01.2010
Tripura	16	500	15	1,762	31	2,262	3,532	113,935	1,561	01.01.2010
Uttarakhand	666	3,746	29	4,219	695	7,965	9,511	13,685	1,194	01.01.2007
Union Territories										
Andaman & Nicobar Islands	7	385	1	450	8	835	465	58,125	557	01.01.2010
Chandigarh	1	50	5	2,562	6	835	1,161	193,500	444	01.01.2008
Dadra & Nagar Haveli	1	30	1	231	2	261	318	159,000	1,218	01.01.2010
Daman & Diu	—	—	3	190	3	190	248	82,667	1,305	01.01.2010
Lakshadweep	9	20	—	—	9	200	73	8,111	365	01.01.2008
Puducherry	6	320	8	2,996	14	3,316	1,267	90,500	382	01.01.2010
All India	6,281	143,069	3,115	36,9351	11,613	540,328	1,137,588	97,958	2,105	

Source: National Health Profile 2009, Ministry of Health & Family Welfare.
Notes: Projected Population shown in the brackets relates to the reference period Rural and Urban bifurcation is not available in Bihar and Jharkhand Hospitals include CHCs.
* Provisional. — Not available.

Table 5A.41 Number of Government Allopathic Doctors and Average Population Served*

Non Special Category States	*2002*			*2008*		
	No of Doctors	*Population Served per Doctor*	*Reference Period*	*No. of Govt. Doctors*	*Average Population Served/Govt Doctor*	*Reference Period*
Andhra Pradesh	1059	64182	1.1.1992	4487	17988	01.01.2007
Assam	2160	12128	1.1.2000	2103	13066	01.01.2004
Bihar	data not furnished			3979	23174	01.01.2008
Chhattisgarh	data not furnished			1171	19585	01.02.2008
Delhi	853	16158	1.1.2001	3629	3933	01.01.2003
Goa	223	7507	1.1.2002	939	1763	01.01.2010
Gujarat	data not furnished			2282	25168	01.01.2010
Haryana	NA	NA	1.1.2001	1836	13165	01.01.2009
Jharkhand				1701	17486	01.01.2008
Karnataka	4447	11714	1.1.2000	5083	11446	01.01.2010
Kerala	4004	8057	1.1.2000	3806	8950	01.01.2010
Madhya Pradesh	data not furnished			3662	18451	01.01.2008
Maharashtra	NA	NA		4520	24237	01.01.2010
Orissa	4904	7312	1.1.2002	5079	7808	01.01.2009
Punjab	3657	6642	1.1.2000	3545	7256	01.04.2005
Rajasthan	5019	11252	1.1.2001	6285	10268	01.01.2010
Tamil Nadu	2855	21637	1.1.2002	7107	9234	01.01.2008
Uttar Pradesh	6766	25123	1.1.2001	6766	23986	01.01.2000
West Bengal	data not furnished			8825	9953	01.01.2010
Special Category States						
Arunachal Pradesh	355	3532	31.3.2002	445	2692	01.01.2009
Himachal Pradesh	NA	NA	1.1.2000	NA	NA	01.01.2000
Jammu & Kashmir	2514	3956	1.1.2000	2185	5152	01.01.2009
Manipur	684	2820	1.1.2001	584	4048	01.01.2009
Meghalaya	346	6665	1.1.1992	504	5079	01.01.2010
Mizoram	260	3427	1.1.2001	380	2553	01.01.2009
Nagaland	354	5014	1.1.2001	314	6914	01.01.2009
Sikkim	176	3335	1.1.2001	222	2694	01.01.2010
Tripura	797	4004	1.1.2000	716	4933	01.01.2010
Uttarakhand	data not furnished			1135	8507	01.01.2010
Union Territories						
Andaman & Nicobar Islands	117	3043	1.1.2001	119	3908	01.01.2010
Chandigarh	1414	661	1.1.2002	672	1728	01.01.2008
Dadra & Nagar Haveli	32	6250	30.4.2002	65	4892	01.01.2010
Daman & Diu	31	5097	1.1.2001	38	6526	01.01.2010
Lakshadweep	28	2179	1.1.2001	23	3174	01.01.2008
Puducherry	606	1607	1.1.2001	362	3500	01.01.2010
All India						

Source: Health Information of India, 2002; National Health Profile 2009, Ministry of Health Family Welfare.
Note: Projected Population shown in the brackets relates to the reference period.
Tamil Nadu, the information relates to only the allopathic doctors in PHCs Uttar Pradesh figure for 1.1.2000 includes Uttarakhand also.
NA: Not available. * — Provisional.

Table 5A.42 Number of Registered Nurses, 2008 and Pharmacists, 2010

Non Special Category States	*Total No. of Registered Nurses as on 31.12.2008*			*Total No. of Pharmacists*
	ANM	*GNM*	*LHV*	*as on 25.01.2010*
Andhra Pradesh	107,986	109,597	2,480	43,958
Assam	18,266	13,982	—	2,429
Bhopal	—	—	—	1,381
Bihar*	7,501	8,883	511	4,163
Chhattisgarh	1,900	2,876	1,352	—
Delhi	2,020	22,113	—	22,010
Goa	—	—	—	466
Gujarat	36,216	87,379	—	20,948
Haryana*	13,727	17,821	694	7,249
Jharkhand*	3,405	1,998	137	—
Karnataka	48,174	109,140	6,838	79,208
Kerala*	28,378	85,624	7,897	17,634
Madhya Pradesh*	26,438	95,135	1,069	—
Maharashtra*	33,158	90,386	566	106,220
Orissa*	49,170	54,499	238	14,312
Punjab*	18,152	45,801	2584	35,290
Rajasthan*	22,239	37,667	850	18,214
Tamil Nadu	53,904	179,082	11,109	151,973
Uttar Pradesh	27,279	19,708	2,763	30,276
West Bengal	56,302	48,470	11,938	89,630
Special Category States,				
Arunachal Pradesh	—	—	—	347
Himachal Pradesh	10,152	8,550	491	2,818
Meghalaya	751	1,811	100	269
Mizoram	1,639	1,809	—	398
Nagaland	—	—	—	1,553
Tripura*	987	940	—	257
Uttarakhand*	700	92	11	—
Union Territories				
Lakshadweep	—	—	—	3,082
Puducherry	—	—	—	1,716
Total	557,022	1,043,363	51,776	655,801

Source: Indian Nursing Council, Pharmacy Council of India.

Notes: 1 Assam = Assam+Arunachal Pradesh + Manipur + Nagaland. 2 Maharashtra = Maharashtra + Goa. 3 Punjab = Punjab + J&K. 4 Tamil Nadu = Tamil Nadu + Andaman & Nicobar Islands + Puducherry. 5 West Bengal = West Bengal + Sikkim. * Last year data for registered nurses in India. ANM: Auxiliary Nurse Midwives. GNM: General Nursing and Midwives. LHV: Lady Health Visitors.

Table 5A.43 Doctors and Health Works in Government Health System Manpower (Rural), 2008

Non Special Category States	*No. of Doctors at PHCs*	*Health Assistants*		*Health Workers*	
		Males	*Females (LHV)*	*Males*	*Females /ANM*
Andhra Pradesh	2,214	1,920	1,564	6,127	1,2541
Assam	408	—	—	—	8,289
Bihar	1,565	634	479	1,074	9,127
Chhattisgarh	862	114	749	2,514	4850
Delhi	18	4	28	—	82
Goa	44	15	20	135	177
Gujarat	1,019	2,421	267	4,456	7,060
Haryana	350	106	285	2,031	2,592
Jharkhand	330	660	—	1,922	5,011
Karnataka	2,814	837	1,170	3,762	8,028
Kerala	1,732	794	740	2,654	5,320
Madhya Pradesh	1,042	495	741	4,030	8,718
Maharashtra	1,191	3,182	3,323	9,956	12,027
Orissa	1,353	168	726	3,392	6,768
Punjab	201	139	179	1,983	2,706
Rajasthan	1,542	714	1,358	2,528	12,271
Tamil Nadu	2,260	303	1,362	3,278	10,343
Uttar Pradesh	2,001	4,294	3,509	2,097	21,024
West Bengal	810	225	300	4,215	6,051
Special Category States					
Arunachal Pradesh	87	56	—	156	256
Himachal Pradesh	407	62	114	1,270	2,496
Jammu & Kashmir	451	89	27	—	1,794
Manipur	115	52	55	420	990
Meghalaya	106	87	75	273	608
Mizoram	52	54	48	398	428
Nagaland	79	15	31	300	696
Sikkim	42	8	18	147	267
Tripura	255	93	62	436	638
Uttarakhand	866	417	340	616	1,903
Union Territories					
Andaman & Nicobar Islands	73	—	19	22	272
Chandigarh	—	—	—	14	14
Dadra & Nagar Haveli	6	3	3	9	38
Daman & Diu	6	—	4	19	38
Lakshadweep	6	—	—	13	14
Puducherry	68	15	12	—	131
All India	24,375	17,976	17,608	60,247	153,568

Source: National Health Profile 2009, Ministry of Health & Family Welfare.
Note: — Not available.

Table 5A.44 Source of Healthcare: Percentage Distribution of Households by Pu

Non Special Category/Urban States	Rural				All			
	Public Medical Sector	NGO or Trust Hospital/ Clinic	Private Medical Sector	Other Source	Public Medical Sector	NGO or Trust Hospital/ Clinic	Private Medical Sector	Other Source
Andhra Pradesh	25.5	0.0	74.1	0.4	25.8	0.2	73.7	0.4
Assam	69.1	0.0	30.7	0.2	65.2	0.0	34.5	0.3
Bihar	6.0	0.1	93.7	0.2	6.7	0.1	92.9	0.2
Chhattisgarh	38.9	0.2	60.5	0.3	36.3	0.2	63.1	0.4
Delhi	37.9	0.0	62.2	0.0	29.3	0.0	70.5	0.2
Goa	31.5	0.1	67.9	0.5	29.6	0.1	69.6	0.6
Gujarat	35.2	3.0	61.6	0.1	27.5	2.4	69.8	0.4
Haryana	27.9	0.0	72.1	0.0	27.7	0.0	72.2	0.1
Jharkhand	20.7	2.2	76.2	1.0	22.3	2.0	74.8	0.9
Karnataka	44.6	0.7	54.5	0.2	36.0	0.5	63.1	0.4
Kerala	52.1	0.6	46.8	0.6	50.0	0.4	49.1	0.6
Madhya Pradesh	37.1	0.1	62.7	0.2	37.4	0.4	61.9	0.3
Maharashtra	36.8	0.4	62.7	0.2	29.7	0.4	69.6	0.3
Orissa	79.0	0.0	19.9	1.1	76.2	0.0	22.9	1.0
Punjab	20.2	0.2	79.5	0.1	19.3	0.4	80.1	0.3
Rajasthan	74.7	0.1	25.2	0.1	70.2	0.2	29.6	0.0
Tamil Nadu	57.6	0.1	42.1	0.3	53.0	0.1	46.6	0.3
Uttar Pradesh	15.0	0.1	84.6	0.3	15.3	0.2	84.2	0.3
West Bengal	31.7	0.1	67.8	0.5	28.8	0.1	70.5	0.5
Special Category States								
Arunachal Pradesh	87.7	1.8	8.8	1.7	82.6	4.4	11.7	1.3
Himachal Pradesh	83.3	0.1	16.4	0.2	82.7	0.1	17.0	0.2
Jammu & Kashmir	72.6	0.6	26.3	0.5	62.9	0.5	36.2	0.4

Manipur	71.7	0.0	27.4	0.8	82.4	0.2	16.8	0.5	79.0	0.1	20.3	0.6
Meghalaya	48.7	0.4	50.8	0.1	70.5	0.3	26.5	2.7	64.9	0.3	32.8	2.0
Mizoram	88.1	0.9	10.6	0.4	93.6	1.9	3.6	1.0	90.6	1.4	7.4	0.7
Nagaland	36.9	0.5	61.8	0.9	57.8	0.7	37.7	3.8	52.1	0.7	44.2	3.0
Sikkim	83.4	0.0	16.2	0.4	94.0	0.0	6.0	0.0	91.8	0.0	8.1	0.1
Tripura	58.8	0.3	40.5	0.5	84.5	0.0	15.0	0.5	80.0	0.1	19.5	0.5
Uttarakhand	47.1	0.4	51.7	0.8	43.4	0.2	55.2	1.3	44.5	0.2	54.2	1.1
All India	29.6	0.5	69.5	0.4	36.8	0.3	62.6	0.3	34.4	0.4	64.8	0.4

Source: *NFHS 3.*

Table 5A.45 Distribution of Households by Type of Toilet Facility, 2002 and 2008–9 (*per cent*)

Non Special Category States	*Septic Tank/ Flush*		*Pit*		*Service*		*No Latrine*	
	2002	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*
Andhra Pradesh	34.8	47	1.3	3.4	1.7	0.9	61.1	47.9
Assam	16.5	26	41	48.7	1.6	2	12.7	12.1
Bihar	13.7	17.2	2.8	4.8	3.2	1.2	78.7	74.1
Chhattisgarh	17.2	21.2	0.3	3.6	0.2	0.2	82.3	72.9
Delhi	76.1	92.2	5.3	3.5	10.4	1.1	6.6	1.7
Goa	70.5	63.9	1.8	12	2.8	0.2	21.7	22.9
Gujarat	43.9	47.2	4.6	8.3	0.8	0.3	50.6	43.6
Haryana	32.8	43.3	7.6	20.7	0.7	0.7	58.8	33.7
Jharkhand	21.9	17.3	0.8	6.4	0.9	0.3	75.5	74.7
Karnataka	23.8	31.7	13.8	15.3	1.5	0.7	60.5	51.5
Kerala	28.4	29.4	61.9	65.1	0.2	0.2	8.6	4.3
Madhya Pradesh	17.8	24.2	3.1	3.6	2.5	0.6	76.6	70.2
Maharashtra	43.2	57.3	1.1	4.3	0.6	1	54.9	36.4
Orissa	13.5	15.1	1.6	2.8	4.2	1.7	79.9	78.7
Punjab	39.7	52.4	20.9	21.2	1.8	1.4	37.6	24
Rajasthan	19.4	24.7	6.7	10.5	1.5	0.6	72.1	63.6
Tamil Nadu	36	49.6	0.6	1.2	1.6	0.9	61.5	46.6
Uttar Pradesh	20.3	33.7	2.4	22.4	5	1.2	72	42.5
West Bengal	26.3	29.9	14.6	31.7	3.3	3	53.6	32.4
Special Category States								
Arunachal Pradesh	19.8	31.9	11.1	15.4	17	6.6	23.2	12.7
Himachal Pradesh	31.5	52.3	0.9	4	4.4	0.6	63.1	42.3
Jammu & Kashmir	18.6	29.5	7.4	19.9	23.3	15.5	39	29.7
Manipur	24.5	30.4	45.3	46.5	17.3	9.3	4.6	0.8
Meghalaya	16	27.2	45	57.1	2.2	4.4	27	9.3
Mizoram	33.3	54.4	56.4	43.1	6.8	0.7	2	0.7
Nagaland	48.7	43.3	37.4	43.4	7.1	2	2.5	2.6
Sikkim	53.3	73.4	35.1	24	0.2	0.1	9.4	2.1
Tripura	8.4	13.2	77.5	71.1	5	0.7	5.2	2.9
Uttarakhand	38.5	25.7	7.8	6.1	1	2.1	51.5	65
Union Territories								
Andaman & Nicobar Islands	45.8	62.7	4.1	8.3	0	0	50	28.8
Chandigarh	91.3	98.3	0	0	2.1	0	6.6	1.7
Dadra & Nagar Haveli	36	45.6	2.4	12.4	0.7	0	60.7	42
Daman & Diu	75.2	35.5	0	37.9	1.1	3.5	23.7	23.1
Lakshadweep	53.7	38.7	39.6	60.1	0	0.4	6.6	0.4
Puducherry	56.2	70	0.3	0.6	1.2	2.6	42.4	25.6
All India	28.5	35.4	7.8	12.2	2.6	1.4	59.8	49.2

Source: NSS 58th and 65th Rounds.

Table 5A.46 Distribution Proportion of Households by Type of Toilet Facility (Rural), 2002 and 2008–9 (*per cent*)

Non Special Category States	*Septic Tank/ Flush*		*Pit*		*Service*		*No Latrine*	
	2002	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*
Andhra Pradesh	17.8	29.9	1.3	4.3	1.7	1	77.7	64.3
Assam	10.4	18.2	43.6	53.5	1.6	2.2	13.8	13.5
Bihar	7.5	11.8	2.7	5	3.3	1	84.9	79.8
Chhattisgarh	8.6	11.3	0	4.2	0.1	0.2	91.3	82.3
Delhi	74.9	84.5	10.8	8.1	8.7	0	5.5	7.5
Goa	63.2	40.6	2.9	22.7	1.8	0.1	27.3	36.2
Gujarat	16.5	26	5.1	6.2	0.5	0.1	78	67.3
Haryana	14.8	29.6	8.1	24.1	0.2	0.1	76.9	45.3
Jharkhand	11.5	7.3	0.5	7	0.1	0.2	86.8	84.1
Karnataka	6.6	7.4	13	16.3	0.6	0.4	79.8	75.2
Kerala	21.3	21.7	67.1	71.7	0.3	0.3	10.3	5.3
Madhya Pradesh	5.1	10.5	1.3	2.7	0.5	0.3	93.1	85.3
Maharashtra	14.2	31.6	1.3	6.3	0.1	0.6	84.1	60.7
Orissa	5.2	7.3	1.5	1.9	4.7	1.3	88.4	88.2
Punjab	21.2	32.1	27.4	29.8	0.1	0.8	51.4	36.2
Rajasthan	5.2	8.2	6.3	8.9	0.8	0.6	87.5	82.1
Tamil Nadu	14.6	23.7	0.7	1.5	1.3	0.5	83.5	73.5
Uttar Pradesh	6.9	23.2	2	21.7	3.2	1.3	87.6	53.5
West Bengal	11.7	14.8	14.5	36.9	2.5	3.4	69.4	41.7
Special Category States								
Arunachal Pradesh	12.1	23.9	10.7	16.2	16.2	5.3	28.7	16.2
Himachal Pradesh	26	47.8	0.7	4.1	2.2	0.5	71	46.5
Jammu & Kashmir	6.3	17.2	8.2	23.4	25.3	19.1	46.9	34.9
Manipur	17.1	21.8	51.6	52.7	14.1	9.4	6.3	1.1
Meghalaya	3.6	14.8	51.3	67	2.2	4.3	32.2	11.4
Mizoram	15.7	32.1	71.6	64.3	6.6	1.1	3.6	1.2
Nagaland	36.1	32.6	45.7	53.8	8.9	2.2	3.8	3.1
Sikkim	47.1	68.9	39.7	28.1	0.3	0.1	10.7	2.5
Tripura	3	5.2	82.7	76.9	4.2	0.9	5.8	3.4
Uttarakhand	30.9	12.6	5.7	5.9	0.6	1.5	61.2	79.2
Union Territories								
Andaman & Nicobar Islands	26.5	47.5	6.1	12.4	0	0	67.4	39.9
Chandigarh	73.6	90	0	0	3.6	0	22.8	9.6
Dadra & Nagar Haveli	25.6	32.2	2.6	14.4	0.6	0	71.1	53.2
Daman & Diu	68.5	8.4	0	57.9	0.9	2	30.6	31.9
Lakshadweep	27.4	21.7	67.8	78.3	0	0	4.7	0
Puducherry	18	34.6	0	0	0	0	82	65.4
All India	11.7	17.9	8.4	14	1.9	1.2	76.3	65.2

Source: NSS 58th and 65th Rounds.

Table 5A.47 Distribution of Households by Type of Toilet Facility (Urban), 2002 and 2008–9 (*per cent*)

Non Special Category States	*Septic Tank/ Flush*		*Pit*		*Service*		*No Latrine*	
	2002	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*
Andhra Pradesh	76.8	85.3	1.3	1.5	1.5	0.7	19.8	11.2
Assam	76.2	84.8	15.7	12.2	1.5	0.2	1.8	0.9
Bihar	61.3	61.9	3.8	3.3	1.9	2.1	31	27.7
Chhattisgarh	56.2	64.3	1.9	1.2	0.4	0.5	41.5	31.5
Delhi	76.4	92.8	3.6	3.2	10.9	1.2	6.9	1.2
Goa	83.1	87.6	0	1.4	4.6	0.2	12.1	9.6
Gujarat	87.5	79.5	3.9	11.5	1.4	0.7	6.8	7.3
Haryana	76.2	73.5	6.6	13.3	1.8	1.9	15	8.4
Jharkhand	62.8	70.6	2.3	3.1	3.6	0.9	30.9	24.5
Karnataka	60.2	72.8	15.8	13.6	3.6	1.1	21	11.3
Kerala	49.1	50.6	46.1	46.6	0.1	0.1	3.7	1.5
Madhya Pradesh	51.4	66.2	7.7	6.4	7.5	1.4	33.1	24.3
Maharashtra	82.7	89.4	0.7	1.9	1	1.4	15.2	5.9
Orissa	59.2	56.2	2.2	7.3	1.1	3.6	32.9	29.1
Punjab	74.5	84.1	8.6	7.8	5.2	2.3	11.6	5
Rajasthan	57.7	70.3	7.7	14.8	3.4	0.8	30.7	12.6
Tamil Nadu	74.4	79.1	0.6	0.8	2.3	1.3	21.9	16
West Bengal	65.4	73.4	14.9	16.5	5.4	2.2	11.2	5.6
Special Category States								
Arunachal Pradesh	51.6	61.5	13.2	12.5	20.3	11.6	0.6	0.1
Himachal Pradesh	68.6	87.5	1.9	2.7	19	1	10.3	8.8
Jammu & Kashmir	59.3	71.3	4.6	7.8	16.8	3.2	12.6	11.8
Manipur	45.6	51.6	27	31.1	26.5	9.3	0	0
Meghalaya	77.7	79.1	13.2	15.3	2.1	5.1	0.9	0.2
Mizoram	55.8	82.3	37	16.7	7.1	0.2	0	0
Nagaland	72	70.1	21.9	17.5	4.1	1.5	0	1.3
Sikkim	92.3	98.9	7	1.1	0	0	0.7	0
Tripura	33.1	48.6	44.5	45.7	9.8	0	0.8	0.9
Uttarakhand	65.9	72.8	15.3	6.5	2.3	4.4	16.5	14.2
Union Territories								
Andaman & Nicobar Islands	85.9	93.9	0	0	0	0	14	6.1
Chandigarh	92.9	99.4	0	0	2	0	5	0.6
Dadra & Nagar Haveli	92.9	87.1	1.6	6.1	1.6	0	3.8	7.1
Daman & Diu	87	986.7	0	0.7	1.4	6.3	11.7	6.4
Lakshadweep	73.7	62	18.1	32.7	0	0.9	8.2	1
Puducherry	76.2	84.8	0.4	0.9	1.8	3.7	21.7	9.1
All India	70.7	77.3	6.3	8	4.7	1.6	17.9	11.3

Source: NSS 58th and 65th Rounds.

Table 5A.48a Distribution of Households by Type of Toilet Facility, by Social Groups, 2002 and 2008–9 (STs and SCs) (*per cent*)

Non Special Category States	*Scheduled Tribes*						*Scheduled Castes*					
	Pit		*Septic Tank/Flush*		*No Latrine*		*Pit*		*Septic Tank/Flush*		*No Latrine*	
	2002	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*
Andhra Pradesh	0.9	1.5	0.7	26.3	74.6	70.9	0.0	2.4	0.6	35.4	81.2	60.1
Assam	0.4	53.4	0.2	15.3	16.2	16.0		50.0	0.0	25.4	17.5	8.8
Bihar		0.8		24.2	84.3	69.1	0.0	3.3	0.9	9.9	91.4	83.9
Chhattisgarh		5.7	0.9	11.7	91.5	81.9		3.5	1.4	21.2	81.2	73.4
Delhi		0.0	6.2	98.0	6.2	0.0	2.4	1.5	13.2	89.8	10.9	4.2
Goa		0.0		44.5		55.5		2.4	5.3	55.3	4.7	38.9
Gujarat		7.1	1.7	18.4	85.9	73.8		4.9	2.5	26.9	53.1	67.2
Haryana		56.0		19.8	82.7	24.2		24.3	0.5	26.1	74.3	48.5
Jharkhand		5.9	4.6	8.9	76.5	84.1		17.1	2.8	9.1	90.7	71.5
Karnataka	0.0	11.5	0.6	14.9	84.4	70.0	0.8	13.5	0.9	14.3	79.9	71.5
Kerala	0.2	41.1		31.0	9.3	27.9	1.3	66.9	0.1	16.9	21.6	15.5
Madhya Pradesh		1.0	0.1	8.1	94.3	90.2	0.1	1.4	0.9	13.0	87.0	84.4
Maharashtra	0.2	4.1	3.3	29.3	87.5	64.1	0.5	3.4	13.3	53.1	66.3	40.6
Orissa		0.8	2.2	5.2	86.9	91.9		2.6	0.3	6.6	84.4	87.5
Punjab	1.5	0.0		17.3	9.4	62.6	0.4	22.1	0.3	36.0	55.3	39.5
Rajasthan	0.0	1.6	0.0	5.2	94.8	92.6		11.3	0.3	11.9	74.8	75.3
Tamil Nadu		0.5	0.7	45.2	70.6	54.3		0.6	2.2	24.8	83.1	72.8
Uttar Pradesh		4.7	1.1	21.3	80.9	73.2	0.1	3.3	2.1	11.5	88.3	84.1
West Bengal	0.3	29.1	1.6	17.2	84.7	41.4	0.7	32.2	3.0	22.4	66.3	39.1
Special Category States												
Arunachal Pradesh	2.4	10.6	2.4	27.1	27.9	15.2		17.3		63.5		0.0
Himachal Pradesh	1.7	3.7		29.9	57.6	65.5		2.4	7.0	47.8	75.9	49.2
Jammu & Kashmir	0.6	40.1		10.7	46.6	26.2		0.7	1.3	29.4	83.3	67.0

(*contd*)

Table 5A.48a (*contd*)

	Scheduled Tribes						*Scheduled Castes*					
	Pit		*Septic Tank/Flush*		*No Latrine*		*Pit*		*Septic Tank/Flush*		*No Latrine*	
	2002	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*
Manipur	0.9	49.4	4.2		25.0		12.6	0.8			40.5	
Meghalaya	5.5	58.6	0.6		25.2		32.4	10.3			83.3	
Mizoram	1.5	43.0	0.4		54.5		2.0	0.7			27.8	0.7
Nagaland	0.6	44.6	1.4		42.7		2.8	2.4			56.2	
Sikkim	1.5	28.3	0.1		69.2		9.1	2.5			31.1	
Tripura		74.5	0.2	7.2	12.0	3.8	0.1	73.8	0.4	9.3	3.0	5.3
Uttarakhand		14.0		33.4	21.5	28.1	0.5	11.7	0.0	20.1	74.3	67.8
Union Territories												
Andaman & Nicobar Islands		8.6		75.2	52.9	16.3						
Chandigarh		0.0	36.0	100.0		0.0		0.0	12.9	99.5	18.1	0.5
Dadra & Nagar Haveli		13.2	0.1	29.1	82.3	57.6		0.0		89.9	29.8	10.1
Daman Diu		16.1	36.4	2.0	53.3	81.8		70.4		12.3	46.6	17.3
Lakshadweep		68.3	1.0	29.9	5.0	0.5					68.0	
Puducherry		0.0		100.0	34.6	0.0		0.2	1.0	28.1	83.7	71.3
All India	0.3	11.0	1.5	16.5	78.0	69.1	0.3	10.2	2.7	22.4	74.9	65.0

Source: NSS 58th and 65th Rounds.

Table 5A.48b Distribution of Households by Type of Toilet Facility, by Social Groups 2002 and 2008–9 (*contd*) (*per cent*)

Non Special Category States	*Other Backward*						*Others*					
	Pit		*Septic*		*No Latrine*		*Pit*		*Septic*		*No Latrine*	
	2002	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*
Andhra Pradesh	0.0	4.2	2.2	43.0	66.5	51.4	0.2	4.1	2.9	66.5	38.3	27.4
Assam	0.0	46.2	0.4	32.9	7.3	7.9	1.5	47.8	0.3	27.0	13.0	13.2
Bihar	0.2	5.9	1.4	16.8	80.9	73.3	1.0	9.2	3.9	42.1	60.0	41.7
Chhattisgarh	0.0	1.5	1.9	20.0	85.2	75.2		92.9	7.3	69.0	44.6	21.2
Delhi	3.6	9.1	4.3	86.0	12.4	2.5	0.2	2.6	1.6	94.7	2.8	0.5
Goa		28.0		41.8	43.1	28.8	0.9	9.2	0.3	73.8	19.6	16.1
Gujarat	0.1	5.8	4.4	36.0	65.6	57.0		11.2	1.6	71.3	23.5	15.9
Haryana		15.0	0.0	42.7	66.1	39.9		21.7	1.2	55.7	46.8	19.7
Jharkhand	0.3	11.5	2.6	15.7	83.2	70.6	0.3	34.5	3.1	30.5	45.2	31.1
Karnataka	0.2	13.4	0.4	29.6	64.0	55.8	0.5	19.6	1.6	47.5	46.9	30.9
Kerala	1.6	69.2	0.3	26.2	8.2	3.0	0.4	57.8	0.3	39.4	4.9	2.0
Madhya Pradesh	0.2	3.9	1.5	24.8	76.5	69.0	0.1	20.4	2.1	53.2	50.4	38.3
Maharashtra		5.7	10.7	55.1	63.0	36.9	0.1	3.9	14.5	71.9	40.9	22.7
Orissa		3.2	1.1	15.4	84.5	78.4	0.1	1.2	3.4	35.1	60.2	54.8
Punjab		21.0	0.9	51.4	40.1	24.1	0.1	20.9	1.5	65.1	23.3	12.2
Rajasthan	0.1	11.8	0.3	20.0	79.5	67.3	0.0	12.3	2.1	53.7	44.5	32.2
Tamil Nadu		1.5	2.5	55.1	58.1	40.8		0.0	1.7	88.7	23.8	5.6
Uttar Pradesh	0.1	5.8	1.1	23.4	76.4	68.3	0.6	6.7	2.3	46.5	47.4	42.1
West Bengal	1.5	34.3	2.0	41.3	47.9	20.9	0.6	30.4	2.2	37.9	43.8	25.3
Special Category States												
Arunachal Pradesh		63.3	14.2	24.8		0.0	4.3	20.8	17.5	41.8	6.9	9.6
Himachal Pradesh		0.8	2.6	29.0	73.4	68.4	0.4	5.3	7.5	61.7	56.3	31.3
Jammu & Kashmir	14.6	38.5	0.4	8.0	22.4	26.9	0.5	19.2	1.4	33.7	30.4	24.2

(*contd*)

Table 5A.48b (*contd*)

	Other Backward Classes						*Others*					
	Pit		*Septic Tank/Flush*		*No Latrine*		*Pit*		*Septic Tank/Flush*		*No Latrine*	
	2002	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*
Manipur	0.2	46.5	0.1	31.3	0.9	0.8	0.4	28.6	2.0	70.5	0.5	0.0
Meghalaya		39.8		50.2	4.3	0.0	1.9	38.3		48.0		0.0
Mizoram		81.0	11.2	19.0		0.0		34.8	2.7	65.2	5.9	0.0
Nagaland		13.5		86.5		0.0		18.0		42.4		7.6
Sikkim		23.2	0.7	73.5	11.9	2.3	1.4	3.0	1.7	96.7	4.5	0.0
Tripura		71.1	0.1	15.3	2.1	0.5		65.0	0.3	21.9	2.8	1.6
Uttarakhand		19.5		40.9	39.8	36.1	0.4	27.2	3.4	36.0	44.2	36.5
Union Territories												
Andaman & Nicobar Islands		29.3		45.3		25.3		3.3	5.2	64.6	50.0	31.8
Chandigarh		0.0	18.5	94.0	12.0	6.0		0.0	1.5	98.8	4.1	1.1
Dadra & Nagar Haveli		7.7		52.6	21.9	39.6		14.6	1.8	72.7	11.1	12.7
Daman and Diu		38.6	25.5	32.7	26.2	25.3		37.8	8.0	55.2	15.6	2.0
Lakshadweep		63.5		36.5		0.0		8.1		91.9		0.0
Puducherry	0.1	0.8	2.3	77.5	38.5	17.5		0.0	1.0	86.9	4.3	7.4
All India	0.2	10.3	2.3	32.9	65.9	54.2	0.4	16.6	4.1	53.2	38.8	26.2

Source: NSS 58th and 65th Rounds.

Table 5A.49 Distribution of Households by Type of Toilet Facility, by Major Religious Communities, 2002 and 2008–9 (*per cent*)

Non Special Category States	*Hindus*			*Muslims*			*Christians*			*Sikhs*		
	Pit	*Septic Tank/Flush*	*No Toilet*	*Pit*	*Septic Tank/Flush*	*No Toilet*	*Pit*	*Septic Tank/Flush*	*No Toilet*	*Pit*	*Septic Tank/Flush*	*No Toilet*
Andhra Pradesh	3.5	44.6	50.2	4.5	65.5	28.4	1.8	46.8	50.9	0.0	100.0	0.0
Assam	45.3	32.0	8.6	56.9	11.8	19.7	55.6	16.1	26.0	0.0	100.0	0.0
Bihar	5.4	20.2	71.0	9.1	23.1	57.8	1.0	38.9	60.2	6.9	27.5	65.7
Chhattisgarh	3.5	20.4	73.8	7.1	78.6	14.4	10.4	24.5	64.1	0.0	21.0	79.0
Delhi	3.5	92.3	1.7	4.3	88.8	1.9	0.0	100.0	0.0	2.3	95.5	0.0
Goa	13.7	60.3	24.8	5.7	55.3	39.0	10.7	74.7	13.7	0.0	100.0	0.0
Gujarat	6.8	41.2	50.6	15.8	48.9	34.5	2.8	46.0	51.3	22.9	74.1	3.0
Haryana	21.4	43.3	32.9	5.7	30.9	63.4	0.0	100.0	0.0	27.8	60.8	11.4
Jharkhand	19.0	17.6	60.8	20.4	12.8	63.9	5.1	33.2	60.4	0.0	62.1	0.0
Karnataka	14.6	29.9	54.3	19.9	40.1	35.4	30.1	59.1	10.0	0.0	49.0	51.0
Kerala	64.8	28.1	5.3	76.4	20.5	1.4	53.6	42.6	3.1	—	—	—
Madhya Pradesh	3.1	22.5	72.6	2.9	53.6	39.3	21.0	50.7	28.3	0.0	93.1	0.0
Maharashtra	4.6	59.6	34.1	3.4	74.4	18.1	4.3	89.4	0.8	0.0	100.0	0.0
Orissa	2.9	15.0	78.8	0.3	36.4	56.0	1.1	5.6	93.3	0.0	100.0	0.0
Punjab	15.5	63.1	19.9	14.5	54.2	31.3	0.0	47.2	52.4	26.9	43.4	26.5
Rajasthan	9.6	23.5	65.8	14.4	36.9	45.7	0.0	43.5	56.2	62.9	22.2	13.4
Tamil Nadu	1.2	47.2	49.3	2.5	75.7	19.7	0.0	69.5	23.3	—	—	—
Uttar Pradesh	4.2	22.6	71.4	10.8	35.7	46.8	0.0	90.9	9.1	8.1	48.8	36.5
West Bengal	30.6	38.5	25.1	32.5	18.2	41.0	25.1	32.7	36.6	11.5	86.7	1.8
Special Category States												
Arunachal Pradesh	24.8	40.3	9.2	11.4	33.4	10.9	11.9	25.7	8.2	—	—	—
Himachal Pradesh	3.8	51.9	42.9	2.2	50.8	47.0	0.0	90.0	10.0			
Jammu & Kashmir	1.2	32.5	63.1	31.3	27.7	7.8	32.5	16.1	0.0	—	—	—

(*contd*)

Table 5A.49 (*contd*)

	Hindus			*Muslims*			*Christians*			*Sikhs*		
	Pit	*Septic Tank/Flush*	*No Toilet*	*Pit*	*Septic Tank/Flush*	*No Toilet*	*Pit*	*Septic Tank/Flush*	*No Toilet*	*Pit*	*Septic Tank/Flush*	*No Toilet*
Manipur	44.4	32.6	0.7	68.6	12.7	0.8	49.2	25.2	0.7			
Meghalaya	55.9	40.0	0.0	56.9	13.6	0.0	57.1	26.5	10.3	—	—	—
Mizoram	55.4	44.4	0.0	14.1	85.9	0.0	39.8	59.0	0.0	—	—	—
Nagaland	27.3	61.1	4.0	42.5	4.2	10.2	44.6	42.7	2.4	—	—	—
Sikkim	24.4	72.7	2.5	1.4	98.6	0.0	16.4	80.8	0.2	—	—	—
Tripura	71.7	14.0	2.8	71.8	6.2	3.5	54.9	10.4	0.0	—	—	—
Uttarakhand	19.5	34.5	44.6	49.2	27.7	21.4	2.4	18.5	79.1	—	—	—
Union Territories												
Andaman & Nicobar	10.0	55.1	34.7	2.0	97.0	1.0	4.7	77.9	17.4	0.0	76.8	23.2
Chandigarh	0.0	98.3	1.7	0.0	92.9	7.1	0.0	100.0	0.0	0.0	—	0.0
Dadra & Nagar Haveli	10.0	46.4	43.6	61.6	38.4	0.0	78.1	0.0	21.9	—	—	—
Daman & Diu	40.0	32.5	24.0	2.5	85.7	4.8	15.8	68.2	16.0	0.0	100.0	0.0
Lakhadweep	11.0	89.0	0.0	68.3	29.9	0.5	100.0	0.0	0.0	—	—	—
Puducherry	0.4	68.7	27.3	7.0	81.9	9.4	0.0	80.0	14.6	—	—	—
All India	10.3	34.7	52.5	21.9	35.4	35.8	27.4	46.9	22.1	26.3	45.9	24.7

Source: NSS 65th Round.
Note: — Not available.

Table 5A.50 Percentage Distribution of Households by Improved Source of Drinking Water, 2008–9

Non Special Category States	*Rural*	*Urban*	*Combined*
Andhra Pradesh	92.5	89.1	91.5
Assam	82.1	92.4	83.3
Bihar	97.3	97.5	97.3
Chhattisgarh	92.2	97.8	93.2
Delhi	80.7	96.7	95.6
Goa	92	91.7	91.8
Gujarat	91.4	95.6	93.1
Haryana	97.8	96.6	97.4
Jammu & Kashmir	82.5	96.6	85.8
Jharkhand	63.4	88.8	67.4
Karnataka	95.1	96.9	95.7
Kerala	69.8	82.3	73.1
Madhya Pradesh	90.3	93	91.1
Maharashtra	87.9	93.4	90.3
Orissa	83.3	91.3	84.6
Punjab	99	98.9	99
Rajasthan	80.1	94.7	84
Tamil Nadu	96.8	89.2	93.3
Uttar Pradesh	96.4	98.4	96.8
West Bengal	94.9	98	96.2
Special Category States			
Arunachal Pradesh	91.7	97.7	93
Himachal Pradesh	89.2	91.6	89.5
Manipur	38.9	76.5	49.1
Meghalaya	66	110	72.2
Mizoram	20.4	72.1	44.4
Nagaland	64.1	52.5	64.4
Sikkim	67.4	98.2	72
Tripura	76.4	96.9	80.2
Uttarakhand	84.1	100	87.5
Union Territories			
Andaman & Nicobar Islands	87.4	98.9	91.2
Chandigarh	97.5	100	99.7
Dadra & Nagar Haveli	89.8	98.5	91.8
Daman & Diu	100	95.2	98.3
Lakshadweep	28.3	41.1	33.5
Puducherry	100	96.5	97.6
All India	90.4	93.9	91.4

Source: NSS 65th Round.

Table 5A.51 Distribution of Households by Source of Drinking Water, 2002 and 2008–9

Non Special Category States	Tube/Handpump Well		Tap Water		Well		Tank/Pond (Reserved for Drinking)		Pond		River/Canal		Spring		Others	
	2002	2008–9	2002	2008–9	2002	2008–9	2002	2008–9	2002	2008–9	2002	2008–9	2002	2008–9	2002	2008–9
Andhra Pradesh	61.2	67.4	24.4	22.5	10.6	4.4	0.7	0.5	0.2	0	0.8	0.5	0.2	0	1.8	4.7
Assam	9.6	9.8	54.2	62.6	25.3	18.4	1.5	0.5	5.2	2.6	3.4	2.5	0.7	2.9	0.1	0.6
Bihar	4.1	4.1	86.6	90.9	9.3	4	0	0	0	0	0	0.1	0	0	0.1	0.9
Chhattisgarh	13.1	17.5	67.8	72.8	17.5	8.3	0	0.3	0	0	1.3	0	0.4	0.2	0	0.7
Delhi	86.3	85	12.1	10.6	0.1	0	0	0.5	0.6	0	0	0	0	0	0.9	4
Goa	66.6	86.3	0.4	0.2	28.5	9.8	0	0	0	0	1	0	3.5	0	0	3.7
Gujarat	71.1	68.2	21.2	21.8	6	5.4	1.1	1.1	0	0.2	0.2	0.8	0.1	0	0.3	2.5
Haryana	50.1	66.1	38.3	30.4	10.7	1.9	0.9	0.4	0	0.3	0	0	0	0	0	0.9
Jharkhand	14.5	10.7	33.6	48.3	47.8	39.2	0	0.1	0.1	0	3	1.5	0.2	0	0.8	0.2
Karnataka	68.9	78	20.3	12.4	9.5	6.4	0.3	1.1	0.1	0.2	0.7	0.8	0	0	0.2	1.1
Kerala	18.9	22.6	1.6	3	76.5	71.1	1.1	0.8	0.2	0.6	0.2	0.1	1.4	0.9	0	0.9
Madhya Pradesh	22.5	23.4	50.1	61.5	26	13.2	0.1	0.4	0.1	0.2	0.8	0.5	0.2	0.1	0.3	0.9
Maharashtra	66.8	71.1	16.9	14.5	13.8	10.4	0.1	0.2	0.1	0.2	1.5	0.4	0	0.2	0.8	3
Orissa	12.4	15	58	65.2	23.6	16.9	0.1	0.2	0.3	0	2.8	1.5	1.8	0.7	1	0.4
Punjab	41.6	54.2	57.4	44.8	0.8	0	0	0.1	0	0	0	0	0	0	0.2	0.9
Rajasthan	40.1	44	37.7	37.6	13.5	8	6.2	3.6	1.4	1.5	0.7	0.8	0	0	0.3	4.5
Tamil Nadu	79.2	84.6	11.3	7.2	5.8	2.1	0.5	0.5	0	0.1	1.2	0.3	0.3	0	1.7	5.1
Uttar Pradesh	12.4	12.2	77.7	83.4	9.8	3.7	0	0	0	0	0	0.1	0	0	0	0.5
West Bengal	25.2	24	66.5	69.7	7.2	25.5	0.2	0.3	0	0	0	0.1	0.6	0.9	0.1	0.6
Special Category States																
Arunachal Pradesh	80.7	81.4	3.6	9.6	2.8	3.9	0	0.1	1	0.9	1.2	1.9	3	0.9	7.3	1.3
Himachal Pradesh	77	79.2	8.6	7.3	5.2	3.7	0.4	0.4	0.1	0.1	0.3	0.2	8.5	7.1	0	2
Jammu & Kashmir	64.6	71.3	15.4	14.4	2.6	0.9	0.2	1.2	0.2	0.7	4.6	1.2	11.8	8.8	0.6	1.5
Manipur	38.1	36.5	7.9	9.5	3.8	3.1	12.3	14.1	10.3	5.4	14.2	16.3	10.6	12.6	2.4	2.5

Meghalaya	48.6	59.3	3.7	7.8	16.4	9.4	6.3	3.1	1.5	0.5	0.2	1.4	22.9	17.9	0.3	0.6
Mizoram	34.3	40.1	1.9	2.7	0.9	0.2	8	2.6	1.8	1.1	0.8	3.2	49.4	47.2	3	2.8
Nagaland	53.6	27.8	5.2	4.4	8.4	38	18.9	15.1	1.7	4.2	0	1.1	12.2	4.8	0	4.5
Sikkim	59.9	72	0.1	0	0	0	0	1.1	0	0	0.3	0	39.7	26.8	0.1	0.1
Tripura	27.3	33.5	41.1	41.9	30.5	19.9	0.3	0.8	0.1	0.3	0	1.8	0	0.2	0.6	1.7
Uttarakhand	61.3	63.9	28.1	23.6	0.3	0	1.2	0.1	0	0	1	0	6	9.6	2.1	2.7
Union Territories																
Andaman & Nicobar	84.3	88.3	0	0.6	10.6	7.2	0	0	0	0	4	1.6	1.2	1.5	0	0.7
Chandigarh	97	97.9	3	1.8	0	0	0	0	0	0	0	0	0	0	0	0.3
Dadra & Nagar Haveli	21.2	42	67.5	43.4	4.7	12.1	0.4	0	0.4	1.1	5.6	0	0	0	0.1	1.4
Daman & Diu	83.3	68.8	12.5	29.5	2	0.9	2.2	0	0	0.1	0	0	0	0	0	0.7
Lakshadweep	6.8	17.2	1.5	6.1	89.5	72.5	1	0	0	0	0	0	0	0	1.2	4.2
Puducherry	96.3	95.8	2.4	0.5	0.6	1.4	0	0	0	0	0	0	0	0	0.6	2.3
All India	40.5	43.1	42.3	43.7	14.3	9.3	0.7	0.6	0.3	0.3	0.8	0.5	0.6	0.5	0.6	2.1

Source: NSS 58th and 65th Rounds.

Table 5A.52 Distribution of Households by Source of Drinking Water (Rural), 2002 and

Non Special Category States	Tube/Tap Well/ Handpump				Well		Tank/ Pond (Reserved for Drinking)				River /Canal		Spring/ Lake		Others	
	2002	2008–9	2002	2008–9	2002	2008–9	2002	2008–9	2002	2008–9	2002	2008–9	2002	2008–9	2002	2008–9
Andhra Pradesh	54.3	63.8	29.7	26.6	13.1	5.9	1	0.7	0.2	0	1.1	0.8	0.2	0	0.2	2.2
Assam	6.9	6.3	54.7	65.4	26.6	18.2	1.7	0.6	5.8	3	3.7	2.8	0.7	3.2	0	0.4
Bihar	0.9	1.1	88.8	93.8	10.2	4.2	0	0	0	0	0	0	0	0	0.1	0.9
Chhattisgarh	1.8	7.6	76.2	81	20	10.1	0	0.4	0	0	1.5	0	0.4	0.2	0	0.7
Delhi	91.3	46.4	5.7	34.3	0.4	0	0	3.2	2.6	0	0	0	0	0	0	16.2
Goa	56.7	85	0.6	0	35.6	15	0	0	0	0	1.6	0	5.5	0	0	0
Gujarat	58.2	58	29.9	28.4	9.6	8.7	1.8	1.7	0	0.3	0.3	1.3	0.2	0	0	1.6
Haryana	38.8	61.2	45	35.3	14.9	2.7	1.3	0.5	0	0.2	0	0	0	0	0	0
Jharkhand	3.6	3.5	37.8	50.9	53.6	43.7	0	0	0.1	0	3.7	1.7	0.2	0	1	0.1
Karnataka	59.5	70.2	26.7	17.5	12	8.9	0.5	1.6	0.1	0.3	1	1.2	0	0	0.2	0.3
Kerala	10.8	15.8	1.5	2.6	83.8	77.8	1.5	1.1	0.3	0.7	0.2	0.1	1.9	1.3	0	0.6
Madhya Pradesh	6.9	9.1	59.9	73.9	31.6	15.5	0.1	0.5	0.1	0	1.1	0.6	0.2	0.1	0.2	0.3
Maharashtra	48.5	56.9	25.5	22.7	22.6	18.1	0.2	0.3	0.1	0.4	2.6	0.7	0	0.4	0.6	0.7
Orissa	4.6	5.8	62.7	73.3	25.8	17.7	0.1	0.3	0.3	0.1	3.3	1.8	2.1	0.9	1.2	0.2
Punjab	22	36.3	76.5	62.7	1.3	0	0	0.2	0	0	0	0	0	0	0.3	0.8
Rajasthan	25.1	28.5	45.7	48.3	17.6	10.7	8.4	4.7	2	2.1	1	1.1	0.1	0	0.2	4.6
Uttar Pradesh	2.2	2.4	85.5	92.6	12.3	4.6	0	0	0	0	0	0.1	0	0	0	0.3
Tamil Nadu	76.9	87.3	13.2	7.3	6.5	3.3	0.4	0.8	0	0.2	1.8	0.6	0.5	0	0.8	0.5
West Bengal	12.5	7.8	77.6	84.8	8.9	5.4	0.2	0.3	0	0	0	0.1	0.7	1.1	0	0.3
Special Category States																
Arunachal Pradesh	78.7	79.8	2.4	11.2	3.5	3	0	0	1.2	1.1	1.5	2.4	3.7	1.1	8.8	1.3
Himachal Pradesh	74.1	78	9.3	7.9	5.9	4.1	0.4	0.4	0.1	0.1	0.3	0.2	9.7	8	0.1	1.3
Jammu & Kashmir	55.7	65.5	18.7	16.9	3	1.1	0.3	1.6	0.2	0.9	5.9	1.6	15.4	11.4	0.8	1
Manipur	29.4	24.7	8.3	10.4	4.8	3.7	14.4	14.5	10.9	6.2	15.5	21.2	14.3	16.7	2.1	2.5

Meghalaya	40.6	50.6	4.5	9.4	19.1	11.3	7.3	3.8	1.8	0.6	0.2	1.7	26.2	22.1	0.2	0.4
Mizoram	14.2	14.6	0.5	4.8	1.1	0.4	7	2.7	2.4	1.2	1.4	5.6	70.1	68.5	3.2	2.2
Nagaland	51.3	28.6	4.3	5.2	5.1	40.7	23.9	15	1.2	3.4	0	1.2	14.2	5.3	0	0.5
Sikkim	53.6	67.4	0.1	0	0	0	0	1.3	0	0	0.3	0	45.9	31.3	0.1	0
Tripura	21.9	27.4	42	43.7	35	23.6	0.4	0.9	0.1	0.4	0	2.1	0	0.3	0.7	1.5
Uttarakhand	56.2	60.8	30.7	23.3	0.4	0	1.1	0.1	0	0	1.2	0	7.7	12.3	2.7	3.5
Union Territories																
Andaman & Nicobar	79.5	83.1	0	0.9	12.9	10.7	0	0	0	0	5.9	2.4	1.7	2.2	0	0.6
Chandigarh	89.9	89.1	10.1	8.4	0	0	0	0	0	0	0	0	0	0	0	2.5
Dadra & Nagar Haveli	14.8	29.8	72.4	51.5	5	16	0.4	0	0.5	1	6.6	0	0	0	0.2	1.8
Daman & Diu	75.3	55.5	18.2	44.5	3.1	0	3.4	0	0	0	0	0	0	0	0	0
Lakshadweep	12.2	22.5	0.1	0.1	87.7	71.8	0	0	0	0	0	0	0	0	0	5.7
Puducherry	93.3	99.1	4.9	0.9	1.2	0	0	0	0	0	0	0	0	0	0.6	0
All India	27.5	30.1	51.3	54.7	17.6	11.8	0.8	0.8	0.4	0.3	1.1	0.7	0.8	0.7	0.3	0.9

Source: NSS 58th and 65th Rounds.

Table 5A.53 Distribution of Households by Source of Drinking Water (Urban), 2002

Non Special Category States	Tube Tap Well/ Handpump		Well		Tank/ Pond (Reserved for Drinking)		Tank		River/Other /Pond		Spring Canal/		Others Lake	
	2002	2008–9	2002	2008–9	2002	2008–9	2002	2008–9	2002	2008–9	2002	2008–9	2002	2008–9
Andhra Pradesh	78.3	75.4	11.2	13.2	4.5	1.1	0	0.2	0.1	0	0.1	0	0	0	5.7	10.2
Assam	35.5	36.6	49.5	41.1	13	19.8	0.1	0	0	0.1	0.2	0	0.4	0.2	0.9	2.2
Bihar	28.5	29	69.1	67	2.3	2.5	0	0	0.1	0	0	0.6	0	0	0	0.9
Chhattisgarh	64.4	60.5	29.3	37.3	6.3	0.5	0	0	0	0	0	0	0	0.5	0	1.1
Delhi	84.9	88	13.8	8.7	0.1	0	0	0.2	0	0	0	0	0	0	1.2	3.1
Goa	83.6	87.7	0	0.3	16.4	4.5	0	0	0	0	0	0	0	0	0	7.5
Gujarat	91.7	83.8	7.3	11.6	0.2	0.2	0	0.3	0	0	0	0	0	0	0.8	4.1
Haryana	77.3	76.9	22.1	19.7	0.6	0	0	0.1	0	0.4	0	0	0	0	0	3
Jharkhand	57.7	49.1	16.9	34.3	25.1	15.4	0	0.4	0	0	0.3	0.1	0	0	0	0.7
Karnataka	88.5	91.3	7	3.7	4.3	2.4	0	0.2	0	0	0	0	0	0	0.2	2.3
Kerala	42.6	41.6	2	4.1	55.3	52.5	0	0	0	0.2	0	0	0	0	0	1.8
Madhya Pradesh	63.7	66.8	24.3	23.6	11.2	5.8	0.2	0.1	0	0.5	0	0	0	0	0.5	3.1
Maharashtra	91.7	88.9	5.2	4.3	1.8	0.8	0	0	0	0	0.1	0	0	0	1.1	6
Orissa	55.4	63.6	32.1	22.3	11.9	12.5	0.2	0.1	0	0	0.4	0.4	0	0	0	1.2
Punjab	78.4	82.1	21.5	16.8	0	0	0	0	0	0	0	0	0	0	0.1	1.1
Rajasthan	80.5	86.6	16.1	7.9	2.5	0.7	0.3	0.5	0	0.1	0	0	0	0	0.6	4.1
Tamil Nadu	83.3	81.4	7.9	7.1	4.4	0.8	0.8	0.2	0	0	0.1	0	0.1	0	3.5	10.5
Uttar Pradesh	79.8	47.3	18.6	50.8	0	0.4	1.4	0	0	0	0.2	0	0	0	0	1.4
West Bengal	59.5	70.4	36.5	26.2	2.9	1.8	0.4	0.2	0	0	0	0.1	0.1	0.2	0.4	1.1
Special Category States																
Arunachal Pradesh	88.9	87.2	8.4	3.8	0.1	7.4	0	0.3	0	0	0	0	0.1	0.1	1	1.2
Himachal Pradesh	95.7	88.5	4	3	0.2	0.1	0	0	0	0.2	0	0	0.1	0.2	0	8
Jammu & Kashmir	94.4	90.9	4.2	5.5	1.3	0.2	0	0	0	0	0	0	0.1	0	0	3.4
Manipur	63	65.6	6.7	7.4	1.1	1.4	6.2	13	8.6	3.4	10.6	4.3	0	2.5	3.2	4.7

Meghalaya	88.8	95.6	0	0.7	2.9	1.4	1.4	0	0.1	0	0	0	6.4	0.7	0.4	14.1
Mizoram	59.9	72	3.6	0.1	0.6	0	9.2	2.5	1	1	0.1	0.3	22.8	20.7	2.7	1.1
Nagaland	57.8	25.7	6.9	2.6	14.6	31.1	9.5	15.2	2.7	6.2	0	0.9	8.5	3.5	0	2.1
Sikkim	99.2	98.2	0	0	0	0	0	0	0	0	0	0	0.8	1.3	0	0.5
Tripura	61.5	60.6	35.9	33.7	2.4	3.3	0	0	0	0	0	0	0	0	0.2	2.4
Uttarakhand	48.6	75	50.2	25	1	0	0	0	0	0	0	0	0	0	0	0
Union Territories																
Andaman & Nicobar	94.3	98.9	0	0	5.7	0	0	0	0	0	0	0	0	0	0	1.1
Chandigarh	97.6	99.1	2.4	0.9	0	0	0	0	0	0	0	0	0	0	0	0
Dadra & Nagar Haveli	56.3	80.2	40.5	18.3	3.2	0	0	0	0	1.6	0	0	0	0	0	0
Daman & Diu	97.1	93.8	2.7	1.4	0.1	2.5	0	0	0	0.2	0	0	0	0	0	2.1
Lakshadweep	2.7	9.5	2.6	14.9	90.9	73.6	1.7	0	0	0	0	0	0	0	2.1	2.1
Puducherry	97.9	94.4	1.1	0.3	0.3	2	0	0	0	0	0	0	0	0	0.7	3.2
All India	73.6	74.3	19.6	17.5	5.1	3.3	0.2	0.2	0	0.1	0.1	0	0.1	0.1	1.3	4.6

Source: NSS 58th and 65th Rounds.

Table 5A.54a Distribution of Households by Source of Drinking Water, by Social Groups, 2002 and 2008–9

Non Special Category States	*Scheduled Tribe*						*Scheduled Caste*					
	Tap		*Tube Well/ Handpump*		*Well*		*Tap*		*Tube Well/ Handpump*		*Well*	
	2002	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*
Andhra Pradesh	27.4	37.7	53.8	38.9	13.6	21.9	58.7	64.7	29.0	25.4	9.9	5.7
Assam	2.0	3.5	51.5	56.0	29.0	26.4	4.2	16.3	53.0	52.6	32.7	21.7
Bihar	6.2	10.0	77.7	68.0	16.1	15.7	1.3	4.9	87.1	90.3	11.6	3.9
Chhattisgarh	6.2	7.0	69.5	77.6	22.0	13.4	10.2	12.2	70.8	80.0	16.3	6.0
Delhi	93.8	92.5		3.7		0.0	91.5	83.7	6.9	13.0		0.0
Goa	100.0	46.1		0.0		53.9	95.3	93.3		0.0	4.7	3.5
Gujarat	25.2	27.6	60.3	58.8	11.9	10.2	80.7	54.5	11.7	36.6	6.5	5.7
Haryana	38.4	19.8	19.4	80.2	42.2	0.0	48.2	65.5	39.9	31.9	11.8	2.3
Jharkhand	3.3	4.1	42.2	57.8	46.9	33.5	13.3	7.5	39.3	71.1	45.9	20.5
Karnataka	62.4	73.0	32.5	14.9	4.6	9.0	61.9	72.9	31.7	17.9	6.2	6.5
Kerala	23.8	38.9	1.7	6.2	74.2	35.8	19.2	30.3	0.3	1.6	78.8	65.0
Madhya Pradesh	8.9	9.4	60.5	67.5	27.9	19.9	22.3	18.5	50.9	61.6	25.7	17.5
Maharashtra	40.3	59.3	25.0	18.7	27.1	17.8	63.1	65.4	21.8	21.1	13.0	6.5
Orissa	9.8	4.7	52.1	68.2	24.4	22.8	7.7	11.4	69.1	71.6	17.0	14.5
Punjab	34.0	38.6	66.0	61.4		0.0	35.6	48.8	63.2	49.4	0.8	0.0
Rajasthan	15.1	9.9	53.4	76.3	29.6	11.6	44.4	44.9	35.6	35.2	11.1	7.9
Tamil Nadu	58.1	73.0	8.7	7.8	26.6	13.8	74.4	88.4	15.9	6.8	7.4	1.2
Uttar Pradesh	11.6	15.8	60.9	79.8	27.5	4.4	6.5	5.5	82.2	90.0	11.2	4.0
West Bengal	20.5	21.0	53.7	59.7	21.9	9.1	20.3	21.4	69.2	70.2	10.3	7.7
Special Category States												
Arunachal Pradesh	79.6	85.8	3.1	3.5	2.7	4.4	86.9	71.5		14.5		10.7
Himachal Pradesh	66.1	81.6	8.7	4.3		2.7	76.2	79.6	7.8	8.0	8.5	3.3
Jammu & Kashmir	44.2	39.4	1.8	28.5	6.9	16.0	41.0	54.8	37.2	29.5	3.4	1.6
Manipur	34.3	25.3	0.9	5.2	2.5	7.2		12.9	57.8	30.3		9.1

Meghalaya	47.4	59.4	0.7	6.0	16.6	9.2	57.4	29.7	14.3	60.6	1.9	1.4
Mizoram	33.2	40.1	1.8	2.8	0.9	0.2	89.6	39.8	1.7	0.0		0.0
Nagaland	54.6	28.0	3.2	4.3	7.0	36.8	44.0	6.0	56.0	8.8		62.7
Sikkim	64.0	67.7		0.0		0.0	43.6	67.5		0.0		0.0
Tripura	8.1	21.7	40.3	35.5	50.7	35.6	30.6	31.7	39.2	51.4	29.6	13.7
Uttarakhand	94.7	85.1	5.3	13.9		0.0	53.2	47.1	42.0	36.4	0.6	0.0
Union Territories												
Andaman & Nicobar Islands	58.8	—		0.0	41.2	0.0						
Chandigarh	91.6	100.0	8.4	0.0		0.0	92.4	100.0	7.6	0.0		0.0
Dadra Nagar Haveli	11.5	31.0	72.5	48.3	6.3	19.6	64.9	36.2	34.0	62.4	1.1	0.0
Daman & Diu	65.6	44.4	34.4	55.6		0.0	47.2	23.9	51.2	76.1		0.0
Lakshadweep	6.8	3.8	1.7	7.1	89.1	84.2					100.0	
Puducherry	100.0	100.0		0.0		0.0	92.4	30.4	4.4	0.2	3.1	0.0
All India	20.9	24.0	47.7	52.2	23.8	17.9	35.4	38.4	49.9	51.4	12.9	7.1

Source: NSS 58th and 65th Rounds.

Table 5A.54b Distribution of Households by Source of Drinking Water, by Social Category

Non Special Category States	Other Backward Classes						Others					
	Tap		Tube Well/ Handpump				Well Tap		Tube Well/ Handpump			
	2002	2008–9	2002	2008–9	2002	2008–9	2002	2008–9	2002	2008–9	2002	2008–9
Andhra Pradesh	63.1	68.6	22.1	20.1	12.1	7.8	66.3	69.6	18.2	19.1	9.3	2.7
Assam	17.4	8.6	51.3	65.8	24.2	19.1	9.6	11.8	57.0	65.6	22.6	14.3
Bihar	4.4	5.3	85.8	90.7	9.6	3.3	5.8	15.9	88.6	80.8	5.6	1.9
Chhattisgarh	14.0	22.3	73.6	72.1	11.9	5.4	35.7	50.4	34.8	42.7	27.6	4.4
Delhi	77.3	79.3	18.8	13.9	0.4	0.0	87.3	86.9	12.0	8.9	0.1	0.0
Goa	72.5	89.2	1.2	0.0	0.1	10.8	65.1	89.3	0.3	0.2	32.7	5.1
Gujarat	70.0	63.5	21.4	27.0	7.6	5.7	86.1	74.5	9.6	20.0	2.4	1.1
Haryana	48.0	64.0	37.7	30.7	11.1	1.8	52.3	68.0	38.1	29.0	9.6	1.7
Jharkhand	12.6	7.5	28.3	53.1	54.9	38.4	35.1	15.4	29.5	73.5	34.3	10.5
Karnataka	69.5	79.5	17.6	12.3	11.0	5.9	72.3	79.9	16.0	8.9	10.4	6.6
Kerala	19.9	21.4	2.5	3.5	75.6	73.2	16.9	21.5	0.6	2.2	77.4	71.3
Madhya Pradesh	22.0	22.9	49.2	59.4	27.6	15.5	36.8	43.1	41.5	43.9	21.0	10.9
Orissa	10.2	15.1	58.3	65.7	29.5	17.3	23.1	30.6	56.2	53.9	18.6	11.8
Punjab	40.7	64.0	58.4	35.3	0.8	0.1	46.9	55.6	52.1	43.7	0.8	0.0
Rajasthan	32.7	40.0	40.8	35.9	14.2	9.5	63.4	69.1	25.7	21.4	6.1	3.3
Maharashtra	66.0	73.1	16.2	12.4	16.1	9.3	73.6	80.2	14.4	9.3	10.5	6.2
Tamil Nadu	81.0	84.9	9.9	7.1	5.0	2.2	77.3	63.8	12.5	9.7	6.0	2.7
Uttar Pradesh	9.4	10.0	79.8	84.7	10.7	4.8	24.2	22.8	69.6	72.8	6.2	3.7
West Bengal	21.1	32.3	68.2	55.2	9.6	5.3	27.9	31.0	66.8	65.5	4.2	1.9
Special Category States												
Arunachal Pradesh	88.0	24.1		67.4	12.0	8.5	86.2	79.2	6.0	16.2	2.9	1.9
Himachal Pradesh	74.1	68.1	12.5	11.8	8.5	4.3	78.5	81.1	8.3	6.5	3.6	3.8
Jammu & Kashmir	75.1	74.3	22.5	8.6	0.2	0.1	69.7	74.9	10.8	12.2	2.4	0.3
Manipur	47.7	40.8	5.1	10.3		0.8	38.5	73.9	13.8	16.4	6.8	0.0

Meghalaya	27.5	68.7		0.0	72.5	18.7	57.2	60.4	20.8	23.5	12.1	10.8
Mizoram	11.4	26.1	75.0	0.0		0.0	61.7	65.2	4.0	0.0		0.0
Nagaland	40.9	69.4	36.9	0.0	8.6	16.7	45.8	21.9	18.7	5.7	23.2	57.6
Sikkim	53.6	71.6		0.0		0.0	66.3	97.7	0.2	0.0		0.0
Tripura	36.6	42.4	44.0	40.4	18.9	12.0	35.4	41.7	41.6	41.2	21.4	13.7
Uttarakhand	41.9	63.9	55.5	35.1	1.2	0.0	68.6	68.6	16.2	16.4		0.1
Union Territories												
Andaman & Nicobar Islands		72.0		0.0		0.0	85.3	41.9		0.0	9.3	0.0
Chandigarh	95.0	93.6	5.0	4.6		0.0	98.2	98.2	1.8	1.8		0.0
Dadra & Nagar Haveli	8.2	49.9	87.3	48.0	4.5	0.0	43.8	68.0	55.5	25.9	0.8	0.0
Daman & Diu	95.8	73.6	0.6	24.5	3.6	1.4	82.5	71.9	12.2	26.2	1.8	0.0
Lakshadweep	8.2	60.1	0.6	7.4	91.2	32.4	12.6	95.5		0.0	87.4	4.5
Puducherry	96.9	72.9	2.2	0.2	0.2	2.0	97.4	82.5		0.0	0.5	0.0
All India	39.4	43.3	42.1	42.5	16.1	10.5	49.6	51.6	36.9	37.7	10.8	6.4

Source: NSS 58th and 65th Rounds.

Table 5A.55 Distribution of Households by Source of Drinking Water, by Major Religious Communities, 2008–9

Non Special Category States	*Hindus*			*Muslims*			*Christians*			*Sikhs*		
	Tap	*Tube Well*	*Well*	*Tap*	*Tube Well*	*Well*	*Tap*	*Tube Well*	*Well*	*Tap*	*Tube Well*	*Well*
Andhra Pradesh	64.9	22.8	7.6	75.6	14.3	2.6	68.0	25.8	3.0			
Assam	10.8	60.3	20.9	7.7	72.0	11.4	6.9	30.0	26.5	12.2	87.8	
Bihar	7.2	88.4	3.4	9.1	87.7	2.5	13.5	86.5		1.5	98.2	
Chhattisgarh	17.0	74.1	7.7	59.3	33.0		13.7	39.0	47.3			
Delhi	83.8	11.2	0.0	89.2	10.0					96.4	0.7	
Goa	83.4	0.3	10.3	88.5		11.5	91.8		8.2			
Gujarat	56.8	33.7	5.5	78.8	18.0	2.0	59.7	35.1	0.1	52.8	25.3	
Haryana	67.6	29.6	1.6	34.3	47.8	7.6				70.1	28.1	
Jharkhand	9.3	66.0	22.9	9.7	59.6	30.1	10.1	38.8	50.9	61.9	38.1	
Karnataka	77.6	12.7	6.5	81.2	11.5	4.1	74.4	4.1	15.1			
Kerala	23.0	3.2	70.8	13.1	3.3	82.9	31.8	2.1	59.3			
Madhya Pradesh	21.4	59.5	16.6	49.8	42.5	4.3	65.1	34.9		71.8	15.4	12.8
Maharashtra	73.8	12.9	8.4	79.4	8.3	4.8	82.7	0.5	10.4	93.4		
Orissa	14.9	65.1	17.1	32.5	59.7	7.9	6.1	70.0	13.3			
Punjab	68.7	30.3	0.0	64.2	34.3	0.0	28.5	71.5	0.0	44.1	54.9	
Rajasthan	42.1	39.3	8.3	64.4	19.3	5.3	36.7	54.2	7.4	67.9	9.6	1.9
Tamil Nadu	84.6	7.2	2.1	88.6	5.9	1.8	79.5	8.6	3.2			
Uttar Pradesh	11.2	83.4	4.9	12.5	85.3	1.4	39.8	60.2	0.0	47.2	52.8	
West Bengal	32.8	60.3	4.7	15.9	81.6	1.8	31.2	43.1	21.3	86.7	13.3	
Special Category States												
Arunachal Pradesh	73.7	20.3	3.2	76.0	14.7	0.7	81.8	7.2	3.3			
Himachal Pradesh	79.1	7.4	3.8	72.9	12.7	2.0				98.5	0.7	
Jammu & Kashmir	61.9	22.3	1.0	79.0	7.4	0.9	83.9	16.1	0.0	35.9	60.8	
Manipur	42.4	10.3	0.8	16.7	26.6	1.9	25.6	5.2	7.2			
Meghalaya	51.9	18.1	14.1	16.8	57.2	26.1	61.3	4.5	8.5			

Mizoram	37.8	0.0	0.0	58.1			43.0	3.0	0.2			
Nagaland	30.8	4.9	44.3	2.1	3.3	87.4	28.0	4.4	36.7			
Sikkim	69.6	0.0	0.0	77.7			70.4	0.0	0.0			
Tripura	33.4	41.9	19.9	30.8	45.6	17.5	36.4	46.2	15.9			
Uttarakhand	64.9	21.2	0.0	56.2	43.5	0.0	56.8	43.2	0.0	49.3	50.7	
Union Territories												
Andaman & Nicobar	84.0	0.8	9.8				99.6		0.4			
Chandigarh	97.5	2.2										
Dadra & Nagar Haveli	39.5	45.2	12.7	91.7	8.3		98.3	1.7				
Daman & Diu	67.1	31.5	0.9	99.9	0.1		84.8					
Lakhadweep	94.1	0.5	5.3	3.8	7.1	84.2						
Puduchery	96.6	0.5	0.5	69.8	0.0	28.5	97.7	0.0	0.0			
All India	43.7	43.6	8.9	35.8	51.8	9.2	48.0	15.2	25.3	49.3	48.5	0.2

Source: NSS 65th Round.

Table 6A.1 Literacy Rate (Rural), 1999–2000 and 2007–8 (*per cent*)

Non Special Category States	*Males*		*Females*		*Persons*	
	1999–2000	*2007–8*	*1999–2000*	*2007–8*	*1999–2000*	*2007–8*
Andhra Pradesh	56.0	66.8	36.0	48.5	46.0	57.5
Assam	76.0	88.2	61.0	76.6	69.0	82.7
Bihar	55.0	68.3	27.0	42.6	42.0	56.1
Chhattisgarh	—	78.2	—	57.4	—	68.1
Delhi	98.0	92.6	67.0	72.2	85.0	83.5
Goa	90.0	86.3	72.0	73.4	81.0	79.7
Gujarat	75.0	79.7	47.0	56.0	62.0	68.1
Haryana	72.0	79.7	48.0	57.8	61.0	69.5
Jharkhand	—	73.5	—	46.2	—	60.5
Karnataka	67.0	74.0	44.0	55.7	56.0	64.9
Kerala	93.0	95.5	86.0	91.1	89.0	93.2
Madhya Pradesh	64.0	75.4	35.0	53.7	50.0	65.1
Maharashtra	78.0	84.2	55.0	65.8	67.0	75.1
Orissa	66.0	74.2	42.0	57.1	54.0	65.6
Punjab	69.0	78.1	56.0	65.5	63.0	72.1
Rajasthan	65.0	71.7	27.0	40.1	47.0	56.4
Tamil Nadu	74.0	83.9	53.0	65.4	64.0	74.4
Uttar Pradesh	65.0	75.5	36.0	51.0	51.0	63.6
West Bengal	71.0	79.2	52.0	64.7	62.0	72.1
Special Category States						
Arunachal Pardesh	57.0	70.9	45.0	58.3	51.0	64.8
Himachal Pradesh	82.0	87.2	65.0	72.1	73.0	79.4
Jammu & Kashmir	77.0	75.5	50.0	53.8	63.0	65.0
Manipur	75.0	88.8	62.0	73.3	69.0	81.2
Meghalaya	79.0	93.3	72.0	90.9	76.0	92.1
Mizoram	91.0	94.9	90.0	91.9	91.0	93.5
Nagaland	89.0	93.6	75.0	86.2	82.0	90.0
Sikkim	81.0	88.5	66.0	77.8	74.0	83.5
Tripura	84.0	80.9	70.0	70.1	77.0	75.7
Uttarakhand	—	84.8	—	63.7	—	73.9
Union Territories						
Andaman & Nicobar Islands	86.0	89.0	77.0	77.4	82.0	83.6
Chandigarh	70.0	85.3	54.0	72.4	65.0	80.6
Daman & Diu	88.0	95.8	68.0	84.2	80.0	91.4
Dadra & Nagar Haveli	71.0	85.8	43.0	47.7	59.0	70.1
Lakshadweep	95.0	99.3	83.0	86.6	89.0	93.3
Puducherry	82.0	87.0	64.0	69.2	73.0	78.8
All India	68.0	77.0	43.0	56.7	56.0	67.0

Source: NSS 55th Round, Report No. 473 (for 1999–2000), and calculated from NSS Database 64th Round (for 2007–8).
Note: — Not available.

Table 6A.2 Literacy Rate (Urban), 1999–2000 and 2007–8 (*per cent*)

Non Special Category States	*Males*		*Females*		*Persons*	
	1999–2000	*2007–8*	*1999–2000*	*2007–8*	*1999–2000*	*2007–8*
Andhra Pradesh	82.0	86.8	67.0	72.4	75.0	79.5
Assam	91.0	96.1	81.0	90.0	86.0	93.3
Bihar	78.0	83.5	60.0	67.3	70.0	76.0
Chhattisgarh	—	92.0	—	79.8	—	86.1
Delhi	92.0	91.3	80.0	77.8	86.0	85.4
Goa	93.0	88.7	82.0	80.6	87.0	84.7
Gujarat	91.0	92.4	77.0	79.5	84.0	86.5
Haryana	85.0	91.1	68.0	75.8	77.0	84.0
Jharkhand	—	89.5	—	76.0	—	83.3
Karnataka	88.0	90.4	76.0	78.6	82.0	84.7
Kerala	96.0	98.2	91.0	94.2	94.0	96.1
Madhya Pradesh	86.0	89.5	68.0	76.2	78.0	83.3
Maharashtra	92.0	93.6	79.0	84.7	86.0	89.3
Orissa	84.0	92.7	66.0	77.5	76.0	85.6
Punjab	84.0	87.1	73.0	80.2	79.0	83.9
Rajasthan	87.0	89.1	63.0	69.2	75.0	79.7
Tamil Nadu	91.0	93.4	79.0	81.5	85.0	87.4
Uttar Pradesh	78.0	81.7	61.0	68.9	70.0	75.8
West Bengal	87.0	91.3	76.0	81.4	82.0	86.6
Special Category States						
Arunachal Pradesh	92.0	94.3	85.0	86.1	89.0	90.4
Himachal Pradesh	94.0	92.9	86.0	86.9	90.0	90.2
Jammu & Kashmir	86.0	87.6	68.0	71.5	78.0	79.8
Manipur	94.0	93.1	81.0	82.4	87.0	88.0
Meghalaya	96.0	96.2	88.0	94.4	92.0	95.2
Mizoram	99.0	99.5	99.0	98.1	99.0	98.8
Nagaland	98.0	98.2	89.0	95.5	94.0	96.9
Sikkim	92.0	90.0	81.0	85.2	87.0	87.9
Tripura	92.0	93.7	78.0	88.3	85.0	91.0
Uttarakhand	—	88.2	—	76	—	82.5
Union Territories						
Andaman & Nicobar Islands	93.0	93.2	80.0	87.5	87.0	90.4
Chandigarh	90.0	87.4	80.0	77.4	85.0	83.0
Dadra & Nagar Haveli	91.0	95.8	86.0	76.8	89.0	88.3
Daman & Diu	96.0	97.6	82.0	94.1	89.0	95.9
Lakshadweep	91.0	93.4	83.0	85.1	87.0	89.2
Puducherry	92.0	95.8	82.0	87.7	87.0	91.7
All India	87.0	89.9	72.0	78.0	80.0	84.3

Source: NSS 55th Round, Report No. 473 (for 1999–2000), and calculated from NSS Database 64th Round (for 2007–8).
Note: — Not available.

Table 6A.3 Literacy Rate, by Social Groups (Rural) per cent 2007-8

Non Special Category States	Scheduled Castes			Scheduled Tribes			Other Backward Classes			Others		
	Male	*Female*	*Person*	*Male*	*Female*	*Person*	*Male*	*Female*	*Person*	*Male*	*Female*	*Person*
Andhra Pradesh	66.4	50.4	58.4	63.8	45.9	54.7	70.8	51.7	61.2	80.4	63.5	72.0
Assam	86.0	67.7	76.9	92.9	79.8	86.6	91.6	81.9	87.0	85.0	74.0	79.7
Bihar	56.4	31.8	45.0	66.0	33.5	49.4	72.9	45.7	60.0	83.8	64.9	74.8
Chhattisgarh	79.9	60.8	70.7	72.1	51.2	61.8	82.2	61.4	72.2	92.6	70.6	82.0
Delhi	90.1	68.5	80.2	—	—	—	89.4	72.7	82.0	97.1	77.5	88.7
Goa	80.2	56.5	68.3	—	—	—	81.3	70.7	76.4	88.6	75.9	81.9
Gujarat	81.0	49.9	66.4	70.6	50.7	60.8	79.5	53.6	66.9	89.5	70.8	80.7
Haryana	72.0	51.4	62.5	71.2	31.1	53.9	82.3	57.0	70.3	82.9	62.4	73.4
Jharkhand	67.6	42.2	55.7	67.4	42.9	55.4	81.0	53.5	67.8	86.7	72.2	79.7
Karnataka	64.9	50.0	57.3	62.4	46.6	54.5	74.9	55.2	65.2	82.2	63.5	73.0
Kerala	90.8	81.5	86.0	79.3	76.9	77.9	95.9	91.3	93.5	97.4	95.4	96.4
Madhya Pradesh	68.8	47.0	58.6	68.7	45.8	57.9	78.3	55.8	67.5	88.3	71.3	80.2
Maharashtra	84.1	60.7	72.4	69.1	40.9	55.4	84.3	66.1	75.2	86.3	69.1	77.8
Orissa	68.4	51.5	59.7	57.7	35.7	46.8	81.9	65.7	73.7	88.3	75.1	81.6
Punjab	71.9	57.7	65.2	—	—	—	75.2	61.3	68.2	84.4	73.7	79.3
Rajasthan	67.6	34.5	52.3	62.4	29.6	46.5	73.4	41.2	57.6	82.3	54.6	68.6
Tamil Nadu	78.0	61.2	69.5	53.2	45.0	48.8	86.3	67.0	76.3	93.2	75.5	84.9
Uttar Pradesh	69.7	45.7	57.8	58.4	32.4	45.6	74.5	47.8	61.5	86.7	67.6	77.2
West Bengal	76.9	60.7	69.1	74.5	55.8	65.0	87.5	72.9	80.6	78.9	67.3	73.2
Special Category States												
Arunachal Pradesh	95.8	90.3	93.2	70.0	59.3	64.8	70.3	81.1	74.0	72.1	52.5	62.5
Himachal Pradesh	85.3	66.8	76.2	77.6	53.6	65.0	88.0	76.5	81.8	88.9	75.7	82.1
Jammu & Kashmir	76.3	53.3	65.4	51.5	19.9	35.0	68.4	48.3	59.1	77.9	56.7	67.5
Manipur	86.1	76.3	81.0	87.8	71.1	79.8	89.2	75.0	82.3	93.7	75.2	83.6

Mizoram	—	—	—	94.1	91.2	92.7	100.0	100.0	100.0	—	—	—
Nagaland	100.0	100.0	100.0	93.5	86.2	89.9	84.4	71.8	77.9	92.2	81.1	87.1
Sikkim	88.0	74.3	81.2	88.1	76.2	82.4	87.8	78.8	83.6	93.6	82.0	88.5
Tripura	79.5	70.5	75.2	76.7	61.0	69.3	87.2	78.5	82.9	82.9	74.7	78.8
Uttarakhand	81.1	58.8	69.8	89.5	46.7	69.6	69.3	50.7	60.2	91.7	70.3	80.3
Union Territories												
Andaman & Nicobar Islands	—	—	—	91.8	78.9	87.0	92.9	86.4	89.6	87.3	73.8	81.1
Chandigarh	67.6	36.4	57.6	—	—	—	88.0	68.1	81.4	88.5	80.5	85.4
Daman & Diu	100.0	100.0	100.0	99.2	93.0	96.5	86.9	65.8	77.2	99.2	98.1	98.9
Dadra & Nagar Haveli	—	—	—	81.4	43.6	64.2	100.0	100.0	100.0	100.0	86.8	96.9
Lakshadweep	—	—	—	99.2	86.4	93.1	100.0	—	100.0	100.0	100.0	100.0
Puducherry	75.1	57.3	66.6	—	—	—	93.8	75.9	85.7	—	—	—
All India	70.6	49.9	60.5	69.3	47.8	58.8	77.7	55.4	66.7	84.6	68.8	76.9

Source: Calculated from NSS 64th Round.

Table 6A.4 Literacy Rate, by Social Groups (Urban) (per cent) 2007-8

Non Special Category States	Scheduled Castes			Scheduled Tribes			Other Backward Classes			Others		
	Male	Female	Person	Male	Female	Person	Male	Female	Person	Male	Female	Person
Andhra Pradesh	87.5	72.5	79.8	84.9	61.0	73.2	87.0	72.0	79.7	92.0	81.5	86.7
Assam	94.2	87.0	90.8	95.8	82.7	89.0	97.4	93.4	95.6	96.3	90.8	93.7
Bihar	74.7	51.0	63.9	88.7	75.7	82.8	78.2	62.5	71.0	87.5	80.3	84.2
Chhattisgarh	87.9	75.3	81.8	91.2	83.0	87.2	89.4	67.7	79.2	98.4	95.7	97.0
Delhi	89.6	68.7	79.8	93.4	84.9	89.4	86.8	63.4	77.5	93.4	85.7	90.0
Goa	63.0	55.6	60.3	71.3	68.5	69.8	92.2	67.5	82.3	91.7	83.5	87.5
Gujarat	86.8	72.3	79.9	92.7	66.1	80.4	88.2	69.3	79.3	95.6	86.8	91.7
Haryana	78.6	56.1	67.9	69.0	68.9	69.0	89.3	71.5	81.2	95.3	83.1	89.7
Jharkhand	84.2	53.3	69.4	78.8	64.1	72.3	88.1	73.4	81.5	93.0	83.7	88.6
Karnataka	80.3	64.4	72.9	88.2	60.8	75.4	89.7	77.6	83.9	94.3	84.5	89.5
Kerala	96.5	89.3	93.0	100.0	86.6	93.2	97.9	93.5	95.6	99.5	97.3	98.3
Madhya Pradesh	77.5	56.0	67.4	78.8	62.0	71.2	89.5	75.4	82.8	94.8	90.1	92.6
Maharashtra	86.5	72.4	79.7	84.6	68.2	77.1	94.7	83.7	89.6	94.3	87.6	91.1
Orissa	85.6	66.0	76.4	79.5	59.2	69.3	92.3	71.1	82.3	97.0	88.2	92.9
Punjab	72.4	61.4	67.6	100.0	100.0	100.0	88.1	79.3	84.0	93.9	88.3	91.2
Rajasthan	82.2	54.6	68.9	77.4	36.0	60.0	87.8	64.9	77.1	93.9	80.7	87.5
Tamil Nadu	87.2	70.3	78.6	77.0	66.1	71.8	94.2	82.5	88.3	98.0	93.0	95.5
Uttar Pradesh	74.5	58.2	66.9	65.1	59.4	62.0	78.0	62.8	71.0	91.9	81.5	87.0
West Bengal	84.3	67.0	76.0	85.8	75.3	81.1	92.3	81.6	87.8	93.6	86.6	90.3
Special Category States												
Arunachal Pradesh	96.2	89.3	92.5	94.7	86.0	90.4	100.0	90.4	95.2	92.7	84.7	89.3
Himachal Pradesh	88.0	83.6	86.1	89.0	72.4	79.3	93.1	75.9	85.3	94.6	90.7	92.8
Jammu & Kashmir	80.3	70.2	74.8	78.5	54.7	69.3	89.0	68.2	79.0	88.3	71.8	80.4
Manipur	91.5	83.4	87.7	95.0	85.9	90.6	93.1	82.4	87.8	92.5	79.6	86.2
Meghalaya	100.0	100.0	100.0	96.8	95.0	95.8	100.0	89.8	95.0	92.3	91.7	92.0

Mizoram	100.0	100.0	100.0	99.2	97.7	98.5	100.0	—	100.0	100.0	100.0	100.0
Nagaland	92.3	84.7	89.8	98.5	95.8	97.2	100.0	100.0	100.0	92.8	82.4	89.3
Sikkim	81.1	80.3	80.8	82.7	89.5	85.7	92.1	82.8	87.3	97.0	86.8	93.2
Tripura	80.9	77.2	79.0	100.0	99.2	99.6	96.1	87.6	92.1	95.2	89.9	92.6
Uttarakhand	86.0	63.0	74.3	92.4	91.2	91.8	78.6	64.6	72.3	94.3	84.9	89.8
Union Territories												
Andaman & Nicobar Islands	—	—	—	100.0	100.0	100.0	92.6	92.3	92.5	93.1	87.0	90.1
Chandigarh	82.1	66.7	75.5	100.0	100.0	100.0	78.2	70.0	74.5	90.8	82.3	87.1
Daman & Diu	100.0	89.8	92.5	100.0	100.0	100.0	93.5	85.5	89.4	98.8	98.1	98.5
Dadra & Nagar Haveli	100.0	74.1	89.7	91.2	62.9	79.4	95.7	80.0	90.4	98.3	84.5	92.6
Lakshadweep	100.0	50.0	83.7	92.4	84.9	88.4	100.0	50.0	98.5	100.0	100.0	100.0
Puducherry	97.6	92.8	95.2	—	—	—	95.1	86.0	90.5	98.9	92.5	95.3
All India	83.1	66.1	74.9	86.0	69.0	78.0	88.3	74.6	81.7	93.8	85.5	89.9

Source: Calculated from NSS 64th Round.

Table 6A.5 Literacy Rate, by Major Religious Communities (per cent), 2001 (Rural)

Non Special Category States	Hindus			Muslims			Christians			Sikhs		
	Male	Female	Person	Male	Female	Person	Male	Female	Person	Male	Female	Person
Andhra Pradesh	70.7	52.5	61.6	74.0	57.8	65.6	70.8	62.8	66.7	—	—	—
Assam	92.9	81.7	87.5	79.8	66.3	73.4	66.6	67.2	66.9	100.0	100.0	100.0
Bihar	73.2	47.6	61.2	56.8	34.8	46.2	65.2	36.7	47.7	100.0	100.0	100.0
Chhattisgarh	77.4	56.7	67.3	100.0	89.1	95.8	93.3	72.5	82.8	—	—	—
Delhi	91.9	71.7	82.9	100.0	79.7	88.4	—	—	—	100.0	74.6	89.3
Goa	85.3	73.1	79.0	78.7	41.2	66.0	97.3	79.5	88.7	—	—	—
Gujarat	79.8	55.6	68.1	75.4	55.4	65.7	86.1	59.7	72.1	61.0	37.9	46.8
Haryana	81.3	59.2	71.0	70.2	43.0	57.8	—	—	—	72.4	58.5	65.9
Jharkhand	77.5	54.5	66.5	76.7	54.2	65.9	64.4	49.6	57.3	—	—	—
Karnataka	74.1	55.4	64.8	70.1	56.7	63.2	86.7	78.3	82.9	100.0	33.3	50.0
Kerala	94.9	89.3	91.9	96.0	92.6	94.2	96.9	94.5	95.7	—	—	—
Madhya Pradesh	75.1	53.0	64.6	81.9	65.0	73.4	25.0	33.3	28.6	—	—	—
Maharashtra	83.1	63.4	73.4	84.0	65.6	75.1	89.6	86.8	87.9	—	—	—
Orissa	74.2	57.1	65.6	85.3	66.1	75.6	58.6	39.1	49.9	—	—	—
Punjab	85.5	69.6	77.9	69.6	65.6	67.8	67.4	64.9	66.1	76.0	64.2	70.3
Rajasthan	72.2	40.5	56.8	61.1	27.4	45.3	75.1	0.0	48.1	74.3	44.7	60.6
Tamil Nadu	83.7	64.6	73.9	90.6	80.2	84.9	85.2	73.2	78.8	—	—	—
Uttar Pradesh	76.9	51.8	64.6	64.4	42.5	53.6	0.0	—	0.0	74.7	61.0	67.1
West Bengal	80.4	65.5	73.2	75.2	63.6	69.4	75.7	56.1	66.5	—	—	—
Special Category States												
Arunachal Pradesh	80.6	68.3	83.4	100.0	90.3	95.5	70.6	55.9	63.7	—	—	—
Himachal Pradesh	87.8	72.8	80.1	66.3	51.0	58.1	100.0	100.0	100.0	54.8	76.9	67.3
Jammu & Kashmir	86.4	65.1	76.2	66.6	44.3	55.8	—	—	—	82.2	80.0	80.9
Manipur	90.4	77.8	84.1	86.8	64.7	76.5	87.7	70.7	79.5	—	—	—

Mizoram	100.0	100.0	100.0	100.0	100.0	100.0	96.9	94.9	96.0	—	—	—
Nagaland	81.5	81.2	81.4	92.5	52.8	74.1	93.6	86.2	90.0	—	—	—
Sikkim	88.2	78.1	83.4	87.7	69.2	83.5	93.0	78.3	85.6	—	—	—
Tripura	82.0	71.3	76.8	73.9	64.1	69.0	76.1	60.6	70.3	—	—	—
Uttarakhand	87.5	65.6	76.1	68.8	50.1	59.3	86.5	59.8	76.5	86.0	87.8	86.7
Union Territories												
Andaman & Nicobar Islands	88.9	75.7	82.5	96.9	89.7	93.2	87.7	78.2	83.8	—	—	—
Chandigarh	87.7	75.8	83.5	78.0	41.7	69.3	—	—	—	70.2	63.7	67.0
Dadra & Nagar Haveli	85.4	46.7	69.5	100.0	100.0	100.0	100.0	85.9	92.9	—	—	—
Daman & Diu	95.5	83.5	90.9	100.0	100.0	100.0	100.0	100.0	100.0	—	—	—
Lakshadweep	—	—	—	99.2	86.4	93.1	100.0	100.0	100.0	—	—	—
Puducherry	86.7	68.8	78.5	100.0	95.7	97.8	72.1	15.4	48.3	—	—	—
All India	77.4	56.2	67.0	71.7	55.0	63.5	85.9	78.0	82.0	75.9	63.4	69.9

Source: Calculated from NSS 64th Round.

Table 6A.6 Literacy Rate, by Major Religious Communities (per cent), 2001 (Urban)

Non Special Category States	Hindus			Muslims			Christians			Sikhs		
	Male	*Female*	*Person*	*Male*	*Female*	*Person*	*Male*	*Female*	*Person*	*Male*	*Female*	*Person*
Andhra Pradesh	89.3	76.1	82.7	85.9	70.9	78.4	87.1	73.0	79.4	—	—	—
Assam	97.9	91.5	94.9	87.2	81.4	84.6	100.0	95.8	98.1	100.0	100.0	100.0
Bihar	84.8	70.8	78.4	68.3	55.4	62.3	98.3	97.9	98.1	100.0	86.9	94.5
Chhattisgarh	91.5	79.0	85.5	97.7	94.1	95.8	100.0	87.1	93.6	100.0	98.1	99.3
Delhi	92.7	78.7	86.6	80.7	64.5	74.2	100.0	100.0	100.0	94.8	88.7	91.8
Goa	90.7	84.0	87.6	73.9	49.0	62.6	97.5	90.0	93.0	—	—	—
Gujarat	92.7	79.2	86.5	88.1	73.4	81.1	100.0	97.4	98.7	100.0	100.0	100.0
Haryana	91.0	75.4	83.8	84.2	57.1	75.4	100.0	84.2	95.0	94.9	89.9	92.7
Jharkhand	90.6	77.3	84.5	81.3	64.8	73.2	93.8	73.2	83.5	100.0	100.0	100.0
Karnataka	91.6	79.4	85.7	85.8	75.5	80.9	94.2	84.8	89.6	—	—	—
Kerala	98.8	94.3	96.4	96.2	91.6	93.8	98.9	97.4	98.1	—	—	—
Madhya Pradesh	89.9	75.8	83.4	81.4	80.2	80.8	100.0	90.3	95.2	100.0	100.0	100.0
Maharashtra	95.0	86.2	90.8	87.5	77.1	82.7	92.8	87.8	90.3	98.0	98.0	98.0
Orissa	93.2	78.0	86.1	79.8	62.3	71.6	100.0	100.0	100.0	100.0	100.0	100.0
Punjab	87.4	79.5	83.9	56.5	48.1	53.0	94.8	87.0	91.0	88.5	83.1	85.9
Rajasthan	90.5	70.8	81.3	80.7	60.1	70.7	100.0	100.0	100.0	90.0	75.3	83.1
Tamil Nadu	93.1	80.5	86.7	93.9	83.3	88.7	95.0	91.2	93.0	—	—	—
Uttar Pradesh	89.5	75.5	83.0	68.4	57.9	63.3	89.5	45.8	62.1	94.9	90.7	93.1
West Bengal	92.8	84.2	88.7	82.7	64.0	74.6	100.0	100.0	100.0	100.0	100.0	100.0
Special Category States												
Arunachal Pradesh	95.7	87.6	94.4	90.3	97.2	93.1	94.8	86.6	90.5	—	—	—
Himachal Pradesh	93.8	87.3	90.8	83.3	83.8	83.5	100.0	80.0	87.5	100.0	100.0	100.0
Jammu & Kashmir	92.4	83.3	88.1	84.4	64.3	74.5	80.8	73.7	77.5	95.0	82.6	89.6
Manipur	92.5	82.9	87.7	90.8	58.7	76.7	95.5	86.2	91.2	—	—	—
Meghalaya	96.8	91.6	94.3	64.9	100.0	80.8	96.7	96.0	96.3	—	—	—

Mizoram	100.0	100.0	100.0	100.0	100.0	100.0	99.2	97.8	98.5	—	—	—
Nagaland	97.8	94.4	96.7	86.4	74.8	81.7	98.5	95.8	97.2	—	—	—
Sikkim	91.9	84.7	88.9	91.1	59.5	85.0	—	—	—	—	—	—
Tripura	93.4	88.2	90.8	84.4	71.8	77.4	100.0	100.0	100.0	—	—	—
Uttarakhand	91.5	80.4	86.0	79.8	63.2	72.5	100.0	100.0	100.0	100.0	100.0	100.0
Union Territories												
Andaman & Nicobar Islands	92.7	87.9	90.3	95.4	88.1	92.1	93.8	80.5	86.6	100.0	100.0	100.0
Chandigarh	86.5	76.2	82.0	71.5	9.4	56.9	100.0	66.7	80.0	97.8	92.2	95.1
Dadra & Nagar Haveli	95.7	76.8	88.2	100.0	0.0	50.0	100.0	100.0	100.0	—	—	—
Daman & Diu	98.0	95.2	96.7	94.7	84.8	90.5	100.0	100.0	100.0	—	—	—
Lakshadweep	100.0	100.0	100.0	92.4	84.8	88.3	100.0	100.0	100.0	—	—	—
Puducherry	94.7	87.8	91.3	100.0	85.1	92.9	98.4	90.1	93.5	—	—	—
All India	91.6	79.3	85.8	80.9	68.8	75.1	95.3	89.0	92.0	90.8	85.3	88.2

Source: Calculated from NSS 64th Round.

Table 6A.7 Gross Enrolment Ratio, by Level of Education, 2004–5 and 2007–8 (*per cent*)

Non Special Category States	*Primary*		*Upper Primary*		*Secondary and Higher Secondary*	
	2004–5	*2007–8*	*2004–5*	*2007–8*	*2004–5*	*2007–8*
Andhra Pradesh	96.7	95.5	71.8	77.3	47.7	51.5
Assam	105.2	129.7	69.7	75.1	32.2	31.5
Bihar	83.8	104.4	32.4	46.2	32.2	19.9
Chhattisgarh	131.8	125.5	79.9	89.8	37.3	34.6
Delhi	94.4	109.1	87.6	99.7	52.3	57.1
Goa	110.1	129.6	100.6	88.7	57.8	58.3
Gujarat	118.7	123.0	73.8	78.2	38.6	42.6
Haryana	82.2	90.4	76.4	75.7	43.6	51.0
Jharkhand	94.8	153.9	43.4	57.9	14.8	14.8
Karnataka	107.1	106.1	85.5	90.2	46.4	54.5
Kerala	93.6	92.3	98.2	100.1	60.2	50.2
Madhya Pradesh	132.2	153.4	83.3	100.0	35.7	47.6
Maharashtra	110.4	101.8	98.1	86.8	55.6	56.5
Orissa	129.7	117.0	74.1	80.1	43.4	42.2
Punjab	77.2	92.8	65.4	69.1	39.6	39.4
Rajasthan	121.2	118.3	70.7	81.4	33.1	39.4
Tamil Nadu	118.4	116.1	107.0	112.7	62.1	72.0
Uttar Pradesh	107.5	113.7	52.4	67.8	36.3	52.9
West Bengal	112.1	112.9	66.5	71.2	31.4	37.5
Special Category States						
Arunachal Pradesh	123.1	143.0	75.5	94.4	42.4	49.4
Himachal Pradesh	108.9	111.7	108.5	114.3	131.3	79.1
Jammu & Kashmir	83.7	103.2	60.3	66.8	35.4	35.8
Manipur	151.7	173.2	94.7	104.3	48.6	51.0
Meghalaya	147.6	191.5	76.5	103.3	33.3	29.9
Mizoram	127.5	167.1	81.8	87.7	44.7	45.6
Nagaland	87.9	92.5	55.6	60.1	21.3	23.0
Sikkim	143.6	148.0	66.7	76.6	33.3	33.2
Tripura	131.0	147.8	78.2	87.8	38.9	44.9
Uttarakhand	117.7	119.4	88.1	72.8	58.0	64.8
Union Territories						
Andaman & Nicobar Islands	108.9	101.8	106.5	102.0	49.0	52.3
Chandigarh	74.0	96.1	68.6	81.5	54.7	60.6
Dadra & Nagar Haveli	134.5	173.8	79.1	98.9	39.0	48.5
Daman & Diu	136.0	135.9	116.6	105.3	69.5	74.9
Lakshadweep	58.8	60.4	58.7	54.5	46.0	45.4
Puducherry	131.6	144.4	108.2	112.0	76.1	81.4
All India	107.8	114.6	69.9	77.5	39.9	45.5

Source: Annual Reports (Years 2009–10, and 2005–6), Ministry of Human Resource Development, Government of India.

Table 6A.8 Gross Enrolment Ratio for Scheduled Tribes, by Level of Education, 2004–5 and 2007–8 (*per cent*)

Non Special Category States	*Primary*		*Upper Primary*		*Secondary and Higher Secondary*	
	2004–5	*2007–8*	*2004–5*	*2007–8*	*2004–5*	*2007–8*
Andhra Pradesh	104.0	102.3	66.9	78.6	44.0	50.3
Assam	113.7	97.8	95.1	81.6	41.6	40.1
Bihar	72.2	97.3	21.1	36.4	41.6	16.9
Chhattisgarh	127.8	132.8	69.6	75.0	30.6	25.7
Delhi	—	—	—	—	—	—
Goa	—	—	—	—	—	—
Gujarat	129.0	130.7	64.5	67.5	29.2	34.2
Haryana	—	—	—	—	—	—
Jharkhand	111.8	131.7	45.8	56.2	13.6	14.8
Karnataka	112.9	108.1	81.9	86.7	39.6	44.7
Kerala	116.0	124.0	98.5	104.4	41.1	61.0
Madhya Pradesh	147.9	136.4	72.6	86.5	18.3	25.5
Maharashtra	130.5	134.3	80.3	83.0	35.5	35.1
Orissa	119.9	126.2	41.2	59.4	18.8	22.4
Punjab	—	—	—	—	—	—
Rajasthan	107.6	110.0	70.0	77.4	27.6	32.2
Tamil Nadu	128.2	175.1	120.6	71.1	52.4	56.6
Uttar Pradesh	148.4	145.4	57.7	55.2	75.2	69.1
West Bengal	112.4	105.1	56.1	58.6	22.2	26.6
Special Category States						
Arunachal Pradesh	131.7	145.1	80.4	88.6	44.2	46.4
Himachal Pradesh	139.0	146.0	127.6	141.2	69.8	88.5
Jammu & Kashmir	101.4	102.8	79.8	54.3	22.0	22.8
Manipur	143.2	153.6	69.0	74.4	30.6	31.3
Meghalaya	134.0	165.5	71.2	83.0	28.3	34.7
Mizoram	132.5	164.6	84.1	89.2	46.8	47.3
Nagaland	83.1	90.6	51.6	61.5	19.9	23.1
Sikkim	252.9	250.8	97.1	123.3	49.8	57.4
Tripura	128.0	150.8	58.1	80.9	26.9	32.0
Uttarakhand	127.4	151.2	132.2	129.0	58.4	61.2
Union Territories						
Andaman & Nicobar Islands	121.3	97.5	94.2	74.6	31.3	54.8
Chandigarh	—	—	—	—	—	—
Dadra & Nagar Haveli	131.7	155	76.8	83.6	33.4	36.9
Daman & Diu	—	127.5	—	119.8	—	46.7
Lakshadweep	58.4	61.0	58.4	60.6	45.1	46.0
Puducherry	—	—	—	—	—	—
All India	121.9	129.3	67.0	74.4	27.7	30.8

Source: Annual Reports (Years 2009–10, and 2005–6), Ministry of Human Resource Development, Government of India.

Table 6A.9 Gross Enrolment Ratio for Scheduled Castes, by Level of Education, 2004–5 and 2007–8 (*per cent*)

Non Special Category States	*Primary*		*Upper Primary*		*Secondary and Higher Secondary*	
	2004–5	*2007–8*	*2004–5*	*2007–8*	*2004–5*	*2007–8*
Andhra Pradesh	108.0	106.1	76.8	81.7	55.3	56.4
Assam	161.6	151.2	115.2	103.9	62.9	61.9
Bihar	80.2	92.8	27.6	40.7	62.9	11.9
Chhattisgarh	148.6	202.5	91.2	127.7	43.7	51.1
Delhi	66.5	71.2	57.9	52.9	22.6	26.8
Goa	105.8	136.2	44.8	82.8	33.9	35.5
Gujarat	156.9	159.5	97.0	98.7	41.6	44.0
Haryana	102.1	111.9	75.2	87.1	31.1	38.7
Jharkhand	92.2	146.6	40.8	55.1	12.6	15.7
Karnataka	114.9	116.3	85.7	93.0	44.2	50.6
Kerala	107.1	109.1	104.0	105.2	57.4	70.0
Madhya Pradesh	146.9	166.4	94.8	107.9	35.3	50.2
Maharashtra	148.6	154.2	130.7	135.1	73.2	73.2
Orissa	138.6	136.7	61.2	83.7	29.5	31.0
Punjab	110.5	110.2	74.0	82.1	32.4	34.5
Rajasthan	126.7	133.0	65.5	75.0	25.0	28.6
Tamil Nadu	106.2	136.5	94.1	86.4	52.3	74.9
Uttar Pradesh	111.3	117.5	50.1	51.7	23.0	23.3
West Bengal	113.4	122.6	58.9	68.9	26.0	31.3
Special Category States						
Arunachal Pradesh	—	—	—	—	—	—
Himachal Pradesh	121.7	124.5	110.7	111.6	56.9	65.9
Jammu & Kashmir	117.5	116.6	96.7	77.9	57.3	37.9
Manipur	141.5	164.7	133.9	154.3	59.3	83.7
Meghalaya	—	—	—	—	—	—
Mizoram	—	—	—	—	—	—
Nagaland	—	—	—	—	—	—
Sikkim	155.4	149.2	79.0	76.8	42.2	22.0
Uttarakhand	147.3	154.6	116.5	118.8	47.0	46.1
Tripura	149.3	166.2	78.9	100.6	43.8	40.5
Union Territories						
Andaman & Nicobar Islands	—	—	—	—	—	—
Chandigarh	49.8	46.1	38.9	42.7	17.1	21.7
Dadra & Nagar Haveli	—	177.5	—	128.4	—	59.6
Daman & Diu	—	182.1	—	116.1	—	120.8
Lakshadweep	—	—	—	—	—	—
Puducherry	123.8	143.3	109.6	111.5	70.9	71.0
All India	115.3	124.9	70.2	76.3	34.7	39.0

Source: Annual Reports, Ministry of Human Resource Development, Government of India.
Note: — Not available.

Table 6A.10 Net Attendance Ratio at Primary Level, by Social Groups (Rural), 2007–8 (*per cent*)

Non Special Category States	*Scheduled Castes*			*Scheduled Tribes*			*Other Backward Classes*			*Others*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Andhra Pradesh	86.1	87.7	86.9	89.0	90.6	89.8	85.8	86.0	85.9	87.3	84.6	86.0
Assam	95.8	83.0	90.0	95.5	83.6	91.4	86.5	90.6	88.1	83.9	84.7	84.2
Bihar	70.6	63.9	67.6	77.4	73.0	75.2	76.9	71.9	74.7	82.9	76.3	80.1
Chhattisgarh	95.8	87.7	92.2	91.1	84.4	87.8	97.3	92.6	95.1	100.0	100.0	100.0
Delhi	90.4	89.3	89.9	—	—	—	100.0	100.0	100.0	89.0	83.8	87.7
Goa	—	—	—	—	—	—	100.0	100.0	100.0	55.8	78.6	65.1
Gujarat	86.9	79.5	83.8	85.1	83.3	84.3	83.3	82.0	82.7	86.1	86.2	86.1
Haryana	85.1	82.8	84.1	—	—	—	88.1	80.2	84.4	92.7	87.9	90.7
Jharkhand	75.1	64.8	70.6	74.8	76.1	75.4	80.7	81.2	80.9	82.0	79.3	80.7
Karnataka	79.5	78.0	78.8	71.1	76.5	73.7	76.5	77.1	76.8	82.2	79.7	81.0
Kerala	82.4	75.1	79.2	—	82.4	88.4	81.3	76.3	78.9	79.8	69.5	74.8
Madhya Pradesh	85.1	82.7	83.9	84.4	82.5	83.5	92.5	87.2	90.0	92.7	94.4	93.5
Maharashtra	86.9	83.0	85.0	70.2	65.6	68.1	84.3	84.3	84.3	86.5	86.7	86.6
Orissa	82.4	80.1	81.3	81.2	77.4	79.6	85.8	89.3	87.5	82.8	91.8	87.4
Punjab	87.7	76.8	82.3	—	—	—	90.9	77.0	83.6	85.9	87.7	86.6
Rajasthan	82.9	67.8	76.6	83.9	62.4	73.6	86.9	82.3	84.7	88.1	89.3	88.6
Tamil Nadu	77.4	86.1	81.6	—	100.0	90.6	86.8	84.1	85.4	90.0	100.0	91.1
Uttar Pradesh	83.1	79.3	81.4	78.6	88.8	83.5	85.1	83.9	84.5	88.5	82.9	85.9
West Bengal	84.5	83.3	84.0	83.9	80.9	82.4	90.0	81.9	85.9	83.2	81.5	82.4
Special Category States												
Arunachal Pradesh	—	—	—	69.1	69.2	69.2	41.4	100.0	70.4	69.2	72.1	70.8
Himachal Pradesh	88.0	87.6	87.8	72.8	93.3	81.5	100.0	95.6	97.9	87.9	96.1	92.3
Jammu & Kashmir	98.5	93.0	96.1	61.6	24.9	38.4	91.8	89.5	90.6	92.1	96.1	94.1

(*contd*)

Table 6A.10 (*contd*)

	Scheduled Castes			*Scheduled Tribes*			*Other Backward Classes*			*Others*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Manipur	92.3	100.0	95.1	75.0	82.6	78.5	92.9	86.0	89.7	93.7	69.7	80.6
Meghalaya	100.0	100.0	100.0	68.9	72.4	70.7	100.0	100.0	100.0	77.8	71.1	74.8
Mizoram	—	—	—	92.8	85.8	89.6	—	—	—	—	—	—
Nagaland	—	—	—	87.3	83.2	85.5	48.7	41.4	42.9	100.0	100.0	100.0
Sikkim	91.6	94.1	92.7	86.6	94.2	90.1	92.5	88.3	90.5	86.9	86.4	86.6
Tripura	89.1	83.2	86.5	88.3	83.4	86.4	100.0	94.2	97.2	88.6	88.4	88.5
Uttarakhand	88.2	88.2	88.2	—	—	—	87.6	69.6	79.7	89.2	92.3	90.7
Union Territories												
Andaman & Nicobar Islands	—	—	—	100.0	55.0	70.9	90.3	100.0	94.1	96.8	87.8	92.0
Chandigarh	—	—	—	—	—	—	100.0	33.3	57.7	70.7	81.6	75.3
Dadra & Nagar Haveli	—	—	—	89.0	74.8	82.9	—	—	—	100.0	100.0	100.0
Daman & Diu	100.0	100.0	100.0	—	—	—	83.5	66.3	77.7	79.3	100.0	90.0
Lakshadweep	—	—	—	88.6	93.8	92.1	—	—	—	—	—	—
Puducherry	85.9	71.4	79.8	—	—	—	86.2	100.0	90.5	—	—	—
All India	81.5	77.4	79.6	82.4	78.7	80.9	83.3	81.0	82.2	85.6	83.8	84.8

Source: Calculated from NSS 64th Round.

Table 6A.11 Net Attendance Ratio at Upper Primary Level, by Social Groups (Rural), 2007–8 (*per cent*)

Non Special Category States	*Scheduled Castes*			*Scheduled Tribes*			*Other Backward Classes*			*Others*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Andhra Pradesh	78.2	58.7	68.8	68.1	74.3	71.0	74.7	63.9	69.4	70.9	65.0	68.1
Assam	77.7	69.6	72.9	75.0	81.1	78.3	74.9	91.4	82.8	57.9	72.0	64.1
Bihar	41.8	24.8	35.2	58.0	56.5	57.2	50.2	39.3	45.5	51.0	45.8	48.9
Chhattisgarh	68.6	74.1	71.7	53.9	40.5	47.7	59.2	56.1	57.9	100.0	42.4	60.9
Delhi	87.4	52.1	70.1	—	—	—	—	—	—	100.0	65.6	81.3
Goa	—	—	—	—	—	—	100.0	100.0	100.0	100.0	100.0	100.0
Gujarat	65.7	60.1	63.3	71.0	68.8	69.9	68.8	52.6	61.3	72.7	60.2	67.3
Haryana	66.1	41.3	55.1	—	—	—	56.6	58.0	57.2	75.2	64.4	70.8
Jharkhand	64.9	48.2	58.2	47.8	45.3	46.6	58.8	47.4	53.0	69.0	71.8	70.4
Karnataka	85.7	69.8	77.6	86.0	62.4	73.4	79.2	81.3	80.2	93.1	88.1	90.7
Kerala	79.2	93.3	83.6	66.7	100.0	78.6	87.0	83.8	85.5	87.6	78.1	82.7
Madhya Pradesh	46.5	56.9	50.3	55.4	42.4	49.8	62.7	55.3	59.0	56.6	58.2	57.2
Maharashtra	72.3	80.7	75.4	51.0	56.9	53.2	75.5	83.7	79.8	83.4	79.3	81.5
Orissa	65.9	66.3	66.1	60.3	58.3	59.4	75.9	71.0	73.4	71.6	76.1	73.5
Punjab	62.8	62.8	62.8	—	—	—	61.4	58.2	60.1	73.7	68.1	71.4
Rajasthan	52.2	39.4	47.4	49.3	44.5	47.1	69.2	43.4	57.4	57.1	58.1	57.6
Tamil Nadu	91.0	86.7	89.0	60.3	85.7	71.2	75.8	76.6	76.2	85.0	100.0	90.9
Uttar Pradesh	45.1	47.3	46.2	68.7	66.7	68.1	47.3	43.9	45.7	52.5	56.1	54.2
West Bengal	72.8	75.0	73.8	63.2	51.8	57.3	84.6	89.1	86.4	65.2	71.0	68.2
Special Category States												
Arunachal Pradesh	—	—	—	53.3	54.7	54.1	100.0	100.0	100.0	33.6	44.2	39.7
Himachal Pradesh	84.0	68.8	77.5	98.3	66.3	85.3	87.4	79.6	81.6	84.3	82.7	83.6
Jammu & Kashmir	70.6	32.8	56.3	39.8	25.4	34.8	63.0	53.4	59.1	63.9	59.9	62.1

(*contd*)

Table 6A.11 (*contd*)

	Scheduled Castes			*Scheduled Tribes*			*Other Backward Classes*			*Others*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Manipur	—	—	—	35.3	49.1	39.8	68.4	66.4	67.6	63.2	43.6	51.3
Meghalaya	—	—	—	32.1	39.9	35.6	—	—	—	80.6	75.7	77.9
Mizoram	—	—	—	87.1	83.7	85.6	—	—	—	—	—	—
Nagaland	—	—	—	61.0	66.5	63.9	—	—	—	—	—	—
Sikkim	—	—	—	30.4	44.3	36.7	47.7	48.5	48.1	58.9	27.9	43.3
Tripura	49.3	54.9	52.5	—	—	—	59.8	67.9	64.3	—	—	—
Uttarakhand	74.4	61.7	66.7	—	—	—	44.9	39.0	41.2	65.3	67.0	66.1
Union Territories												
Andaman & Nicobar Islands	—	—	—	62.2	80.6	66.6	54.8	54.8	54.8	78.2	86.0	81.0
Chandigarh	—	—	—	—	—	—	—	—	—	74.9	67.0	70.7
Dadra & Nagar Haveli	—	—	—	74.8	69.2	72.5	—	—	—	—	—	—
Daman & Diu	100.0	100.0	100.0	100.0	100.0	100.0	59.0	100.0	74.4	—	—	—
Lakshadweep	—	—	—	80.5	80.6	80.6	—	—	—	—	—	—
Puducherry	73.1	31.3	55.4	—	—	—	61.7	100.0	75.1	—	—	—
All India	60.7	55.4	58.3	58.8	54.9	57.0	62.0	55.7	59.0	67.2	67.1	67.2

Source: Calculated from NSS 64th Round.
Note: — Not available.

Table 6A.12 Net Attendance Ratio at Primary Level, by Social Groups (Urban), 2007–8 (*per cent*)

Non Special Category States	*Scheduled Castes*			*Scheduled Tribes*			*Other Backward Classes*			*Others*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Andhra Pradesh	81.3	81.6	81.4	76.4	95.1	85.8	89.9	79.1	85.0	87.5	86.4	87.0
Assam	92.7	89.6	91.1	87.2	100.0	92.4	78.5	98.5	85.8	87.6	75.1	81.5
Bihar	78.9	68.0	74.3	—	—	—	77.5	80.1	78.6	89.0	78.6	84.1
Chhattisgarh	93.9	92.8	93.3	88.8	99.4	92.8	76.6	71.0	74.1	76.5	97.4	86.5
Delhi	85.4	88.4	87.0	—	—	—	82.9	88.9	85.3	91.6	85.7	89.5
Goa	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	78.3	74.8	77.0
Gujarat	84.7	75.4	80.8	81.7	77.4	79.1	80.1	80.4	80.3	79.8	82.8	81.0
Haryana	79.1	80.9	80.0	—	—	—	80.0	93.3	84.2	89.9	81.9	87.0
Jharkhand	84.8	94.4	89.1	100.0	81.0	91.6	76.8	92.1	83.9	69.1	87.5	77.6
Karnataka	83.8	91.0	86.5	90.9	85.4	88.8	75.7	83.2	79.4	86.8	72.7	79.4
Kerala	61.1	100.0	87.8	—	—	—	74.1	71.2	72.6	90.1	89.9	90.0
Madhya Pradesh	71.2	73.8	72.2	87.2	79.4	84.0	89.1	92.4	90.5	88.6	83.3	86.0
Maharashtra	85.6	69.9	77.6	75.7	69.0	73.9	82.1	74.3	78.4	82.4	82.5	82.4
Orissa	90.4	86.3	88.6	68.2	64.7	66.5	91.8	75.4	84.0	76.9	78.5	77.5
Punjab	51.3	81.8	61.3	—	—	—	85.2	73.4	81.3	86.8	77.1	81.7
Rajasthan	95.4	95.1	95.3	73.6	77.8	75.3	87.0	82.1	84.7	86.6	80.2	83.5
Tamil Nadu	86.2	89.4	87.8	100.0	100.0	100.0	84.2	83.0	83.6	81.3	82.8	82.1
Uttar Pradesh	72.0	66.0	69.1	—	—	—	75.2	68.8	72.2	83.0	73.6	78.8
West Bengal	77.6	83.7	80.5	81.8	83.0	82.3	89.4	66.7	81.5	77.5	73.6	75.9
Special Category States												
Arunachal Pradesh	81.8	83.6	83.0	80.6	89.3	85.1	64.7	81.5	73.5	92.5	98.4	95.0
Himachal Pradesh	100.0	100.0	100.0	—	—	—	100.0	65.3	77.4	78.0	86.1	80.9
Jammu & Kashmir	96.2	96.8	96.5	100.0	100.0	100.0	92.0	68.5	84.7	94.4	94.1	94.3

(*contd*)

Table 6A.12 (*contd*)

	Scheduled Castes			*Scheduled Tribes*			*Other Backward Classes*			*Others*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Manipur	100.0	100.0	100.0	89.8	95.0	92.0	94.4	95.1	94.7	85.8	91.3	87.8
Meghalaya	—	—	—	84.9	79.0	81.3	87.0	100.0	91.0	87.1	78.7	82.1
Mizoram	100.0	100.0	100.0	89.1	89.5	89.3	—	—	—	—	—	—
Nagaland	—	—	—	92.2	82.7	87.9	100.0	100.0	100.0	—	—	—
Sikkim	100.0	100.0	100.0	—	—	—	100.0	99.1	99.4	62.7	100.0	83.1
Tripura	70.7	85.8	77.0	100.0	100.0	100.0	94.3	97.5	95.7	87.0	99.5	93.4
Uttarakhand	95.2	100.0	96.0	—	—	—	65.7	91.7	77.5	70.7	90.1	81.2
Union Territories												
Andaman & Nicobar Islands	—	—	—	—	—	—	100.0	—	100.0	96.6	100.0	98.4
Chandigarh	76.9	74.5	75.6	—	—	—	69.5	61.5	67.7	95.9	95.3	95.7
Dadra & Nagar Haveli	—	—	—	97.1	75.1	94.8	94.2	100.0	95.9	100.0	100.0	100.0
Daman & Diu	—	—	—	100.0	100.0	100.0	85.4	65.0	74.0	100.0	100.0	100.0
Lakshadweep	—	—	—	78.8	80.5	79.6	—	—	—	—	—	—
Puducherry	96.4	71.3	83.3	—	—	—	76.2	96.4	85.0	100.0	100.0	100.0
All India	80.1	80.9	80.5	82.3	82.8	82.6	81.4	79.4	80.5	84.0	80.9	82.6

Source: Calculated from NSS 64th Round.

Table 6A.13 Net Attendance Ratio at Upper Primary Level, by Social Groups (Urban), 2007–8 (*per cent*)

Non Special Category States	*Scheduled Castes*			*Scheduled Tribes*			*Other Backward Classes*			*Others*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Andhra Pradesh	82.4	64.6	72.1	86.5	70.8	80.1	75.0	78.5	76.7	76.4	73.4	74.9
Assam	73.4	84.5	78.5	81.1	100.0	90.5	72.8	70.3	71.7	64.4	82.2	72.8
Bihar	42.5	37.0	39.7	—	—	—	53.6	50.7	52.3	50.7	63.8	56.8
Chhattisgarh	52.2	84.2	70.1	78.3	86.5	81.0	52.8	59.1	56.0	91.8	91.0	91.2
Delhi	64.6	48.1	57.5	—	—	—	79.2	71.3	75.9	69.0	60.7	64.7
Goa	—	11.8	11.8	100.0	100.0	100.0	—	—	—	82.7	69.4	75.3
Gujarat	78.7	76.1	77.7	82.0	51.7	75.5	77.5	63.6	72.0	78.6	76.2	77.7
Haryana	52.9	55.7	54.2	—	—	—	76.0	45.2	56.7	84.7	70.2	78.2
Jharkhand	72.6	66.2	69.8	72.7	72.9	72.8	56.6	47.7	53.4	64.0	59.0	62.2
Karnataka	98.7	85.3	90.6	69.0	88.1	79.5	94.8	85.6	90.0	85.8	89.0	87.3
Kerala	100.0	95.1	97.8	—	—	—	90.5	81.9	86.0	91.6	80.4	85.5
Madhya Pradesh	62.1	26.0	42.0	63.2	76.2	68.1	60.3	56.9	58.7	68.1	84.4	75.4
Maharashtra	74.5	70.8	72.6	92.7	53.0	73.5	87.3	83.1	85.2	81.9	76.8	79.5
Orissa	94.0	65.9	79.9	23.2	80.8	42.9	77.8	40.3	60.5	84.5	83.4	84.0
Punjab	64.4	42.8	54.8	—	—	—	60.0	78.7	68.3	73.2	68.9	71.5
Rajasthan	51.7	44.1	48.2	—	—	—	56.6	57.5	56.9	49.1	62.2	54.5
Tamil Nadu	72.5	75.3	73.9	100.0	100.0	100.0	76.1	74.9	75.5	90.1	93.5	91.5
Uttar Pradesh	41.4	39.6	40.6	—	—	—	46.0	38.2	41.9	60.4	57.0	58.8
West Bengal	74.5	81.8	77.8	89.3	100.0	92.1	74.3	49.0	62.7	74.6	81.8	77.5
Special Category States												
Arunachal Pradesh	61.8	100.0	84.1	70.5	58.3	63.3	100.0	100.0	100.0	84.6	69.4	78.6
Himachal Pradesh	84.4	23.2	71.5	—	—	—	56.3	86.7	67.6	82.4	86.6	84.6
Jammu & Kashmir	81.8	68.7	74.3	—	—	—	59.6	77.5	71.1	63.2	68.4	65.7

(*contd*)

Table 6A.13 (*contd*)

	Scheduled Castes			*Scheduled Tribes*			*Other Backward Classes*			*Others*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Manipur	—	—	—	100.0	43.4	80.0	82.0	71.6	77.9	45.3	50.6	47.4
Meghalaya	—	—	—	48.6	57.4	53.7	—	—	—	66.6	45.1	54.2
Mizoram	—	—	—	93.0	95.5	94.0	—	—	—	—	—	—
Nagaland	—	—	—	83.6	68.9	76.4	—	—	—	—	—	—
Sikkim	—	—	—	32.0	12.9	28.2	43.3	40.3	41.3	12.2	56.9	15.3
Tripura	43.8	59.1	48.1	100.0	100.0	100.0	77.9	38.1	56.1	77.8	62.8	71.4
Uttarakhand	31.3	47.0	37.2	—	—	—	59.0	60.4	59.8	54.9	34.8	41.9
Union Territories												
Andaman & Nicobar Islands	—	—	—	—	—	—	100.0	100.0	100.0	88.8	73.1	80.2
Chandigarh	79.2	100.0	82.6	—	—	—	53.7	57.3	56.0	70.1	65.0	68.7
Dadra & Nagar Haveli	100.0	100.0	100.0	96.2	100.0	96.7	72.2	47.7	67.1	91.1	80.9	87.7
Daman & Diu	—	—	—	—	—	—	69.1	95.3	86.5	82.1	100.0	89.4
Lakshadweep	—	—	—	94.4	93.0	93.8	—	—	—	—	—	—
Puducherry	100.0	100.0	100.0	—	—	—	75.0	71.4	73.4	100.0	86.4	89.0
All India	66.0	60.3	63.3	73.1	72.5	72.9	68.0	63.3	65.7	72.1	72.3	72.2

Source: Calculated from NSS 64th Round.
Note: — Not available.

Table 6A.14 Out of School Children (6 to 17 years), by Social Groups, 2007–8 (*per cent*)

Non Special Category States	*Scheduled Tribes*			*Scheduled Castes*			*Other Backward Classes*			*Others*			*All Social Groups*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Andhra Pradesh	23.0	18.8	21.0	15.2	18.9	17.0	14.3	19.1	16.7	11.0	17.3	14.2	14.5	18.6	16.5
Assam	8.7	13.3	10.6	3.2	13.5	8.3	14.3	20.2	16.9	16.1	21.3	18.3	13.6	19.3	16.1
Bihar	22.3	38.2	30.0	31.3	40.4	35.2	21.9	31.1	25.9	15.1	22.7	18.4	22.6	31.5	26.4
Chhattisgarh	13.4	24.4	18.6	12.2	15.6	13.8	15.2	19.1	17.0	7.3	4.7	6.0	13.6	19.8	16.5
Delhi	—	—	—	13.7	12.8	13.3	19.2	11.0	16.1	8.8	13.5	10.7	11.8	12.9	12.3
Goa	—	—	—	24.7	25.1	24.9	3.9	44.2	23.9	16.2	9.2	12.9	14.7	15.5	15.1
Gujarat	22.5	29.2	25.7	15.3	22.4	18.4	19.3	30.3	24.6	10.1	18.6	13.7	17.0	26.5	21.3
Haryana	—	—	——	20.7	28.0	24.0	14.5	25.4	19.5	7.1	13.5	9.7	12.8	21.3	16.5
Jharkhand	26.4	25.6	26.0	25.3	31.8	28.1	14.2	16.5	15.3	17.3	18.6	17.9	19.8	21.9	20.8
Karnataka	21.7	26.3	23.9	14.3	21.8	17.9	13.1	16.2	14.6	11.2	11.8	11.5	13.4	16.7	15.0
Kerala	—	—	—	5.0	5.7	5.3	3.9	3.2	3.6	1.5	1.2	1.4	3.4	2.9	3.1
Madhya Pradesh	25.1	28.3	26.6	21.5	25.7	23.4	14.2	18.7	16.3	11.3	12.8	12.0	17.5	21.1	19.2
Maharashtra	29.8	40.7	34.5	17.2	18.1	17.6	13.1	16.3	14.6	11.0	14.1	12.5	14.3	17.6	15.9
Orissa	28.7	41.5	—	22.7	29.8	26.3	19.5	23.6	21.5	15.4	22.6	19.0	21.7	28.9	25.2
Punjab	—	—	—	28.0	30.4	29.1	15.2	25.0	19.8	11.3	8.4	10.0	18.6	20.0	19.2
Rajasthan	23.2	40.6	30.9	19.1	33.5	25.2	11.2	26.9	18.5	9.5	17.4	13.0	14.1	28.2	20.4
Tamil Nadu	44.0	23.4	32.3	14.4	11.6	13.1	8.7	9.1	8.9	2.8	3.7	3.2	10.1	9.6	9.9
Uttar Pradesh	22.4	18.6	20.8	23.5	24.9	24.2	20.1	24.3	22.0	12.3	19.7	—	19.6	23.5	21.4
West Bengal	16.0	27.5	21.6	19.5	20.6	20.0	15.9	21.3	18.3	22.3	18.9	20.6	20.7	20.0	20.4
Special Category States															
Arunachal Pradesh	12.9	14.9	13.9	11.0	4.5	6.7	9.6	8.6	9.1	13.2	26.9	20.0	12.9	17.1	15.0
Himachal Pradesh	6.0	9.4	7.6	7.2	8.8	7.9	1.2	1.7	1.4	3.1	5.0	4.0	4.2	5.9	5.0
Jammu & Kashmir	—	—	—	6.4	18.0	12.4	9.9	12.7	11.1	6.5	10.3	8.4	7.7	14.6	11.0

(*contd*)

Table 6A.14 (*contd*)

	Scheduled Tribes			*Scheduled Castes*			*Other Backward Classes*			*Others*			*All Social Groups*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Manipur	7.9	12.3	9.8	6.8	7.1	6.9	6.2	10.5	8.1	5.5	14.4	10.1	6.8	11.6	8.9
Meghalaya	10.5	9.3	9.9	—	—	—	—	—	—	2.8	7.5	4.9	9.6	9.1	9.3
Mizoram	7.4	7.3	7.3	—	—	—	—	—	—	—	—	—	7.4	7.4	7.4
Nagaland	5.0	8.6	6.7	—	—	—	9.4	36.0	26.3	55.6	55.7	55.6	5.6	9.5	7.4
Sikkim	9.6	12.6	11.0	7.6	19.5	12.5	5.5	6.0	5.8	8.3	13.3	10.6	7.5	10.1	8.7
Tripura	17.7	22.6	19.8	17.8	17.0	17.4	16.1	11.8	14.0	14.2	13.6	13.9	16.5	16.5	16.5
Uttarakhand	—	—	—	12.4	19.0	15.8	28.1	28.9	28.5	5.6	6.2	5.9	12.8	14.9	13.8
Union Territories															
Andaman & Nicobar Islands	6.3	22.4	12.1	—	—	—	5.0	7.3	6.2	5.3	5.5	5.4	5.3	6.8	6.1
Chandigarh	—	—	—	26.3	21.9	24.6	11.1	49.9	28.0	7.2	8.2	7.5	12.3	20.4	15.5
Dadra & Nagar Haveli	10.1	31.6	19.2	—	—	—	—	—	—	—	—	—	7.6	28.2	15.6
Daman & Diu	—	—	—	—	—	—	14.5	19.6	16.7	—	—	—	6.1	10.3	7.7
Lakshadweep	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puducherry	—	—	—	4.7	11.2	7.7	8.1	8.4	8.2	—	—	—	7.0	8.6	7.7
All India	21.7	28.4	24.8	21.0	25.0	22.8	16.6	22.2	19.2	12.7	16.3	14.3	16.9	21.8	19.2

Source: Calculated from NSS 64th Round.
Note: — Not available.

Table 6A.15 Out of School Children (6 to 17 years), by Major Religious Communities, 2007–8 (*per cent*)

Non Special Category States	*Hindus*			*Muslims*			*Christians*			*Sikhs*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Andhra Pradesh	14.6	18.0	16.3	15.2	26.7	21.2	18.1	13.7	15.8	—	—	—
Assam	12.0	17.0	14.2	17.0	21.6	18.9	0.3	39.4	22.7	—	—	—
Bihar	20.0	29.2	23.9	36.5	44.0	39.8	21.6	11.3	16.2	—	—	—
Chhattisgarh	13.6	19.9	16.6	25.7	8.4	16.7	13.2	18.6	15.5	—	—	—
Delhi	10.7	10.4	10.6	23.0	28.9	25.6	—	—	—	—	—	—
Goa	15.2	15.3	15.3	20.9	37.2	26.9	—	—	—	—	—	—
Gujarat	16.0	25.0	20.1	28.1	44.0	35.7	18.1	7.9	12.6	—	—	—
Haryana	11.4	18.4	14.4	26.8	46.4	36.0	—	—	—	10.7	20.5	15.1
Jharkhand	18.8	20.9	19.7	23.4	28.6	25.9	23.7	24.7	24.1	—	—	—
Karnataka	13.1	16.5	14.8	17.5	19.2	18.4	—	—	—	—	—	—
Kerala	4.2	2.8	3.5	3.5	3.3	3.4	2.4	2.4	2.4	—	—	—
Madhya Pradesh	17.1	21.1	18.9	22.9	22.0	22.4	—	—	—	—	—	—
Maharashtra	13.5	15.8	14.6	20.6	29.4	24.9	21.9	22.6	22.3	—	—	—
Orissa	21.4	28.5	—	32.0	43.0	37.9	17.7	18.9	18.3	—	—	—
Punjab	21.9	17.5	20.0	15.2	35.5	24.9	19.6	16.2	17.8	16.6	21.3	18.7
Rajasthan	12.9	27.4	19.4	27.0	37.3	31.7	46.4	100.0	65.1	24.6	42.6	30.3
Tamil Nadu	10.3	9.8	10.1	11.1	10.3	10.7	5.0	6.6	5.9	—	—	—
Uttar Pradesh	16.2	18.6	17.3	33.6	41.0	37.2	—	—	—	6.5	23.5	14.0
West Bengal	16.2	17.4	16.7	29.2	24.4	26.9	6.0	20.5	14.2	—	—	—
Special Category States												
Arunachal Pradesh	5.8	11.4	8.5	4.6	3.0	4.0	16.2	19.2	17.6	—	—	—
Himachal Pradesh	4.3	5.4	4.8	9.2	25.2	17.4	—	—	—	—	—	—
Jammu & Kashmir	6.1	9.7	7.9	9.1	18.5	13.6	—	—	—	—	—	—

(*contd*)

Table 6A.15 (*contd*)

	Hindus			*Muslims*			*Christians*			*Sikhs*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Males*	*Females*	*Persons*
Manipur	4.6	8.8	6.6	14.3	29.5	20.3	7.8	12.2	9.8	—	—	—
Meghalaya	9.6	5.3	7.2	1.4	9.7	4.8	9.7	9.0	9.4	—	—	—
Mizoram	—	—	—	—	—	—	5.5	5.8	5.6	—	—	—
Nagaland	29.5	46.3	37.9	47.1	45.5	46.1	4.9	8.3	6.5	—	—	—
Sikkim	6.3	8.5	7.3	—	—	—	15.1	10.8	12.7	—	—	—
Tripura	15.8	15.3	15.6	22.4	19.6	21.0	13.8	49.8	26.8	—	—	—
Uttarakhand	7.9	10.6	9.2	31.3	29.9	30.6	—	—	—	—	—	—
Union Territories												
Andaman & Nicobar	4.9	4.5	4.7	7.7	4.9	6.4	5.5	18.2	10.5	—	—	—
Chandigarh	11.4	22.8	15.8	35.4	48.4	40.2	—	—	—	11.8	2.1	7.6
Dadra & Nagar Haveli	7.9	29.0	16.1	—	—	—	—	—	—	—	—	—
Daman & Diu	9.6	12.6	10.8	—	—	—	—	—	—	—	—	—
Lakshadweep	—	—	—	5.4	7.1	6.2	—	—	—	—	—	—
Puducherry	7.4	10.0	8.5	6.1	10.0	7.7	—	—	—	—	—	—
All India	15.5	20.2	17.7	26.4	31.5	28.8	8.7	10.7	9.7	15.3	20.9	17.7

Source: Calculated from NSS 64th Round.
Note: — Not available.

Table 6A.16 Average Flow Rates at Primary Level, 2006–7 (*per cent*)

Non Special Category States	*Promotion Rate*	*Repetition Rate*	*Dropout Rate*	*Cohort Survival Rate at Primary*
Andhra Pradesh	90.5	2.6	6.9	76.7
Assam	83.0	3.5	13.5	53.4
Bihar	79.0	7.2	13.8	61.7
Chhattisgarh	86.3	6.3	7.3	75.9
Goa	81.6	5.2	13.2	47.9
Gujarat	87.0	8.8	4.2	84.2
Haryana	87.0	8.6	4.4	89.6
Jharkhand	77.5	9.7	12.8	59.9
Karnataka	94.6	2.0	3.4	89.7
Madhya Pradesh	77.9	13.6	8.6	74.8
Maharashtra	91.5	5.2	3.4	85.2
Punjab	86.5	8.0	5.5	99.0
Rajasthan	75.2	9.4	15.4	51.1
Tamil Nadu	97.6	0.7	1.7	94.9
Uttar Pradesh	82.4	1.4	16.2	61.0
West Bengal	77.5	13.1	9.4	65.6
Special Category States				
Arunachal Pradesh	77.5	8.3	14.2	49.2
Himachal Pradesh	93.3	4.1	2.6	97.1
Jammu & Kashmir	97.3	1.5	1.3	97.3
Manipur	78.3	1.7	20.0	44.4
Meghalaya	73.9	5.4	20.8	35.7
Mizoram	89.4	2.6	8.0	66.9
Nagaland	72.7	2.9	24.3	27.6
Sikkim	78.0	16.9	5.2	78.0
Tripura	83.6	4.7	11.7	60.6
Uttarakhand	87.4	5.7	6.9	79.4
Union Territories				
Daman & Diu	83.5	11.0	5.4	80.0
Puducherry	97.1	0.5	2.4	86.7
All India	84.5	6.1	9.4	72.0

Source: DISE (2010).

Table 6A.17 Coverage of Anganwadi Centres, 2005–6 (*per cent*)

Non Special Category States	*Percentage of Enumeration Areas Covered by An AWC*	*Percentage of Children Under Age Six Living in Enumeration Area Covered by An AWC*	*Percentage of Children Under Age Six who Received Any Service from an AWC in the Past Year*
Andhra Pradesh	74.9	86.2	27.5
Assam	77.0	88.6	26.8
Bihar	75.5	87.9	8.8
Chhattisgarh	68.1	78.6	55.2
Delhi	34.8	45.5	8.4
Goa	77.0	74.6	32.3
Gujarat	80.5	84.0	40.5
Haryana	69.2	73.8	21.2
Jharkhand	86.3	91.5	58.6
Karnataka	92.0	92.9	33.5
Kerala	87.2	90.4	28.7
Madhya Pradesh	64.5	9.8	45.8
Maharashtra	57.4	74.7	38.0
Orissa	71.3	80.4	60.5
Punjab	64.6	64.9	10.5
Rajasthan	65.2	65.7	15.9
Tamil Nadu	96.3	97.0	41.6
Uttar Pradesh	62.6	76.2	18.6
West Bengal	72.2	88.4	38.0
Special Category States			
Arunachal Pradesh	35.4	38.7	9.6
Himachal Pradesh	56.6	62.4	34.7
Jammu & Kashmir	81.4	83.2	16.6
Manipur	86.7	88.9	28.0
Meghalaya	26.8	34.7	21.9
Mizoram	95.3	94.6	52.7
Nagaland	93.0	95.8	37.9
Sikkim	66.7	77.6	35.4
Tripura	100.0	100.0	26.6
Uttarakhand	66.3	73.3	24.5
All India	72.4	81.1	28.4

Source: *NFHS 3*, 2005–6.

Table 6A.18 Average Number of Classrooms, by Type of School, 2007–8

Non Special Category States	*Government Schools*	*Private Schools*	*All Schools*
Andhra Pradesh	2.9	9.5	4.3
Assam	2.1	2.7	2.2
Bihar	2.7	4.8	2.7
Chhattisgarh	2.7	5.7	2.9
Delhi	17.8	20.3	18.7
Goa	2.8	9.6	4.7
Gujarat	5.2	8.1	5.6
Haryana	4.7	9.6	5.5
Jharkhand	2.5	6.6	2.7
Karnataka	4.0	8.3	4.9
Kerala	11.0	12.0	11.5
Madhya Pradesh	3.0	6.3	3.6
Maharashtra	4.3	9.0	5.7
Orissa	3.5	4.3	3.5
Punjab	4.3	12.5	4.9
Rajasthan	3.7	7.5	4.5
Tamil Nadu	4.7	9.5	6.3
Uttar Pradesh	3.9	5.8	4.3
West Bengal	4.2	1.4	3.7
Special Category States			
Arunachal Pradesh	3.0	8.7	3.3
Himachal Pradesh	3.2	8.8	3.9
Jammu & Kashmir	3.3	10.3	4.7
Manipur	4.5	8.2	5.8
Megahlaya	2.6	3.0	2.8
Mizoram	3.9	6.9	4.4
Nagaland	5.5	11.1	7.0
Sikkim	7.0	6.6	6.9
Tripura	5.7	11.6	6.0
Uttarakhand	3.1	6.1	3.7
Union Territories			
Andaman & Nicobar Islands	7.9	11.7	8.4
Chandigarh	23.8	33.5	27.4
Dadra & Nagar Haveri	3.7	10.9	4.0
Daman & Diu	6.2	9.6	6.5
Lakshadweep	12.6	—	12.6
Puducherry	9.0	16.4	11.7
All India	3.6	7.2	4.3

Source: DISE (2010).

Table 6A.19 Distribution of Schools with 1 Room & 2 Rooms, by Type of Management, 2007–8 (*per cent*)

Non Special Category States	*Government Management*	*Private Management*	*All Management*	
	1 room	*1 room*	*1 room*	*2 room*
Andhra Pradesh	29.8	3.4	24.3	19.4
Assam	59.9	43.2	56.7	13.6
Bihar	5.9	3.5	5.8	26.6
Chhattisgarh	4.8	3.0	4.6	25.4
Delhi	—	0.1	—	0.9
Goa	21.8	1.2	16.2	34.3
Gujarat	3.1	1.0	2.8	19.7
Haryana	2.7	0.4	2.3	10.2
Jharkhand	2.7	1.7	2.6	35.2
Karnataka	10.6	2.0	9.0	26.5
Kerala	0.8	0.3	0.5	0.5
Madhya Pradesh	4.1	1.6	3.6	28.8
Maharashtra	7.6	0.5	5.5	24.6
Orissa	5.7	2.5	5.3	30.8
Punjab	3.1	0.5	2.9	20.9
Rajasthan	3.5	0.9	3.7	28.1
Tamil Nadu	—	—	—	26.7
Uttar Pradesh	0.6	0.5	0.6	12.2
West Bengal	7.6	0.3	6.3	17.5
Special Category States				
Arunachal Pradesh	31.1	1.4	29.7	16.3
Himachal Pradesh	6.9	1.0	6.2	26.4
Jammu & Kashmir	11.3	0.4	9.1	26.5
Manipur	2.0	1.1	1.7	19.8
Megahlaya	22.9	20.3	21.3	22.4
Mizoram	1.1	1.7	1.2	1.4
Nagaland	0.2	0.3	0.2	0.4
Sikkim	2.1	1.4	1.9	7.6
Tripura	0.7	—	0.7	9.8
Uttarakhand	2.8	0.9	2.4	37.5
Union Territories				
Andaman & Nicobar Islands	2.5	2.4	2.5	13.1
Chandigarh	—	—	—	—
Dadra & Nagar Haveli	2.9	26.3	4.3	32.9
Daman & Diu	1.3	—	1.0	5.1
Lakshadweep	—	—	—	—
Puducherry	2.7	0.4	1.9	6.4
All India	9.6	3.8	8.5	22.5

Source: DISE (2010).
Note: — Not available.

Table 6A.20 Schools having Girls Toilet Facility, Drinking Water Facility, Electricity, Computer, 2007–8 (*per cent*)

Non Special Category States	*Girls Toilet Facility*	*Drinking Water Facility*	*Electricity*	*Computers*
Andhra Pradesh	46.7	90	36.7	21.1
Assam	10.5	62.2	7.4	3.7
Bihar	21.6	80.6	3	0.6
Chhattisgarh	19.9	86.7	19.6	8.5
Delhi	74.1	99.5	98.6	72.8
Goa	45.4	96.5	94.7	30.6
Gujarat	65.3	87.2	80.5	36.5
Haryana	87.3	97.4	95.4	25.3
Jharkhand	20.7	70.7	6.5	5.5
Karnataka	47.2	79.6	69.3	11.8
Kerala	79	97.6	88.7	71.2
Madhya Pradesh	47	91.9	20.5	12.4
Maharashtra	60	87.5	70.8	36.5
Orissa	28	85.6	18.4	8
Punjab	86.1	97.7	85.7	30.6
Rajasthan	79.3	87.7	26.4	14.9
Tamil Nadu	65.6	62.3	75.6	24.3
Uttar Pradesh	82.4	97.7	16.9	3.3
West Bengal	35.1	78.8	21.1	5
Special Category States				
Arunachal Pradesh	11.9	65.8	15.9	9.2
Himachal Pradesh	38.6	93.1	56.8	11.1
Jammu & Kashmir	22	75.9	19.8	13
Manipur	18	75.9	20.6	11.3
Megahlaya	10.2	50.6	13.2	6.2
Mizoram	23.5	79.5	29.4	13.9
Nagaland	37	72.1	29.9	19.7
Sikkim	88.7	42.3	39.4	21.9
Tripura	22.6	76.9	11.9	7.9
Uttarakhand	52.1	87	28.1	22.6
Union Territories				
Andaman & Nicobar Islands	73.8	98.1	89.4	41.2
Chandigarh	94.9	100	100	76.1
Dadra & Nagar Haveri	25.3	91.1	69.4	5.9
Daman & Diu	61.2	86.7	93.9	36.7
Lakshadweep	62.2	100	100	81.1
Puducherry	86.2	98.2	96.3	63
All India	—	—	33.3	14.3

Source: DISE (2010).
Note: — Not available.

Table 6A.21 Pupil –Teacher Ratio at Primary and Upper Primary Levels, 2007–8

Non Special Category States	*Primary Level*	*Upper Primary Level*
Andhra Pradesh	32.0	28.0
Assam	38.0	18.0
Bihar	68.0	54.0
Chhattisgarh	43.0	32.0
Delhi	46.0	31.0
Goa	25.0	27.0
Gujarat	30.0	37.0
Haryana	53.0	37.0
Jharkhand	73.0	55.0
Karnataka	23.0	32.0
Kerala	28.0	25.0
Madhya Pradesh	41.0	33.0
Maharashtra	34.0	32.0
Orissa	42.0	35.0
Punjab	53.0	21.0
Rajasthan	43.0	32.0
Tamil Nadu	44.0	54.0
Uttar Pradesh	76.0	79.0
West Bengal	51.0	70.0
Special Category States		
Arunachal Pradesh	33.0	24.0
Himachal Pradesh	18.0	13.0
Jammu & Kashmir	39.0	10.0
Manipur	33.0	22.0
Meghalaya	47.0	15.0
Mizoram	17.0	8.0
Nagaland	20.0	15.0
Sikkim	16.0	15.0
Tripura	27.0	19.0
Uttarakhand	25.0	16.0
Union Territories		
Andaman & Nicobar Islands	17.0	16.0
Chandigarh	36.0	15.0
Dadra & Nagar Haveli	91.0	14.0
Daman & Diu	33.0	36.0
Lakshadweep	31.0	11.0
Puducherry	25.0	21.0
All India	47.0	35.0

Source: Statistics of School Education, Ministry of Human Resource Development, 2007–8.
Note: — Not available.

Table 6A.22 Female Teachers by Levels of Education, 2007–8 (*per cent*)

Non Special Category States	*Primary Only*	*Primary with Upper Primary*	*Primary with Upper Primary & Secondary / Hr Secondary*	*Upper Primary Only*	*Upper Primary with Secondary / Hr Secondary*	*All Levels*
Andhra Pradesh	48.1	45.1	64.3	—	39.7	44.9
Assam	35.5	34.2	48.8	20.4	27.0	30.2
Bihar	38.7	34.4	18.0	26.3	10.4	36.5
Chhattisgarh	31.0	48.4	44.4	28.3	30.2	32.9
Delhi	68.6	81.5	74.7	52.4	46.2	67.5
Goa	82.3	78.2	81.7	60.2	61.7	76.5
Gujarat	49.1	53.5	71.2	56.2	65.0	53.4
Haryana	47.3	50.0	50.8	36.0	42.8	46.3
Jharkhand	27.0	28.3	36.4	69.3	26.3	28.3
Karnataka	47.9	54.0	72.9	52.7	49.9	53.2
Kerala	73.7	68.7	71.4	69.7	67.2	71.6
Madhya Pradesh	32.1	52.4	62.0	30.4	61.1	37.3
Maharashtra	46.0	45.0	42.1	35.0	24.9	42.8
Orissa	37.1	37.4	50.2	21.0	36.7	36.7
Punjab	65.1	74.5	76.5	49.6	53.7	60.9
Rajasthan	29.3	29.8	31.6	50.7	21.2	29.3
Tamil Nadu	78.5	68.7	72.6	71.2	99.2	73.9
Uttar Pradesh	39.8	38.0	33.9	25.7	13.6	36.3
West Bengal	28.8	13.8	39.1	34.3	37.5	32.4
Special Category States						
Arunachal Pradesh	37.3	37.4	30.7	34.8	22.0	35.9
Himachal Pradesh	45.7	63.1	60.6	24.8	32.1	42.1
Jammu & Kashmir	41.0	41.9	52.6	55.5	25.1	43.6
Manipur	41.3	41.8	43.2	35.5	48.3	42.4
Megahlaya	51.6	61.4	68.7	38.8	49.7	51.1
Mizoram	48.9	52.9	53.4	27.0	35.3	42.5
Nagaland	42.4	44.5	54.8	26.5	33.9	42.6
Sikkim	45.2	41.4	48.0	50.0	48.4	45.1
Tripura	20.6	20.4	30.3	63.6	23.3	24.8
Uttarakhand	54.4	58.4	54.1	31.1	23.3	46.2
Union Territories						
Andaman & Nicobar Islands	56.8	59.0	55.7	72.7	55.8	57.3
Chandigarh	78.9	84.3	80.7	92.9	84.4	81.2
Dadra & Nagar Haveri	44.2	57.1	75.6	41.7	60.0	55.6
Daman & Diu	72.1	47.6	66.7	45.0	43.5	63.3
Lakshadweep	40.9	42.9	41.2	12.5	37.6	40.2
Puducherry	62.9	61.6	59.5	—	45.2	61.2
All India	42.3	45.1	55.8	35.4	37.9	42.7

Source: State Report Cards, 2007–8, DISE.
Note: — Not available.

Table 6A.23 Distribution of Teachers, by Social Groups, 2007–8 (*per cent*)

Non Special Category States	*STs*	*SCs*	*OBCs*	*Others*
Andhra Pardesh	6.4	12.9	38.5	42.2
Assam	17.0	5.8	29.6	47.6
Bihar	4.5	14.7	45.0	35.7
Chhattisgarh	28.7	13.3	37.7	20.3
Delhi	2.1	11.9	7.9	78.1
Goa	1.4	1.2	6.6	89.2
Gujarat	15.0	10.3	27.1	47.5
Haryana	0.5	10.4	20.6	68.3
Jharkhand	27.0	8.5	40.2	24.4
Karnataka	2.9	11.5	23.7	61.9
Kerala	2.6	3.9	39.7	51.7
Madhya Pradesh	14.5	13.4	30.7	41.4
Maharashtra	6.3	11.2	31.3	41.4
Orissa	11.6	12.0	36.6	39.8
Punjab	0.8	19.9	11.5	67.8
Rajasthan	8.0	15.1	36.7	40.1
Tamil Nadu	0.7	13.2	76.7	9.4
Uttar Pradesh	0.8	14.1	36.5	48.7
West Bengal	4.5	19.5	6.7	67.5
Special Category States				
Arunachal Pradesh	65.5	1.8	3.5	29.3
Himachal Pradesh	5.8	14.4	10.4	69.5
Jammu & Kashmir	8.3	4.9	5.8	81.0
Manipur	36.2	4.2	5.8	53.8
Meghalaya	90.0	1.7	1.2	7.0
Mizoram	96.2	1.1	0.8	1.6
Nagaland	83.7	4.2	1.9	9.9
Sikkim	38.9	4.0	35.3	21.6
Tripura	33.4	13.6	16.5	36.5
Uttarakhand	2.8	11.3	13.7	70.2
Union Territories				
Andaman & Nicobar Islands	7.2	0.4	3.6	87.9
Chandigarh	0.2	7.9	2.3	87.7
Dadra & Nagar Haveli	51.1	6.2	4.2	36.6
Daman & Diu	5.8	7.9	29.0	49.9
Lakshadweep	97.6	0.2	0.2	1.6
Puducherry	1.4	14.2	32.8	24.0
All India	9.1	12.3	32.8	44.6

Source: DISE (2010).

Table 6A.24 Public Expenditure on Education, 2007–8 (*per cent*)

Non Special Category States	*Per cent of State Domestic Product (SDP)*
Andhra Pradesh	1.9
Assam	4.1
Bihar	4.7
Chhattisgarh	2.2
Delhi	1.4
Goa	2.0
Gujarat	1.7
Haryana	1.7
Jharkhand	3.1
Karnataka	1.9
Kerala	2.6
Madhya Pradesh	2.4
Maharashtra	1.3
Orissa	2.7
Punjab	1.8
Rajasthan	3.0
Tamil Nadu	10.2
Uttar Pradesh	3.2
West Bengal	2.2
Special Category States	
Arunachal Pradesh	7.1
Himachal Pradesh	4.5
Jammu & Kashmir	3.7
Manipur	6.4
Meghalaya	4.7
Mizoram	9.1
Nagaland	—
Sikkim	9.8
Tripura	4.6
Uttarakhand	4.2

Source: Expenditure figures from CAG 2009, and SDP figures from CSO 2010.
Note: — Not available.

Table 6A.25 Average Annual Expenditure Per Student of age 5–29 Years in General Education, by Social Groups, 2007–8 (*Rs*)

Non Special Category States	*Scheduled Castes*	*Scheduled Tribes*	*Other Backward Classes*	*Others*	*All Social Groups*
Andhra Pradesh	1,744.0	1,193.0	2,134.0	4,582.0	2,551.0
Assam	1,855.0	1,351.0	2,294.0	1,883.0	1,921.0
Bihar	817.0	1,113.0	1,239.0	2,644.0	1,449.0
Chhattisgarh	1,052.0	619.0	974.0	4,367.0	1,082.0
Delhi	2,103.0	11,623.0	4,042.0	8,924.0	6,149.0
Goa	2,005.0	1,060.0	1,483.0	3,257.0	2,895.0
Gujarat	1,825.0	874.0	1,473.0	4,901.0	2,391.0
Haryana	2,044.0	2,795.0	4,061.0	6,806.0	4,880.0
Jharkhand	1,223.0	1,082.0	1,461.0	3,210.0	1,825.0
Karnataka	912.0	1,013.0	2,227.0	3,495.0	2,339.0
Kerala	2,021.0	2,637.0	3,241.0	5,365.0	3,675.0
Madhya Pradesh	896.0	580.0	1,586.0	3,473.0	1,645.0
Maharashtra	1,699.0	1,297.0	2,243.0	4,511.0	3,245.0
Orissa	1,052.0	782.0	1,663.0	3,137.0	1,670.0
Punjab	2,699.0	—	3,997.0	7,586.0	5,389.0
Rajasthan	1,875.0	1,308.0	2,343.0	4,441.0	2,593.0
Tamil Nadu	1,512.0	750.0	2,889.0	9,845.0	2,907.0
Uttar Pradesh	1,199.0	2,541.0	1,558.0	3,392.0	1,862.0
West Bengal	2,193.0	1,838.0	3,247.0	3,462.0	2,980.0
Special Category States					
Arunachal Pradesh	3,021.0	1,888.0	1,970.0	2,531.0	2,064.0
Manipur	4,844.0	3,542.0	4,848.0	3,831.0	4,250.0
Meghalaya	4,255.0	2,176.0	6,052.0	3,435.0	2,354.0
Mizoram	2,969.0	2,899.0	—	4,641.0	2,903.0
Nagaland	5,427.0	6,060.0	4,245.0	6,922.0	6,040.0
Tripura	2,363.0	2,226.0	3,235.0	3,650.0	2,893.0
Uttarakhand	1,323.0	1,910.0	2,195.0	3,874.0	2,951.0
Union Territories					
Andaman & Nicobar Islands	—	691.0	4,873.0	4,052.0	3,939.0
Dadra & Nagar Haveli	6,591.0	1,536.0	1,459.0	2,743.0	1,757.0
Daman & Diu	1,954.0	8,542.0	1,502.0	4,310.0	3,487.0
Lakshadweep	—	676.0	—	3,414.0	757.0
Puducherry	3,045.0	—	3,640.0	4,511.0	3,505.0
All India	1,534.0	1,203.0	1,951.0	4,232.0	2,461.0

Source: Calculated from NSS 64th Round.
Note: — Not available.

Table 6A.26 Average Annual Expenditure Per Student of Age 5–29 Years in General Education, by Major Religion Communities, 2007–8 (*per cent*)

Non Special Category States	*Hindus*	*Muslims*	*Christians*	*Sikhs*
Andhra Pradesh	2,562.0	2,508.0	2,969.0	—
Assam	2,258.0	1,286.0	863.0	3,817.0
Bihar	1,484.0	1,207.0	214.0	3,892.0
Chhattisgarh	1,043.0	2,020.0	1,635.0	7,230.0
Delhi	5,810.0	3,607.0	14,946.0	18,940.0
Goa	2,330.0	3,843.0	5,394.0	—
Gujarat	2,424.0	1,781.0	2,427.0	2,688.0
Haryana	5,020.0	2,140.0	1,655.0	6,044.0
Jharkhand	1,951.0	1,459.0	1,326.0	1,082.0
Karnataka	2,183.0	2,231.0	8,423.0	—
Kerala	3,679.0	2,822.0	4,942.0	—
Madhya Pradesh	1,565.0	2,225.0	1,559.0	—
Maharashtra	3,200.0	2,693.0	7,347.0	9,865.0
Orissa	1,707.0	897.0	542.0	5,688.0
Punjab	6,420.0	4,076.0	2,292.0	4,851.0
Rajasthan	2,609.0	1,870.0	370.0	4,896.0
Tamil Nadu	2,794.0	3,485.0	3,936.0	—
Uttar Pradesh	1,862.0	1,785.0	7,513.0	3,951.0
West Bengal	3,581.0	1,675.0	3,816.0	7,200.0
Special Category States				
Arunachal Pradesh	2,476.0	2,267.0	2,287.0	3,550.0
Himachal Pradesh	3,804.0	1,881.0	1,870.0	33,523.0
Jammu & Kashmir	4,358.0	3,866.0	8,470.0	9,718.0
Manipur	4,721.0	3,762.0	3,545.0	—
Meghalaya	4,051.0	2,766.0	2,260.0	—
Mizoram	3,484.0	—	3,132.0	—
Nagaland	4,740.0	5,383.0	6,058.0	—
Sikkim	2,533.0	858.0	2,277.0	—
Tripura	3,087.0	1,720.0	3,724.0	—
Uttarakhand	3,070.0	2,100.0	2,645.0	8,732.0
Union Territories				
Andaman & Nicobar Islands	4,285.0	5,672.0	2,007.0	20,320.0
Chandigarh	12,433.0	432.0	3,950.0	18,176.0
Dadra & Nagar Haveli	1,725.0	2,010.0	3,594.0	—
Daman & Diu	3,363.0	2,779.0	10,106.0	—
Lakshadweep	7,130.0	676.0	500.0	—
Puducherry	3,368.0	4,880.0	2,875.0	—
All India	2,434.0	2,007.0	3,924.0	5,522.0

Source: Calculated from NSS 64th Round.
Note: — Not available.

Table 7A.1 Housing: Distribution of Households by Pucca and Kutcha House, 2002 and 2008–9 (*per cent*)

Non Special Category States	*Pucca House*		*Kutcha House*	
	2002	*2008–9*	*2002*	*2008–9*
Andhra Pradesh	55.4	77.1	17	10.6
Assam	19.4	27	51	32.6
Bihar	32.3	48.3	34.7	32.7
Chhattisgarh	20.7	39.4	2	2.1
Delhi	95.2	94.7	0.5	2.6
Goa	18.6	86	0.4	1.4
Gujarat	56.4	75.7	5	5.6
Haryana	85.3	94.8	2.6	1.7
Jharkhand	31.7	43	15.7	12.4
Karnataka	34.6	63.5	8.2	4.7
Kerala	40.2	80.3	6.6	2.9
Madhya Pradesh	32.2	56.9	6.7	4.8
Maharashtra	56.5	78.9	3.7	2.7
Orissa	25.9	40.3	46.6	35
Punjab	75.7	93.4	3.5	2.1
Rajasthan	63	73.8	17.8	11.6
Tamil Nadu	39.3	73.5	20.3	11.6
Uttar Pradesh	59.6	67.8	18.5	16.3
West Bengal	33	50.3	19.5	19
Special Category States				
Arunachal Pradesh	27	33.9	59.1	46.7
Himachal Pradesh	46.2	80.6	1.2	0.8
Jammu & Kashmir	65.4	68.3	16.7	13.3
Manipur	11.7	17	31.9	21.9
Meghalaya	44.8	51.4	29.6	27.9
Mizoram	65.6	67.1	16.9	14.4
Nagaland	43.9	55.2	12.5	9.9
Sikkim	64.8	62.5	9.3	7.7
Tripura	9.2	19.2	31.8	12.4
Uttarakhand	76.1	93.9	5.4	2.5
Union Territories				
Andaman & Nicobar Islands	58.2	68.5	24.5	6.6
Chandigarh	83.3	97.8	0.2	0.2
Dadra & Nagar Haveli	45.8	51.1	9.1	11.1
Daman & Diu	80.1	93	0.1	2.3
Lakshadweep	26.3	93.9	0.9	2.6
Puducherry	55.1	78.9	28.5	13.9
All India	47.4	66.1	16.1	12.6

Source: NSS 58th and 65th Rounds.
Note: — Not available.

Table 7A.2 Housing: Distribution of Households by Pucca and Kutcha House (Rural), 2002 and 2008–9 (*per cent*)

Non Special Category States	*Pucca House*		*Kutcha House*	
	2002	*2008–9*	*2002*	*2008–9*
Andhra Pradesh	45.6	70.2	21.6	13.6
Assam	14.7	20.6	55.3	36.6
Bihar	27.4	44.5	37.9	35.5
Chhattisgarh	14.2	30.1	2.3	2.3
Delhi	90.3	98.2	0	0.3
Goa	10.6	77.4	0.4	0.4
Gujarat	35.1	62.3	7.6	8.5
Haryana	83.4	92.9	3.6	2.2
Jharkhand	22.6	34.1	19.3	14.3
Karnataka	20.7	48.3	10.6	6.6
Kerala	35.7	77.3	7.9	3.5
Madhya Pradesh	19.4	46.5	8.2	6
Maharashtra	36.8	65.6	5.8	4.5
Orissa	18.3	32.8	53	40.6
Punjab	70.8	90.4	4.8	3.2
Rajasthan	54.1	65.3	22.8	15.4
Tamil Nadu	26.4	61	27.3	18.6
Uttar Pradesh	51.3	60.5	23	20.2
West Bengal	21.1	36.3	26	25.3
Special Category States				
Arunachal Pradesh	17.1	26.2	68.5	53.7
Himachal Pradesh	40.2	78.5	1.3	0.8
Jammu & Kashmir	57.9	61	20.8	16.3
Manipur	8.1	12.1	38.8	28.1
Meghalaya	37.7	42.6	34.7	34.4
Mizoram	49.8	47	28.7	25.1
Nagaland	34.8	48.1	16	12.8
Sikkim	59.4	55.9	10.8	9
Tripura	4.8	10.6	35.8	14.8
Uttarakhand	70.8	92.7	6.9	3.1
Union Territories				
Andaman & Nicobar Islands	42.1	56.2	36.3	9.8
Chandigarh	92	99.7	0.4	0
Dadra & Nagar Haveli	38.5	37.2	10.4	14.7
Daman & Diu	81.5	90.7	0.1	2.9
Lakshadweep	32	94.5	1.2	2.8
Puducherry	26.2	56.6	53.5	30
All India	35.8	55.4	21.3	17

Source: NSS 58th and 65th Rounds.

Table 7A.3 Housing: Distribution of Households by Pucca and Kutcha House (Urban), 2002 and 2008–9 (*per cent*)

Non Special Category States	*Pucca House*		*Kutcha House*	
	2002	*2008–9*	*2002*	*2008–9*
Andhra Pradesh	79.7	92.8	3.9	5.5
Assam	64.9	375.5	2.4	9.5
Bihar	69.8	79.4	10.3	10.4
Chhattisgarh	50.1	79.9	1.1	0.5
Delhi	96.5	94.4	2.8	0.7
Goa	32.3	94.6	2.4	0.3
Gujarat	90.5	96.1	1	0.8
Haryana	89.8	98.8	0.5	0.3
Jharkhand	67.6	90.4	1.9	0.9
Karnataka	63.5	89.3	1.5	3.1
Kerala	53.4	88.7	1.2	3
Madhya Pradesh	66.1	88.6	1	2.3
Maharashtra	83.2	95.5	0.4	0.7
Orissa	67.7	79.8	5.4	11
Punjab	85.1	98.2	0.5	1.3
Rajasthan	87.3	96.9	1.3	4.4
Tamil Nadu	62.5	87.7	3.6	7.4
Uttar Pradesh	88.8	94	2.1	2.4
West Bengal	65.1	90.9	1.1	2.1
Special Category States				
Arunachal Pradesh	67.7	62	20.8	20.1
Himachal Pradesh	85.7	98	0.3	0.6
Jammu & Kashmir	90.2	93.6	3.1	3.4
Manipur	22.3	29.1	6.6	12.2
Meghalaya	80.6	88.3	0.7	4.2
Mizoram	85.9	92.1	0.9	1.8
Nagaland	60.8	72.7	2.6	6.1
Sikkim	98.6	99.9	0	0
Tripura	36.8	57.6	1.5	6.4
Uttarakhand	95.1	98	0.2	0.1
Union Territories				
Andaman & Nicobar Islands	91.7	93.4	0.1	0
Chandigarh	82.4	97.5	0.2	0.2
Dadra & Nagar Haveli	86.1	94.4	0	1.2
Daman & Diu	77.7	97.5	1.1	0.3
Lakshadweep	21.9	92.9	2.3	0.7
Puducherry	70.2	88.2	7.2	15.4
All India	76.8	91.7	2.1	3.3

Source: NSS 58th and 65th Rounds.

Table 7A.4a Housing: Distribution of Households by Pucca and Kutcha House, by Social Groups, 2002 and 2008–9 (*per cent*)

Non Special Category States	*Scheduled Castes*				*Scheduled Tribes*			
	Pucca House		*Kutcha House*		*Pucca House*		*Kutcha House*	
	2002	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*
Andhra Pradesh	42.8	56.8	29.5	15.7	47.8	71.1	22.9	12.2
Assam	11.1	18.1	60.9	37.9	14.6	28	51.9	29.7
Bihar	51.3	49.3	34.1	17.3	24.1	51.2	46.3	33.9
Chhattisgarh	9.4	22.4	4.5	3.2	23.9	32.3	0.7	1.3
Delhi	100	100	0	0	88.5	89.7	1	6.4
Goa	100	89.6	0	0	3.8	67	6.3	19.6
Gujarat	14.8	45.1	19.9	11.8	54.5	63.9	4.7	10.6
Haryana	100	79.9	0	12.3	75.6	88	5.4	3.5
Jharkhand	24	20.6	21.7	21.4	18.3	28.4	14.2	32.3
Karnataka	29	55.6	18.1	10.1	28.3	56.9	11.1	7.7
Kerala	47.2	73.3	10	9.5	22.9	67.9	15.7	8.1
Madhya Pradesh	9.7	36.8	8.3	5.1	28.7	46.8	10.4	5.7
Maharashtra	24.8	54.4	10.6	9.2	49.8	77.1	4.8	3.2
Orissa	17.4	25.5	45	36	16.3	32	57.2	44
Punjab	89.3	73.3	10.7	25.3	68.9	88.5	5	3.7
Rajasthan	38	41.4	15.9	7.1	51.9	68.4	26.6	19.8
Tamil Nadu	26.9	71.1	46.4	16.8	30.9	61.7	30.9	21.3
Uttar Pradesh	27.1	53.9	10.5	30.6	48.8	50.4	26.3	26.9
West Bengal	20.3	28	40.8	20.5	20	40.7	25.1	20.7
Special Category States								
Arunachal Pradesh	20.2	25.1	67.8	50.4	69	55.6	31	16.8
Himachal Pradesh	33.8	54.8	0.6	2.5	37.4	79.2	1.2	0.4
Jammu & Kashmir	29.2	15.7	58.7	52.6	57.3	62.8	28.7	22.7
Manipur	11.7	11	47.4	37.5	0.4	14.3	19.1	8.4
Meghalaya	45.7	37.6	28.5	29.3	8.9	32	31.7	37.6
Mizoram	65	65.5	17.2	14.1	96.4	85.2	0	5.3
Nagaland	43.2	32	12.3	9.7		33.3	100	3.8
Sikkim	75	54.5	4	9.8	52.3	45.6	22.2	12.6
Tripura	1.9	10	49.4	27.1	7	13.7	25.1	7.4
Uttarakhand	86.6	81	0	13.1	76.8	85.1	9.5	5.9
Union Territories								
Andaman & Nicobar Islands	60.2	85.3	28.1	0				
Chandigarh	88.9	100	0	0	78.6	99.5	1.1	0.5
Dadra & Nagar Haveli	28.5	33.3	13.1	16.5	56.7	55.7	0.4	0
Daman & Diu	62.9	59.8	0.4	21.6	55	87.4	0	2.7
Lakshadweep	23.4	93.4	1	4	100		0	
Puducherry	33.1	100	34.6	0	18	50.3	69.2	35.2
All India	22.9	38.3	23.2	16.4	39.5	57.9	22.2	18.8

Source: Computed from NSS 58th and 65th Rounds.

Table 7A.4b Housing: Distribution of Households by Pucca and Kutcha House, by Social Groups, 2002 and 2008–9

(*per cent*)

Non Special Category States	*Other Backward Classes*				*Others*			
	Pucca House		*Kutcha House*		*Pucca House*		*Kutcha House*	
	2002	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*
Andhra Pradesh	51.9	72.8	17.7	9.4	66.4	86.3	9.2	4.6
Assam	22.6	32.5	46.1	26.7	21.7	26.3	49.8	34
Bihar	29.6	51.5	33.6	29	47.4	73.9	27.1	14.2
Chhattisgarh	21.3	48.2	0.9	1.7	48.1	79.4	1.2	0.2
Delhi	94.3	97.8	0.3	0.3	98.1	94.9	0.4	3.4
Goa	0	72	0.2	0.8	21.2	91.5	0.2	0.1
Gujarat	44.3	72.7	4	5.7	83	93	0.7	0.8
Haryana	82.4	95.2	3.7	1.6	91.6	97.9	0.7	0.5
Jharkhand	30	46.9	15.1	15.5	56.4	45.3	10.2	19.9
Karnataka	25.1	58	7.7	4.5	45	75.5	6.1	2.3
Kerala	39.3	78.9	6.5	2.8	47.4	86.2	4.1	1.5
Madhya Pradesh	34.9	56.4	6.5	3.3	51.6	77	2.4	1.6
Maharashtra	49.9	80.6	2.8	3.1	68.1	88.8	2.4	1.2
Orissa	23.8	44.6	48.7	33	47	58.1	35.9	28.1
Punjab	74.3	91.9	6.6	2.1	81.4	97.6	0.7	0.7
Rajasthan	66.6	75.4	19	13.8	77.2	91.6	10.2	4.1
Tamil Nadu	39.3	75.7	18.2	9.2	69.7	96.5	4.1	1
Uttar Pradesh	57	68.6	19.5	14.8	75.2	81.5	10.5	7.8
West Bengal	38.3	66.1	17.4	4.5	40.7	61.1	15.1	13.8
Special Category States								
Arunachal Pradesh	49.6	18.9	32.1	76.8	50.6	39.3	30.6	42.2
Himachal Pradesh	40.6	61.4	0.8	1	51.6	87.4	1.4	0.6
Jammu & Kashmir	70.8	58.3	12.1	12.7	68.1	72	13.2	10.4
Manipur	11.8	15.4	20	15.7	12	34.9	27.3	8.9
Meghalaya	28.8	57.9	20.1	28.6	46.3	59.6	38.7	19.5
Mizoram	86.4	20	13.6	68.3	78.3	54.3	13.5	7.4
Nagaland	40.3	56.3	20.3	9.4	51.8	21.9	11.8	27.7
Sikkim	53.1	54.4	14.7	7.6	71.4	87.5	5.8	0.3
Tripura	11.5	23.5	24.1	4.7	15.2	31.2	27.2	6
Uttarakhand	77.4	93.8	10.8	2.8	75.3	96.3	2.4	0.9
Union Territories								
Andaman & Nicobar Islands		38.4	100	9.4	58.1	52.3	24.3	8.7
Chandigarh	81.7	95.4	0.6	0.7	84	97.8	0	0
Dadra and Nagar Haveli	87.2	58.2	2.4	14.8	86.9	89.7	0.4	0
Daman & Diu	68.8	94.5	0.3	0.8	89.4	100	0	0
Lakshadweep	37.6	67.6	0	32.4	9.3	98.6	1.9	1.4
Puducherry	59.1	85.3	23.5	10.2	85.1	81.2	4.3	5.2
All India	44.7	66.6	17	12.4	61.3	77.9	10	7.7

Source: Computed from NSS 58th and 65th Rounds.

Table 7A.5 Housing: Distribution of Households by Pucca and Kutcha House, by Major Religious Communities, 2008–9 (*per cent*)

Non Special Category States	*Hindus*		*Muslims*		*Christians*		*Sikhs*	
	Pucca House	*Kutcha House*	*Pucca House*	*Kutcha House*	*Pucca House*	*Kutcha House*	*Pucca House*	*Kutcha House*
Andhra Pradesh	74	9.8	84.3	2.3	76.4	14.4	100	22.9
Assam	31.9	27.5	12.7	45.2	21.2	33.6	78.7	81.8
Bihar	57	26.4	51.1	29.3	53.8	30.9	56	41.1
Chhattisgarh	38.9	1.7	76.1	1.4	20.2	19.7	21	0
Delhi	94.7	3	88.8	8.5	100	0	100	0
Goa	83.9	2.1	87.3	0	89.9	0.3	100	0
Gujarat	71	6.2	87.5	4	47.2	1.7	76.9	47.6
Haryana	94.3	1.5	90.9	4.2	100	0	96.2	1.9
Jharkhand	37.5	23.4	39.5	16.1	50.2	1.8	100	52.9
Karnataka	62	5.1	70.6	1.7	81.6	0.5	69.1	37.3
Kerala	78	4	79.4	1.4	86.2	1.9		
Madhya Pradesh	53	3.8	74.6	6.2	80.6	0	93.1	13.6
Maharashtra	81.7	2.8	87.1	1.2	98.6	0.5	100	7.9
Orissa	40.1	35.2	56.9	29.5	31.7	33	100	
Punjab	94.4	2.5	84.1	5.9	95.4	0.1	92.7	2
Rajasthan	73	11.4	83	12.5	78.2	0.3	63.9	29.2
Tamil Nadu	72.4	12.3	82.7	1.2	82.7	6.6		
Uttar Pradesh	64.7	17.7	73.6	12.4	92.8	0	85.5	7.5
West Bengal	58.5	13.2	43.3	22.3	58.2	1.8	100	37.3
Special Category States								
Arunachal Pradesh	37.3	45.2	44.5	8.7	18.6	61.2	—	—
Himachal Pradesh	80	0.6	77.5	4.4	100	0	100	0.4
Jammu & Kashmir	67.3	19.3	67.2	8.9	83.6	16.4	98.2	3.6
Manipur	16.5	14.4	10.2	20.5	10.9	38	3.5	
Meghalaya	45.9	31.7	28.7	46.3	39.7	28.4	100	0
Mizoram	43.4	38.9	85.9	0	71.2	8.3	100	0
Nagaland	40.3	6.8	1.1	31.3	32.1	9.6	0	
Sikkim	55.5	9.4	80.8	0.9	67.6	2.6		
Tripura	19.8	12.2	16	11.7	13.5	5.9		
Uttarakhand	93.5	2.3	90.4	5.3	95.1	0	97.9	0.7
Union Territories								
Andaman & Nicobar Islands	47.8	9.4	54.9	10.3	76.2	0.9	100	0
Chandigarh	98.1	0.3	97.6	0	100	0	95	0
Dadra & Nagar Haveli	48.9	11.7	96	0	79.4	0		
Daman & Diu	92.5	2.4	100	0	100	0	100	0
Lakshadweep	97.6	2.4	93.4	3.6	0	100		
Puducherry	79.1	13.5	83.8	0	75.1	24	—	—
All India	65.4	12.7	63.8	14.7	69.3	9.6	91.3	5.7

Source: Computed from NSS 65th Round.
Note: — Not available.

Table 7A.6 Distribution of Households with Electricity for Domestic Use, 2002 and 2008–9 (*per cent*)

Non Special Category States	*Rural*		*Urban*		*Combined*	
	2002	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*
Andhra Pradesh	78.1	93.2	93.7	97.5	82.6	94.5
Assam	24.6	40.2	86.8	94.6	30.4	46.6
Bihar	9.7	24.5	66	79.4	16.1	30.5
Chhattisgarh	52.1	81.1	86.5	96.7	58.3	84
Delhi	100	96	99.5	98.6	99.6	98.4
Goa	98.4	99.5	99.7	97.3	98.9	98.4
Gujarat	82.2	89.7	95.9	99	87.5	93.4
Haryana	85.9	93.4	97.7	98.3	89.4	95
Jharkhand	25.1	43	86.5	93.9	37.5	51.1
Karnataka	82.5	94.1	94.9	97.9	86.5	95.5
Kerala	75.5	92.7	90.4	97.9	79.3	94.1
Madhya Pradesh	67.9	81.3	92	96.9	74.6	85.1
Maharashtra	77.6	81.9	95.9	98.5	85.3	89.3
Orissa	28.6	44.9	86.6	90.1	37.5	52.1
Punjab	95.7	96.5	98	99.3	96.5	97.6
Rajasthan	44.8	63.8	87.1	97	56.2	72.6
Tamil Nadu	80.3	92.6	93.7	97.8	85.1	95
Uttar Pradesh	24.3	37.6	86.3	89.8	37.9	49
West Bengal	25.7	49.5	83.7	93.3	41.4	60.8
Special Category States						
Arunachal Pradesh	50.3	77.9	95.8	98.5	59.2	82.3
Himachal Pradesh	98.3	98.6	99.8	99.4	98.5	98.7
Jammu & Kashmir	96.3	95.9	99.5	97.5	97.1	96.3
Manipur	85.8	86.8	92.8	99.5	87.6	90.5
Meghalaya	56.8	69.8	93.9	99.3	63	75.5
Mizoram	75.5	81.9	99.8	99.8	86.1	89.9
Nagaland	94.6	99	97.5	100	95.6	99.3
Sikkim	85.1	95.8	99.1	99.4	87	96.4
Tripura	57.5	66.1	90.3	95.3	62	71.5
Uttarakhand	56.3	85.5	98	98.6	65.3	88.4
Union Territories						
Andaman & Nicobar Islands	72.3	84.5	97.2	98.5	80.4	89.1
Chandigarh	99.9	100	99.7	98.5	99.7	98.7
Dadra & Nagar Haveli	97.5	100	100	100	97.9	100
Daman & Diu	99.5	100	99.9	97.4	99.6	99.1
Lakshadweep	100	100	100	100	100	100
Puducherry	87.9	95.2	95.3	99.3	92.8	98.1
All India	53	66	91.6	96.1	63.9	75

Source: Computed from NSS 58th and 65th Rounds.

Table 7A.7 Distribution of Households with Electricity for Domestic Use, by Social Groups, 2002 and 2008–9 (*per cent*)

Non Special Category States	*Scheduled Castes*		*Scheduled Tribes*		*Other Backward Classes*		*Others*	
	2002	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*	*2002*	*2008–9*
Andhra Pradesh	62.4	72.1	75.6	91	82.2	92.8	92.2	97.5
Assam	18.9	34.5	26.4	48.8	37.2	60	31.9	44.3
Bihar	7.8	26.3	6.6	27.9	15.8	34.6	27	58.5
Chhattisgarh	37.9	72.6	63.8	89.1	65.5	90.3	84.4	95.2
Delhi	100	100	99.5	98.2	99.4	98.4	99.7	98.5
Goa	100	100	93.7	76.3	99.8	99.1	98.9	100
Gujarat	73.7	85.5	85.1	92.1	83.6	91.4	96.8	96.9
Haryana	100	100	80.9	89.8	87.7	96.2	94.3	97.7
Jharkhand	26.8	31.2	22.3	36.8	38	55.7	62.8	66
Karnataka	86.6	92.5	76.6	90.1	83.6	96	92.7	98.4
Kerala	72.8	68	68.3	87.7	77.8	95.4	85.8	95.3
Madhya Pradesh	53.6	67.2	71.5	85.7	77.1	87.8	92.1	95.9
Maharashtra	59.3	75.5	77.6	85.1	85.2	90.9	93.1	96
Orissa	18.8	21	23.3	44.9	41.3	62.6	63.7	77.6
Punjab	91.3	96.2	93.4	95.8	96.5	97.2	99.2	99
Rajasthan	30.8	46	49.1	63.6	54.3	73.5	78.1	92
Tamil Nadu	77.3	86	74.5	92.1	87.4	95.8	96.4	99.7
Uttar Pradesh	25	43.9	21.9	31.9	34.3	46.6	60.6	70.4
West Bengal	18.7	37.3	27.8	55	47.1	77.6	50.8	68.4
Special Category States								
Arunachal Pradesh	52.2	80.5	100	100	76	96.8	83.6	83.2
Himachal Pradesh	98.4	97.9	98.2	97.3	99.1	99.7	98.5	99
Jammu and Kashmir	63.1	96.4	94	98.2	100	93.9	98.9	96.3
Manipur	80.3	73.5	100	94.2	88.4	98.4	92.9	98.2
Meghalaya	60.8	74.6	72.7	31.2	85.7	88.8	72.6	89.6
Mizoram	85.9	90.1	100	98.6	86.4	61.5	87.7	92.6
Nagaland	96.1	99.2	56	99.6	96.3	100	90.8	100
Sikkim	88.2	96.6	82.3	95.8	86.8	95.7	87.3	99.7
Tripura	52.6	61.1	55.7	68.6	67	82.4	71	77.8
Uttarakhand	78.5	94.2	57.1	80.3	75.6	94.1	66.7	89.1
Union Territories								
Andaman & Nicobar Islands	79.7	97.1				93.4	80.4	86.6
Chandigarh	100	100	98.9	98.5	100	97.8	99.7	98.9
Dadra & Nagar Haveli	96.9	100	99.6	100	100	100	100	100
Daman & Diu	97.3	99.7	100	100	100	98.5	100	100
Lakshadweep	100	100	100		100	100	100	100
Puducherry	65.4	100	82.6	98.7	94.1	97.9	100	99.1
All India	47	61.2	52.2	66.4	62.7	75.3	76.7	84.3

Source: Computed from NSS 58th and 65th Rounds.

Table 7A.8 Distribution of Households with Electricity for Domestic Use, by Major Religious Communities, 2008–9 (*per cent*)

Non Special Category States	*Hindus*	*Muslims*	*Christians*	*Sikhs*
Andhra Pradesh	92	96.6	93	100
Assam	54.8	27.1	34.9	100
Bihar	38.1	38.2	46.5	34.2
Chhattisgarh	83.7	92	91.3	100
Delhi	98.8	94	100	100
Goa	97.5	100	99.9	100
Gujarat	91.7	95.1	90.6	100
Haryana	95	91.1	100	98.1
Jharkhand	50.2	49.6	46.6	100
Karnataka	95.1	98	99.1	100
Kerala	92.9	97.3	94.1	
Madhya Pradesh	84.1	92.9	83.5	100
Maharashtra	91.2	95.8	99.5	100
Orissa	52.5	68.1	23.6	100
Punjab	98.3	84.9	96.7	97.5
Rajasthan	71.9	79.1	78.2	78.6
Tamil Nadu	94.6	99.4	98.8	
Uttar Pradesh	45.7	56.5	96.5	55.7
West Bengal	70	47.9	61	88.5
Special Category States				
Arunachal Pradesh	85.3	83.6	78.1	
Himachal Pradesh	98.6	98.7	100	100
Jammu & Kashmir	99.4	94.4	100	91.9
Manipur	98.2	99.2	73	76.6
Meghalaya	90.6	78.3	73.8	100
Mizoram	62.4	100	96.2	100
Nagaland	99.8	100	99.2	100
Sikkim	95.5	98.6	98.6	
Tripura	72.9	60.4	63.1	
Uttarakhand	87.3	96.5	100	100
Union Territories				
Andaman & Nicobar Islands	87.2	98	92.9	76.8
Chandigarh	99	90.8	100	100
Dadra & Nagar Haveli	100	100	100	
Daman & Diu	99	100	100	100
Lakshadweep	100	100	100	
Puducherry	98.3	100	95.1	
All India	75.2	67.5	86.2	96

Source: Computed from 65th Round.

Table 7A.9 Distribution of Households with Access to Telephone (*per cent*)

Non Special Category	*Rural*		*Urban*		*Combined*	
States/Cities	*Mar–2008*	*Dec–2010*	*Mar–2008*	*Dec–2010*	*Mar–2008*	*Dec–2010*
Andhra Pradesh	10.4	31.3	75	172	28.3	
Assam	4.4	22.2	76.3	114.1	14.7	
Bihar	3.3	25.8	92	256.5	12.6	
Chennai	—	—	—	—	103.9	
Chhattisgarh	1.4	2.7	14.9	16.8	4.4	
Delhi	—	—	—	—	110.1	
Gujarat	16.4	43.7	60.1	124.2	33.6	
Haryana	17.2	47.6	58.2	136.8	30.4	
Jharkhand	1.2	2.3	11.7	18.1	3.6	
Karnataka	11.5	32.3	75	166.8	34.5	
Kerala	26.2	51.3	100.8	228.9	45.3	
Kolkata	—	—	—	—	64.2	
Madhya Pradesh	5.3	26.6	60.2	138.9	20.3	
Maharashtra	12.6	41.9	57	105.8	27.4	
Mumbai	—	—	—	—	83.5	
Orissa	7.1	26.8	55.6	179.2	15	
Punjab	25.1	53.3	82.8	162.1	47.9	
Rajasthan	12.7	36.7	59.1	144	23.7	
Tamil Nadu	15.8	46	58.6	145.9	35.1	
Uttar Pradesh	6.3	24.8	52.2	139.3	16.2	
West Bengal	7.4	32.6	57.4	141.1	14.4	
Special Category States						
Himachal Pradesh	30.8	69.7	127.8	388.8	41.2	
Jammu & Kashmir	7.9	28	61.2	97.5	21.8	
North-East—1	7.2	47.2	93.5	184.7	27.7	
North-East—2	3.3	7.3	28.4	38.3	9.1	
All India	9.5	31.2	66.4	147.5	26.2	

Source: Annual Report 2010–11 and 2008–9, Ministry of Telecommunications, Government of India.
Note: — Not available.

Table 7A.10 Coverage of Mobiles (Rural), March 2008

Non Special Category States	*Per Cent Rural Coverage*
Andhra Pradesh	73
Assam	40
Bihar including Jharkhand	70
Delhi	100
Gujarat	65
Haryana	100
Karnataka	91
Kerala including Lakshadweep	100
Madhya Pradesh including Chhattisgarh	33
Maharashtra	40
Orissa	59
Punjab	88
Rajasthan	68
Tamil Nadu including Puducherry	100
Uttar Pradesh including Uttarakhand	99
West Bengal including Andaman & Nicobar Islands	93
Special Category States	
Himachal Pradesh	48
Jammu & Kashmir	47
North East	17
All India	69

Source: TRAI (2008).

Table 7A.11 Road Length per 100 Square Kilometres and Per Million Population, March 2004

Non Special Category States	*Road Length*	
	Per 100 Sq. Kms of Area	*Per Million of Population*
Andhra Pradesh	74.9	27.1
Assam	246	72.4
Bihar	78.4	8.9
Chhattisgarh	54.7	35.5
Delhi	2010.3	21.5
Goa	276.6	76
Gujarat	73.3	28.4
Haryana	64.9	13.6
Jharkhand	14.8	4.4
Karnataka	104.3	37.9
Kerala	368.7	45
Madhya Pradesh	53.6	27.4
Maharashtra	88.6	28.2
Mizoram	23.2	55.1
Nagaland	124.5	103.8
Orissa	137.3	58.1
Punjab	90.9	18.8
Rajasthan	42.3	25.6
Tamil Nadu	131.3	27.4
Uttar Pradesh	101.5	14.7
West Bengal	101.1	11.2
Special Category States		
Arunachal Pradesh	18.8	143.1
Himachal Pradesh	58.5	53.6
Jammu & Kashmir	9.5	20.8
Manipur	56.4	54.9
Meghalaya	43.3	48.1
Sikkim	29.1	38.1
Tripura	227.5	74.6
Uttarakhand	108.6	68.4
Union Territories	18	41.6
Andaman & Nicobar Islands	143.6	18.2
Chandigarh	128.7	28.7
Dadra & Nagar Haveli	283.9	20.1
Lakshadweep	500	26.2
Puducherry	542.8	26.7
All India	81.2	26

Source: Transport Research Wing, Ministry of Road Transport & Highways.
Note: + Excludes Road Constructed under the JRY and PMGSY.

Table 8A.1 Percentage of Working Children (age 5 to 14), by Gender, 1993–4, 2004–5, and 2007–8

Non Special Category States	*1993–4*			*2004–5*			*2007–8*
	Boys	*Girls*	*Children*	*Boys*	*Girls*	*Children*	*Children*
Andhra Pradesh	14.5	14.9	14.7	6.1	7.1	6.6	4.1
Assam	3.2	2.1	2.7	2.6	1.0	1.8	1.5
Bihar	4.2	2.1	3.3	2.0	0.6	1.4	1.4
Chhattisgarh	—	—	—	3.5	5.6	4.6	2.4
Delhi	1.2	0.2	0.8	0.3	0.2	0.3	0.5
Goa	0.0	3.0	1.5	4.2	1.2	2.7	
Gujarat	3.2	3.6	3.4	2.7	2.3	2.5	2.6
Haryana	2.4	2.6	2.5	1.4	2.0	1.7	1.1
Jharkhand	—	—	—	2.3	2.7	2.5	1.4
Karnataka	11.4	10.4	10.9	4.4	5.0	4.7	2.6
Kerala	0.7	0.8	0.7	0.3	0.1	0.2	0.3
Madhya Pradesh	7.7	5.6	6.8	2.4	3.3	2.8	1.9
Maharashtra	4.4	5.3	4.8	3.2	3.7	3.4	1.7
Orissa	7.7	6.0	6.8	5.2	4.5	4.9	3.4
Punjab	3.4	1.2	2.4	2.2	1.1	1.7	1.5
Rajasthan	8.0	16.7	12.0	3.8	6.0	4.9	4.0
Tamil Nadu	7.3	10.0	8.6	1.2	1.9	1.5	0.9
Uttar Pradesh	5.6	3.5	4.6	4.4	3.3	3.9	2.8
West Bengal	5.4	3.9	4.7	3.8	3.1	3.5	3.3
Special Category States							
Arunachal Pradesh	1.8	1.2	1.5	—	—	—	—
Himachal Pradesh	13.0	12.9	13.4	2.0	3.5	2.7	2.0
Jammu & Kashmir	—	—	—	—	—	—	1.0
Manipur	0.4	0.6	0.5	—	—	—	—
Meghalaya	2.8	2.5	2.7	—	—	—	—
Mizoram	2.4	1.5	2.1	—	—	—	—
Nagaland	1.7	1.5	1.6	—	—	—	—
Sikkim	0.7	0.6	0.7	—	—	—	—
Tripura	1.8	1.3	1.6	—	—	—	—
Uttarakhand	—	—	—	3.3	1.9	2.6	2.1
Union Territories							
Andaman & Nicobar Islands	8.9	4.4	6.6	—	—	—	—
Chandigarh	0.0	0.0	0.0	—	—	—	—
Dadra & Nagar Haveli	0.0	3.6	1.6	—	—	—	—
Daman & Diu	0.7	0.0	0.4	—	—	—	—
Lakshadweep	0.0	0.0	0.0	—	—	—	—
Puducherry	2.0	0.0	1.1	—	—	—	—
All India*	6.2	6.0	6.2	3.3	3.3	3.3	2.4

Source: Computed from NSS 50th and 61st unit level data.
Note: — Not available.

Table 8A.2 Percentage of Nowhere Children by Gender, 1993–4 and 2007–8

Non Special Category States	*1993–4*			*2007–8*
	Boys	*Girls*	*Children*	*Children*
Andhra Pradesh	12.8	26.5	19.7	5.7
Assam	20.3	24.4	22.1	10.1
Bihar	35.0	55.1	43.8	27.8
Chhattisgarh	—	—	—	12.2
Delhi	—	—	—	11.6
Goa	—	—	—	—
Gujarat	17.1	28.0	22.2	9.9
Haryana	16.6	26.3	21.2	10.9
Jharkhand	—	—	—	15.4
Karnataka	11.4	20.7	15.9	8.0
Kerala	6.0	5.5	5.8	2.9
Madhya Pradesh	24.8	41.8	32.6	13.1
Maharashtra	10.3	17.1	13.5	8.0
Orissa	23.5	37.8	30.4	13.6
Punjab	14.4	21.8	17.8	9.9
Rajasthan	20.6	43.3	30.8	17.0
Tamil Nadu	8.3	11.8	10.1	2.4
Uttar Pradesh	25.6	47.4	35.3	16.9
West Bengal	21.6	30.8	26.0	12.8
Special Category States				
Arunachal Pradesh	—	—	—	—
Himachal Pradesh	—	—	—	4.1
Jammu & Kashmir	—	—	—	7.2
Manipur	—	—	—	—
Meghalaya	—	—	—	—
Mizoram	—	—	—	—
Nagaland	—	—	—	—
Sikkim	—	—	—	—
Tripura	—	—	—	—
Uttarakhand	—	—	—	6.6
Union Territories				
Andaman & Nicobar Islands	—	—	—	—
Chandigarh	—	—	—	—
Dadra & Nagar Haveli	—	—	—	—
Daman & Diu	—	—	—	—
Lakshadweep	—	—	—	—
Puducherry	—	—	—	—
All India	19.8	32.3	25.6	13.0

Source: Computed from NSS 50th and 61st round unit level data.
Note: — Not available.

Table 8A.3 Percentage of Working Children (age 5 to 14), by Gender, (Rural), 1993–4 and 2004–5

Non Special Category States	*1993–4*			*2004–5*		
	Boys	*Girls*	*Children*	*Boys*	*Girls*	*Children*
Andhra Pradesh	17.0	18.3	17.6	7.1	8.6	7.8
Assam	3.2	1.8	2.6	2.7	0.9	1.9
Bihar	4.6	2.3	3.6	2.0	0.6	1.4
Chhattisgarh				3.4	6.2	4.8
Delhi	0.0	0.0	0.0	0.0	0.0	0.0
Goa	0.0	1.7	0.9	5.8	1.0	3.5
Gujarat	3.7	4.7	4.1	2.9	2.7	2.8
Haryana	2.2	3.1	2.6	1.6	2.5	2.0
Jharkhand				2.3	2.8	2.5
Karnataka	13.7	14.0	13.9	5.7	6.7	6.2
Kerala	0.6	1.0	0.8	0.3	0.0	0.2
Madhya Pradesh	9.7	6.8	8.4	2.6	3.8	3.1
Maharashtra	5.4	7.7	6.5	4.3	5.5	4.9
Orissa	8.4	6.5	7.5	5.6	5.0	5.3
Punjab	3.7	1.5	2.7	0.1	1.2	0.6
Rajasthan	9.7	20.4	14.6	3.6	7.3	5.4
Tamil Nadu	8.2	12.7	10.4	1.2	1.9	1.5
Uttar Pradesh	5.9	3.9	5.0	4.2	3.3	3.8
West Bengal	6.5	3.5	5.0	3.5	2.8	3.2
Special Category States						
Arunachal Pradesh	2.1	1.4	1.7	—	—	—
Himachal Pradesh	14.1	13.9	14.5	2.2	3.8	2.9
Jammu & Kashmir	5.2	5.9	5.5	—	—	—
Manipur	0.6	0.6	0.6	—	—	—
Meghalaya	3.3	3.0	3.3	—	—	—
Mizoram	4.1	2.9	3.7	—	—	—
Nagaland	2.0	1.8	1.9	—	—	—
Sikkim	0.7	0.7	0.7	—	—	—
Tripura	1.9	1.3	1.7	—	—	—
Uttarakhand				4.2	2.2	3.2
Union Territories						
Andaman & Nicobar Islands	11.9	6.0	8.9	—	—	—
Chandigarh	0.0	0.0	0.0	—	—	—
Dadra & Nagar Haveli	0.0	3.8	1.7	—	—	—
Daman & Diu	1.3	0.0	0.7	—	—	—
Lakshadweep	0.0	0.0	0.0	—	—	—
Puducherry	0.0	0.0	0.0	—	—	—
All India*	7.1	7.2	7.3	3.5	3.7	3.6

Source: Computed from NSS 50th and 61st unit level data.
Note: — Not available.

Table 8A.4 Percentage of Working Children (age 5 to 14), by Gender, (Urban), 1993–4 and 2004–5

Non Special Category States	*1993–4*			*2004–5*		
	Boys	*Girls*	*Children*	*Boys*	*Girls*	*Children*
Andhra Pradesh	7.7	5.8	6.8	3.2	2.9	3.3
Assam	2.9	4.7	3.8	0.9	1.1	1.0
Bihar	1.7	0.9	1.3	1.9	0.4	1.2
Chhattisgarh	—	—	—	4.6	1.2	2.9
Delhi	1.3	0.3	0.9	0.4	0.2	0.3
Goa	0.0	4.9	2.4	0.8	1.5	1.2
Gujarat	2.4	1.4	2.0	2.3	1.3	1.8
Haryana	3.2	1.3	2.4	1.0	0.6	0.9
Jharkhand	—	—	—	2.4	2.3	2.3
Karnataka	6.4	2.1	4.4	1.2	0.9	1.0
Kerala	0.9	0.3	0.6	0.3	0.3	0.3
Madhya Pradesh	1.3	1.6	1.5	1.6	1.6	1.6
Maharashtra	2.9	1.3	2.1	1.2	0.6	0.9
Orissa	3.1	2.5	2.8	2.2	1.3	1.7
Punjab	2.7	0.6	1.7	1.9	0.2	1.1
Rajasthan	2.6	4.1	3.2	4.3	2.0	3.1
Tamil Nadu	5.7	4.7	5.2	1.2	1.8	1.5
Uttar Pradesh	4.5	1.6	3.2	5.4	3.6	4.5
West Bengal	2.6	5.0	3.8	5.4	4.6	5.0
Special Category States						
Arunachal Pradesh	0.0	0.0	0.0	—	—	—
Himachal Pradesh	2.9	1.7	2.4	0	1.0	0.5
Jammu & Kashmir	1.4	0.5	1.1	—	—	—
Manipur	0.0	0.5	0.2	—	—	—
Meghalaya	0.5	0.3	0.4	—	—	—
Mizoram	0.4	0.0	0.2	—	—	—
Nagaland	0.7	0.0	0.4	—	—	—
Sikkim	0.8	0.0	0.4	—	—	—
Tripura	1.5	1.4	1.5	—	—	—
Uttarakhand	—	—	—	0.5	0.5	0.5
Union Territories						
Andaman & Nicobar Islands	0.8	0.1	0.4	—	—	—
Chandigarh	0.0	0.0	0.0	—	—	—
Dadra & Nagar Haveli	0.0	1.7	1.0	—	—	—
Daman & Diu	0.0	0.0	0.0	—	—	—
Lakshadweep	0.0	0.0	0.0	—	—	—
Puducherry	3.2	0.0	1.7	—	—	—
All India*	3.6	2.5	3.1	2.6	1.9	2.3

Source: Computed from NSS 50th and 61st round unit level data.
Note: — Not available.

Table 8A.5 Percentage of Working Children (age 5 to 14), by Social Groups, 2004–5

Non Special Category States	*Schedule Tribes*			*Schedule Castes*			*Other Backward Castes*			*Others*		
	Boys	*Girls*	*Children*	*Boys*	*Girls*	*Children*	*Boys*	*Girls*	*Children*	*Boys*	*Girls*	*Children*
Andhra Pradesh	9.6	11.2	10.1	6.6	3.7	5.6	5.6	7.3	6.2	5.6	3.3	4.9
Assam	5.0	0.7	2.9	1.8	0.9	1.5	0.5	0.8	0.7	2.5	0.3	1.2
Bihar	3.3	0.0	2.1	0.9	0.5	0.8	2.2	0.3	1.6	2.5	0.0	1.7
Chhattisgarh	5.7	0.4	1.0	3.2	0.1	0.5	2.1	1.6	1.7	1.5	4.7	3.0
Delhi	—	—	—	0.1	0.0	0.1	—	—	—	0.6	0.0	0.4
Goa	—	—	—	—	—	—	—	—	—	6.1	3.0	5.0
Gujarat	4.2	3.9	4.1	3.2	0.0	2.3	2.7	4.5	3.3	1.7	0.5	1.3
Haryana	—	—	—	2.7	3.3	2.9	0.6	0.9	0.7	1.3	2.5	1.7
Jharkhand	1.6	1.0	1.2	2.2	2.4	2.2	2.2	1.1	1.8	3.8	1.3	3.0
Karnataka	3.5	9.0	5.1	7.2	2.0	3.5	3.3	5.8	4.1	4.2	0.2	2.9
Kerala	—	—	—	1.2	0.0	0.9	0.3	0.0	0.2	—	—	—
Madhya Pradesh	3.5	7.9	4.8	2.2	0.9	1.4	2.2	1.5	2.0	1.7	0.0	1.2
Maharashtra	5.7	12.8	7.7	3.2	1.8	2.6	3.3	2.0	2.7	2.6	1.0	2.1
Orissa	11.4	5.6	8.0	3.6	4.1	3.8	3.8	2.0	3.1	1.0	0.4	0.6
Punjab	—	—	—	3.3	0.2	2.0	2.8	5.1	3.6	0.8	1.1	0.9
Rajasthan	6.2	13.0	8.7	5.1	5.7	5.3	3.3	3.9	3.6	1.4	1.4	1.4
Tamil Nadu	—	—	—	1.6	0.9	1.3	1.1	2.7	1.7	0.0	1.0	0.4
Uttar Pradesh	15.2	0.4	2.1	5.6	2.3	4.4	4.4	2.8	3.7	3.0	0.9	1.8
West Bengal	3.8	3.4	3.6	2.4	2.0	2.2	2.7	1.1	2.1	4.6	2.0	3.2
Special Category States												
Himachal Pradesh	2.9	8.0	4.7	1.4	2.2	1.8	1.5	0.4	1.1	2.4	5.0	3.3
Uttarakhand	7.8	0.0	1.0	3.6	0.6	2.4	7.2	2.8	5.7	1.5	1.8	1.6
All India*	5.4	2.7	3.8	3.7	1.7	2.8	3.1	2.6	2.9	2.8	1.1	2.0

Source: Derived for unit level data of NSSO, 2004–5.
Note: — Not available.

Table 8A.6 Percentage of Working Children (age 5 to 14), by Religious Communities, 2004–5

Non Special Category States	*Hindus*			*Muslims*			*Others*			*All*		
	Boys	*Girls*	*Children*	*Boys*	*Girls*	*Children*	*Boys*	*Girls*	*Children*	*Boys*	*Girls*	*Children*
Andhra Pradesh	5.3	7.0	6.1	6.2	4.5	5.4	5.1	3.6	4.4	5.4	6.7	6.0
Assam	1.8	0.7	1.3	3.6	1.2	2.5	0.0	0.2	0.1	2.4	0.8	1.7
Bihar	1.3	0.4	0.9	2.6	0.4	1.6	—	—	—	1.5	0.4	1.0
Chhattisgarh	3.5	4.0	3.8	1.9	2.0	2.0	—	—	—	3.4	3.9	3.6
Delhi	0.0	0.2	0.1	2.8	0.0	1.5	—	—	—	0.3	0.2	0.3
Goa	0.0	1.9	1.0	—	—	—	—	—	—	4.2	1.2	2.7
Gujarat	2.5	1.7	2.1	3.6	0.2	2.0	—	—	—	2.6	1.5	2.1
Haryana	1.3	0.1	0.8	0.2	0.0	0.1	0.8	1.0	0.9	1.3	0.1	0.7
Jharkhand	2.4	2.0	2.2	2.4	2.8	2.6	1.4	6.7	3.7	2.3	2.4	2.3
Karnataka	4.1	4.8	4.4	3.9	0.9	2.6	0.0	3.5	1.6	4.0	4.3	4.1
Kerala	0.2	6.5	3.1	0.0	0.9	0.5	0.1	0.0	0.1	0.2	3.5	1.7
Madhya Pradesh	2.1	2.8	2.4	2.5	1.3	2.0	0.0	3.1	1.4	2.1	2.7	2.4
Maharashtra	2.4	3.2	2.8	2.8	1.5	2.2	1.7	1.9	1.8	2.4	2.9	2.6
Orissa	4.6	3.3	4.0	2.6	0.0	1.5	0.1	5.2	2.2	4.4	3.3	3.9
Punjab	1.2	0.0	0.6	7.2	0.0	3.6	2.3	0.5	1.5	2.0	0.3	1.2
Rajasthan	3.3	4.7	4.0	5.6	1.3	3.6	4.6	0.0	1.9	3.5	4.3	3.9
Tamil Nadu	1.3	0.0	0.7	0.1	0.0	0.0	0.2	0.0	0.1	1.2	0.0	0.6
Uttar Pradesh	2.6	0.9	1.8	5.7	4.2	5.0	—	—	—	3.2	1.6	2.5
West Bengal	2.3	1.1	1.7	5.9	3.6	4.7	3.7	10.2	6.8	3.5	2.1	2.8
Special Category States												
Himachal Pradesh	0.3	1.1	0.7	—	—	—	12.0	1.0	7.2	0.8	1.5	1.1
Uttarakhand	1.9	0.4	1.1	6.6	0.2	3.6	0.0	1.8	1.2	2.3	0.4	1.4
All India*	2.6	2.4	2.5	4.3	2.6	3.5	1.8	1.5	1.6	2.8	2.4	2.6

Source: Derived from NSS 61st round unit level data.
Note: — Not available.

Table 8A.7 Sectoral Distribution of Child Labour, 2004–5 (*per cent*)

Non Special Category states	*Agriculture*	*Manufacturing*	*Construction*	*Trade Hotels & Restaurants*	*Community, Social and Personal Services*	*Others*	*Total*
Andhra Pradesh	69.0	9.7	3.2	9.0	7.1	2.0	100.0
Assam	69.3	8.4	1.8	7.8	11.0	1.8	100.0
Bihar	71.8	11.2	0.0	15.5	1.1	0.5	100.0
Chhattisgarh	87.9	2.4	0.9	7.2	1.7	0.0	100.0
Delhi	0.0	11.1	0.0	57.8	31.1	0.0	100.0
Gujarat	76.7	2.6	0.3	17.8	1.5	1.2	100.0
Haryana	65.6	3.8	7.0	8.1	15.5	0.0	100.0
Jharkhand	65.3	14.6	4.3	12.1	2.8	0.9	100.0
Karnataka	82.6	9.3	1.2	5.7	0.3	0.9	100.0
Kerala	19.2	32.8	0.0	32.0	16.1	0.0	100.0
Madhya Pradesh	82.9	9. 9	1.5	4.3	1.3	0.0	100.0
Maharashtra	82.6	5.3	1.9	5.8	4.1	0.3	100.0
Orissa	73.2	17.4	3.3	3.3	1.1	1.8	100.0
Punjab	67.9	12.7	1.2	7.2	8.4	2.6	100.0
Rajasthan	75.8	9.6	2.9	7.3	0.4	4.0	100.0
Tamil Nadu	39.5	44.6	5.9	5.7	2.7	1.7	100.0
Uttar Pradesh	61.2	25.3	0.4	9.7	2.1	1.2	100.0
West Bengal	34.6	43.9	3.3	9.7	6.6	2.0	100.0
Special Category States							
Himachal Pradesh	87.4	0.0	0.0	6.7	4.7	1.2	100.0
Uttarakhand	80.7	4.7	5.2	9.3	0.0	0	100.0
All India	68.1	16.6	2.0	8.5	3.4	1.5	100.0

Source: Derived from 61st Round NSS unit level data.

Table 8A.8 Percentage of Disability by Gender, 2002

Non Special Category States	*Rural*			*Urban*		
	Male	*Female*	*Person*	*Male*	*Female*	*Person*
Andhra Pradesh	2.0	1.8	1.9	1.5	1.3	1.4
Assam	1.1	0.9	1.0	1.2	1.0	1.1
Bihar	2.1	1.2	1.7	1.7	1.2	1.5
Chhattisgarh	2.0	1.6	1.8	2.0	1.7	1.9
Delhi	0.8	0.5	0.7	0.6	0.4	0.5
Goa	2.3	1.0	1.6	1.5	1.7	1.5
Gujarat	2.2	1.6	1.9	1.8	1.3	1.6
Haryana	2.3	1.5	1.9	1.5	1.2	1.4
Jharkhand	1.6	0.9	1.3	1.4	0.7	1.0
Karnataka	2.0	1.5	1.7	1.2	1.0	1.1
Kerala	2.5	2.0	2.2	2.6	2.1	2.3
Madhya Pradesh	2.0	1.5	1.7	1.7	1.2	1.5
Maharashtra	2.4	1.7	2.0	1.6	1.4	1.5
Orissa	2.7	2.4	2.5	2.0	1.7	1.8
Punjab	2.6	1.8	2.2	1.6	1.4	1.5
Rajasthan	1.8	1.2	1.5	1.6	1.0	1.3
Tamil Nadu	2.2	1.9	2.0	2.0	1.6	1.8
Uttar Pradesh	2.3	1.6	2.0	1.8	1.3	1.6
West Bengal	2.0	1.4	1.7	2.1	1.7	1.9
Special Category States						
Arunachal Pradesh	1.9	1.5	1.7	0.1	0.0	0.1
Himachal Pradesh	3.3	2.1	2.7	1.6	1.0	1.3
Jammu & Kashmir	2.1	1.2	1.6	1.4	1.1	1.3
Manipur	1.1	0.8	1.0	1.1	0.9	1.0
Meghalaya	1.9	1.4	1.6	1.1	0.7	0.9
Mizoram	0.9	0.8	0.8	0.8	0.6	0.7
Nagaland	0.9	0.9	0.9	0.6	0.8	0.7
Sikkim	1.9	1.6	1.7	0.7	0.5	0.6
Tripura	0.7	0.7	0.7	1.2	1.1	1.1
Uttarakhand	2.2	1.9	2.1	1.2	0.7	0.9
Union Territories						
Andaman & Nicobar Islands	2.3	1.1	1.7	1.3	0.6	1.0
Chandigarh	0.9	0.7	0.8	0.6	0.5	0.6
Dadra & Nagar Haveli	1.0	0.7	0.9	0.8	0.6	0.7
Daman & Diu	0.6	1.4	0.9	1.5	1.2	1.4
Lakshadweep	2.8	2.0	2.3	2.6	2.6	2.6
Puducherry	1.8	1.8	1.8	2.3	2.6	2.4
All India*	2.1	1.6	1.8	1.7	1.3	1.5

Source: NSS 58th Round, Report on Disabled Persons in India, December, 2003.

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IHDR ERRATA

Page No.	Col.	Para	Line	Error	Correction
5	1	2	7	320	302
17	1	2	4	0.512	0.519
25	1	1	5	HDI increases by more than 10 percentage points	the increase in HDI (21%) rises by additional 10 percentage points
25	1	2	2		delete Assam
97	Table 3.1	Source			Source: NSS, Report Nos. 409, 515, and Calculated from NSS 66th Round (Employment and Unemployment Survey).
101	2	3	1	2004–5	2009-10
102	1	2	2	both rural	rural
102	1	2	2	urban	STs in urban
119	Box 3.3	4	1	(Abhijit Sen 2000)	Abhijit Sen
126	1	3	4		delete adult
126	1	3	5	10	17
145	1	1	3	>	<
152	1		11	1.3	2.8
152	Table 5.3	last row, last three values	(for 2002 -6)	61.3, 63.0, 62.2	62.6, 64.2, 63.5
156	Table 5.4	First two rows, third column	(for 2005 -6)	2.65, 3.09	2.59, 3.40
171	1	4	4		Delete Tamil Nadu
171	2		11		One third Muslims and SCs and two thirds of ST households lack toilets
211	1	3	2	Madhya Pradesh	Uttar Pradesh
218	1	1	8		Delete Uttarakhand
333	Table 5A.49	Title			Delete 2002
387	Table 7A.4a				Inter change Scheduled Castes and Scheduled Tribes
391	Table 7A.7				Inter change Scheduled Castes and Scheduled Tribes