

Tripura Human Development Report 2007

PUBLISHED BY

Government of Tripura

All rights reserved

PHOTO CREDITS

V.K. Ramachandran: pages 1, 2 (all except the middle photo), 31, 32, 34, 41, 67 (bottom photo), 68 (left photo), 69, 112 (bottom photo), 124 (bottom photo), 128.

Government of Tripura: pages 2 (middle photo), 67 (top photo), 68 (right photo), 72, 76, 77, 79, 89, 97, 112 (top photo), 124 (top left and top right photos).

COVER DESIGN

Alpana Khare

DESIGN AND PRINT PRODUCTION

Tulika Print Communication Services, New Delhi



August 27, 2007

MESSAGE

Tripura is a small State of North Eastern Region, bounded by Bangladesh on three sides. Post-independence, the State has been placed in a highly disadvantaged position. Geographical isolation, lack of adequate physical infrastructure such as railway line, road net-work, availability of power etc. have been major constraints in development of the State. Due to historical reasons, sizable population of the State is living below the poverty line. Notwithstanding these handicaps, the Government has been trying its best to ensure rapid socio-economic development of the State.

As a result of the sincere efforts of the government over a period of time there has been improvement in the economic growth of the State and living conditions of the people. The State has made progress in the area of literacy and is amongst the top achievers. Various schemes for employment generation as well as beneficiary oriented poverty alleviation programme with active involvement of the Panchayati Raj Institutions has brought about economic development. On the health sector physical infrastructure has been expanded alongwith manpower. New initiatives like formation of Self Help Groups particularly with women members have been taken to tackle the problem of poverty. These are some of the important steps, which have raised hopes and aspirations amongst the people for providing better quality of life.

However, much more needs to be done by utilizing the available physical, human and economic resources in the State to further improve the quality of life particularly of those living below the poverty line. There is dearth of basic physical infrastructure like good roads, railway network, air communication, reliable tele-communications; infrastructure development in social sectors like health, education, sanitation etc. has also lagged behind. Several initiatives have been taken by the Government to overcome these bottlenecks and high priority has been given for rapid development of the system as a whole with

Continuation sheet

special emphasis on agriculture, communications, power, education, health and security. Unemployment and under-employment are chronic problems and specific attention has been given for creating and expanding employment opportunities for the unemployed youths.

In this context the importance of human resources need not be further emphasized. This is a very critical factor which needs to be properly utilized and exploited so that it can yield the desired output for the growth of the State. For a proper assessment of the potential of the human resources it is necessary that there should be a stock taking of what has been achieved so far in the State, what are the strengths and weaknesses in the prevailing situation and what are the steps which can shape the way forward. An attempt has been made to put all these issues at one place in the Tripura Human Development Report which has been prepared with the active help of the Planning Commission and the United Nations Development Programme. It is a comprehensive report that has documented the state of human development, listed indicators of human development, examined various socio-economic indicators of growth, attempted to identify institutional strengths as well as constraints and has indicated a way forward. I am hopeful that the report will provide valuable inputs and would be helpful in reorienting our strategy towards the goal of ensuring faster economic development.

I would like to thank officials of the Foundation for Agrarian Studies, Kolkata, who have undertaken this work as well as officers concerned of the State Government, Planning Commission and UNDP for their help in bringing about this report.

(Manik Sarkar) Chief Minister

ACKNOWLEDGEMENTS

This *Report* is the outcome of active collaboration among Departments of the Government of Tripura, independent academics and researchers, and staff and scholars of the Foundation for Agrarian Studies. The nodal agency on the official side was the Department of Planning and Coordination of the Government of Tripura, and successive Directors of the Department – A. Guha, S.K. Choudhury, R. Sarwal and Jagdish Singh – have played a pivotal role in coordinating the work of this *Report*. S.K. Panda, Principal Secretary, took an active personal interest in the preparation of the *Report*. The Staff of the Department, and M. Debbarma in particular, have worked hard to collect data, organize workshops and help in the preparation of the *Report*.

The process of planning, researching and writing this *Report* has taken over two years, and I have accumulated many debts on the way. The entire process was guided by the Steering Committee under the Chairmanship of the Chief Secretary. The members of the Steering Committee inclu-ded a representative each from the Planning Commission and UNDP, New Delhi; the Vice-Chancellor, Tripura University; Professor Abhijit Sen, Jawaharlal Nehru University, New Delhi and Professor V. K. Ramachandran, Indian Statistical Institute, Kolkata; Commissioners of Planning & Coordination, Health, Education, Social Welfare & Social Education and Rural Development of the Government of Tripura; and Directors of the State Insti-tute of Public Administration and Rural Development (SIPARD) and Planning Department.

All Departments of the Government of Tripura and the TTAADC cooperated in the provision of data. Special mention must be made of the Directorate of Economics and Statistics, and A. K Chanda, Joint Director, for providing data for the *Report*.

The Foundation for Agrarian Studies set up a core group comprising Mita Choudhury, Malabika Dasgupta, V.K. Ramachandran, Vikas Rawal and Madhura Swaminathan to provide guidance on the academic inputs to the *Report*.

The bulk of this *Report* is based on the background papers written by Venkatesh Athreya, Indira Chakravarty, Mahadev Chakravarti, Pallavi Chavan, Mita Choudhury, Jayanta Choudhury, Malabika Dasgupta, Samir Guha Roy, Himanshu, Archana Prasad, Vikas Rawal, Minakshi Sen

ACKNOWLEDGEMENTS

Bandyopadhyay and Amitabha Sinha. The papers are listed in the Bibliography. Mita Choudhury's efforts were crucial in the preparation of the Statistical Appendix. Vikas Rawal was responsible for created the block level digitized maps of selected indicators. Case studies were undertaken by students of the Department of Economics, Tripura University. Guddi Tiwari provided research assistance.

The Foundation for Agrarian Studies conducted a field survey for the *Report* that was designed and supervised by V.K. Ramachandran, V. Surjit and Aparajita Bakshi. The other contributors to the survey efforts are listed elsewhere.

Participants in workshops held in Agartala, Udaipur, Ambassa and Kailashahar made important comments on early drafts of the background papers and the *Report*. Seeta Prabhu gave advice and encouragement at various stages of the preparation of this *Report*. Jayati Ghosh and K. Nagaraj commented on the first draft of the *Report*.

A.K. Shiva Kumar gave me excellent advice on the content and organization of the *Report*. I thank Venkatesh Athreya for his careful reading of the draft *Report*. Mahadev Chakravarti has shared his knowledge of Tripura society and history with me. V.K. Ramachandran contributed significantly to this *Report* from the early planning to the final writing and editing.

The team at Tulika Print Communication Services has worked in record time to prepare this publication. Kalyani Ramachandran selected the colour scheme, and she and Madhav gave me much support.

Lastly, I record my gratitude to the Indian Statistical Institute, my home institution.

MADHURA SWAMINATHAN Principal Resource Person and Editor

vi ACKNOWLEDGEMENTS

CONTENTS

	Mes	sage from the Chief Minister of Tripura	iii
	Ack	nowledgements	v
ı		State of Human Development	1
		The State and Its People	3
		Components of Human Development	10
		Human Development Index (HDI) for Tripura	24
	1.4	Concluding Remarks	29
2		Economy	33
		Economic Structure	33
		Forest-based Livelihoods	36
		Infrastructure	43
	2.4	Work and Unemployment	50
	2.5	Income and Asset Poverty	58
	2.6	Summary	66
3	Edu	cation, Health, Nutrition	73
	3.1	Education	73
	3.2	Health	85
	3.3	Nutrition and Food Security	92
	3.4	Housing, Sanitation and Drinking Water	99
	3.5	Summary	101
4	Pro	moting Human Security	103
	4.1	Human Security and Human Development	103
	4.2	The Breeding Ground for Divisive Political Movements	104
	4.3	The Impact of Insurgency on Society and People's Lives	108
	4.4	Fighting Insurgency	111
	4.5	Summary	115
5	Den	nocratic Decentralization	117
	5.1	Role of Decentralized Institutions	117
	5.2	Panchayati Raj Institutions	117

CONTENTS

	5.3 Urban Local Bodies	120
	5.4 Tripura Tribal Areas Autonomous District Council	121
	5.5 Political Participation of Women	122
	5.6 Special Initiatives	125
	5.7 Concluding Remarks	126
6	Financial Constraints & Expenditure Patterns	129
	6.1 Financial Constraints	129
	6.2 Social Sector Spending	131
	6.3 Summary	136
7	The Way Forward	137
	7.1 Strengths and Achievements	137
	7.2 Challenges and Problems	138
	7.3 Priorities for Planning	140
	Glossary and Abbreviations	142
	Bibliography	143
	Annexures	145
	Annexure 1: Estimation of District Domestic Product (DDP) Annexure 2: Calculation of the Human Development Inde	145 ex
	(HDI) and Gender-related Development Index (GDI) Annexure 3: List of Blocks Wholly in the Autonomous District	146 ct
	Council Annexure 4: Estimation of Birth Rates by Reverse Surviva	147
	Method	147
	Annexure 5: Estimation of Mortality Rates by Indirect Method	
	Annexure 6: Issues in School Education	150
	Annexure 7: Border Fencing	154
	Annexure 8: Public Expenditure Ratios	154
	Statistical Appendix	156
	Population: Tables P1–P12	156
	Education: Tables E1–E18	162
	Health and Nutrition: Tables H1-H14	170
	Labour Force: Tables L1-L20	175
	Economy and Infrastructure: Tables E&I 1 - E&I 26	184
	Living Conditions: Tables LC1-LC10	196
	Financial Resources: Tables F1-F9	202
	Political Participation and Violence: Tables O1-O7	206

viii CONTENTS



Tables

Chapter 1: The State of Human Development	
Table 1.1: Area and population of Tripura, by district, 2001	5
Table 1.2: Share of rural and urban populations and population of Scheduled Castes (SCs) and Scheduled Tribes (STs) in total population	
of Tripura, by district, 2001	6
Table 1.3: Population of Scheduled Tribes (STs) by rural–urban location, Tripura, by district, 2001	6
Table 1.4: Area, population, sex ratio, density and share of Scheduled Tribes (STs) in Tripura, North East and India, 2001	8
Table 1.5: Population growth rate, density and sex ratio in Tripura, by district, 1991 and 2001	9
Table 1.6: Proportionate broad age-group structure of population by sex, Tripura, by district, 2001	11
Table 1.7: Literacy rates for persons aged 7 and above by sex and location in Tripura by district, North East and India, 2001	12
Table 1.8: Gap in literacy rates across social groups, Tripura, North East and India, 1991 and 2001	15
Table 1.9: Children attending school, Tripura, North East and India, 1991	16
Table 1.10: Children attending school, Tripura, North East and India,	
2001	16
Table 1.11: Expectation of life at birth by sex in Tripura, by district, 1991 and 2001	17
Table 1.12: Child sex ratio, Tripura by district and India, 1991 and 2001	18
Table 1.13: Compound annual growth rate of NSDP at factor cost, Tripura, 1980–81 to 2002–03	21
Table 1.14: Compound annual growth rate of per capita NSDP at factor cost, Tripura, 1980–81 to 2002–03	21
Table 1.15: Absolute level of per capita income at current prices, Tripura,	
by district, 1993–94 to 2001–02	22
Table 1.16: Ranking of per capita income across districts of Tripura,	
1993–94 to 2001–02	22
Table 1.17: Rate of growth of SDP/DDP of Tripura and districts at factor	
cost (constant prices at 1993-94 series)	23
Table 1.18: Rate of growth of per capita DDP of Tripura and districts at	2.3

CONTENTS

Table 1.19: Share of different sectors in NSDP of Tripura and National Income of India, 1980–81, 1990–91 and 2002–03	23
Table 1.20: Human Development Index (HDI) of Tripura and districts,	23
2001	25
Table 1.21: Gender-related Development Index (GDI) of Tripura and districts, 2001	25
Table 1.22: Human Development Index (HDI) of North Eastern States and India, 2001	28
Table 1.23: Gender-related Development Index (GDI) of North Eastern States and India, 2001	28
Table 1.24: Human Development Index (HDI) of Tripura, by district, 1991 and 2001	29
Table 1.25: Gender-related Development Index (GDI) of Tripura, by district, 1991 and 2001	29
Chapter 2: The Economy	
Table 2.1: Land-use classification in Tripura, by district, 2004–05 Table 2.2: Number of registered factories with number of workers employed, Tripura and districts, as of March 2005	33
Table 2.3: Enterprises and workers as per the Economic Census, Tripura and districts, 1998 and 2005	36
Table 2.4: Number of households and persons dependent on <i>jhum</i> , Tripura, 1968 to 2007	37
Table 2.5: Number of families resettled under various schemes, 1986–87 to 2004–05	39
Table 2.6: Road length by type of road, Tripura, 2004-05	45
Table 2.7: Telecommunication facilities, Tripura and districts, 2003-04	45
Table 2.8: District-wise energy consumption, 1999–2000 to 2004–05 Table 2.9: Share of different uses in total power sold to ultimate consumers, 2005–06	46 46
Table 2.10: Credit-deposit ratio, Tripura, North East and India, 1961–2003	49
Table 2.11: Work participation rate, all persons and Scheduled Tribe (ST) persons, Tripura, North East and India, 2001	51
Table 2.12: Descriptive statistics on work participation rate in Tripura, 2001	51
Table 2.13: Work participation rate by religious community and sex, Tripura and India, 2001	53
Table 2.14: Number of persons usually employed in the principal status as well as subsidiary status per 1000 persons for Tripura, North East and India, 1993–94 and 1999–2000	53
Table 2.15: Descriptive statistics on percentage share of workers classified by four-fold classification, female main workers, Tripura, rural, 2001	54
Table 2.16: Descriptive statistics on percentage share of workers classified	
by four-fold classification, male main workers, Tripura, rural, 2001	54
Table 2.17: Summary table on block-level occupational structure, Tripura, 2001	54
Table 2.18: Head count ratio of poverty, Tripura, rural and urban, 1983 to 1999–2000	59

x CONTENTS

Chapter 3: Education, Health, Nutrition	
Table 3.1: Enrolment rates by age group and district, 2005-06	78
Table 3.2: Drop-out rates among primary and upper primary school	
children	79
Table 3.3: Total fertility rates (TFR), crude birth rates (CBR), crude death	
rates (CDR), natural growth rates (NGR) and maternal mortality rates	
(MMR)	85
Table 3.4: Infant and child mortality in Tripura	85
Table 3.5: Estimated infant mortality rates by district and sex, 2001	86
Table 3.6: Index of ageing and dependency ratio in Tripura, by district	
and sex, 2001	86
Table 3.7: Distribution of disabled persons by type of disability, 2001	87
Table 3.8: Morbidity profile of selected diseases	87
Table 3.9: Immunization coverage, Tripura and districts, 1998–99	89
Table 3.10: Public health institutions, Tripura, by district, as of April	
2007	90
Table 3.11: Health-care services received by source, location and standard	0.0
of living (percentage of households), 1998–99	90
Table 3.12: Food group-wise mean intake per adult consumption unit as a	
percentage of the Recommended Daily allowance (RDA), Tripura and	0.2
selected villages	92
Table 3.13: Percentage distribution of families according to various levels	0.2
of energy and protein intake	93
Table 3.14: Mean intake profile of nutrients in Tripura (intake as per cent of Recommended Daily Allowance)	93
Table 3.15: Nutritional anthropometry of children below 3 years of age	94
Table 3.16: Anaemia prevalence among young children (6–35 months)	94
Table 3.17: Anaemia prevalence among ever-married women (15–49 years)	95
Table 3.18: Number and type of ration cards, Tripura, 2005	97
Table 3.19: Offtake of rice per person from the PDS, Tripura, 2005	97
Table 3.20: Sanitation, fuel and drinking water facilities in households,	21
Tripura and India	99
Table 3.21: Selected housing facilities in rural area of Tripura	100
Table 3.21. Selected floating facilities in ratar area of Tripara	100
Chapter 5: Democratic Decentralization	
Table 5.1: Panchayati Raj Institutions and elected representatives, 2004	118
Table 5.2: Elected representatives in Gram Panchayats, Panchayat Samitis	
and Zilla Parishads, 1994, 1999 and 2004	123
Table 5.3: Elected chairpersons in Gram Panchayats, Panchayat Samitis	
and Zilla Parishads in Tripura, 1994, 1999 and 2004	123
Table 5.4: Women in the executive hierarchy	123
Table 5.5: Voters as percentage of electorate, Tripura and India, Lok	
Sabha elections	125
Table 5.6: Voters as percentage of electorate, Tripura Assembly elections	125
Chapter 6: Financial Constraints & Expenditure Patterns	
Table 6.1: Per capita central transfers to Tripura and other North Eastern	
States, 2002–03	130
Table 6.2: Per capita expenditure on social sector and its components in	4.5.5
Tripura, 1993–94 and 2002–03	135

CONTENTS xi

52

CONTENTS xii

Figure 2.6: Work participation rate of urban females in Tripura, by dis-	
trict, 2001	52
Figure 2.7: Percentage of households owning none of the specified assets,	
Tripura, 2001	65
Figure 2.8: Percentage of households owning the specified assets in rural	
and urban areas, Tripura, 2001	65
Chapter 3: Education, Health, Nutrition	
Figure 3.1: Proportion of boys and girls attending school, by single years	
of age, Tripura, 1991 and 2001	78
Figure 3.2: Infant deaths per 1,000 live births, districts, Tripura, 2001	85
Figure 3.3: Mean age at marriage of women in Tripura	88
Figure 3.4: Mean intake per adult consumption unit as a percentage of	
the Recommended Daily Allowance	92
Figure 3.5: Proportion of house with temporary structure, district-wise,	
2001	100
Figure 3.6: Percentage of houses with no latrine, Tripura, 2001	100
Figure 3.7: Percentage of houses dependent on open sources of drinking	
water, Tripura, 2001	101
water, Impara, 2001	101
Chapter 6: Financial Constraints & Expenditure Patterns	
Figure 6.1: Fiscal deficit and central transfers as a percentage of GSDP,	129
Tripura, 1993–94 to 2001–02	12)
Figure 6.2: Trends in Public Expenditure Ratio, Social Allociation Ratio,	
Social Priority Ratio and Human Expenditure Ratio, Tripura, 1993–94 to 2002–03	132
	132
Figure 6.3: Ratio of fiscal deficit to GSDP in Tripura, 1993–94 to 2001–	122
02	133
Figure 6.4: Ratio of debt to GSDP in Tripura, 1994–95 to 2001–02	133
Figure 6.5: Per capita expenditures on social sectors, by State, 2002–03	121
(in Rs)	134
Figure 6.6: Composition of expenditure on general education, Tripura,	
1993–94 and 2002–03	134
Figure 6.7: Expenditure on elementary and secondary education, Tripura,	
1993–94 to 2002–03	135
Statistical Appendix	
Figure: Population of children aged 6-10 per primary school teacher,	
block-wise, Tripura, 2001/2002	169
Figure: Real wages in agriculture, Tripura	191
Boxes	
Chapter 1: The State of Human Development	
Box 1.1: Formation of the State of Tripura	3
Box 1.2: Geographical Features of the State	4
Box 1.3: Data Sources and Methodology	5
Box 1.4: Administrative Structure	8
Box 1.5: Method of Retabulation of Census Data	8
Box 1.6: Tribal Diversity of Tripura	10

CONTENTS xiii

Chapter 2: The Economy	
Box 2.1: The Abhanga Rubber Plantation	40
Box 2.2: Jiban Deep JFM, Melaghar Forest Range	42
Box 2.3: The Scheduled Tribes and Other Traditional Forest Dwellers Act	43
Box 2.4: Agricultural Wages	55
Box 2.5: Public Programmes for Employment Generation	56
Box 2.6: Survey in Selected Villages of Tripura, 2005	60
Box 2.7: Household Land Holdings in the Survey Villages	61
Box 2.8: Homestead Land	63
Box 2.9: Land Reforms	64
Box 2.10: Household Assets in Three Villages	68
Chapter 3: Education, Health, Nutrition	
Box 3.1: Disparities in Literacy Achievements	74
Box 3.2: Jana Siksha Andolan (People's Education Movement)	75
Box 3.3: School Enrolment	80
Box 3.4: Teacher Adequacy	84
Box 3.5: Two-Village Survey on Health and Nutrition	88
Box 3.6: Malnutrition among Children in Two Villages	95
Box 3.7: Iodisation of Salt	96
Box 3.8: Public Distribution System	98
Box 3.9: Rural Pollution	101
Box 3.10: Total Sanitation Campaign	102
Chapter 4: Promoting Human Security	
Box 4.1: Immigration of Early Bengali Settlers	104
Box 4.2: Women's Fight against Terrorism in Tripura	110
Box 4.3: Story of Displacement	111
Box 4.4: Fighting Terrorism the UN Way	113
Box 4.5: Surrender of Extremists	113
Box 4.6: Community Resistance	115
Chapter 5: Democratic Decentralization	
Box 5.1: Political Parties in Government	117
Box 5.2: Origins of Village Self-Governance	118
Box 5.3: Devolution of Functions to Local Bodies, 1994	119
Box 5.4: Tripura Tribal Areas Autonomous District Council (TTAADC)	121
Box 5.5: Structure and Powers of the TTAADC	122
Box 5.6: Nine Point Programme	126
Box 5.7: Pradhans and Upapradhans in Gram Panchayats	127
Chapter 6: Financial Constraints & Expenditure Patterns	
Box 6.1: Awards by Tenth and Eleventh Finance Commissions	130
Box 6.2: Implications of the Twelfth Finance Commission Award	131

xiv CONTENTS

Maps

Chapter 1: The State of Human Development	
Map 1.1: Map of Tripura	3
Map 1.2: Share of Scheduled Tribes (STs) and Scheduled Castes (SCs) in	
population, Tripura, 2001	7
Map 1.3: Male and female literacy in Tripura, by rural block, 2001	14
Map 1.4: Sex ratio among all persons and among Scheduled Tribe (ST)	
persons	19
Map 1.5: Child sex ratio	20
Map 1.6: Human Development Index (HDI) of Tripura, by district, 2001	26
Map 1.7: Gender-related Development Index (GDI) of Tripura, by dis-	
trict, 2001	27
Chapter 2: The Economy	
Map 2.1: Availability of electricity by rural block, 2001	47
Chapter 3: Education, Health, Nutrition	
Map 3.1: Number of children per primary school teacher, Tripura, 2001	82
Map 3.2: Number of single-teacher schools, Tripura, 2001	83
Map 3.3: Distribution of health facilities, Tripura, 2001	91

CONTENTS xv

THE STATE OF HUMAN DEVELOPMENT

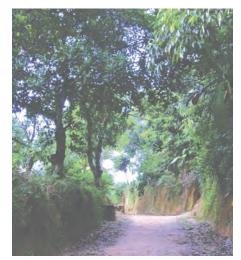
his *Report* describes and analyses human development in the State of Tripura and its constituent districts and blocks. The first *Human Development Report* prepared by the United Nations Development Programme (UNDP) in 1990 defined human development as

a process of enlarging people's choices. The most critical of these wide-ranging choices are to live a long and healthy life, to be educated and to have access to resources needed for a decent standard of living. Additional choices include political freedom, guaranteed human rights and personal self-respect.

Tripura is a State of three million persons located in the North East of India and surrounded on three sides by Bangladesh. The key message of this chapter, and of the *Tripura Human Development Report*, is that the people of the State have experienced significant progress in the social, economic and political indicators of human development. The situation in Tripura is better than the Indian average, particularly with

respect to achievements in health and education, and the implementation of an effective system of democratic decentralization.

Nevertheless, historical and geographical circumstances have resulted in an economic structure that is non-diversified and, in particular, lacking in a manufacturing base. Weak infrastructure – in particular, the limited road and rail network both within the State and that connecting Tripura to the rest of India – is a constraint on overall development. During the last two decades, the people of the State have also suffered from the effects of insurgency and associated violence.



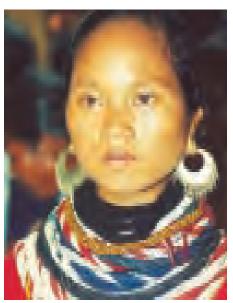








The people of the State have experienced significant progress in the social, economic and political indicators of human development.







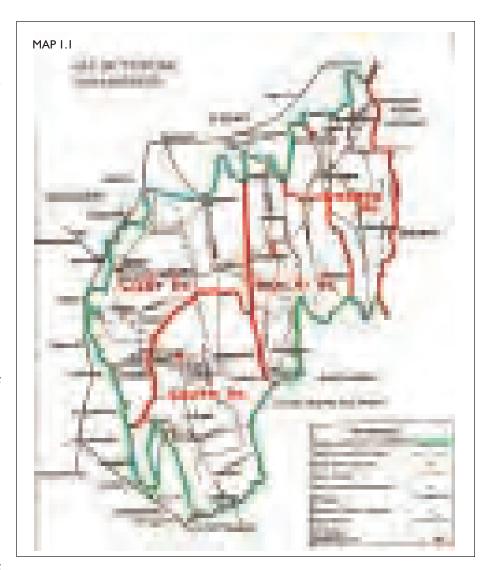
I.I The State and Its People

The subject matter of human development is concern for the people and their well-being. It is this concern for the people that distinguishes the human development approach from development strategies that are concerned solely with national income or wealth or capital accumulation. Incomes and wealth, particularly their distribution, are also central to human development, but primarily as a means to giving people resources that can be used to enhance their wellbeing. By focusing on people – children, women and men - the human development approach also focuses on inequalities of gender.

Tripura, which is in North East India, became a full-fledged State of the Indian Union on 21 January 1972 (see Box 1.1). It is situated between latitudes 22°56' and 24°32' north, and longitudes 91°09'and 92°20' east. It is the third smallest State in the country (excluding Delhi) and covers an area of 10,491.69 sq. km.

Tripura is a land-locked State, surrounded by Bangladesh on its north, south and west. The length of its international border is 856 km (84 per cent of its total border), while it shares a 53 km-long border with Assam and a 109 km-long border with Mizoram. Tripura is connected with the rest of India by only one road, which runs through the hills to Cachar District in Assam. The terrain of the State is hilly and forested: over 60 per cent is hilly, and around two-thirds of the land area is classified as forest land (Box 1.2).

The Partition of India in 1947 was a defining event in the history of Tripura, and had an enduring effect on the process of social and economic development in the State. The Partition was perhaps the largest move-



BOX I.I

Formation of the State of Tripura

Tripura was a princely State whose dynasty of tribal kings stretches back to antiquity. After rule by the Khilji dynasty was established in Bengal in 1240, Tripura became a tributary State to the rulers of Bengal. Later, the East India Company extracted a tribute on the accession of every new prince, sending him a deed of acknowledgment and robe of honour in return. After 1857, there was no treaty between the British government and the rulers of Hill Tipperah (as the British then called Tripura) but the Rajas paid a succession duty to the Government (Hunter 1873: 461).

After India became independent, on 15 October 1949, the Regent Maharani of Tripura acceded to the Indian Union as a 'C' category State. Tripura became a Union Territory in November 1956. A popularly elected ministry was formed in Tripura in July 1963 and since then the State has had a government elected on the basis of universal adult franchise. Tripura attained full Statehood on 21 January 1972.

Source: Gan Choudhuri (1999), Hunter (1873) and Menon (n.d).

BOX 1.2

Geographical Features of the State

The hill ranges in the State encountered as one moves from west to east are the Baramura-Debtamura Range, the Atharamura Range, the Longtharai Range, the Shakhan Range and the Jampui Range. Betling Shib (939 metres), situated in the Jampui Range, is the highest peak of Tripura. Valleys such as Khowai, Dhalai, Manu and Deo are situated between the main hill ranges of Tripura. The uplands are interspersed by small isolated hillocks that are known locally as tillas. The alluvial plains of Tripura include the narrow valleys, locally known as *lungas*, that lie mainly in the western part of the State. The *lungas* are fertile and rice is cultivated here. There are very few flood plains in Tripura; they are mostly located in the west and south, and form the main agricultural lands of the State. There are marshes, and both natural and artificial lakes, in the plains. A number of west-, north- and south-flowing rivers originate in the hills of Tripura and flow into Bangladesh. The westward-flowing Gomati is the longest and most important river of the State. A hydroelectric power plant has been set up by harnessing the Gomati at Dumbur Falls.

Natural gas deposits are among the most important features of Tripura's natural resource base. Natural gas has been struck in the Baramura Hills and in Rokhia in South District, and natural gas-based thermal power plants have been set up at both places.

The hills of Tripura have red laterite soil which is porous and lacks essential mineral salts, so that irrigation and fertilizers are needed to make it suitable for cultivation. The flood plains and narrow valleys of the State have alluvial soil. However, the alluvial soil is sandy, lacks the capacity for water retention, and is poor in humus and essential nutrients.

Although Tripura is a land-locked State, since it is situated only about 60 km to the north of the Bay of Bengal, the sea influences the climate. The highest temperatures recorded in the Agartala Observatory in the height of summer in April and May range between 35°C and 37°C. In January, the coldest month of the year, the mean temperature of the State seldom goes down below 10°C. Tripura experiences very heavy rain from June to September/October from the South West Monsoon. Winters are mostly dry. The annual average rainfall of the State is 225 cm.

Source: Dasgupta (2005).

Partition resulted in a huge infrastructural and economic setback for the State. It aggravated the geo-political isolation of Tripura.

ment of evicted people in modern history. It witnessed a heavy influx of refugees into Tripura from erstwhile East Pakistan, people who arrived with little wealth in hand. The Partition had a dramatic effect on both the economy and the demography of the State. The large-scale immigration not only placed a tremendous burden on the resources of the State, but also led to an upheaval in the social composition of its population. The Partition resulted in a huge infrastructural and economic setback for Tripura. It lost all its rail-heads - to the west, south and north – as they fell in East Pakistan, and the State was cut off from India's railway network. The distance by road from Agartala to Kolkata was less than 350 km before Partition. After Partition, the route to Kolkata via the Siliguri land corridor became 1,700 km long. The Partition thus aggravated the geo-political isolation of Tripura (and, indeed, of the entire North Eastern region).

Movements of people into Tripura also occurred before Partition (for example, 15,000 refugee-victims of communal disturbances migrated here in 1941). And there was a big spike in migration during and immediately after the Bangladesh war of independence in 1971. This small geographic area in a corner of India has had to accept and support waves of refugees.

At the time of Tripura's merger with the Indian Union, the major mode of farming in the State was shifting cultivation or *jhum*, which produced little surplus. Only a small proportion of the State's plain lands were under settled agriculture (mainly by Bengali settlers), and the main crop was rice. Most of the plains were not under cultivation and were cover-

ed with cane-brakes and marshes. The economy of Tripura at the time of Independence could be characterized as agriculture- and forest-based, with no manufacturing base.

1.1.1 Demographic Features

At the Census of 2001, Tripura had a population of 31,99,203 or just over 3 million persons, making it population-wise the eighth smallest State in the country (Goa and the six States of the North East other than Assam are smaller than Tripura; see Table 1.4). In the North East, Tripura comes second to Assam in respect of population and population density.

The State is divided into four districts, namely, North District, South District, West District and Dhalai (formed in 1995). Agartala, the capital, is in West District.

The following features of the population are of immediate relevance.

First, the State is characterized by a low share of urban population in the total population: only 17 per cent of the population is urban as compared to the national average of 28 per cent. The incidence of urbanization ranges from 26.7 per cent in West District to a mere 6 per cent in Dhalai. The urban population is thus unequally distributed, with West District accounting for 75 per cent and Agartala, the capital, alone accounting for 35 per cent of the urban population of the State. Dharamnagar, the second biggest town in the State, is only one-sixth the size of Agartala. The smallest urban area is Kamalpur Nagar Panchayat (with 5,143 persons in 2001), the size of a village in many parts of India.

Secondly, the distribution of Tripura's population is uneven across districts. Nearly 48 per cent of the population of the State lives in West

BOX 1.3

Data Sources and Methodology

This *Report* draws on qualitative and quantitative information from a wide variety of sources. The sources include the following:

- Reports and statistical data (published and unpublished) provided by Departments of the Government of Tripura.
- Statistical data from national surveys, most importantly, Censuses of India, National Sample Surveys and National Family Health Surveys.
- A special sample survey for this *Report* was carried out by the Foundation for Agrarian Studies in 2005. The survey covered three villages (one each in Dhalai, North District and South District) representing three different agricultural types. The study collected information on land and asset ownership, on education, and on the public distribution system.
- Another special survey was conducted for this *Report* by the All-India Institute of Hygiene and Public Health in two villages in West District. This census-type survey assessed aspects of health and nutrition.
- Background papers were specially commissioned to provide insights into aspects of Tripura's history and society, economy, and polity. The methods of inquiry used by the authors of these papers are similarly diverse. For example, estimates of life expectancy and mortality at the district level were prepared by adapting existing analytical methods to data available for Tripura. The Directorate of Economics and Statistics calculated the District Domestic Product (DDP) for each district for the first time. An exploratory analysis of teacher–student ratios as well as the distribution of teachers across schools was undertaken. Several background papers used quantitative and qualitative information gathered through direct field trips.
- Maps were prepared for this *Report* by digitizing a map of Tripura showing district and block boundaries. Using Geographical Information System (GIS) software, data on different socio-economic variables at the block level were combined with geographic information and plotted on the maps.

TABLE 1.1

Area and population of Tripura, by district, 2001

	Area (in sq. km.)	Share of total area (%)	Population	Share of total population (%)
West District	2,996.8	28.6	15,32,982	47.9
South District	3,051.5	29.1	7,67,440	24.0
Dhalai	2,348.1	22.4	3,07,868	9.6
North District	2,095.3	19.9	5,90,913	18.5
Tripura State	10,491.7	100.0	3,199,203	100.0

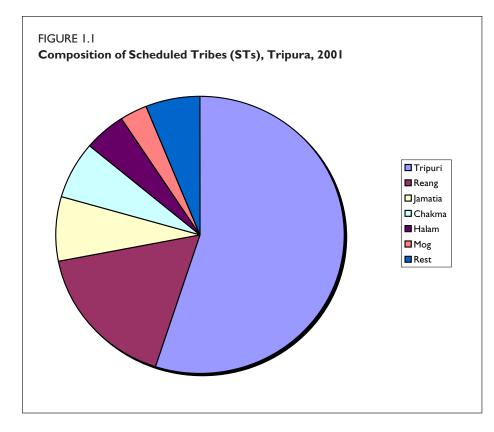


TABLE 1.2

Share of rural and urban populations and population of Scheduled Castes (SCs) and Scheduled Tribes (STs) in total population of Tripura, by district, 2001

	Sł	Share of specified population in district total (%)					
	Rural	Urban	SCs	STs	SCs & STs		
West District	73.3	26.7	19.3	25.3	44.5		
South District	92.9	7.1	16.6	37.7	54.3		
Dhalai	93.9	6.1	16.2	54.0	70.2		
North District	89.4	10.6	14.0	25.5	39.5		
Tripura State	82.9	17.1	17.4	31.1	48.4		

TABLE 1.3

Population of Scheduled Tribes (STs) by rural-urban location, Tripura, by district, 2001

	Rural	Urban	% Rural
West District	367,167	19,914	94.8
South District	287,815	1,704	99.4
Dhalai	164,170	2,156	98.7
North District	148,845	1,655	98.9
Tripura State	967,997	25,429	97.4

District (Table 1.1). Dhalai, the newest district, is also the smallest in terms of population. In the rural areas, the largest blocks are Mohanpur and Bishalgarh in West District, and the smallest is Jampuii Hills in North District (with only 9,630 persons).

Thirdly, the population of Tripura is characterized by social diversity. Specifically, people of the Scheduled Tribes (STs) comprise about one-third of the population. People from nineteen tribes are represented in the population of the State, the two largest tribes being the Tripuri and the Reang, which together accounted for 71 per cent of the tribal population in 2001 (Box 1.6). There is also a plurality of languages and dialects: the two official languages of the State are Bengali and Kokborok.

Figure 1.1 shows the composition of the tribal population in Tripura.

Among the four districts, Dhalai is the only one where people of the STs constitute more than one-half of the population.² There is also a rural-urban divide: the overwhelming majority of the tribal people (97.4 per cent) reside in rural areas (Table 1.3). Human development among the tribal peoples is thus very closely tied to the fate of the rural economy.

The fourth feature of the demography of the State concerns the rate

¹ In this *Report*, 'tribal people' or 'tribal population' and related terms are used to describe the people of the Scheduled Tribes (STs) who are indigenous to the North East. This is how the tribal people refer to themselves; the term 'Adivasi' is not used in the region except to describe people of the STs who are indigenous to States outside the North East.

² Block-wise data show that in several blocks, more than 80 per cent of the population is tribal. When we examined data at the village level, we found that 72 per cent of the population of ADC (Autonomous Dostrict Council) villages belonged to the STs; the corresponding ratio was 18 per cent for non-ADC villages.

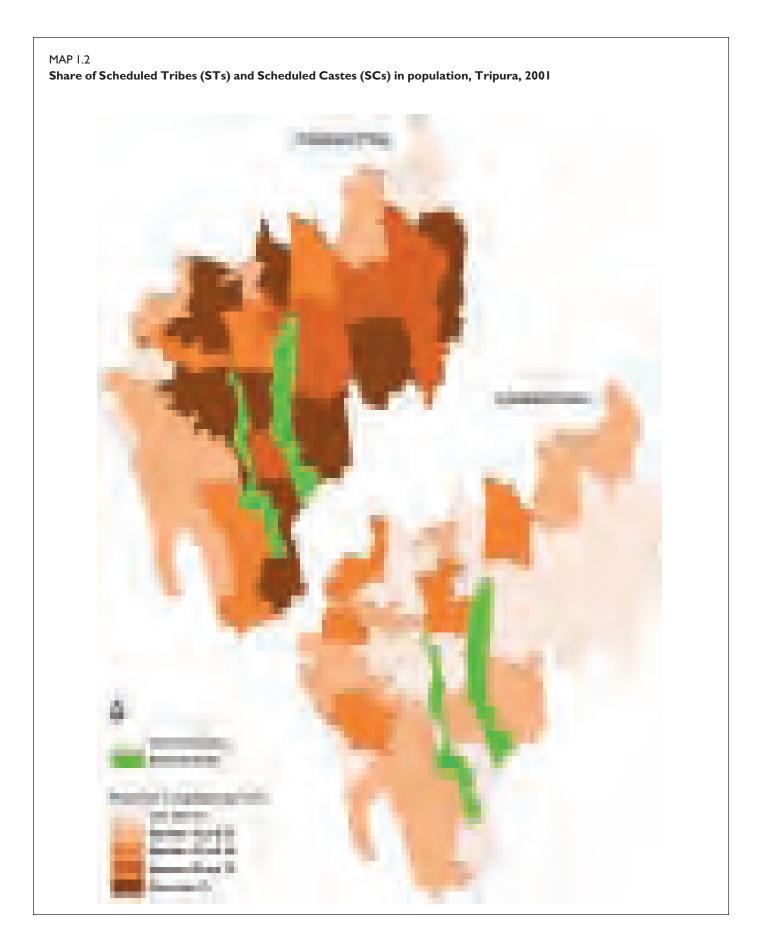


TABLE 1.4

Area, population, sex ratio, density and share of Scheduled Tribes (STs) in Tripura, North East and India, 2001

	Population		Population growth	Sex ratio	Area	Population	ST
	2001	1991	(1991–2001)	(2001)	(in sq. km)	density (2001)	(%)
Tripura	31,99,203	2757,205	16.0	948	10,492	305	31.1
Assam	26,655,528	22414,322	18.9	935	78,483	340	12.4
Arunachal Pradesh	1,097,968	864,558	27.0	893	83,743	13	64.2
Manipur	2,166,788	1837,149	17.9	978	22,327	97	34.2
Meghalaya	2,318,822	1774,778	30.7	972	22,429	103	85.9
Mizoram	888,573	689,756	28.8	935	21,081	42	94.5
Nagaland	1,990,036	1209,546	64.5	900	16,579	120	89.1
Sikkim	540,851	406,457	33.1	875	7,096	76	20.6
India	1,028,610,328	838567,936	22.7	933	328,974	3127	8.2

BOX 1.4

Administrative Structure

The State has 4 districts, 17 sub-divisions, 40 development blocks, 13 Nagar Panchayats and one Municipal Council (Agartala). Tripura has a unique institution in the form of the Tripura Tribal Areas Autonomous District Council (TTAADC), created under the Seventh Schedule of the Constitution in 1979 but brought under the Sixth Schedule in 1985. The TTAADC covers almost 70 per cent of the area of the State, and 15 blocks fall entirely within its jurisdiction. There are 513 Gram Panchayat villages and 526 villages in the TTAADC areas. The total number of habitations (or residential clusters) is 8,081, indicative of the dispersed pattern of settlement (with each village having on average 8 habitations).

BOX 1.5

Method of Retabulation of Census Data

At the Census of 2001, there were 38 blocks in Tripura. Since then, two new blocks, Ompi (drawn from Amarpur) and Mungiakami (drawn from Tulashikhar, Kalyanpur and Teliamura), have been formed. To get a statistical picture of the 40 blocks, we have used village-level data (from the Primary Census Abstract) of the Census of 2001 and recast the data on 38 blocks to conform to the present 40 blocks. As far as possible, statistical data at the block level are presented for the 40 blocks. Also, to make comparisons over time at the district level, the Census of India 1991 data have been recomputed and presented for 4 districts (although there were only 3 districts in 1991).

Tripura was a tribal-majority State before Independence; today, tribal people constitute only 31 per cent of the total population.

of growth of population. The period from 1951 to 1961 was characterized by very high rates of growth, influenced by large-scale immigration from Bangladesh (then East Pakistan). The rate of growth of population was lower from 1961 to 1991, but still higher than the all-India rate. Population growth during this period was also affected by immigration from Bangladesh, particularly around 1971, when that country gained independence. The average compound rate of growth of population in Tripura from 1951 to 1991 was 3.7 per cent per annum.

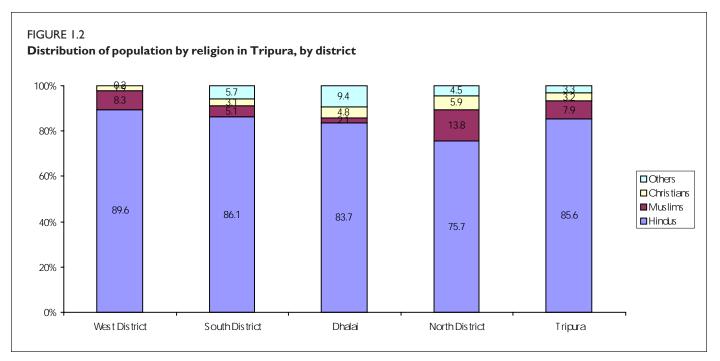
However, there was a striking decline in the decadal growth rate during 1991–2001 (16 per cent) (Table 1.5). The rate of growth of population (1.6 per cent) has now fallen below the country's growth rate of 2.2 per cent. It is to be seen in the next Census of 2011 whether the achieved decline is sustained. This will depend, firstly, on the accuracy of measurement of the

³ Large-scale population movements may have affected the accuracy of Census data in Tripura, as all migrants may not be counted. Also, the to-and-fro movement across the border influences the population count.

TABLE 1.5

Population growth rate, density and sex ratio in Tripura, by district, 1991 and 2001

	Decadal gro	Decadal growth rate (%)		s per 1000 males)	Density (persons per sq km)	
	1981-1991	1991–2001	1991	2001	1991	2001
West District	32.5	18.5	944	951	432	511
South District	40.3	6.8	951	945	236	251
Dhalai	33.7	10.9	931	935	118	131
North District	30.9	26.5	943	951	223	282
Tripura State	34.3	16.0	944	948	263	305



low level of growth rate in the decade 1991–2001, and, secondly, on whether immigration between 2001 and 2011 remains low.³

Fifthly, migration and population changes have decisively altered – 'reversed' is more correct – the demographic balance in the State. Tripura was a tribal-majority State before Independence; today, tribal people constitute only 31 per cent of the total population.

Sixthly, Dalits constitute 17 per cent of Tripura's population. In many blocks of West and South Districts, people of the Scheduled Castes (SCs) constitute more than 20 per cent of the population (the highest proportion is 31 per cent in Salema block). There is a significant SC population in urban areas (18 per cent), in contrast to STs. In eleven towns, SCs constitute more than one-quarter of the total population. It is to be noted that persons belonging to the SCs are not confined to specific areas (paras or bastis) of villages and towns in Tripura. The population of Other Backward Classes (OBCs) in the State is 6.7 lakhs according to an official estimate prepared in 1995.

Seventhly, Hindus constitute a majority in all districts. The share of Muslims in the population in North

Dalits constitute

17 per cent of

Tripura's population.

BOX 1.6

Tribal Diversity of Tripura

The small State of Tripura has a large diversity of tribal peoples. There are around nineteen tribal communities: Tripuri, Reang, Jamatia, Chakma, Halam, Mog, Kuki, Noatia, Garo, Munda, Lushai, Oraon, Santhal, Uchai, Khasi, Bhil, Chaimal, Lepcha and Bhutia.

TRIPURI: This is the largest tribe in Tripura, comprising 55 per cent of the tribal population in 2001. Tripuris are concentrated in West District with a few people in North and South Districts. Debbarma and Choudhury are used as surnames by Tripuris. Tripuris belong to the Bode group of Indo-Mongloid origin, and their mother tongue belongs to the Kokborok linguistic group.

REANG: The Reangs comprise the second biggest tribe in Tripura. Reangs also live in Mizoram and Assam. Their language Kau Bru is distinct from Kokborok, and belongs to the Tibeto–Burman family of languages. One half of the population of Reangs resides in North District, the remaining are in South and Dhalai districts. Reangs have been termed a 'primitive tribe' by the Government of India.

JAMATIA: The Jamatias, the third largest tribal group in Tripura, are Kokborok-speaking people. Almost 80 per cent of Jamatias are found in South District. The tribe has a distinctive community organization termed *Hoda*.

CHAKMA: Chakmas are a Scheduled Tribe in Tripura, Mizoram, Assam, Meghalaya and West Bengal. In Tripura, Chakmas are concentrated in the northern part of the State. Their language, Chakma, is Indo–Aryan. Most Chakmas are Buddhists.

HALAM: Halams are considered to be a Kuki group. In Tripura, Halams are concentrated in the southern and western part of the State. The tribe has four main sub-groups or *dafas*, namely, Halam Kaipeng, Halam Kaloi, Halam Molsom and Halam Rupini. The Halam Kaipeng and Halam Molsom speak the Halam language, while the Halam Kaloi and the Halam Rupini speak Kokborok.

MOG: Mogs are said to have migrated from Myanmar via the Arakan Hills and the Chittagong Hill tracts, and are spread all over the State with maximum density in South District. Mogs speak the Magh language, belonging to the Tibeto–Chinese family of languages, and use the Burmese script.

Source: K.S. Singh (1998) and www.tripurainfo.com/tribes.

The concept of human development encompasses broad aspects of human life. These include the ability to lead a long and healthy life, the ability to acquire learning, and the ability to participate freely and with dignity in social and political life.

and West Districts, and the share of Buddhists in the population in South District and Dhalai are higher than in the State as a whole (Figure 1.2). Ninety-three per cent of the Muslim population of Tripura is rural.

Eighthly, the populations of Tripura and its constituent districts are relatively young (Table 1.6).4 Other than in West District (which includes Agartala), more than one-third of the population of each district was made up of children below 15 years of age. The share of the elderly population (above 60 years of age) was 7.5 per cent. In fact, among the North Eastern States, Tripura has the highest share of persons above the age of 60, and the proportion is close to the national average in this regard. The long-term effects of the recent fertility decline, in terms of bringing down the share of children in the population and raising the share of the elderly, are yet to be seen.

I.2 Components of Human Development

The concept of human development encompasses broad aspects of human life. The literature recognizes certain capabilities as constituting the building blocks of human development. These include the ability to lead a long and healthy life, the ability to acquire learning, and the ability to participate freely and with dignity in social and political life. It is clear that access to resources, and hence employment, incomes and wealth, are a determining factor in achieving basic capabilities.

Before proceeding further, it is worth reiterating some of the key

⁴ An accuracy index computed to test the data on the age–sex distribution of the population was within standard bounds (Guha Roy 2005).

propositions made in the UNDP's first *Human Development Report* (1990).

 Substantial improvement in levels of human development are possible even at fairly modest levels of income.

This proposition is relevant to developing countries and relatively low-income areas like Tripura. It is an argument against the view that improvements in well-being, such as in basic health or in reduction of child labour, can be achieved only after attaining a high level of income.

 The link between economic growth and human progress is not automatic.

This proposition underlines the importance of the 'how' and 'for whom' of economic growth, and not just the level of economic growth. Unless the benefits of economic growth are distributed equitably, and unless the resources generated by economic growth are used to improve people's capabilities (such as by investing in primary education), higher economic growth need not lead to higher levels of human development.

 Developing countries are not too poor to pay for human development and take care of economic growth.

This statement has two implications. First, it shows that economic growth must not be seen as a tradeoff with higher human development, an idea common among critics. Secondly, low per capita incomes cannot be a justification for not intervening directly in order to raise the wellbeing of the majority of the population.

Social subsidies are absolutely necessary for poorer income groups.
 Given the highly unequal distribution of incomes in most developing

TABLE 1.6

Proportionate broad age-group structure of population by sex,
Tripura, by district, 2001

	Sex	В	road age grou	P	Total population
		0-14	15-59	60+	(base=100)
West District	Persons	32.1	60.4	7.5	100
	Males	31.9	61.2	6.9	100
	Females	32.2	59.8	8	100
South District	Persons	34.5	58.2	7.3	100
	Males	34.2	59	6.8	100
	Females	34.8	57.4	7.8	100
Dhalai	Persons	36.7	56.7	6.6	100
	Males	36.6	57	6.4	100
	Females	37. I	56.2	6.7	100
North District	Persons	35	57.9	7.1	100
	Males	34.8	58.3	6.9	100
	Females	35.2	57.7	7.1	100
Tripura	Persons	33.7	59	7.3	100
	Males	33.5	59.6	6.9	100
	Females	33.8	58.4	7.8	100

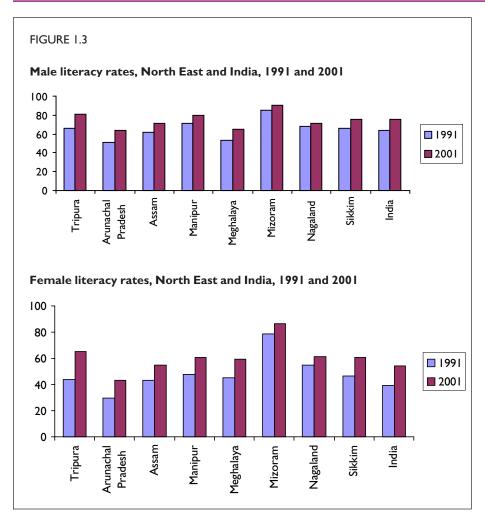
countries, this statement recognizes that market mechanisms alone cannot ensure enhanced human development, particularly for those at the lower end of the distribution of incomes. Public policy thus has a key role to play in ensuring better human development.

In Tripura, full participation in economic and political life has been affected by insurgency movements led by separatist and divisive forces. These forces have targeted civilians and the armed forces. The insurgents and terrorists aim to intimidate the target groups and spread a sense of public fear, to invite wide attention and publicity of their violent actions in the media, and to provoke strong retaliatory action from the Government. The insurgency and associated violent conflicts have affected many aspects of living in Tripura, and dealing with insurgency is central to furFull participation in economic and political life has been affected by insurgency movements.

TABLE 1.7

Literacy rates for persons aged 7 and above by sex and location in Tripura by district, North East and India, 2001

		Rural			Urban			Total	
	Male	Female	Person	Male	Female	Person	Male	Female	Person
Tripura	78.4	60.5	69.7	93.2	85.0	89.2	81.0	64.9	73.2
West District	81.5	63.8	72.9	92.9	84.4	88.7	84.6	69.6	77.3
South District	77.6	58.2	68.2	95.0	87.4	91.3	78.9	60.3	69.9
Dhalai	68.6	48.9	59.1	91.8	81.9	87.2	70.2	51.0	60.9
North District	78.2	62.7	70.7	94.2	88.3	91.3	80.0	65.6	73.0
Arunachal Pradesh	57.7	36.9	47.8	85.2	69.5	78.3	63.8	43.5	54.3
Assam	68.2	50.7	59.7	89.7	80.2	85.3	71.3	54.6	63.3
Manipur	77.3	57.0	67.3	88.7	70.0	79.3	80.3	60.5	70.5
Meghalaya	59.2	53.2	56.3	89.0	83.5	86.3	65.4	59.6	62.6
Mizoram	84.9	77.3	81.3	96.4	95.8	96.1	90.7	86.7	88.8
Nagaland	67.6	57.5	62.8	87.4	81.4	84.7	71.2	61.5	66.6
Sikkim	74.5	58.0	66.8	87.8	79.2	83.9	76.0	60.4	68.8
North East	69.1	52.4	61.0	90.0	80.7	85.7	72.6	57.0	65.1
India	71.4	46.7	59.4	86.7	73.2	80.3	75.8	54.2	63.4



thering human development and human security in the State. We shall return to this in Chapter 4.

We begin our description of the components of human development here with a brief discussion of the three major indicators comprising the Human Development Index or HDI: education, longevity and incomes.

1.2.1 Literacy and Education

Literacy and education are intrinsic to human development. Tripura made substantial progress in the expansion of literacy and schooling in the 1990s. In 2001, the literacy rate for persons above the age of 6 years was 73 per cent in Tripura, 63 per cent in India and 65 per cent in the North East. Among the North Eastern States, Tripura ranked second after Mizoram, and its rank improved between 1991 and 2001. The gap between Mizoram and Tripura was much wider in the case of females than males (Figure 1.3). In Tripura, female literacy is substantially lower than literacy among males. About 35 per cent of females above the age of 7 in 2001 were illiterate; the corresponding figure for males was 19 per cent.

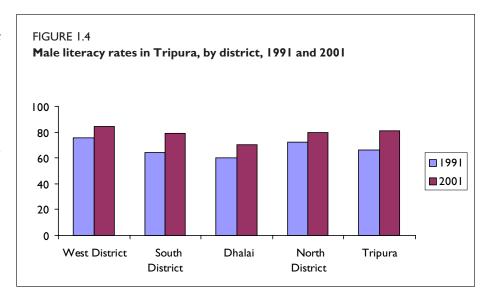
There have been further improvements in this decade, with aggregate literacy estimated to be 80 per cent in 2005 (see Chapter 3).

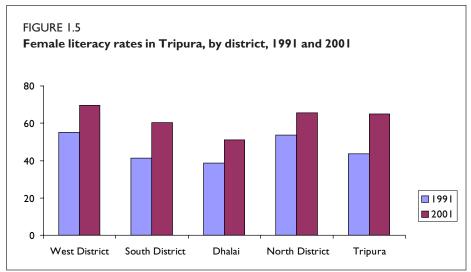
The literacy rate for the rural population in 2001 (70 per cent) was substantially lower than the literacy rate for the urban population in the same year (89 per cent). Literacy rates for persons from the STs were lower than literacy rates for the rest of the population. Literacy rates among Dalits in Tripura were better than the corresponding national averages.

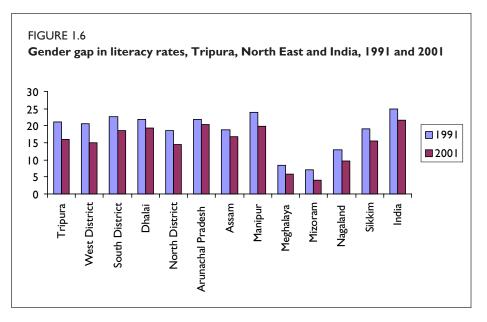
Educational deprivation was compounded when different categories of deprivation overlapped – for example, about 57 per cent of ST rural women were illiterate in 2001.

There are also regional variations in literacy. Dhalai was the most backward district in respect of literacy, while West District had the lowest proportion of illiterates in the population (Figures 1.4 and 1.5). A detailed block-wise picture shows that the rural area with the highest levels of literacy was Panisagar in North District. Chhamanu in Dhalai was the worst performer: only 18.5 per cent women and 46.1 per cent men were literate in 2001. Overall literacy rates were less than 50 per cent in Chhamanu and Dumburnagar blocks of Dhalai and Damchhara block of North District. In urban areas, barring a few exceptions, literacy rates were above 80 per cent.

There has been progress between 1991 and 2001. The gender gap in literacy rates declined from 21 percentage points in 1991 to 16 percentage points in 2001. The corres-







MAP I.3 Male and female literacy in Tripura, by rural block, 2001

ponding decline at the all-India level was from 25 to 22 percentage points. The gender gap was the largest in Dhalai, but even Dhalai performed better than the Indian average (Figure 1.6). However, the gender gap in rural areas was almost twice that in urban areas.

Similarly, there has been a substantial decline in the rural–urban gap in literacy rates, from 26 percentage points in 1991 to 19.5 percentage points in 2001. Again, Dhalai has a distinctly wider rural–urban gap than other districts. Further, the rural–urban divide in respect of literacy is wider than the Indian average in all districts other than West District (Figure 1.7).

In contrast to other States of the North East where literacy attainment among the tribal populations is higher than among the general population, in Tripura, people belonging to the STs lag behind the rest of the population in respect of literacy. Although this gap has narrowed between 1991 and 2001 (see Table 1.8), it remains sizeable.

School attendance

There has been substantial improvement in school attendance rates in Tripura between 1991 and 2001 (Tables 1.9 and 1.10). The proportion of children in the age group 6–14 years who were not attending school halved during this decade, from 43.4 per cent in 1991 to 23 per cent in 2001. There was also a decline in the absolute number of children not attending school, from 2.54 lakhs in 1991 to 1.64 lakhs in 2001.

There have been major increases in attendance rates in rural areas, including among girls in rural areas. For example, among 6–14 year-old child-

FIGURE 1.7 Rural-urban gap in literacy rates, Tripura, North East and India, 1991 and 2001 50 40 30 **1991** ■ 200 I 20 10 Meghalaya Mizoram West District Dhalai North District Assam Nagaland Sikkim South District Arunachal Pradesh Manipur

TABLE 1.8

Gap in literacy rates across social groups, Tripura, North East and India,
1991 and 2001 (percentage point gap between general population and STs)

District/State		2001			1991	
	Male	Female	Person	Male	Female	Person
Tripura	11.2	17.1	14.2	14.9	17.9	16.6
Arunachal Pradesh	3.4	1.1	2.8	5.5	2.41	4.92
Assam	-3.I	-0.3	-1.6	0.76	1.29	1.22
Meghalaya	0.5	-0.8	-0. I	0.73	-0.58	0.15
Mizoram	-1.2	-0.4	-0.7	-1.14	-0.07	-0.43
Nagaland	0.5	-0.2	0.2	-0.18	-0.44	-0.17
Sikkim	2.2	0	1.4	-1.21	-4.12	-2.42
India	14	14.3	14.4	19.5	14.6	17.3

Note: A negative value indicates that the literacy rate among STs is higher than among the general population. Similarly a positive value indicates that the literacy rate among STs is lower than among the general population.

Tripura made substantial progress in the expansion of literacy and schooling in the 1990s. In 2001, the literacy rate for persons above the age of 6 years was 73 per cent in Tripura, 63 per cent in India and 65 per cent in the North East.

TABLE 1.9

Children attending school, Tripura, North East and India, 1991(per cent)

		Rural			Urban			Total	
	Boys	Girls	All	Boys	Girls	All	Boys	Girls	All
Tripura	57.9	61.6	53.9	76.2	77.8	74.6	60.2	63.7	56.6
West District	64.4	67.7	60.9	77.0	78.7	75.2	66.7	69.7	63.7
South District	49.5	54.0	44.8	78.3	80.3	76.4	50.8	55.1	46.3
North District	57.6	61.3	53.9	78.2	79.3	77. I	59.1	62.6	55.5
Arunachal Pradesh	49.1	37.2	43.4	71.3	64.6	68. I	52.0	40.6	46.5
Assam	54.0	46.3	50.2	75.6	71.6	73.6	56.0	48.7	52.4
Manipur	57.5	51.1	54.4	68.4	65.0	66.7	60.4	54.9	57.7
Meghalaya	34.7	35.7	35.2	78.7	76.0	77.3	42.I	42.6	42.4
Mizoram	61.0	57.2	59.1	83.6	82.2	82.9	70.9	68.2	69.6
Nagaland	54.9	51.0	53.0	73.8	72.I	73.0	58.0	54.4	56.2
Sikkim	67.4	60.7	64.0	81.3	77. I	79.3	68.5	62.0	65.3
North East	50.5	53.9	46.9	73.9	75.6	72. I	53.3	56.6	50.0
India	58.0	41.1	49.9	74.9	68.9	72.0	62.1	47.9	55.3

TABLE 1.10

Children attending school, Tripura, North East and India, 2001 (per cent)

		Rural			Urban			Total	
	Boys	Girls	All	Boys	Girls	All	Boys	Girls	All
Tripura	77.5	73.6	75.6	87. I	84.7	85.9	78.7	75.0	76.9
West District	81.5	78.6	80. I	86.6	84.4	85.5	82.5	79.8	81.2
South District	78.6	73.7	76.2	91.5	88.4	89.9	79.2	74.4	76.9
Dhalai	68.0	61.5	64.9	84.8	82.9	83.9	68.8	62.6	65.8
North District	73.0	69.6	71.3	87.4	83.9	85.7	74.I	70.7	72.4
Arunachal Pradesh	59.2	51.0	55.2	84.6	79.5	82. I	64.2	56.7	60.5
Assam	63.4	60.3	61.9	84.1	81.5	82.8	65.5	62.5	64.I
Manipur	78. I	74.7	76.5	89.4	87.6	88.5	80.8	77.9	79.4
Meghalaya	51.7	54.4	53.0	87.4	87.6	87.5	57.9	60.3	59.1
Mizoram	74.9	72.5	73.7	91.7	91.2	91.5	82.6	81.2	81.9
Nagaland	69.4	67.3	68.4	85.I	84.0	84.6	72.0	70.0	71.0
Sikkim	81.9	81.0	81.4	86.9	82.7	84.8	82.3	81.2	81.7
North East	63.6	65.0	62.2	84.7	85.8	83.7	66.4	67.7	65.0
India	72.4	63.0	67.9	81.8	79.7	80.8	74.7	67.1	71.1

Source: Census of India, 2001, Table C10.

There have been major increases in attendance rates in rural areas, including among girls in rural areas.

ren, 62 per cent of girls in rural areas attended school in 1991; by 2001, the proportion had risen to 74 per cent. Compared to the Indian average, Tripura has a higher attendance rate in aggregate, but the relative performance is better in rural areas. In 2001, the gender gap in school attendance rates in Tripura (3.7 percentage points) was lower than in India (7.1 percentage points).

Looking at different social groups, children of ST families in Tripura show lower-than-average school attendance rates in both urban and rural locations, but children belonging to SC backgrounds show higher-than-average school attendance rates, particularly in rural areas.

1.2.2 Health and Longevity

Expectation of life at birth is a component of the HDI. Estimates of life expectancy at the district level, for males and females separately, have been prepared for this *Report* using indirect estimation techniques, as there are no estimates of vital rates (birth rates, death rates, infant mortality rates) at the district level.⁵ The Sample Registration System (SRS) does not provide such estimates because of a small sample size, and the civil registration system cannot be relied upon.

Our estimates show that in 2001, life expectancy at birth for males and females in Tripura was 71 years and 74 years respectively. In terms of life expectancy, attainments in Tripura are higher than the national average, which is 61 for males and 62.5 for females (SRS 2003). There is, however, inter-district variation. Women

in West District live five years longer than women in Dhalai; men in West District live four years longer than men in Dhalai.

The sex ratio (or ratio of females to 1,000 males) is a simple indicator of gender equality. It is a measure of the relative longevity of males and females, and is the outcome of factors such as sex ratio at birth, sex differentials in mortality, sex-specific migration and sex differentials in population enumeration. Among the countries of the world, India is unique in that the data show a declining trend in sex ratios in the twentieth century. Tripura, however, does better than the national average both in terms of the absolute value of and trends in sex ratio (Figure 1.8). Among the States of the North East, Meghalaya and Mizoram have higher sex ratios than Tripura.

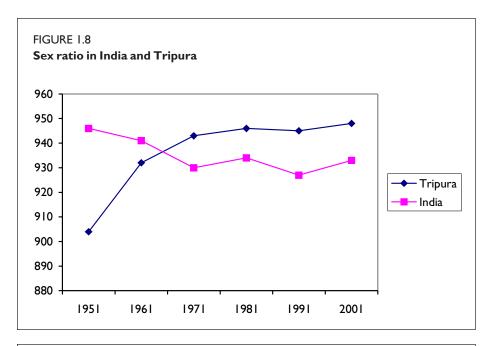
In 2001, there were 948 females per 1,000 males in Tripura as compared to 933 in India. Although the North and South Districts had higher sex ratios than the other districts, the inter-district variation in population sex ratio was not high (Table 1.5). The sex ratio increased in all districts other than South District during the decade 1991 to 2001. Sex ratios for

Life expectancy at birth for males and females in Tripura was 71 years and 74 years respectively, higher than the national average of 61 years and 62.5 years.

TABLE 1.11
Expectation of life at birth by sex in Tripura, by district, 1991 and 2001

	L'	991	20	2001		
	Males	Females	Males	Females		
West District	68	70	73	75		
South District	65	66	70	71		
Dhalai	64	65	69	70		
North District	67	69	72	74		
Tripura State	66	69	71	74		

⁵ See Annexures 5 and 6 for details of the methodology of estimation of birth rates and death rates.



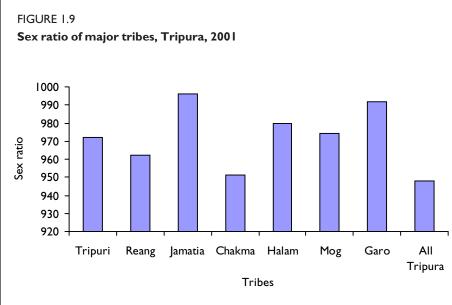


TABLE 1.12

Child sex ratio, Tripura by district and India, 1991 and 2001

	Sex ratio of (0–6 year-olds	Percent change
	1991	2001	1991–2001
West District	964	967	0.3
South District	970	961	-0.9
Dhalai	974	965	-0.9
North District	965	970	0.5
Tripura	968	966	-0.2
India	945	927	-1.9

each rural block and each urban area are reported in the Appendix. Among rural areas, the highest sex ratio of 993 was observed in Killa block (South District).

The sex ratio among the major tribes was higher than the State average (Figure 1.9 and Map 1.4). In three blocks – Killa, Amarpur and Kalyanpur – the sex ratio of the tribal population was greater than 1,000.

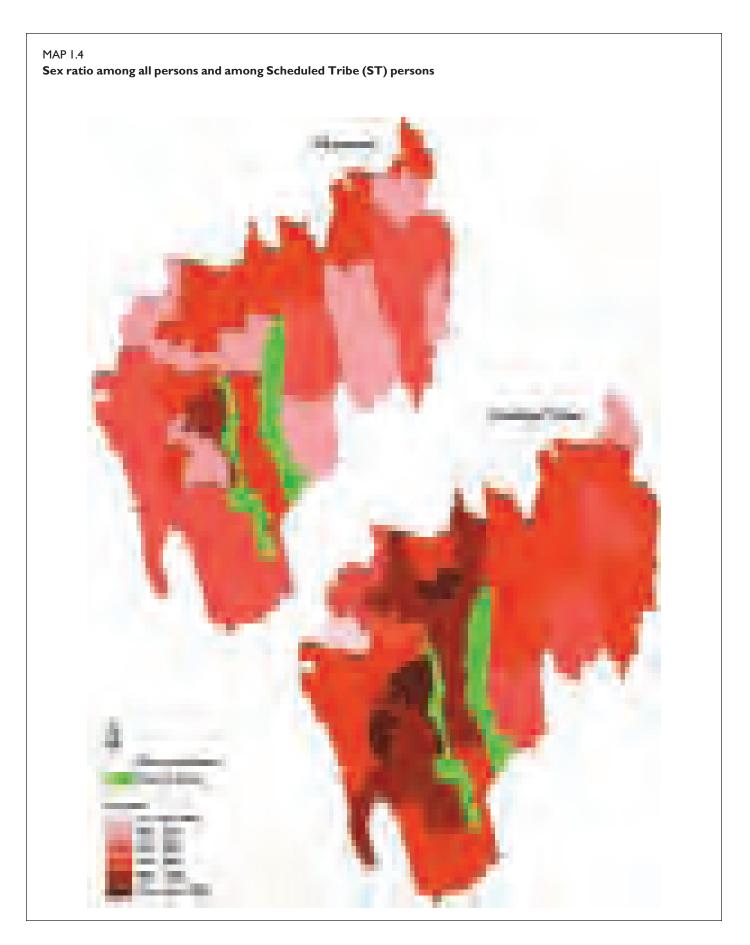
The child sex ratio, that is, sex ratio of children of 0-6 years, indicates the degree of gender discrimination against young children. The child sex ratio in Tripura was 966 as compared to the Indian average of 927 (Map 1.5 and Table 1.12). The child sex ratio was greater than 1,000 – a very favourable outcome - in four blocks and above 990 in another four blocks. However, there was a negative trend in the child sex ratio in South District and Dhalai during the 1990s. Although the decline is small, further investigation is required since there is little evidence of open discrimination against infant girls.

1.2.3 Incomes and Economic Growth

The relationship between incomes and human development is a complex one. While higher levels of income provide the means for better provisioning of public services such as education or health, it is clearly not necessary to wait for high levels of income to expand basic capabilities, nor does it follow that high levels of income are a sufficient condition for high levels of human development.

Growth of SDP and per capita SDP

The simplest indicator of incomes or output in a State is the State Domes-



MAP 1.5 Child sex ratio

The rate of growth of Net State Domestic Product (NSDP) in Tripura was higher than the growth rate of India's Net Domestic Product (NDP) during the 1990s.

tic Product (SDP).⁶ In 2003–04, the latest year for which data are available, the net income or Net SDP (NSDP) of Tripura was Rs 32,480 million. To put this in perspective, in 2001, Tripura's NSDP accounted for 0.28 per cent of India's national income, while the population of Tripura was 0.3 per cent of the Indian population.

In 2001–02, the per capita income of the State was Rs 18,759 (the Gross National Product or GNP per capita at factor cost in current prices was Rs 20,047 the same year). In terms of access to resources, the average person in Tripura has fewer resources than the average person in India. The State with the highest per capita income the same year was Goa, with Rs 49,673 per person or almost three times the estimate for Tripura.⁷

The growth record of incomes in Tripura, however, has been remarkable. The compound annual growth rate of NSDP (at constant prices) was 5.2 per cent in the 1980s and 6.7 per cent in the 1990s (Table 1.13). The acceleration in growth during the

⁶ SDP is the value of all final goods and services produced within the geographical boundary of a State within a particular year. Estimates of SDP are prepared both at current and constant prices. The estimates of SDP at current prices reflect the value of final goods and services produced in the State at prices prevailing during the current year. The estimates of SDP at constant prices are prepared by evaluating the output of the current year with base year prices in order to eliminate the effect of price changes. Net SDP at factor costs is also termed net incomes.

⁷ This estimate is taken from RBI (2004). The estimate for Tripura in the RBI report is a little lower (Rs 17,459) than the estimate reported here.

⁸ Unless otherwise stated, data used in this section are those provided by the Directorate of Economics and Statistics of the Government of Tripura.

1990s started around 1994–95. This is good performance by any standard. In fact, in several years, the annual rate of growth of SDP, even at constant prices, exceeded 10 per cent. Moreover, the rate of growth of NSDP in Tripura was higher than the growth rate of India's Net Domestic Product (NDP) during the 1990s (the annual growth rate of national income was 5.5 per cent during 1993–94 to 2002–03, and the annual growth rate of State income was 8.3 per cent over the same period).

Tripura's growth performance has also been good in per capita terms, particularly in the 1990s. While per capita NSDP grew at 2.4 per cent per annum in real terms in the 1980s, the annual growth rate was over 5 per cent in the 1990s (Table 1.14). Population changes played a key role: during the 1980s, the large increase in population lowered the gains in per capita terms. With the deceleration in population growth in the 1990s, per capita income increased faster. Although still below the national average, per capita income in Tripura has been steadily catching up with the rest of India (Figure 1.10). In 1980-81, per capita SDP of Tripura was 75 per cent of the Indian average; by 2002-03, it had risen to 88 per cent of the Indian average.

In fact, in the 1990s, and specifically since 1993–94, the new base year for estimates by the Central Statistical Organization (CSO), the growth of per capita income in Tripura surpassed that of all States.

District incomes

Estimates of incomes at sub-State level for selected years were prepared specially for this *Report* by the Directorate of Economics and Statistics of

TABLE 1.13

Compound annual growth rate of NSDP at factor cost, Tripura, 1980-81 to 2002-03

	At current prices	At constant prices
1980-81 to 1990-91	12.4	5.2
1990-91 to 2000-01	13.1	6.7
1990-91 to 2003-04	12.7	6.8
1980-81 to 2003-04	13.2	6.3
Note: Figures for 2003-0	4 are provisional.	

TABLE 1.14

Compound annual growth rate of per capita NSDP at factor cost, Tripura, 1980-81 to 2002-03

	At current prices	At constant prices
1980-81 to 1990-91	9.4	2.4
1990-91 to 2000-01	11.5	5.2
1990-91 to 2002-03	11.7	5.3
1980-81 to 2002-03	10.9	4.2

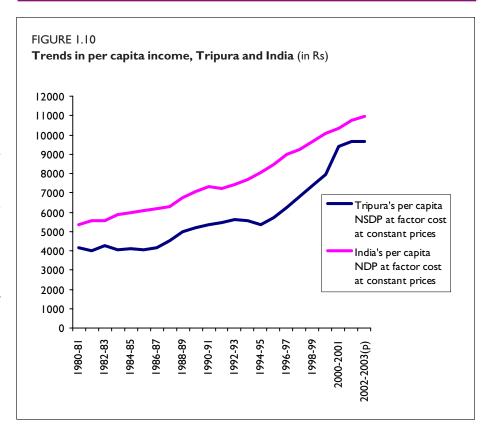


TABLE 1.15

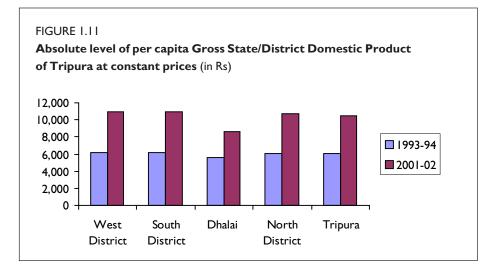
Absolute level of per capita income at current prices, Tripura, by district, 1993-94 to 2001-02 (in Rs)

Year	Tripura	West District	South District	Dhalai	North District
1993–94	6,074	6,215	6,232	5,535	6,098
1999-2000	14,297	14,917	14,117	12,652	14,057
2000-01	16,510	17,342	16,181	13,932	16,154
2001-02	18,759	19,254	18,498	15,971	18,758

TABLE 1.16

Ranking of per capita income across districts of Tripura, 1993–94 to 2001–02

Year	West District	South District	Dhalai	North District
1993–94	100	100.2	89.0	98.1
1999-00	100	91.9	79.I	92.7
2000-01	100	95.7	76. I	95.9
2001-02	100	99.9	78.7	98.0



In the 1990s, the growth of per capita income in Tripura surpassed that of all States.

the Government of Tripura. Adjusting for population size, the per capita District Domestic Product (DDP) or district incomes were calculated (Table 1.15).

In 1993–94, the South District had the highest per capita income, Rs 6,232, followed closely by the West District and then the North Dis-

trict. Dhalai had the lowest per capita income (Rs 5,534). By the late 1990s, West District had moved ahead, and was followed by North and South Districts, with Dhalai still lagging behind. In 2001–02, the latest year for which district-level disaggregated estimates are available, West District was still ahead though the per capita income in North and South Districts was very close (Figure 1.11).

To understand how the relative positions of different districts have changed, we have taken the per capita income of West District at 100 and then obtained the relative ranking of the other districts (Table 1.16). It is clear that today, the average per capita income of the North and South Districts is close to that of West District. However, the per capita income of Dhalai is not only lower but has fallen behind, indicating that economic growth during the 1990s was shared unequally among districts.

Taking the entire eight-year period for which data are available, that is, 1993-94 to 2001-02, all the districts showed a good performance in terms of growth, although the growth rate was slowest in Dhalai (6.1 per cent per annum) and fastest in North District (7.9 per cent) (Table 1.17). Dividing these years into two sub-periods, the 1990s (1993–94 to 1999–2000) and the early 2000s (1999-2000 to 2001-02), the data show that West District experienced the fastest growth among all districts in the first sub-period, and South District grew fastest in the second sub-period.

The district-wise pattern of change is a little different in terms of per capita income growth (Table 1.18). For the full period, West District was clearly the leader in terms of growth rate of per capita income and almost 2 percentage points higher than

⁹ See Annexure 1 on methodology of construction of District Domestic Product (DDP). The estimates were prepared by A.K. Chanda.

Dhalai. However, in the recent period, per capita income growth has been higher in the South and North Districts than in West District.

Sectoral composition of output

The sectoral shares of the State Domestic Product (SDP) point to an unbalanced and non-diversified economic structure. Agriculture remains important, although the contribution of the primary sector to SDP has declined steadily, from 47 per cent in 1980 to 30 per cent in 2002 (Table 1.19). The share of the secondary sector remained unchanged in the 1980s and rose in the 1990s. The tertiary sector, however, is the most important sector of the economy, accounting for over 50 per cent of SDP. In the 1980s, the main impetus for higher growth of SDP came from growth of the tertiary sector, where the growth rate was almost 8 per cent per annum.

The 1990s were characterized by a rise in secondary sector output relative to the tertiary sector. However, a detailed decomposition of output shows that the share of manufacturing fell between 1990-91 and 2003-03, while the share of construction almost doubled during the same period. Within the tertiary sector, although the increase in share of finance and banking indicates modernization, the fall in share of transport and communication is not a good sign. The largest contribution to SDP came from community and social services, a sector that is funded largely by public resources.

The sectoral composition of output is different in each of the four districts. Agriculture and the primary sector had the least weight in West District, which is not surprising since it is the most urbanized district of the State. In 1993–94, the primary sector

TABLE 1.17

Rate of growth of SDP/DDP of Tripura and districts at factor cost (constant prices at 1993–94 series) (per cent per annum)

	Tripura		North District	South District	Dhalai
1993-94 to 2001-2002	7.3	7.5	7.9	7.5	6.1
Subperiod I: 1993-94 to 1999-2000	6.5	7.0	6.9	5.7	5.2
Subperiod 2: 1999-00 to 2001-2002	6.7	6.2	7.6	9.2	6.1

TABLE 1.18

Rate of growth of per capita DDP of Tripura and districts at constant prices (1993–94 series) (per cent per annum)

	Tripura	West District	North District	South District	Dhalai
1993-94 to 2001-02	5.9	6.2	5.9	5.6	4.4
Subperiod 1: 1993-94 to 1999-00	5.2	5.7	4.9	4.4	4.0
Subperiod 2: 1999-00 to 2001-02	6.5	6.0	8.0	8.9	5.8

TABLE 1.19

Share of different sectors in NSDP of Tripura and National Income of India,
1980-81, 1990-91 and 2002-03 (in per cent)

Sector	Tripura				India			
	1980–81	1990–91	2002–03	1980–81	1990–91	2002–03		
Primary	46.7	36.9	30.0	38.9	31.3	22.7		
Secondary	10.5	10.3	18.6	19.7	22.0	20.5		
Tertiary	42.8	52.8	51.4	41.5	46.7	56.9		
Aggregate	100.0	100.0	100.0	100.0	100.0	100.0		

accounted for 28.6 per cent of DDP in West District, and its share fell to 20.8 per cent in 2001–02. By contrast, the primary sector contributed almost one-half of DDP in Dhalai in 1993–94, and its share remained as high as 38 per cent in 2001–02. South District was also predominantly agricultural in 1993–94; over the years, however, the share of agriculture has declined substantially. Agricultural growth was higher and growth in the secondary sector lower in West District than in the other three districts.

The tertiary sector is the most important sector of the economy, accounting for over 50 per cent of SDP.

The State has high levels of unemployment, particularly in urban areas and among young men and women.

The lack of basic infrastructure and transport connectivity is a major constraint on economic growth, employment generation and diversification of output and employment.

An important characteristic of Tripura is the large area under forests (60 per cent of the geographical area). More than 70 per cent of the forested land is out of the control of the State administration (including the Autonomous District Council), since its control is vested with the Central Government (through the Forest Conservation Act 1980). The use and development of forest areas is particularly relevant to the creation of sustainable livelihoods for the tribal peoples.

Unemployment

A detailed analysis of patterns of employment and unemployment (in Chapter 2) shows that the State has high levels of unemployment, particularly in urban areas and among young men and women. Unlike the national situation, there is not much difference between short-term and long-term unemployment rates in Tripura, suggesting that most unemployment is of a chronic nature. In rural areas unemployment rates are, as expected, lower than urban rates of unemployment. However, the majority of workers in rural areas, particularly among the Scheduled Tribes, are engaged in agriculture and related activities. The creation of diverse and sustainable forms of employment is a major challenge for the State.

Infrastructure

Lastly, proper infrastructure is essential for economic expansion. Tripura is somewhat unique in having experienced a major decline in transport connectivity with the rest of India as a result of the Partition, and in the continued neglect of the transport requirements of the State by the Central Government. Be it in power or

transport or telecommunications or banking, as Chapter 2 shows, the infrastructure available in the State is greatly inadequate for its needs. The lack of basic infrastructure and transport connectivity is a major constraint on economic growth, employment generation and diversification of output and employment.

I.3 Human Development Index (HDI) for Tripura

The successive *Human Development Reports* of the UNDP use a Human Development Index (HDI) to record and monitor the level and progress of human development. From the first *Report*, the three main components of the HDI have been:

- a measure of resources (per capita income);
- a measure of education and knowledge; and
- a measure of life and health.

In practice, these features of development are represented by per capita income, literacy and years of schooling, and life expectancy at birth.

The methodology for constructing the HDI has been modified over the years, not only in response to data availability and constraints, but also in recognition of further dimensions of human development such as gender equality. Following the UNDP methodology, each indicator is first converted into a dimension index by normalizing actual achievements in relation to the highest achievement possible (in the case of literacy, for example, the maximum achievement is 100 per cent). Thus we estimate an education index (based on literacy and school enrolment among 6 to 14 year-olds), a health index (based on life expectancy) and an income index (based on per capita SDP). These three indices are then combined to obtain the HDI by simple averaging.

HDI = 1/3 (health index) + 1/3 (education index) + 1/3 (income index)

The detailed methodology and assumptions are given in Annexure 2.

The HDI for Tripura for the year 2001 was 0.59 (Table 1.20, Map 1.6). Following the classification used by the UNDP, the achievements in human development as measured by the HDI in Tripura correspond to the 'medium' level of achievement at the international level (a value below 0.5 is termed 'low' and a value above 0.8 is termed 'high' achievement). The district-level Human Development Indices indicate that West District ranks first, followed by North District, South District and Dhalai. The gap between West District and Dhalai is 10 percentage points, though even Dhalai scrapes through into the medium achievement category (HDI value of 0.51).

The components of HDI (education index, health index and income index) indicate that the ranks of the districts are similar for each component index. The health indices indicate high achievement, particularly in West and North Districts, while the income index is quite low in all districts. Aggregate HDI is thus driven down by the income index.

The Gender-related Development Index or GDI incorporates differentials in achievements between men and women. To compute the GDI, each index, such as the education index, is calculated separately for males and females, and then the two indices are combined in such as way that larger disparities are penalized (see Annexure 2). In 2001, the estimated value of GDI for Tripura was

TABLE 1.20
Human Development Index (HDI) of Tripura and districts, 2001

	Education index	Health index	Income index	HDI
West District	0.77	0.82	0.26	0.61
South District	0.70	0.76	0.24	0.57
Dhalai	0.60	0.74	0.19	0.51
North District	0.72	0.80	0.25	0.59
Tripura	0.73	0.79	0.25	0.59

TABLE 1.21

Gender-related Development Index (GDI) of Tripura and districts, 2001

	Equally distributed education index	Equally distributed health index	Equally distributed income index	GDI
West District	0.76	0.82	0.17	0.58
South District	0.69	0.76	0.19	0.55
Dhalai	0.59	0.74	0.16	0.50
North Distric	t 0.71	0.80	0.16	0.56
Tripura	0.72	0.79	0.18	0.56

0.56 (Table 1.21, Map 1.7). This is, as expected, lower then the estimated HDI on account of gender inequalities.

The ranks of the districts in terms of GDI and its components are similar to the ranking of districts with respect to HDI other than in terms of the 'equally distributed income index' (a measure of the extent of deviation from a State where males and females have the same income per head). A lower disparity between women and men in terms of work participation in South District results in that district having the highest value of the equally distributed income index. West District, which ranks first in terms of the income index, ranks second in terms of the equally distributed income index.

To put the attainments of Tripura in perspective, we have estimated the HDI for the other States of the North The Human Development Index (HDI) for Tripura for the year 2001 was 0.59. The achievements in human development as measured by the HDI in Tripura correspond to the 'medium' level of achievement at the international level.

MAP I.6

Human Development Index (HDI) of Tripura, by district, 2001



MAP I.7 Gender-related Development Index (GDI) of Tripura, by district, 200 I

TABLE 1.22

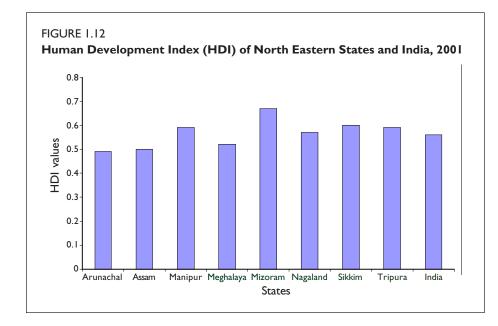
Human Development Index (HDI) of North Eastern States and India, 2001

	Education index	Health index	Income index	HDI
Arunachal Pradesh	0.55	0.68	0.23	0.49
Assam	0.62	0.76	0.13	0.50
Manipur	0.73	0.85	0.18	0.59
Meghalaya	0.62	0.72	0.23	0.52
Mizoram	0.87	0.83	0.30	0.67
Nagaland	0.67	0.76	0.29	0.57
Sikkim	0.71	0.80	0.29	0.60
Tripura	0.73	0.79	0.25	0.59
India	0.64	0.78	0.28	0.56

TABLE 1.23

Gender-related Development Index (GDI) of North Eastern States and India, 2001

	Equally distributed education index	Equally distributed health index	Equally distributed income index	GDI
Arunachal Pradesh	n 0.53	0.68	0.21	0.48
Assam	0.61	0.76	0.10	0.49
Manipur	0.72	0.85	0.18	0.58
Meghalaya	0.62	0.72	0.21	0.51
Mizoram	0.87	0.83	0.30	0.67
Sikkim	0.70	0.80	0.26	0.59
Tripura	0.72	0.79	0.18	0.56
India	0.62	0.78	0.21	0.54



East as well as for India (Table 1.22). Similarly, we have calculated the GDI for all the North Eastern States and India (Table 1.23).

The first noteworthy feature of our estimates is that the HDI and GDI for Tripura are higher than the corresponding values for India as a whole in 2001 (Tables 1.22 and 1.23, and Figure 1.12). The individual components of HDI and GDI show that Tripura performs much better than India with respect to the education index, close to the Indian average with respect to the health index, and worse than India in terms of the income index.

Among the North Eastern States, Tripura shares third rank with Manipur (after Mizoram and Sikkim) with respect to the HDI and fourth rank with respect to the GDI. The State ranks second with respect to the education index (after Mizoram), and fourth with respect to the health and income indices among the eight North Eastern States. The rank of the State, however, falls when the income index is adjusted for gender disparity.

To examine progress in human development at the district level, we have also attempted to estimate the HDI and GDI for Tripura for the early 1990s (Tables 1.24 and 1.25).

Between 1991 and 2001, the improvements in HDI and GDI in Tripura have been greater than in India as a whole (Tables 1.18 and 1.19). The HDI and GDI improvements in Tripura were primarily driven by improvements in the education and income indices. The difference between the HDI and GDI marginally increased between 1991 and 2001 on account of a more skewed gender composition of the work force in the State.

1.4 Concluding Remarks

This chapter has examined levels and progress in three basic indicators of human development in Tripura, a State with a population of a little over 3 million persons located in the North East of India, and in its constituent four districts (South District, West District, Dhalai, North District).

A salient demographic feature of the State is the high rate of growth of population during the last fifty years, particularly in the decade 1951–61. In the North East, Tripura is now second to Assam in terms of population size and population density. The rate and pattern of population growth has brought about a major shift in the demographic balance of the State. The share of the tribal population in the total population of the State fell dramatically from 50 per cent in 1941 to 31 per cent in 1961.

The demographic and associated social, economic and political upheavals gave rise to separatist and divisive insurgency movements in the State. Today, these armed insurgents have lost an agenda but continue to engage in indiscriminate violence targeting both civilians and representatives of the State.

The Universal Declaration of Human Rights recognizes the right of all human beings to "seek and enjoy in other countries asylum from persecution". When India opened its doors to refugees from erstwhile East Pakistan, it was the Government of Tripura that shouldered the enormous social responsibility of rehabilitation of refugees. The refugees brought with them new methods of settled agriculture, and contributed to the development of the productive forces in the countryside. Cultural inter-

TABLE 1.24

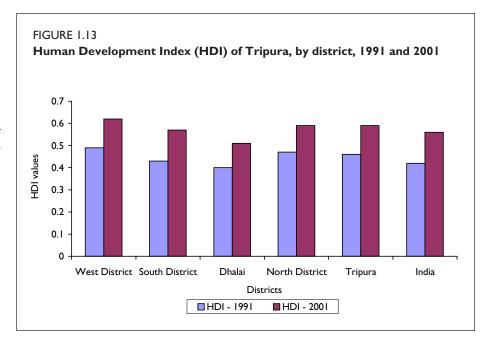
Human Development Index (HDI) of Tripura, by district, 1991 and 2001

	Education index		Health index Inco		Income	Income index		HDI	
	1991	2001	1991	2001	1991	2001	1991	2001	
West District	0.66	0.77	0.73	0.82	0.08	0.26	0.49	0.62	
South District	0.53	0.70	0.67	0.76	0.08	0.24	0.43	0.57	
Dhalai	0.50	0.61	0.66	0.74	0.05	0.19	0.40	0.51	
North District	0.63	0.73	0.72	0.80	0.07	0.25	0.47	0.59	
Tripura	0.60	0.73	0.71	0.79	0.07	0.25	0.46	0.59	
India	0.52	0.64	0.59	0.78	0.16	0.28	0.42	0.56	

TABLE 1.25

Gender-related Development Index (GDI) of Tripura, by district, 1991 and 2001

	Equally distributed education index		Equally distributed Equa			qually distributed income index		GDI	
	1991	2001	1991	2001	1991	2001	1991	2001	
West District	0.64	0.77	0.73	0.82	0.03	0.17	0.47	0.58	
South District	0.51	0.69	0.67	0.76	0.04	0.19	0.41	0.55	
Dhalai	0.47	0.59	0.66	0.74	0.03	0.16	0.39	0.50	
North District	0.62	0.72	0.72	0.80	0.03	0.16	0.45	0.56	
Tripura	0.59	0.72	0.71	0.79	0.03	0.18	0.44	0.56	
India	0.49	0.62	0.59	0.78	0.12	0.21	0.39	0.54	



Achievements in respect of literacy and school enrolment are lower in the district of Dhalai, whose population is largely rural and tribal, than in the other three districts.

action between tribal and non-tribal people paved the way for new social developments, and also influenced the radical mass movements that existed in the State. Nevertheless, as we have noted, the tribal population was converted to a minority in its own land, and demographic change triggered social divisions that racked the State for years to come.

We have examined three basic components of the Human Development Index, namely, literacy and schooling, life expectancy, and per capita income.

Tripura has made substantive progress in respect of literacy and school education, particularly in the 1990s, and today the literacy levels among the people of the State are higher than the corresponding national averages. We have also noted big improvements in school attendance in recent years, suggesting that both absolute deprivations in education and relative disparities will be reduced in the future. Nevertheless, there are areas of concern as literacy among rural people lags behind that in urban areas, literacy among tribal people lags behind that of non-tribal persons, and literacy rates among females are lower than literacy rates among males. Achievements in respect of literacy and school enrolment are lower in the district of Dhalai, whose population is largely rural and tribal, than in the other three districts.

For assessing capabilities in respect of health, special estimates of the expectation of life at birth at the level of each district were prepared for this *Report*. These estimates showed life expectancy of 74 years for women and 71 years for men in Tripura, which are higher than the corresponding national averages. Tripura also does better than the national

average in terms of the sex ratio (or ratio of females to 1,000 males), an indicator of gender equality. Disparities were observed across districts, with West District taking the top rank and Dhalai the lowest rank in terms of life expectancy.

The third and final component of the Human Development Index is per capita income. At the aggregate level, it is clear that Tripura is relatively backward in terms of incomes: the per capita State Domestic Product (SDP) of Tripura is below the national average, and the per capita income of the State is only 40 per cent of that of the State with the highest per capita income. At the same time, per capita SDP has grown at a rate of over 5 per cent per annum in the 1990s, enabling the State to inch closer to the Indian average. Estimates of the DDP, prepared for the first time in the State for this Report, show that levels of income are similar in the North, West and South Districts but Dhalai has a distinctly lower level of income. Further, Dhalai did not gain proportionately from the growth of incomes in the 1990s.

Combining the three basic indicators, the value of the Human Development Index for Tripura for 2001 was estimated to be 0.59 (on a scale of 0 to 1). According to international norms, this corresponds to a moderate level of achievement of human development (less than 0.50 is categorized as low achievement, 0.50 to 0.80 as moderate achievement, and greater than 0.80 as high achievement).

Between 1991 and 2001 Tripura made commendable progress in all three indicators of human development and in the aggregated HDI. This is in contrast to the international experience which shows that countries and regions in conflict "regress

rather than progress in respect of economic and social indicators of development" (Stewart 2004).

In the following chapters, we discuss in greater detail specific issues of concern to human development.

Among the three components of the HDI, the income index has the lowest value in Tripura. The issue of diversified economic growth with generation of adequate employment is clearly critical to the State. Chapter 2 discusses the urgency of expanding and modernizing basic infrastructure including that for transport and communication. Aspects of economic progress, including poverty and assets and employment and wages, are also discussed in Chapter 2. The steady progress in literacy and school enrolment reflect imaginative and committed efforts to improve education, though there is still a long way to go. Chapter 3 discusses problems in the education sector, particularly in respect of primary schooling. While indicators of mortality and longevity have improved, there remain major concerns on the health front, including in respect of morbidity, malnutrition and health infrastructure, and these too are discussed in Chapter 3. Insecurity stemming from violence related to political conflict has affected the economy and jeopardizes human security; this critical issue is discussed in Chapter 4. Tripura has been a leader in implementing democratic decentralization and Chapter 5 focuses on the component institutions and their functioning. Chapter 6 examines the financial constraints of the Government of Tripura, as well as the level, composition and growth of social sector spending. Chapter 7 is the concluding chapter of the Report.

The status of women is critical to the expansion of capabilities. However, women's position has to be gauged with respect to all aspects of human development and therefore in terms of a diverse range of indicators. For that reason, we do not have a separate chapter on women; instead, we examine the status of women with respect to all the key parameters (such as employment status, school enrolment, political participation) throughout the *Report*.

Between 1991 and
2001 Tripura made
commendable progress
in all three indicators of
human development and
in the aggregated HDI.







THE ECONOMY

have noted in Chapter 1 that per capita incomes in Tripura are lower than in the country as a whole, and that the income component lowered the aggregate value of the Human Development Index (HDI). While the State has made commendable progress in terms of absolute levels of economic growth, its per capita income is low and below the national average. Within Tripura, Dhalai stands out as the economically backward district. Thus resource constraints - for individuals and for the State - are factors of importance affecting human development. In this chapter, we first examine key features of the economy of the State including the structure of the economy, the special dependence on forests and the weak infrastructural base. Then we turn to problems of livelihoods by examining issues of employment, incomes and assets.

2.1 Economic Structure

2.1.1 Agriculture

While the economy of Tripura is still largely rural and agricultural (83 per cent of the population live in rural areas and 30 per cent of the Net State Domestic Product, or NSDP, is from the primary sector), the land available for cultivation is relatively restricted. The terrain and forest cover are

such that only 27 per cent of the geographical area is cultivable (the share is as low as 11 per cent in Dhalai, see Table 2.1). Cropping intensity is highest in South District, followed by West District. There is limited land available for expansion of agriculture and allied activities.

Rice is Tripura's main crop: 91 per cent of the cropped area is sown to rice. The acreage under rice is highest in West District, followed by South District. Other important crops are pulses, oilseeds, potato and jute. A variety of fruits, vegetables and spices, covering around 73,000 hectares, are grown in the State. The main fruit crops are jackfruit, coconut, pineapple, banana, mango and orange. Other crops include arecanut and cashewnut.

The terrain and forest cover are such that only 27 per cent of the geographical area is cultivable.

TABLE 2.1 Land-use classification in Tripura, by district, 2004-05

	Net sown area as % of geographical area	Forest area as % of geographical area	Cropping intensity
West District	40.5	31.6	176
South District	28.9	45.8	191
Dhalai	11.3	80.6	158
North District	32.9	61.3	157
Tripura State	26.7	57.8	176

Note: Cropping intensity is the gross cropped area divided by the net sown area.





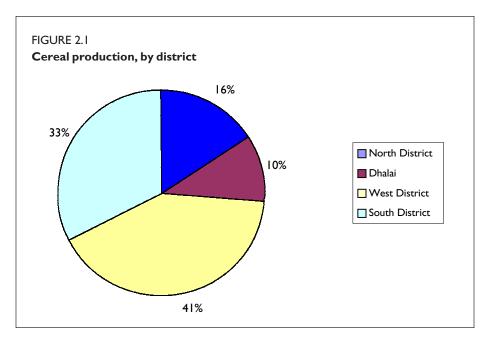
Plains land cultivation is concentrated in West and South Districts, and these two districts account for the bulk of cereal production (41 per cent and 33 per cent respectively; see Figure 2.1). North District and Dhalai, by contrast, contribute less to cereal production and more to the production of fruit (Figure 2.2).

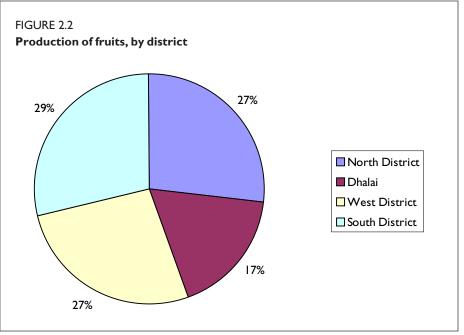
The rate of growth of agricultural production in the last five years has not been high except in South District. The average annual growth rate of rice production between 1999-2000 and 2004–05 was 2.1 per cent, and yield growth was very low (0.4 per cent). Even taking a longer time horizon, the growth performance in respect of rice and food grain has not been satisfactory (at around 1.5 per cent per annum). The average rice vield in the State, 2.2 tonnes per hectare, is however a little above the all-India average (2 tonnes per hectare), with West and South Districts showing higher yields than North District and Dhalai. Over the years, Bengalispeaking immigrants, including Partition refugees, have contributed to improvements in agriculture, particularly wet-rice cultivation.

Agriculture in the State has the potential to develop. Past performance has been constrained not just by the terrain but by a lack of development of irrigation, limited use of modern inputs, and inadequate access to agricultural extension and markets. There is tremendous potential for the expansion of horticulture and plantation crops. Water bodies, including those within forests, can be utilized for fishery activities.

2.1.2 Industrial Backwardness

The economy of Tripura is characterized by the near-absence of an industrial base, with manufacturing





accounting for less than 3 per cent of NSDP. The major industries in the State are based on natural gas and plantation crops, specifically, rubber, tea and bamboo. There is also a traditional handloom and handicraft industry. Even the small manufacturing base is unequally distributed across the State. Estimates of District Domestic Product (DDP) show that the share of the secondary sector ranged from 5 per cent in Dhalai to

The economy of Tripura is characterized by the near-absence of an industrial base, with manufacturing accounting for less than 3 per cent of NSDP.

TABLE 2.2

Number of registered factories with number of workers employed,
Tripura and districts, as of March 2005

	Factories registered under			Total factories	Share in total	No. of workers
	Sec. 2m(i)	Sec. 2m(ii)	Sec. 85		factories	employed
West District	191	104	711	1006	63.7	19,185
South District	37	48	192	277	17.5	5,848
Dhalai	16	8	33	57	3.6	1,845
North District	95	14	129	238	15.1	6,247
Tripura	339	174	1065	1578	100.0	33,125

Notes: Sec. 2m(i) are factories using power and employing ten or more workers; Sec. 2m(ii) are those without power and employing twenty or more workers; and Sec. 85 are registered under State Government provisions.

Source: Economic Review 2004-05.

TABLE 2.3
Enterprises and workers as per the Economic Census, Tripura and districts, 1998 and 2005

	Enterprises				Workers			
	1998		2005		1998		2005	
	Number	Share	Number	Share	Number	Share	Number	Share
West District	53,487	51.2	91,788	48.7	144,046	53.7	193,484	51.0
South District	24,069	23.0	49,448	26.3	46,540	17.3	88,203	23.2
Dhalai	7,433	7.1	15,526	8.2	19,160	7.1	30,552	8.1
North District	19,438	18.6	31,522	16.7	58,511	21.8	67,082	17.7
Tripura	104,427	100.0	188,284	100.0	268,257	100.0	379,321	100.0

Source: Directorate of Economics and Statistics, Quick Manual Tabulation Result of the 5th Economic Census.

The natural resources of Tripura include its forests and major natural gas reserves.

12 per cent in North District. The number of registered factories totalled 1,578 in 2005, of which 64 per cent were located in West District and less than 4 per cent in Dhalai (Table 2.2). Even the scale of the unorganized manufacturing sector was small. A recent survey (in 2001) conducted by the National Sample Survey (NSS) on

¹ There was a higher share of female workers relative to male workers in unorganized manufacturing in Tripura compared to the all-India average, but the gross value added per worker was lower in Tripura than the national average.

unorganized manufacturing shows that the unorganized sector has 234 workers per 10,000 population in Tripura, compared to the all-India average of 363 workers per 10,000 population.

Nonetheless, data from the Fourth and Fifth Economic Censuses indicate a rise in the number of enterprises between 1998 and 2005. While West District continues clearly to dominate in terms of the number of enterprises, there has been a relative increase in the number of enterprises in South District and Dhalai over the last seven years (Table 2.3). Non-agricultural enterprises accounted for 90 per cent of total enterprises. However, only 2 per cent of enterprises employed ten or more workers.

As shown in Chapter 1, the biggest contribution to SDP comes from the tertiary sector, a sector that is something of a mixed bag. While some activities such as banking generate demand for high-income skilled labour, others like construction generate demand mainly for skilled and unskilled manual workers.

Tripura has natural resources including gas and forest wealth. Natural gas has been struck in the Baramura Hills and in Rokhia in South District, and natural gas-based thermal power generation is operational at both places. Through proper utilization of these resources, and in the absence of social and economic disruption, further industrialization and more rapid economic growth are possible (for example, through development of gas-based industry or ecotourism).

2.2 Forest-based Livelihoods 2.2.1 Dependence on Forests

Since a large part of the State is under forest cover, the problem of tribal livelihoods in forest areas is a challenging one in respect of both socio-economic and ecological development. While existing tribal organizations have demanded that people get land and forest rights, the Government itself has been attempting to balance the needs of tribal livelihoods with forest conservation. Of the forested land in the State, more than 70 per cent falls under the Sixth Schedule, that is, under the jurisdiction of the Tripura Tribal Areas Autonomous Development Council (TTAADC). However, the Council has no control over its administration since the land falls under the purview of the Forest (Conservation) Act 1980 and, therefore, under the Central Government. This makes the task of tribal development additionally difficult, and the initiatives of the State Government and the challenges before it have to be evaluated in this context.

2.2.2 *Jhum Cultivation and Jhumias* Traditionally, most of the tribal population practised shifting or *jhum* cultivation and were termed *jhumias*. The term *jhumia* is a generic term used for tribal people dependent on shifting cultivation as the primary source of livelihood.

A significant number of persons and families in Tripura continue to depend on forests and *jhum* cultivation as their main source of livelihood (Table 2.4). J.B. Ganguly's book on the *Problems of Jhumias in Tripura* (1968) showed that in 1961 there were about 25,000 families who were dependent on *jhum* for their livelihood. By 1978, this number had increased to 46,854 families, of which about 23,292 families were primarily dependent on *jhum* for their livelihood. By 1987 the estimate was

TABLE 2.4

Number of households and persons dependent on *jhum*, Tripura, 1968 to 2007

Year	Source of the Estimate	No. of Households	No. of Persons
1968	J. B. Ganguly	25,000	
1978	Benchmark Survey 1978*	46,854	2.59 lakh
1987	Benchmark Survey 1987*	55,049	2.88 lakh
1999	Department of Tribal Welfare	51,265	-
2007	Forest Department	27,278	1.36 lakh

^{*} Government of Tripura.

revised to 55,049 families that were more or less dependent on jhum for their survival. Of these, 40,000 were in TTAADC areas. Further, 21,677 families were primarily dependent on jhum, and 33,372 families were partially dependent on jhum for their livelihood. In 1999, according to the Department of Tribal Welfare, 51,265 families were dependent on *jhum*, and the large majority of them were fully dependent on *jhum*. The big concentration of jhumia families was in Dhalai and South District. In 2007, the Forest Department completed a first-ever Census enumeration of hard core shifting cultivators and found 27,278 families (or 1,36,000 persons) dependent on *jhum*.² The total count shows a clear decline in the number of jhumia families.

All the same, the continued dependence on *jhum* of more than 10 per cent of tribal families is of concern since *jhum* is a high-risk system of cultivation and, in the current circumstances (with reduced years of the *jhum* cycle), cannot provide an adequate means of livelihood. *Jhum* has been and continues to be a precari-

The TTAADC has no control over the administration of forest land since it falls under the purview of the Forest (Conservation) Act 1980 and, therefore, under the Central Government. This makes the task of tribal development additionally difficult, and the initiatives of the State Government and the challenges before it have to be evaluated in this context.

² 'Enumeration of Shifting Cultivators in Tripura', Forest Department, Government of Tripura.

According to official statistics, in 1999, around 26.75 lakh person-days of employment was generated by the forestry sector. The estimate for 2003–04, however, is only 12.6 lakh person-days, or a halving of employment.

ous system of cultivation that yields barely enough to survive. Even thirty years ago, the average cost of production on 1 acre of jhum land was about Rs 226, and it provided about 65 person-days of employment and yielded an income of about Rs 218.3 A decade later, in the 1980s, another analysis showed that many jhumia families earned a large portion of their incomes from non-traditional wage employment, especially through the Forest Department. The estimated average annual income of a jhumia household was Rs 184 from cultivation; Rs 539 from collection of bamboo, firewood and sungrass; and Rs 1,750 from labour for the Forest Department and forest traders who paid the *jhumias* minimum prices for the collection of forest produce.⁴ A case study conducted in May 2005 in Halodia village of Mungiakami block revealed that one adult worker earned only Rs 1,000 to Rs 1,100 each year from jhum (from a combination of rice cultivation and harvest of muli bamboos).5

Nevertheless, forests remain an important source of livelihood for the tribal population. *Jhum* cultivation has an intimate relationship with forest use, not only in terms of the habitation and cultivation of tracts inside forested areas, but also because the forestry sector provides important supplementary income and inputs in the daily lives of tribal people. There are benefits to forest dwellers, difficult to quantify, from the collection of fruits, bamboo shoots and other edible produce, from fodder, from

construction material for houses, and from medicinal plants.

Though the overall contribution of the forestry sector to the economy is significant, the data point to a decline in the output of timber and a rise in the output of non-timber forest produce. In particular, with a sharp rise in its collection, bamboo has emerged as one of the main sources of forest-based livelihood. The decline in output of timber has adversely affected the contribution of the forestry sector to employment in rural areas. According to official statistics, in 1999, around 26.75 lakh person-days of employment were generated by the forestry sector. The estimate for 2003-04, however, is only 12.6 lakh person-days, or a halving of employment, mainly on account of the ban on green felling imposed by the Supreme Court.6

2.2.3 Jhumia Rehabilitation Programmes

The major public policy intervention in favour of forest dwellers has been to rehabilitate and resettle jhumia families.⁷ The first attempts to settle *jhumias* were made by the Raja of Tripura, who set up the Kalyanpur Reserve in 1931. The reserve was situated in a fertile area outside forests and was intended to induce jhumias to take to the plough. Tenancy laws were enacted to protect tribal rights over land. The immigrants who moved, however, were mainly non-tribals. The post-Independence period saw a spate of attempts to settle jhumias into occupations that were integrated into the mainstream peasant econ-

³ Deb Burman (1971).

⁴ Banerjee, Dasgupta and Prasad Roy (1986).

⁵ Interviews by Archana Prasad with families that lived originally in Halodia, now in the relocated village of North Gokul Nagar, Mungiakami block, Dhalai District, 13 May 2005.

⁶ Deputy Conservator of Forests, Tripura.

⁷ Material for this paragraph is taken from Suchintya Bhattacharya, *From Jhuming to Tapping*, Department for Welfare of Scheduled Tribes, Government of Tripura, 1992, pp. 64–65.

omy. The Congress Government set up colonies where *jhumias* were given land to carry out plough cultivation. Through the 'Shifting Cultivation Control Scheme', a centrally sponsored scheme, each family was to be granted a piece of cultivable land and Rs 500 as initial capital. Each settlement or 'colony' was designed to provide basic amenities to the tribal people. A total of 59 colonies were established by 1969. The success of the programme was, however, limited, since 37 per cent of the settled families failed to take to the plough.

Most of these measures failed to curb jhum cultivation in forested areas. By the 1980s, nearly 1.2 lakh acres were occupied by tribals in reserved, proposed reserved and protected forest areas; 1 lakh acres were utilized for cultivation alone and the rest was used for homestead and other purposes.8 The challenge of rehabilitation was thus a large-scale one, and had to be implemented in accordance with the Forest (Conservation) Act 1980. Since land for rehabilitation was scarce outside forested areas, the State Government soon realized that non-agricultural forest-based options had to be pursued.

The Government of Tripura has taken innovative approaches towards the development of tribal livelihood systems. The number of families involved in four major plantation schemes clearly shows that raising rubber plantations has been one of the important means of *jhumia* rehabilitation (Table 2.5).

Rubber plantations

India is the fourth largest producer of rubber in the world after Thailand,

TABLE 2.5

Number of families resettled under various schemes, 1986-87 to 2004-05

Total number of families	
8,962	
9,445	
795	
557	
18,959	
	8,962 9,445 795 557

Indonesia and Malaysia, and of India's total production, 90 per cent is grown in Kerala. The 1980s witnessed an expansion of rubber into non-traditional zones, of which Tripura was the most important. The rubber plantation project was conceived as a lucrative alternative to jhum cultivation.9 The Tripura experiment is modelled on the experiences of the Kerala rubber economy, where the 'Rubber for the Poor' project attempted to provide tribal and other marginal farmers with a steady income. Rubber has the potential of providing jhumias with a substantial income. In the period when rubber trees are immature, inter-cropping with cash crops like pineapple can provide an income. The Government of Tripura is also eager to use tila land and waste land to grow cash crops and tap industrial and export markets.

Apart from income benefits, the *jhumia* rehabilitation schemes are also significant because they contribute to skill development in several ways (see Box 2.1).

The rubber plantation project was conceived as a lucrative alternative to *jhum* cultivation. The Tripura experiment is modelled on the experiences of the Kerala rubber economy, where the 'Rubber for the Poor' project attempted to provide tribal and other marginal farmers with a steady income.

⁸ Government of Tripura, *Annual Tribal Sub Plan*, 2003–04: 10th Five Year Plan, p. 10.

⁹ By the time of the Ninth Five Year Plan, raising rubber plantations had become one of the main strategies for rehabilitation of *jhumias*. Here the Central Government, Rubber Board and the World Bank came together to provide loan assistance to the Tripura Government to raise rubber plantations and develop itself into the 'Second Rubber Capital of India'.

BOX 2.1

The Abhanga Rubber Plantation

Abhanga Rubber Plantation in Ambassa block is one of the oldest rubber plantation projects in Tripura. It also happens to fall within the constituency of the Chief Executive Member of the TTAADC, Aghore Deb Barma. The rubber plantation was started in 1985 following a meeting of all the village residents. The village panchayat made a list of beneficiaries, and between 1985 and 1987 khas (government-owned) land was allotted to them on which to start rubber plantations. Initially, there were 101 hectares of plantation with 84 beneficiaries from Abhanga, Makhanya and Maharani Gram Panchayats. Between 1987 and 1994, when rubber trees had to be nurtured, a wage of Rs 46 per day was paid to the allottees. Once tapping started, the rate of survival of plants determined the income of the tappers. Families that had up to 150 surviving trees earned around Rs 1,500 per month, those having 300–400 trees earned about Rs 5,000 per month, and those with 500 trees, i.e. with 1.5 hectares, earned about Rs 12,500 per month. A rubber processing factory also existed in the catchment area of the plantation, and a daily wage of Rs 50 was given to the twelve people who worked here.

This rather successful plantation was totally destroyed by the cyclone of 2002, and the people were forced to eke out a livelihood through other means. Instead of going back to *jhum*, the people started to sell fuel-wood, earning approximately Rs 30 per day. Recognizing that *jhum* was an unreliable livelihood, the people went to the Government to revive the plantation.

The Abhanga Plantation is a good example of how rehabilitation can enhance human development. There is one junior basic school in the region and many health camps have been held in the project area. *Pattas* or land titles have been made out jointly to couples, and women play an important and active part in all operations of rubber-tapping and processing.

Source: Field visit by Archana Prasad (May 2005).

As of 31 March 2007, a total of 472 Joint Forest Management groups involving 44,882 families have been established. The majority of beneficiaries of Joint Forest Management are tribal families.

Horticulture, tea and coffee

Another major effort to rehabilitate jhumias has been through the horticultural programme. Agricultural conditions in Tripura are suited to the cultivation of horticultural crops such as banana and pineapple, and several horticultural schemes have been initiated, including programmes for the development of fruit trees, and for the development of kitchen gardens. However, expenditure on horticultural schemes has been inadequate, and only 15 per cent of the allocation proposed in the 2002-07 Tribal Sub-Plan has been disbursed. Tea and coffee plantations have been started on a small scale. Further development of horticultural crops requires investment in processing and marketing.

Joint Forest Management programme

West Bengal and Tripura were the first two States in the country to implement the Joint Forest Management (JFM) programme. Both view it as crucial to providing a livelihood base for tribal people while preserving and regenerating forests. Tripura began by implementing the 1991 resolution of the Government of India with respect to JFM. In 2001, the Government of Tripura revised the resolution such that, apart from usufruct benefits, IFM committees are also entitled to 50 per cent of the profits from the sale of timber crops and 100 per cent from the sale of medicinal plants and non-timber forest produce. Members of JFMs can also cultivate indigenous fish in water bodies created by the Forest Department.

As of 31 March 2007, a total of 472 JFM groups involving 44,882 families have been established. The majority of beneficiaries of JFM are tribal families. The story of the Jiban Deep JFM in Melaghar illustrates the opportunities for equitable socio-economic development through JFM (see Box 2.2).

2.2.4 Emerging Issues: Forest or Regrouped Villages

Agricultural development in the State is severely constrained by the lack of availability of agricultural land. At the same time, development of nonfarm labour opportunities and industrial activity is influenced by the lack of adequate infrastructure in remote tribal and forested areas. The remote areas have also been affected by insurgency. The pressures of insurgency and the lack of infrastructure have moti-







BOX 2.2

Jiban Deep JFM, Melaghar Forest Range

This was the first Joint Forest Management (JFM) project in the North Eastern region and was started in 1989. The State Forest Department, assisted by the Jagdish Bose Vrikshamitra Society (JBVS), initiated the project. The forest management committee is elected every year and consists of thirteen elected persons of whom three are women. It polices 100 hectares of forest land covering four panchayats. Most of the forest under the JFM is reserved and protected forest. Eighty per cent of the population has *joteland* (land owned by individuals for cultivation) outside the forests, while 20 per cent have rights allotted in forest lands to practise forest-related livelihood strategies.

Though the JFM brings four panchayats in its fold, the biggest and the most active is Purba Chandgara, which has 230 families. The *Gram Pradhan* of Purba Chandgara, Tapan Chakraborty, says that the JFM and panchayat committee work with each other in two ways. First, the panchayat helps the JFM Committee (JFMC) identify poor families who should benefit from different programmes. Second, the panchayat gets involved with the day-to-day life of forest-dependent people through the JFMC. Indralal, the president of the JFMC, stated that the Committee has worked to build unity between tribals, non-tribals and Muslims in order to strengthen communal harmony.

The Jiban Deep JFMC attempts to distribute the benefits of JFM in an equitable way. Families under the JFMC are divided into A, B and C grades. A-grade families, of which there are twenty to twenty-five, do not need any additional employment through the JFMC. B-grade families, of which there are thirty, get some but not sufficient work in a year and are allowed to collect some forest produce. Most families belong to the C type, i.e. families that get very little work in the year and whose livelihoods depend on forest-related work. While C- and B-grade families are the primary focus of the JFMC, A-type families are also included in its activity so as to prevent illegal felling and in order not to alienate dominant groups of the village from JFM activity.

Members of the Jiban Deep JFMC were concerned about people who came to the forest to collect fuel but lived outside the boundaries of the JFMC. In order to include them in the accounting, members suggested that share-holder cards be issued to all beneficiaries. The members questioned the formation of the Forest Development Agency and its criteria for allocation of funds to JFMs.*

Note: In 2002, the Ministry of Environment and Forests proposed the creation of a Forest Development Agency (FDA), one for each forest division, to act as an umbrella organization for afforestation and other activities sponsored by the Central Government. All development projects in a forest area have to be approved by the FDA.

Source: Archana Prasad (2005).

vated *jhumias* to abandon interior villages and shift to new settlements – forest or regrouped villages – close to the main roads. Currently (March 2007), there are twenty-three forest villages comprising 3,908 families.

The formation of forest villages is an opportunity to help *jhumias* gain access to basic services. It is also an opportunity to expand livelihood options. Regrouping has a positive impact on the access that resettled people have to social and physical infrastructure (e.g., access to drinking water, school buildings, biogas experiments, pucca houses). However, it is essential to plan for sustainable sources of income generation that provide year-round employment in the new location. Cooperative enterprises can be encouraged in the sphere of both production and marketing. As many of the villages of resettled people are in reserved forests, the Forest (Conservation) Act 1980 has been critical to the generation of livelihoods (since it determines land-use). A basic issue in the development of forest-based livelihoods is access to forest resources, and the new legislation, the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006, is of crucial relevance to Tripura (see Box 2.3). The new Act provides the scope for additional income-generating activities to be introduced.

Since forest villages are located in reserved and protected forests, the process of regrouping has generated issues between the Forest Department and tribal people that need to be resolved. Access to forest resources is more difficult when living outside the forest or on its fringes than when living in the forest. Another contentious issue is of land rights within the forest villages, as on some sites, the

extent of land demarcated for new settlements is less than that actually occupied by the settlers in their original homes, including within forests.

2.3 Infrastructure

Infrastructure is essential for any economy to develop. In the case of Tripura, the need for basic infrastructure is intense on account of the historical underdevelopment of infrastructure, the setback at the time of Partition and the physical location of the State.¹⁰ Tripura is remote and isolated within India, and to overcome this handicap, the State needs modern, reliable, quick and cheap methods of communication and transport with the rest of India, and particularly with trade hubs such as Kolkata. Good connectivity is essential for further social and economic development of the State.

This section deals with three main components of basic infrastructure, namely, transport (road and rail) and telecommunications and power. We also have a special section on banking, which is a critical source of finance for investment.

2.3.1 Transport and Communications

Railways, a cheap and convenient form of transport, and, historically, the basis of industralization, have a negligible presence in Tripura. In 1892, the Assam–Bengal Railway line was opened, and in 1903, the extension from Bogro to Tinsukhia junction, the last junction on the North East Frontier Railway, was completed. More than a century later, Agartala has no rail connection and

¹⁰ Geographic isolation, a hilly terrain and deficit infrastructure are, according to Atul Sarma, major constraints to the development of all North Eastern States (Sarma 2005).

BOX 2.3

The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006: Provisions and Relevance to Tripura

The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Bill 2005 was first introduced in Parliament in December 2005; it was subsequently referred to a Joint Parliamentary Sub-Committee (JPC) and an amended Bill was approved by both houses of Parliament in the winter session of 2006. The new Act presents an excellent opportunity to meet the challenges of tribal development and forest management in Tripura, as issues of settlement and forest development are crucial to the long-term prosperity of a large part of the tribal population of the State.

The Act deals with the issue of settlement of land rights and rights to minor forest produce in forested areas with a view to correct the 'historical injustices' that have been perpetrated on the Scheduled Tribes (STs) and other traditional forest dwellers in the country. The main provisions of the Act include:

- The settlement of land and forest rights to all STs and other traditional forest dwellers living inside forest areas before 13 December 2005, the date on which the Bill was introduced in Parliament. The original Bill proposed a cut-off date of 25.10.1980 and the amendment of the cut-off date has been on account of pressure from progressive movements.
- The Act now includes 'traditional forest dwellers' within its ambit. This
 means that minority tribals and others who live in forested areas will be
 covered by the new law.
- The Act pays attention to displaced people and to rehabilitation. The Act now covers all forests including reserved forests, national parks and sanctuaries. It also makes relocation from the 'critical wildlife areas' voluntary and only after the rights of those dwelling within that area are settled. The process by which the 'critical wildlife areas' have to be determined has also been made more representative and participatory.
- The JPC Report has led to recognition of the developmental role of the State and the right of forest dwellers to basic amenities.
- The Act provides for granting joint *pattas* to people who have a claim on land rights. The proposed ceiling of 2.5 hectares per nuclear family has been removed and provision for settlement on an 'as is where is basis', with a new ceiling of 4 hectares, has been made in the final Act.
- The Act strengthens the powers of the Gram Sabha to settle rights at the local level and makes other institutional structures more representative.
 The amended Act is an important step in decentralizing forest administration.
- The nodal agency for the implementation of the Act is to be the Ministry of Tribal Affairs of the Government of India.

In the process of implementing the Act, the following issues are relevant to Tripura and its peoples.

• The institutional framework in the Act empowers the Gram Panchayat to settle rights within the 'local and customary limits of its jurisdiction'.

(continued on the next page)

BOX 2.3 (continued)

Since more than 80 per cent of the forests in Tripura are under the jurisdiction of the Central Government, panchayats and other local bodies may have only a limited say in the issue of settlement of rights.

- Amendments are needed to bring government-owned forests under the
 overall framework of the procedures suggested in the Act so that the
 authority of the Forest Department can be subordinated to district and
 State-level monitoring committees set up under this Act. Changes are
 also required to provide greater powers to the Autonomous District
 Council (ADC).
- The State Government needs to be empowered especially with respect to settlement of rights in their own areas. For example, the process of identification of people eligible for rights, the actual position of forest habitations and the nature of development activities should be decisions that are made at the State level.
- Sustainable forest and land-use will depend on the access of forest rightholders to basic infrastructure such as irrigation, roads and access to markets. The West Bengal and Tripura experiences show that employment generation and enhancement of forest-based livelihoods are possible through sustainable forest use. At present, attempts to rehabilitate forestdependent people are obstructed by the Forest (Conservation) Act 1980, since any development activity within forest areas requires the permission of the Central Government. The Act should recognize the powers of the State Government and its right to redevelop its own forests so that both security of tenures and livelihood can be maintained over a long term. State Governments should have the responsibility to ensure that all forest right-holders have access to basic amenities and inputs required for sustainable land and forest use. The funds for this development can be mobilized from at least three sources: grants-in-aid given by the Central Government; State budget allocations and forestry projects; and taxation by State Governments of commercial activities of big projects, such as mining in forest areas.

Partition choked off
Tripura's major lines of
transport and
communication by
severing inland waterway,
roadways and railway
networks.

the railway network in North East India remains sparse.

Partition choked off Tripura's major lines of transport and communication by severing inland waterway, roadways and railway networks. Before 1947, the main railhead for Agartala was nearby Akhaura – now in Bangladesh. After the disruption of rail connections in 1947, major efforts were made to create direct railway links between Assam and Kolkata. In the sixtieth year of Independence, Agartala remains without a railhead. Extension of the existing

rail track, from Lumding in Assam to Agartala via Manu in Tripura, was recently taken up as a national project with an expected completion date of March 2007. The deadline has passed, and the line has not progressed beyond Manu (amounting to 67 kms of track in Tripura). Further, there remains the issue of converting the metre gauge to broad gauge, and this work is yet to be sanctioned. The Government of Tripura has also proposed extending the railway line all the way down south to Sabroom in South District, so as to connect to the port of Chittagong, which is another 75 kms away. Creating a rail link with Akhaura in Bangladesh, with further connections to India, can be another channel for trade.

The State is entirely dependent on its roadways for basic transport. The Assam–Agartala National Highway 44 (NH-44), constructed after Independence, is still the only road link with the rest of India. It remains a single-lane highway of sub-standard quality, and a precarious link since a severe landslide or disruption can effectively cut off the State from its neighbours. There is urgent need both to improve the state of NH-44 and to build a second expressway to improve passenger and cargo movements. 12

The road network within the State is very poor: the total road length was 15,780 km in 2005, of which only 24 per cent was surfaced (black-topped) road, and there was no double or multi-lane highway. The State has

¹¹ Every year, the Patherkandi area of NH-44 is damaged badly by rain.

¹² The State Government has proposed an alternate National Highway connecting Kukital on the Assam border with Kumarghat, Chebri, Teliamura, Ompi, Amarpur, Jatanbari, Silachari and Sabroom.

400 km of national highway and 545 km of State highways (Table 2.6). Of the total road length, as much as 57 per cent is covered by an earthen surface. The proportion of surfaced road length to total road length in Tripura is the second lowest after Assam among the North Eastern States. The road length per 100 sq km of area was 148 in Tripura in 1999. By way of comparison, the corresponding figure in Goa was 263.

Differences across districts are vividly reflected in vehicular density: the number of vehicles per sq km ranged from 0.25 in Dhalai to 14 in West District.

Further, as discussed in Chapter 4, safety on the highways is a severe constraint on the normal flow of vehicular traffic, adding to the costs of transporting people and goods and greatly inconveniencing travellers. The distance from Kolkata to Agartala was less than 350 km before Partition and is currently 1,700 km. The costs of transport are disproportionately high: a 9-ton truck from Guwahati to Kolkata, covering a distance of 1,100 km, charges Rs 20,000, while the same truck charges Rs 16,000 for a 1,600-km distance from Kolkata to Chennai (Sarma 2005).

In addition to expanding rail and road links, the use of riverine routes in Bangladesh, particularly for transporting goods, needs to be explored. Even though it is important to break the inordinate dependence on air traffic, we must recognize that air travel has a special role to play in the transport system of the North East. In the North East air travel covers a much wider section of the population than elsewhere. Any future system of transportation must include an air shuttle network with the North East and

TABLE 2.6 Road length by type of road, Tripura, 2004–05 (in km)

Length (in km)	
400	
545	
1,452	
12,801	
582	
15,780	
	400 545 1,452 12,801 582

TABLE 2.7

Telecommunication facilities, Tripura and districts, 2003-04

District	No. of telephone exchanges	No. of telephone connections	Tele-density per 100 population	No. of public call offices	No. of telegraph offices
West District	29	51,084	26.9	654	12
South District	31	15,830	10.6	140	10
North District	16	11,527	13.9	133	7
Dhalai	7	3,186	4.9	25	6
Tripura	83	81,627	18.4	952	35

Source: Economic Review of Tripura, 2003-04.

between the North East and key points in the rest of India.

Telecommunications

While telecommunication facilities have grown in recent years, they are still very limited both with respect to absolute levels and spread, and far from the requirements of a modern economy (Table 2.7).

2.3.2 *Power*

Energy consumption per capita in the State is lower than in other parts of India. ¹³ In 2002–03, the annual per capita consumption of electricity in Tripura (111 Kwh) was lower than the average for the North East (114 Kwh), lower than the Indian average

The distance from Kolkata to Agartala was less than 350 km before Partition and is currently 1,700 kms.

¹³ See Sinha (2005).

TABLE 2.8 District-wise energy consumption, 1999–2000 to 2004–05 (in mu)

Year		Dist		Total energy	
	West	North	Dhalai	South	
1999–2000	373.6	76.5	35.3	102.9	588.4
2000-01	379.8	77.8	35.9	104.7	598.1
2001-02	389.6	79.8	36.8	107.4	613.5
2002–03	428.3	87.7	40.5	118.0	674.5
2003–04	426.8	87.4	40.3	117.6	672.2
2004–05	396.8	81.2	37.5	109.3	624.8

Source: Tripura State Electricity Corporation.

TABLE 2.9

Share of different uses in total power sold to ultimate consumers, 2005–06

Use	Share (%)
Domestic consumers	39.0
Commercial	9.0
Industrial power	13.0
Public lighting	2.0
Irrigation, public water and sewage	33.0
Tea garden and other bulk supply	4.0
All	100.0
Source: Economic Review of Tripura 2005-06.	

Rural electrification is inadequate: only 32 per cent of rural households reported the use of electricity for lighting at the Census of 2001 (the national average was 43.5 per cent of households).

(373 Kwh), and only about one-fourth of the average for the western and southern region of the country. Within Tripura, the pattern of energy consumption is very unequal across districts, with West District accounting for 63 per cent of total consumption. A third and worrying feature of power consumption is that consumption has declined in all districts in the last few years (Table 2.8).

Domestic use is the biggest component of power consumption (39 per cent of total power sales). Irrigation, water and sanitation account for 33 per cent of power use and industry accounts only for 13 per cent of total use. The low consumption shares of industry and commercial

users reflect the overall backwardness of the economy.

Rural electrification is inadequate: only 32 per cent of rural households reported the use of electricity for lighting at the Census of 2001 (the national average was 43.5 per cent of households). Detailed blockwise data show that even in a block close to the State capital, Mohanpur, only 48 per cent of the houses reported using electricity for lighting (Map 2.1). Furthermore, the use of electricity was not universal even in urban areas.

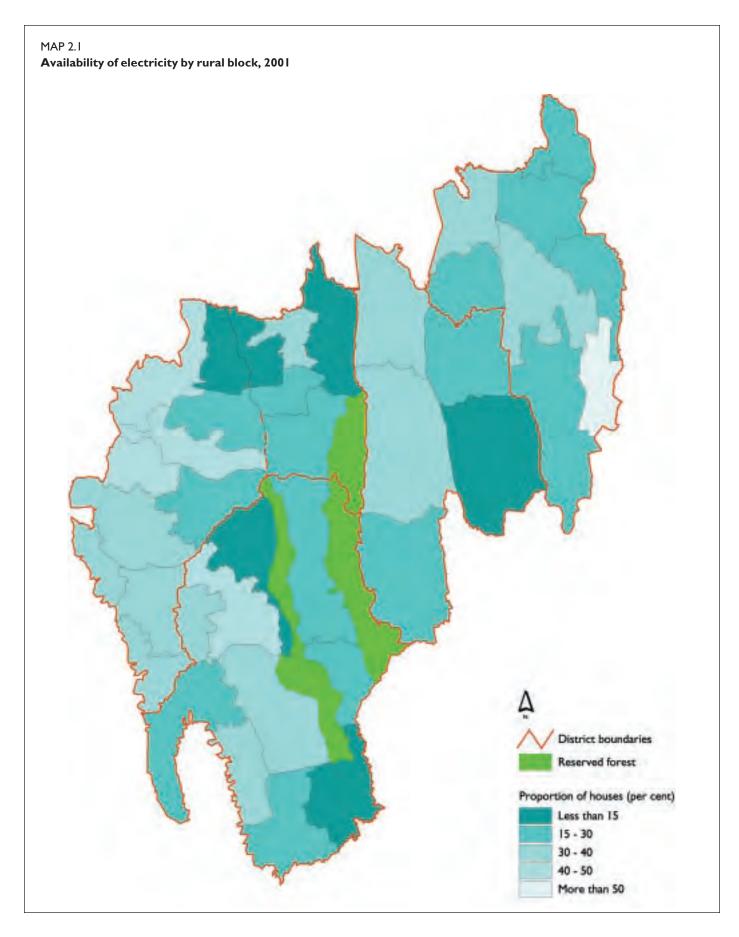
Tripura has three power plants but production is not enough to meet its present requirements and power is imported from the North Eastern grid during the peak load period. Being endowed with natural gas, the State has the potential for thermal power generation.

Given the problems above, it is not surprising that the Eleventh Finance Commission ranked Tripura as the second most backward State in the North East in respect of infrastructure.

2.3.3 Banking

Tripura had an underdeveloped banking infrastructure when it joined the Indian Union in 1949. In 1956, when Tripura became a Union Territory, it had only two bank offices, and a coverage of 3,00,000 persons per bank office. By 1961, the number of bank offices in the State had increased to four, and the population per bank office had come down marginally, to 2,75,000 persons per bank office (the figure for India was 99,000 persons per bank branch). With the nationalization of

¹⁴ This section is based on a background note prepared by Pallavi Chavan (2005).



The expansion of the banking network in Tripura after 1970 is entirely attributable to the public sector. In 2004, there were 34 offices of the State Bank and its associates, 62 offices of other nationalized banks and 90 offices of Regional Rural Banks. Foreign banks and private banks did not have a single office in all of Tripura.

major commercial banks in 1969 and the initiation of a policy of 'social and development banking', banking infrastructure in Tripura expanded. By 1975, the population per bank branch had declined to 77,900. The spread of banking continued thereafter, and by 1990, Tripura had a population per bank branch of 17,900 persons. However, despite this expansion, banking infrastructure, as measured by the population per bank branch, remained below the all-India average.

Within Tripura, the spread of commercial banking was better in the South District in 1975. However, the development of banking in the subsequent period brought about a remarkable increase in the reach of commercial banks in North and West Districts. By 1990, North District had the best coverage among all the districts. Since the formation of the new district of Dhalai in 1995 makes district-wise comparisons over time difficult, a composite figure for North District, South District and Dhalai is also reported. In 2005, Dhalai had the lowest spread of banking in the State.

The expansion of the banking network in Tripura after 1970 is entirely attributable to the public sector. In 1961, all four bank offices in Tripura were offices of Indian scheduled commercial banks. By 1975, the number of branches of public sector banks (comprising nationalized banks, and the State Bank of India and its subsidiaries) had increased to twenty. After the establishment of Regional Rural Banks (RRBs) in 1974, they emerged as another important source of banking in the State. In 2004, there were 34 offices of the State Bank and its associates, 62 offices of other nationalized banks and 90 offices of RRBs. Foreign banks and private banks did not have a single office in all of Tripura.

From 1980 to 1990, there was a substantial rise in credits and deposits in real terms: the per capita credit outstanding rose from Rs 185 in 1980 to Rs 877 in 1990 (at 1993-94 prices), while deposits per capita rose from Rs 360 to Rs 959 during the same period. Evidently, credit as a percentage of deposits was also on a rise: by 1990, the credit-deposit ratio was 91.5 per cent. In 1990, West District accounted for 70 per cent of the deposits mobilized but only 43 per cent of aggregate credit outstanding. It follows that the credit-deposit ratios in West District were much lower than in South and North Districts.

This phase of bank expansion benefited the rural areas of Tripura. The rate of growth of rural offices of commercial banks was nearly seven times the rate of growth of the rural population between 1975 and 1980.¹⁵ In 1975, all bank offices in Tripura were rural and semi-urban offices. Even in 2000, nearly 82 per cent of the bank offices in Tripura were rural and semi-urban offices. There were some urban offices but no metropolitan office in the State in 2000. Urban offices were reported only in West District.

The increased supply of bank credit

¹⁵ Rural bank offices are offices serving a centre with a population of less than 10,000, while semi-urban offices serve a population ranging between 10,000 and 1,00,000. The other two population groups of bank offices are urban (serving populations ranging between 1,00,000 and 10,00,000), and metropolitan (serving populations above 10,00,000). The information on bank offices by population groups is available only from 1972 onwards, when the Reserve Bank of India began the collection of Basic Statistical Returns from commercial banks, which became the basis of *Banking Statistics*.

to rural areas also meant increased availability of credit for agriculture and allied activities. The ratio of agricultural credit from commercial banks to domestic product originating from agriculture rose steadily, from 2.9 per cent in 1980–81 to 9.7 per cent in 1990–91.

There was a clear setback to the expansion of banking infrastructure in Tripura after 1990. In the decade of financial liberalization, while there were no closures of bank branches as in other States, the rise in the number of bank branches did not keep pace with the rise in population.

A comparison of the distribution of bank credit and population across States brings out the growing marginalization of Tripura, along with the other North Eastern States, during the 1990s. In the aggregate credit outstanding from scheduled commercial banks in the country, Tripura had a share of only 0.02 per cent in 1975 as compared to its share of 2.4 per cent in the total population. During the period of social and development banking, there was a small rise in the share of credit to the North Eastern States. By 1990, the share of Tripura in total bank credit had risen to 0.2 per cent. After 1990, however, a downward trend began that took the State back to the level of 1980.

Given that a large number of bank offices in Tripura were rural offices, it is not surprising that there was a steep fall in the credit–deposit ratio for rural offices in the State after 1990. The ratio fell from a high of 110 per cent in 1990 to 34.8 per cent in 2003, and stood at 36.6 per cent in 2005.

The decline in aggregate credit disbursal was accompanied by a fall in the share of credit to agriculture and allied activities. If value added

TABLE 2.10

Credit-deposit ratio, Tripura, North East and India, 1961-2003
(per cent)

Region	1961	1975	1980	1990	2000	2003
I Dhalai	-	-	_	-	47.8	35.1
2 North District	-	27.4	62.5	262.4	38.7	30.9
3 South District	-	25.7	64.1	81.3	37.5	35.8
4 Composite (1+2+3)	-	26.6	63.2	173.6	66.0	33.8
5 West District	-	14.2	46.9	56.4	20.5	23.1
Tripura State	5.4	16.3	51.3	91.5	25.7	26.1
North East	26.5	42.4	35.3	52.2	28.9	27.9
India	65.6	72.2	67.2	60.7	56.0	59.2

Note: North East includes Tripura, Assam, Manipur, Mizoram, Meghalaya and Nagaland depending on the availability of data for each State for every year reported in

Source: Reserve Bank of India, Banking Statistics, various issues; RBI (1961).

in a sector is taken as a rough indicator of the demand for credit from a given sector, it is clear that there was a widening gap between the supply of commercial bank credit and the demand for credit to agriculture. The ratio of bank credit to agriculture to value added from agriculture fell from 9.7 per cent in 1990–91 to 5.1 per cent in 2000–01. The declining share of agriculture in bank credit is of serious concern.

There was also a fall in the share of credit advanced to the industrial sector, which consumed the largest portion of bank credit at the all-India level. At the same time, there was a sharp rise in the share of personal loans, which included credit for housing, consumer durables and other personal loans. The increased supply of consumer credit by banks in recent years is an indication that banks cater to the consumption credit needs of the economically better-off sections of the urban population in the State while ignoring the rural and less-privileged sections of the population.

There was a clear setback to the expansion of banking infrastructure in Tripura after 1990. In the decade of financial liberalization, while there were no closures of bank branches as in other States, the rise in the number of bank branches did not keep pace with the rise in population.

The withdrawal of nationalized commercial banks from the field of social redistribution in recent times has resulted in the denial of access to banking services for underprivileged regions and sections of the population

In 2001, according to the Census, only 26.5 per cent of all households in Tripura were utilizing bank services. The use of commercial banking was lowest among ST households. In rural Dhalai, only 11 per cent of all tribal households reported any access to banking institutions. There was only one block in West, North and South Districts each, and none in Dhalai, where more than 30 per cent of the rural households used commercial banking services.

In 2001, only about 12.2 per cent of the villages in Tripura had a commercial bank branch. Of the remaining villages, only 15.1 per cent had a branch operating within 5 km. In other words, the people of 72 per cent of Tripura's villages had to travel more than 5 km to reach a bank branch.

Access to Primary Agricultural Credit Societies (PACS), the villagelevel cooperative institutions, appears to be relatively better in Tripura than access to commercial banks. The State has a two-tier structure of shortand medium-term cooperative credit, where the Tripura State Cooperative Bank supplies credit to the PACS, which then lend to end-users of credit. Data from NABARD indicate that there were three villages per PACS in Tripura in 2000, better coverage than in many other States of the North East. However, all results related to the cooperative network in Tripura need to be interpreted with caution. There are serious problems of availability of updated and reliable data on the existence and viability of cooperative societies in Tripura and the business undertaken by them (NABARD 1998).

To conclude, the policy of social and development banking, which was

designed to increase the access of underprivileged regions and sections of the population, and neglected economic sectors, to commercial banking, did benefit Tripura as it did other States of India. While historically prevalent regional disparities were lowered, they did not disappear. There was improvement in the provision of and access to banking infrastructure and services in the State after 1969. However, with the onset of financial liberalization in 1991, there was a stark reversal in policy and outcomes. Credit-deposit ratios fell sharply, the expansion of bank branches came to a halt, and the gap between bank lending to Tripura and other North Eastern States, and to some of the advanced States from the western and northern regions, widened after 1991.

As in other parts of India, the share of loans to agriculture from commercial banks declined in Tripura while the share of personal consumption loans rose. If this trend continues, access to commercial banking is likely to get even more restricted in the coming years. The withdrawal of nationalized commercial banks from the field of social redistribution in recent times has resulted in the denial of access to banking services for underprivileged regions and sections of the population.

2.4 Work and Unemployment

2.4.1 Work Participation Rate

The two commonly used sources of information on the availability, extent and nature of work are the Census of India and the National Sample Surveys (NSS).¹⁶

At the Census of 2001, the work

 $^{^{16}}$ This section draws on Dasgupta (2005).

participation rate was 51 per cent for males and 21 per cent for females in Tripura.¹⁷ The male work participation rate is close to the Indian average. The work participation rates for women are similar to those of Assam and eastern India (West Bengal), and much lower than those of the other North Eastern States and also the Indian average. Interestingly, even among the ST population, female work participation rates in Tripura were the second lowest (after Assam) in the North East. However, there has been a rise in both male and female work participation rates between 1991 and 2001. South District and Dhalai show higher work participation rates than North and West Districts, both for males and females. Work participation rates are lowest in North District (Table 2.12). For women, the highest work participation rate was in Dhalai and the lowest in North District.

In the Statistical Appendix we report the work participation rates for each urban area and each rural block respectively. In urban areas, the male work participation rate was highest in Agartala (62.8 per cent) and lowest in Kailashahar (47.6 per cent). The highest urban female work participation rate was in Khowai (Agartala came second). As for rural areas, female work participation was as high as 49.4 per cent in Killa in South District, while it was only 7.9 per cent in Panisagar in North District. Female work participation rates were higher in the Autonomous District Council (ADC) blocks (where the proportion of ST population is high-

TABLE 2.11

Work participation rate, all persons and Scheduled Tribe (ST) persons,

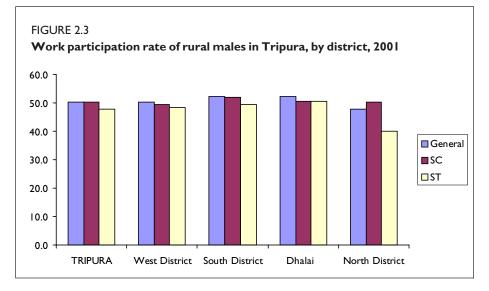
Tripura, North East and India, 2001

	All			Sche	Scheduled Tribes		
	Persons	Male	Female	Persons	Male	Female	
Tripura	36.2	50.6	21.1	42.7	47.6	37.5	
Arunachal Pradesh	44.0	50.6	36.5	43.0	44.8	41.2	
Manipur	43.6	48.1	39.0	44.1	46.4	41.8	
Mizoram	52.6	57.3	47.5	51.7	55.3	48.1	
Assam	35.8	49.9	20.7	43.2	50.5	35.8	
Sikkim	48.6	57. 4	38.6	48.6	54.6	42.3	
Meghalaya	41.8	48.3	35.1	42.8	47.8	38.3	
Nagaland	42.6	46.7	38.1	42.3	44.5	40.1	
India	39.1	51.7	25.6	49.1	53.2	44.8	

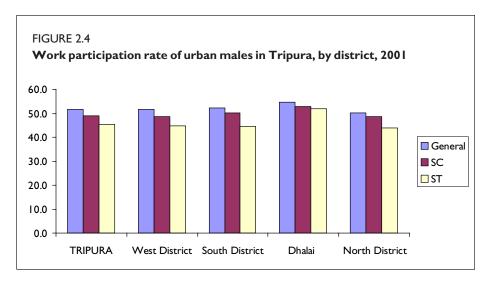
TABLE 2.12

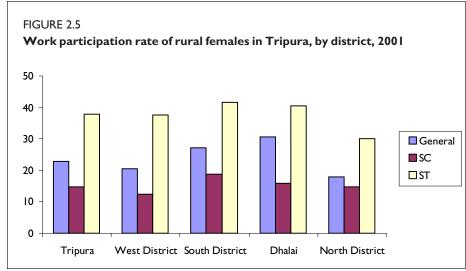
Descriptive statistics on work participation rate in Tripura, 2001
(block name in parentheses)

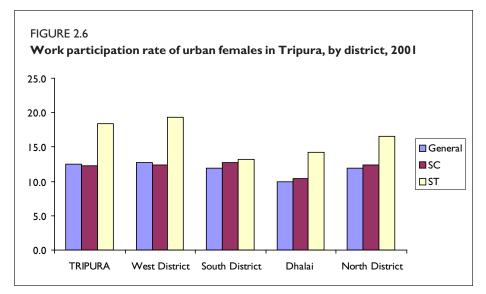
Category	Minimum value	Maximum value	Range	Coefficient of variation (%)
Rural male	37.2 (Dasda)	56.6 (Chhamanu)	19.4	7.0
Rural female	7.9 (Panisagar)	49.4 (Killa)	41.5	44.7
Urban male	47.6 (Kailashahar)	62.8 (Agartala)	15.2	7.6
Urban female	7.5 (Narsingarh)	19.3 (Khowai)	11.8	23.4



¹⁷ Work here, of course, does not fully capture women's work since it refers to participation in economic activity and not to extended SNA.







er) than in the non-ADC blocks. However, among women, the marginal work participation rate was higher than the main work participation rate in 28 out of 40 blocks, indicating that work was available to most women workers for less than six months in a year.

The coefficients of variation of work participation were, as expected, lower for males than females. The high range in respect of values of work participation among women was primarily on account of wide differences in marginal work participation rates.

Religious background had a strong effect on female work participation rates with the work participation rate among Muslim women almost half the work participation rate of Hindu women. The highest work participation was among Buddhist and Christian women. Differences were not as marked among male workers.

The NSS data also point to relatively low work participation rates in Tripura. In 1999-2000, Tripura's employment rate (combined for both principal and subsidiary status usual workers) was lower than the all-India average for men and women. The gap was largest for rural females. The female employment rate in Tripura, both urban and rural, was lower than in the other seven States of the North East. In Mizoram and Nagaland, the employment rate among rural women was 44 per cent, while the corresponding figure for Tripura was 7 per cent.

According to the NSS, the employment rate declined between 1993 and 1999; the decline was very sharp for women and less for men, particularly in urban areas (Table 2.14). The fall in employment rate is similar to the all-India pattern.

TABLE 2.13 Work participation rate by religious community and sex, Tripura and India, 2001

Religion		India			Tripura	
	Persons	Male	Female	Persons	Male	Female
All religions	39.1	51.7	25.6	36.2	50.6	21.1
Hindus	40.4	52.4	27.5	36.5	51.3	21.0
Muslims	31.3	47.5	14.1	29.2	46.2	11.2
Christians	39.7	50.7	28.7	38.7	43.6	33.6
Sikhs	37.7	53.3	20.2	86.6	94. I	12.0
Buddhists	40.6	49.2	31.7	43.0	49.4	36.3
Jains	32.9	55.2	9.2	41.1	64.3	15.8
Others	48.4	52.5	44.2	55.1	58.4	50.8

Source: Census of India 2001.

TABLE 2.14 Number of persons usually employed in the principal status as well as subsidiary status per 1000 persons for Tripura, North East and India, 1993-94 and 1999-2000

		1993–94			1999–00				
	Ru	ıral	Uı	ban	Ru	Rural		Urban	
	Male	Female	Male	Female	Male	Female	Male	Female	
Tripura	522	128	497	124	504	73	494	75	
Arunachal Pradesh	497	409	515	101	422	310	399	100	
Assam	516	159	528	92	529	151	522	112	
Manipur	477	308	434	223	495	253	445	211	
Meghalaya	619	493	500	189	557	418	393	197	
Mizoram	529	317	484	264	555	440	471	259	
Nagaland	439	216	378	99	518	441	393	199	
Sikkim	563	191	580	136	502	241	519	200	
All India	553	328	521	155	531	299	518	139	

Source: NSSO, different rounds.

2.4.2 Child Labour

A positive feature of the employment situation in Tripura is that the rates of child labour are low. In 1999-2000, no child aged 5 to 9 in urban areas and no boy of the same age group in rural areas was in the labour force. Among rural girls, 0.6 per cent was employed. The low incidence of child labour reflects success in enrolling children in primary school. In the age group 10 to 14 years, work participation rates declined in the 1990s,

and reached zero for urban boys. However, it was 3.1 per cent for rural boys and 0.3 per cent for rural girls. While the prevalence of child labour is much lower in Tripura than in the country as a whole (where 9 per cent of rural boys and girls were employed), the retention of older rural children in schools continues to be a matter of concern.

2.4.3 Occupational Structure The rural work force is dominated by

The low incidence of child labour reflects success in enrolling children in primary school.

TABLE 2.15

Descriptive statistics on percentage share of workers classified by four-fold classification, female main workers, Tripura, rural, 2001

Female main workers	Minimum	Maximum	Range	Coefficient of variation
Cultivators	7.3	81.2	73.8	57.6
	(Mohanpur)	(Jampuii hills)		
Agricultural labourers	4.8	65.9	61.1	47.7
	(Kadamtala)	(Chhamanu)		
Workers in household industry	0.2	22.2	22	113.5
	(Dumburnagar)	(Kumarghat)		
Other workers	4.7	81.2	76.5	67.7
	(Ompi)	(Kadamtala)		

TABLE 2.16

Descriptive statistics on percentage share of workers classified by four-fold classification, male main workers, Tripura, rural, 2001

Male main workers	Minimum	Maximum	Range	Coefficient of variation
Cultivators	14.2 (Dukli)	70.4 (Jampuii hills)	56.2	33.9
Agricultural labourers	6.3 (Jampuii hills)	58.9 (Chhamanu)	52.6	42.2
Workers in household industry	0.4 (Killa)	4.3 (Melaghar)	3.9	59.8
Other workers	17 (Killa)	75.2 (Dukli)	58.2	42.3

TABLE 2.17

Summary table on block-level occupational structure, Tripura, 2001

Number of blocks in which proportion of cultivators and agricultural labourers in total main workers (%)			
Exceed	Female workers	Male workers	
> 60	19	21	
> 70	13	13	
> 80	10	2	

An interesting feature of agricultural employment is the equality between male and female average wages.

agricultural workers. In 2001, in rural areas, cultivators and agricultural labourers together accounted for around 55 per cent of all workers.¹⁸ The proportion of cultivators among male and female workers was similar but a higher proportion of women workers than male workers were agricultural labourers. There was less diversification of occupations among persons belonging to the STs: cultivators and agricultural labourers accounted for 77 per cent of the work force. By contrast, 'other workers' were a larger share of total workers among the non-ST population, particularly among the SCs.

In 1991, workers in agriculture (cultivators plus agricultural labourers) accounted for 70 per cent of workers among the general population and 78 per cent among the ST population. There has been a big change in occupations among the general population during the decade of the 1990s but not much among ST workers. The change in occupations is also notable among SC workers.

The blockwise data reveal wide variations across the State. Among females, cultivators accounted for 81 per cent of all workers in Jampuii Hills and for 7 per cent in Mohanpur. Agricultural labourers accounted for 66 per cent of women workers in Chhamanu block. Workers in household industry comprised over 20 per cent of the work force only in a few blocks (Melaghar and Kumarghat). Among males, too, there was large variation with cultivators compris-

¹⁸ Recently released data on the nine-fold industrial classification show that public administration and other services, followed by trade, were the main activities among the non-agricultural work force (see Statistical Appendix).

ing 70 per cent of total workers in Jampuii Hills and 16 per cent in Jirania. Similarly, agricultural labourers accounted for 59 per cent of all workers in Chhamanu and 6.3 per cent in Jampuii Hills.

The distribution of blocks by the proportion of workers in agriculture shows that in a large number of blocks, agriculture remains the dominant occupation.

An interesting feature of agricultural employment is the equality between male and female average wages (see Box 2.4).¹⁹

2.4.4 Unemployment

The problem of unemployment is acute in Tripura. In 1999–2000, all the unemployment rates in urban Tripura, with the exception of the current daily status rate of unemployment for males, were higher than the corresponding all-India averages. For example, among males, usual status unemployment was 5.4 per cent in Tripura as compared to the national average of 4.5 per cent. All the North Eastern States (except Meghalaya and Mizoram) had higher-than-national average rates of unemployment.

A distinctive feature of unemployment in Tripura (as in several of the

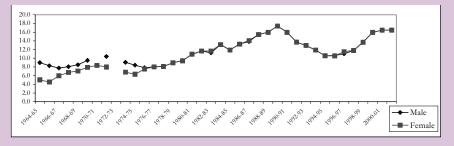
BOX 2.4

Agricultural Wages

According to data from *Agricultural Wages in India*, there ceased to be a gender gap in the range of agricultural wage rates for male and female labour from the late 1970s (see Figure below).* Thus we find that women's wages in agriculture in Tripura were higher than in several States including Assam, but also the high-productivity district of Barddhaman in West Bengal. Interestingly, male wages in Tripura are lower than in Barddhaman though similar to those in the less agriculturally advanced districts of Purulia and Kooch Bihar in West Bengal.

Furthermore, real wages for agricultural workers rose steadily in the 1980s. However, there was a big dip in the early 1990s on account of a rise in inflation, and wages have not yet recovered in real terms.

Real wages in agriculture, Tripura, at 1986-87 prices (in Rs)



* The wage series data constructed from Agricultural Wages in India (AWI) refer to one centre in Tripura, Limbucherra (in erstwhile West District and now in Dhalai).

North Eastern States) is that of very little difference between the usual status, weekly status and daily status unemployment rates. The general pattern in most of India is that the daily status rate is higher than the weekly status rate (measures of shortterm unemployment), and both are much higher than the usual status unemployment rate (a measure of long-term or chronic unemployment). In Tripura, it appears that most unemployment is of a long-term nature (given the small difference between the long-term and shortterm unemployment rates).

According to the NSS, unemployment rates have declined between 1993–94 and 1999–2000 in urban

A distinctive feature of unemployment in Tripura (as in several of the North Eastern States) is that of very little difference between the usual status, weekly status and daily status unemployment rates.

¹⁹ Data from the *Rural Labour Enquiry*, however, show that female wage earnings were 75 per cent of male wage earnings in 1999–2000.

²⁰ The NSS has three reference periods for the question on employment status. Usual status refers to the preceding year and anyone who is engaged in any economic activity for a long period of time is considered as gainfully employed. Weekly status counts a person as employed if she has undertaken economic activity for at least one hour on any one day of the preceding week. Daily status counts a person as employed if she has worked for four hours or more on the day preceding the survey.

Public Programmes for Employment Generation

Public programmes for employment generation have been implemented in both rural and urban Tripura.

Self-employment

The Swarnajayanti Gram Swarozgar Yojana (SGSY) was launched in Tripura, as in the rest of India, on 1 April 1999, by redesigning and restructuring all earlier self-employment programmes of the Government of India. The main objective of the SGSY was to bring the assisted poor families above the poverty line by providing them incomegenerating assets through a combination of bank credit and government subsidy. Funding for SGSY is provided by the Centre and the State in the ratio of 75:25. The target group comprises families below the poverty line in rural areas, with a reservation of 50 per cent for Scheduled Castes and Scheduled Tribes, 40 per cent for women and 3 percent for physically handicapped persons.

The concurrent evaluation of the SGSY, undertaken by the Ministry of Rural Development of the Government of India (2003) in the third year of its implementation, shows that it has been very successful in Tripura. The concurrent evaluation ranked States on the basis of achievements under SGSY. The parameters considered for the ranking were: average investment per below-poverty-line (BPL) family, credit—subsidy ratio, proportion of funds utilized, time taken for disbursement, emphasis given to group vis-à-vis individual approach, emphasis on vulnerable target groups (SC/ST, women and physically handicapped), incremental income generated from SGSY, expenditure incurred by the beneficiaries, benefits obtained and coverage achieved through basic orientation training, skill development training and visits made by BDOs and bank officials. States were categorized into two groups based on their population – major States, and other States and Union Territories. Tripura's rank was second among the other States and Union Territories (the top rank in this category was won by Himachal Pradesh).

The SGSY enhanced human development in the State by improving the level of well-being of the economically and socially disadvantaged sections of its population. Many beneficiaries were women (a majority in the case of self-help groups). Around 45 per cent belonged to SC and ST. The programme reached the educationally backward in the State as well as the landless (only 0.4 percent of SGSY beneficiaries owned landed property). Before being assisted under the SGSY, 96 percent of self-employed persons ('swarozgaris') were landless agricultural labourers and 5.7 percent were unemployed educated youth.

SGSY activity had a marked social and economic impact on individual self-employed persons: 100 per cent of beneficiaries enjoyed increased incomes, 76 per cent had greater savings and 13 per cent reported improved 'social prestige'. The average incremental income generated from SGSY activities of 154 sample individual beneficiaries was Rs 7,737 for the three-year period under review. The average incremental income among beneficiaries was Rs 8,800 at the all-India level. The concurrent evaluation shows that the economic impact of SGSY activities on groups has been less satisfactory than on individual beneficiaries. After joining SGSY, incomes have risen for 6.8 per cent of groups. SGSY activities have brought better health and educational facilities to 13 per cent of the members of Self-Help Groups (SHGs), and improved the social prestige of the members. However, the average annual income generated for a sample of twelve groups was only Rs 11,610 (as compared to the national average of Rs 93,346).

Number of be	eneficiaries of SGS	Y in Tripura,	, 1999-2000 to 2003-04	

	Individual beneficiaries	Self-Help Groups				
Total number	49,269	12,729				
Scheduled Tribes as per cent of total	37.2	36.7				
Scheduled Castes as per cent of total	18.9	19.9				
Women as per cent of total	30.1	66.0				
Source: Rural Development Department, Government of Tripura.						

(continued on facing page)

BOX 2.5 (continued)

Wage employment

The Sampoorna Gramin Rozgar Yojna (SGRY) was begun by the Government of India in September 2001 and the employment generated through this has increased steadily every year since its inception except for 2004–05. However, in Tripura, the average days of employment generated per below poverty line (BPL) family was only 32 days in 2003–04 and 27 in 2004–05. The daily wage paid to workers under SGRY, in cash and the money value of 5 kg of rice, amounts to Rs 50 (which is the minimum wage rate in the State). This suggests that the programme, as it functions now, needs to be stepped up to make a significant impact on poverty and unemployment.

The National Rural Employment Guarantee Scheme (NREGS) of 2006 provides for enhancement of livelihood security of rural households by the provision of at least 100 days of guaranteed wage employment every financial year to every household whose adult members volunteer to do unskilled manual work. In Dhalai, the only district selected for the NREGS in the first year, the pace of employment generation has been commendable.* From January to August 2006, a total of 71,800 families, or 90 per cent of families in the district, registered and 64,587 job cards were issued. A total of 3 million person days of employment were generated, that is, around 46 days of employment were provided to each registered job card holder.

In 2006–07, Tripura topped all States of India in respect of the person-days of employment generated per household under NREGA. The generation of 87 days of employment per beneficiary household, very close to the stated goal of 100 days in the Act, is "an unprecedented achievement in the history of social security in India" (Dreze and Oldiges 2007). Nonetheless, the programme of employment generation has to be expanded in terms of both coverage of districts and scale of employment to make a dent on unemployment. Future expansion of employment must also emphasise vocational training and skills in order to help create skilled employment.

Urban programmes

Employment programmes have been less effective in urban areas. From 1998–99 to 2004–05, 4.28 lakh person days of employment were generated in the 12 Nagar Panchayats of the State under the Urban Wage Employment Programme (UWEP) and 25 Development of Women and Children in the Urban Areas (DWCRA) groups were formed. A total of 50,000 person days were generated under UWEP in 2004–05 or roughly an average of one day of work per income-poor urban person. The State Government launched a new State Urban Employment Programme in 2005–06, with the objective of generating additional gainful employment for the unemployed and underemployed of both sexes in the urban areas of the State.

* West and South Districts have been included in the NREGS for 2007-08.

Tripura for both men and women.21

The NSS data on the pattern of unemployment in rural areas show distinct features. First, rural unemployment rates were lower than urban unemployment rates. Secondly, contrary to the all-India trend, unemployment rates fell between 1993

²¹ We have not included the figures from the NSS 61st round for 2004–05 since the estimates point to huge increases in unemployment rates in Tripura as well as all other States of the North East. For example, the new estimates indicate a seven-fold increase in male and female usual status unemployment rates in rural Tripura.

and 1999. Thirdly, both short-term and long-term unemployment rates in rural Tripura in 1999 were lower than the corresponding Indian averages. This was not so in 1993–94. In other words, while rural unemployment worsened in the rest of India in the 1990s (a now established feature of rural distress in the country), the picture was different in Tripura, where rural employment rates improved. An important reason for Tripura's better performance in this respect is that rural employment programmes were implemented more se-

While rural unemployment worsened in the rest of India in the 1990s (a now established feature of rural distress in the country), in Tripura rural employment rates improved.

In urban areas of Tripura, unemployment levels are very high. In rural areas, unemployment is less visible, but workers are concentrated in agriculture.

The poverty line as well as measures of poverty and inequality for Tripura and for all North Eastern
States are the same as for Assam, and are not calculated separately.

riously in this State than elsewhere. (see Box 2.5).

In rural areas, the daily status unemployment rates were higher than the weekly status and usual status rates for both men and women. This indicates that, unlike in urban areas, some employment (even if the income was low) was available in rural areas and thus there was less reported long-term or usual status unemployment than short-term unemployment. Workers engaged in collection of forest produce, for example, would not be counted as unemployed even though the income generated from this activity may be low.

Another feature that demarcated rural from urban unemployment is that male unemployment rates were higher than female unemployment rates (other than for daily status unemployment). The situation was the reverse in urban areas: female unemployment rates were higher than male unemployment rates.

Unemployment rates among educated persons were higher than the corresponding rates for the total population. In urban areas, male unemployment rates were higher than the all-India average. Unemployment was much higher among women than men, and had increased for women while it had decreased for men.²²

The very high rate of unemployment among youth in Tripura is a matter of serious concern. In urban areas, male youth unemployment rates were almost double the corresponding all-India averages. For young women, the unemployment rate in Tripura (by the usual status definition) was higher than the national average. Further, between

1993 and 1999, male unemployment rose while female unemployment fell. For young men and women, the long-term and short-term unemployment rates were similar, indicating chronic unemployment (most prominent among urban males).

In 1999–2000, the usual status unemployment rate among young men in urban Tripura was 21.9. In other words, more than one in five young men were unemployed and one in six young women was unemployed. For young men, the unemployment rate (usual status) was higher than all other States of the North East other than Nagaland. For women, unemployment was higher than the all-India average but less than for the North Eastern States (perhaps reflecting the relatively lower proportion of women entering the work force).

In urban areas of Tripura, unemployment levels are very high. In rural areas, unemployment is less visible, but workers are concentrated in agriculture. More and better work and livelihood opportunities are a necessary condition for improvement of Tripura's human development.

2.5 Income and Asset Poverty 2.5.1 Expenditure Poverty

In official estimates of expenditure poverty prepared by the Government of India, the poverty line as well as measures of poverty and inequality for Tripura and for all North Eastern States are the same as for Assam, and are not calculated separately. This follows the recommendations of the Report of the Expert Group on Estimation of Proportion and Number of Poor (GOI 1993).²³ As a result of the practice of using the poverty

²² This may also reflect better reporting of female workers in recent years.

²³ See Himanshu (2005).

and inequality measures of Assam for the rest of the North East, there is no independent information available on trends in poverty and inequality for any of the North Eastern States. This is despite the fact that the surveys of consumption expenditure undertaken by the National Sample Survey Organization (NSSO), which form the basis of poverty calculation for the country as well as other States, are conducted in all North Eastern States. Nearly sixty years after Independence, it is unacceptable that the national statistical system treates Tripura (and other North Eastern States) as if they were not separate States at all in respect of such important statistical parameters.

Another anomaly that needs to be noted is that Assam is the only State of India in which the official urban poverty line is lower than the rural poverty line. The ratio of urban to rural poverty line was 1.38 at the all-India level in 1999–2000; in Assam, the ratio was less than 1 (0.94). Since the Assam poverty line is also the poverty line for seven other States, this anomaly is carried over and imposed on the data for all the States of the North East.

The Planning Commission estimates of poverty in Tripura, based on the head count ratios for Assam, are 40 per cent in rural areas and 7.5 per cent in urban areas in 1999-2000 (Table 2.18). The corresponding all-India numbers were 27.1 per cent and 23.8 per cent for rural and urban areas. The incidence of rural poverty in Tripura is thus higher than the all-India average; the reverse is the case for urban poverty. Official estimates point to a decline in the incidence of poverty during the 1990s, particularly in rural areas. The absolute number of poor persons in Tripura

TABLE 2.18

Head count ratio of poverty, Tripura, rural and urban, 1983 to 1999-2000

Year		Head count ratio					
	(percentage of p	(percentage of population below the official poverty line)					
	Rural	Rural Urban Combined					
1983	42.6	21.7	40.0				
1993-94	45.0	7.7	39.0				
1999-2000	40.0	7.5	34.4				

Note: Only the ratios in the combined column differ for each of the North Eastern States, as the proportion of population that is rural and urban differs across States.

Source: Planning Commission.

by this official estimate was 13 lakhs in 1999–2000.

Estimates of poverty prepared by the Government of Tripura, however, show a higher incidence of poverty than the Planning Commission estimates. Using the official methodology and data on consumer expenditure from the NSS, it is reported that 55 per cent of the population fell below the poverty line in 2001–02. Such high levels of poverty are a serious concern since the majority of people live in rural areas.

While it is clear that the official methodology of the Government of India for the estimation of poverty in Tripura is flawed, nevertheless, in terms of orders of magnitude, the data suggest that expenditure poverty, particularly in rural areas, is acute, and encompasses the majority of the population.

2.5.2 Asset Distribution

We turn next to the pattern of asset ownership and asset poverty.

Distribution of land

The primary asset in a largely rural and agriculture-based economy is, of course, land. The pattern of ownership of land in Tripura is complicated by the fact of a large area under forIt is unacceptable that the national statistical system treates Tripura (and other North Eastern States) as if they were not separate States at all in respect of such important statistical parameters.

BOX 2.6

Survey in Selected Villages of Tripura, 2005

A survey was conducted in three villages in Tripura as part of the preparation of the *Human Development Report*. A brief questionnaire was canvassed in a sample of households in each selected village. The questionnaire had four sections. The first section related to general information on all members of the households, the second section dealt with land holdings and ownership of assets, the third section related to issues of the public distribution system (PDS), and the final section to education. In addition to this, a village-level questionnaire was canvassed in order to gather information on village-level amenities and educational facilities.

The three villages selected in the survey represent three different typologies. The villages were selected from South District, Dhalai and North District (see Table below). The village in South District, West Muhuripur, was chosen to represent the settled agriculture that is characteristic of the plains regions. Dhalai fared poorly in many of the development indicators and hence one village was selected from this district. The third village from North District was a newly resettled forest (or regrouped) village.

At the initial stage a shortlist of villages was prepared using the Census 2001 data and then the final village selection was done in consultation with the State administration. The feasibility of conducting a village survey in Tripura is influenced by security considerations and this in turn affected the selection of villages. The forest village in North District does not figure in Census 2001 as it was formed in 2003. This village was selected after discussions with the District administration.

Name of village	Block	Number of households by	Number of households in 2005 (obtained from	Sample size
		Census 2001	panchayat office)	3120
Mainama	Manu	972	1079	169
West Muhuripur	Bagafa	231	247	102
Khakchang	Dasda	_	_	97

As a result of the process of agrarian change and land reform, no area in the State is characterized by the dominance of oldstyle landlordism or by large-scale land ownership.

ests, area over which individual rights are not available, and the practice of shifting cultivation in forest areas.

The World Agricultural Census of 1990–91 indicates that 68 per cent of operational holdings in Tripura were below 1 hectare.²⁴ In fact, this proportion was higher than the corresponding proportion in all other States of the North East as well as

the Indian average (59 per cent). Small (1 to 2 hectares) and marginal (less than 1 hectare) operational land holdings together accounted for 90 per cent of total holdings and 63 per cent of the area operated. At the other end of the distribution, operational holdings that were above 10 hectares in extent together constituted 0.1 per cent of holdings and 6.5 per cent of operational area. There is not much variation in the distribution of operational holdings across districts except that South District has no large holdings at all. The distribution of land across size classes reflects the high density of population as well as the pressure of population on cultivable land in the State. The average size of an operational holding was 0.96 hectare in 1991.

We use the results of a three-village survey conducted for this *Human Development Report* to illustrate the current pattern of ownership holdings of land in the State (see Box 2.6).

Land ownership patterns vary across the State and, consequently, were different in the three villages we surveyed. There was, however, an important common feature of the ownership of agricultural land by households in different areas: as a result of the process of agrarian change and land reform, no area in the State is characterized by the dominance of old-style landlordism or by largescale land ownership (see Box 2.7). In the two villages of settled agriculture, West Muhuripur in South District and Mainama in Dhalai, there is a high incidence of landlessness. At the same time, among land-owning households, the average size of holding is very small. The third village studied was special in being a newly resettled forest village. Very few

²⁴ Data from the World Agricultural Census 1995–96 have not been officially released, nor are data from the 2000–01 Census avail-able.

Household Land Holdings in the Survey Villages

There is a clear distinction between the distribution of ownership holdings of land in Mainama (Dhalai) and West Muhuripur (South District), on the one hand, and Khakchang (North District), on the other.

Khakchang is a resettled village, established on forest land, and as such is something of a special case. There are very few ownership holdings of land in the village; those households that do own land generally came to do so before the establishment of the resettled village in 2003. Of the households in Khakchang that cultivate land, most have leased in forest land on annual contract from the Forest Department for *jhum* cultivation. The Department provides seeds and cash support for cultivation. Land cultivated for a season is left fallow for three years.

A significant proportion of households in Mainama and West Muhuripur do not own any land (42 per cent and 46 per cent respectively, *Table 1*). Landlessness contributes to high inequality with respect to the distribution of ownership holdings (*Table 2*). The Gini coefficient is affected not only by the extent of landlessness but also by the skewed distribution of land holdings among those who own agricultural land.

Table 1

Ownership holdings of households, by size class of household ownership holding, Mainama Village, Dhalai, 2005 (in acres)

Size class of ownership holding	Но	Households		Extent	
. <u></u>	Number	% of column total	Area	% of column total	
0	71	42.0	0.0	0.0	
0.01 to 1	39	23.1	21.6	10.8	
1.01 to 2.5	33	19.5	57.9	28.9	
2.6 to 4	17	10.1	56.3	28.1	
4.01 and above	9	5.3	64.6	32.2	
Total	169	100.0	200.4	100.0	

Ownership holdings of households, by size class of household ownership holding, West Muhuripur Village, South District, 2005 (in acres)

Size class of ownership holding	Ho	Households		ent owned	
	Number	% of column total	Area	% of column total	
0	47	46.1	0.0	0.0	
0.01 to 1	25	24.5	11.4	13.4	
1.01 to 2.5	16	15.7	26.1	30.7	
2.6 to 4	10	9.8	31.8	37.4	
4.01 and above	4	3.9	15.8	18.5	
Total	102	100.0	85.I	100.0	

Ownership holdings of households, by size class of household ownership holding, Khakchang Village, North District, 2005 (in acres)

Size class of ownership holding	Но	Households		Extent	
	Number	% of column total	Area	% of column total	
0	89	91.8	0.0	0.0	
0.01 to 1	2	2.1	0.7	4.2	
1.01 to 2.5	4	4.1	7.1	42.9	
2.6 to 4	1	1.0	2.8	16.8	
4.01 and above	1	1.0	6.0	36.1	
Total	97	100.0	16.6	100.0	

Table 2

Some statistics on land ownership in the villages of West Muhuripur, Mainama and Khakchang, Tripura, 2005

Village/District	Average size of household	Size of ownership holding (in acres)		Gini coefficient	
	ownership holding (acres)	Lowest	Highest	Ownership holding	Operational holding
West Muhuripur (South District)	0.8	0.15	6.0	0.722	0.569
Mainama (Dhalai)	1.2	0.06	23.2	0.701	0.647
Khakchang (North District)	0.2	0.3	6.0	Not computed	0.569

Note. A value of zero for the Gini coefficient represents perfect equality and a value of one represents perfect inequality.

(continued on next page)

BOX 2.7 (continued)

Nevertheless, the actual size of holdings is very small indeed (*Table 2*). The average size of owned land holdings was 0.8 acre in West Muhuripur, 1.2 acres in Mainama and only 0.2 acre in Khakchang. In Mainama, household ownership holdings range from 0.6 to 23 acres. The biggest land owner was a distant outlier; the second largest household ownership holding was only 6 acres. In West Muhuripur, the corresponding range was from 0.15 acre to 6 acres.

As we have said, the distribution of ownership holdings of land and the extent of landlessness in Khakchang reflect the predominance of land under *jhum* cultivation in the village. Here too, the distribution is skewed while land holdings themselves are small.

The distribution of household operational holdings of land in the villages is characterized by many of the same features, with one major difference: the distribution of operational holdings is less unequal than the distribution of ownership holdings (*Table 3*).

In West Muhuripur, households with no operational holdings of agricultural land are a distinctly smaller share of all households than those with no ownership holdings of agricultural land. This is also true of Khakchang. In West Muhuripur, this is because about 30 per cent of all operational holdings is leased in. In Khakchang, more than 75 per cent of operational holdings are either leased in, mortgaged in, or are *jhum* holdings taken on lease from government. It is interesting that the household with the largest ownership holding of land in Mainama, 23 acres in extent, is mainly leased out; the operational holding of the household (the head of the household is a school teacher) is 10.4 acres.

Table 3

Operational holdings of households, by size class of household operational holding, West Muhuripur Village, South District, 2005 (in acres)

Size class of	Households			Extent
operational holding	Number	% of column total	Area	% of column total
0	25	24.5	0	0
0.01 to 1	36	35.3	17.9	17.2
1.01 to 2.5	28	27.5	41.1	39.3
2.6 to 4	12	11.8	40.9	39.1
4.01 and above	1	0.9	4.6	4.4
Total	102	100.0	104.5	100.0

Operational holdings of households, by size class of household operational holding, Mainama Village, Dhalai, 2005 (in acres)

Size class of	Но	useholds	Exte	nt operated
operational holding	Number	% of column total	Area	% of column total
0	66	39.1	0	0
0.01 to 1	38	22.5	24.4	12.8
1.01 to 2.5	44	26.0	74.I	38.8
2.6 to 4	14	8.3	49.4	25.8
4.01 and above	7	4.1	43.2	22.6
Total	169	100.0	191.1	100.0

Operational holdings of households, by size class of household operational holding, Khakchang Village, North District, 2005 (in acres)

Size class of	Ho	useholds		Extent
operational holding	Number	% of column total	Area	% of column total
0	41	42.3	0	0
0.01 to 1	26	26.8	17.7	21.6
1.01 to 2.5	23	23.7	34.3	41.8
2.6 to 4	3	3.1	8.8	10.7
4.01 and above	4	4.1	21.2	25.8
Total	97	100.0	82.0	100.0

Source: Foundation for Agrarian Studies (2006).

BOX 2.8

Homestead Land

Homestead land or the land around the dwelling of rural households in Tripura covers courtyards, places for storage of grain and hay, and yards for livestock. It also covers trees and a variety of fruit, vegetable and tuber crops that contribute directly to the households' nutrition and income.

The measurement of the extent of homestead calls for particular care since the homestead plot often merges with family holdings of orchard and regular agricultural land. There is no distinct separation, in such cases, of the court-yard, kitchen garden, the farmyard, the field and domestic tress and groves. It is also possible that households benefit from homestead plots that they do not actually own – as when a person lives with his family in the same compound as his parents' household or when a family lives in a rented house. Thus, even a household that is recorded as owning no homestead land may derive part of its nutrition and living from the land around its home.

In Mainama and West Muhuripur, in common with villages in different parts of the State, homesteads are often located on *tila* land, that is, on small, densely vegetated hillocks. Dwellings are thus scattered, and the typical pattern of habitation is not a cluster of huts and villages at a single location. The settlement pattern in Khakchang, however, is distinct from the other villages. Many homes are in the resettled section of the village, where houses are not surrounded by vegetated homestead plots.

With all these qualifications, the data still show that the average extent of homestead plots is substantial, 0.33 acre in West Muhuripur and 0.32 acre in Mainama (see Table below). The average extent is smaller in Khakchang, where homestead cultivation has not yet developed on the plots allocated to the households by the Government.

Had we included orchards – which are generally located in the surroundings of the homestead, the average size of homestead plot in Mainama and West Muhuripur would have been still larger.

Average size of household homestead holding, by size category of ownership holding of agricultural land, West Muhuripur, Mainama, and Khakchang Villages, 2005 (in acres)

Size category of household holding	Average size of household homestead holding			
of ownership agricultural land	ership agricultural land West Muhuripur		Khakchang	
0	0.35	0.20	0.07	
0.01 to 1.00	0.31	0.35	0.00	
1.01 to 2.50	0.19	0.36	0.37	
2.51 to 4.00	0.50	0.25	0.00	
above 4.00	0.34	1.05	0.02	
All categories	0.33	0.32	0.08	

Source: Foundation for Agrarian Studies (2006).

households here owned land; most of them leased in land from the Forest Department for *jhum* cultivation.

A discussion of household land holdings in Tripura is incomplete without reference to homesteads and their current and potential role in the household economy (see Box 2.8). In the villages of settled agriculture, on average, a household owned one-third of an acre of homestead land. Kerala is the State in India where the economics of homestead cultivation has attracted scholarly and policy at-

tention in recent years. It is noteworthy that the average size of homestead plots in West Muhuripur and Mainama is actually greater than the corresponding figure from a recent study of homestead cultivation in north Kerala.²⁵ In the Kerala study, about 10 per cent of the household incomes of agricultural worker families, the average size of whose homestead plots were 0.27 acres, came from homestead cultivation. If the develA discussion of household land holdings in Tripura is incomplete without reference to homesteads and their current and potential role in the household economy.

²⁵ Ramakumar (2005).

Land Reforms

Tripura's land reform experience has been somewhat unique, in that its most significant component was restoration of alienated land to tribal families. As of September 2005, almost 9,000 cases of restoration had been handled and 7,147 acres had been restored to tribal families.

The Tripura Land Revenue and Land Reforms (TLR&LR) Act has been amended on two occasions to strengthen the section that deals with transfer of tribal lands and restoration of alienated land to tribal families. The Government of Tripura has set up special courts for the speedy trial of cases pertaining to alienation and restoration of tribal lands. The State Government offers compensation of Rs 8,000 per acre to non-tribals who acquired land from a tribal, in order to expedite the process of restoring alienated land to tribal families. Despite the commitment of the State Government to restoration of alienated land, some problems remain such as difficulties in identification of tribal families from whom land has been alienated. As indebtedness has been a major cause of tribal land alienation in the past, financial and other support has to be provided to tribals whose lands have been restored so that they become viable cultivators. Rehabilitation of small cultivators who stand to lose land as a result of the restoration of alienated land to tribals has also to be ensured.

The second most significant aspect of land reform is land redistribution, primarily of State-owned *khas* land and, secondarily, of land identified by the State as ceiling-surplus land. Government-owned *khas* land has been allotted to families that are either landless or homeless or both. From 1997–98 to 2004–05, a total of 34,598 acres were distributed to 37,349 families.

A total of 1,995 acres of land have been declared as ceiling surplus land in Tripura, and 80 per cent of the ceiling surplus land has been distributed to households, especially among Scheduled Caste and Scheduled Tribe households belonging to landless and homeless families. A total of 1,598 acres have been distributed to 1,424 landless families as of November 2004. Of the remaining 397 acres of land declared as surplus, 242 acres have been reserved for public purpose, 96 acres are unfit for cultivation and 59 acres are involved in litigation.

Although the State Government has decided to confer the title of the allotted land to both the husband and wife jointly, data have not been collected on the number of joint *pattas* issued or even the number of *pattas* distributed to women in their name. This lacuna in data collection needs to be rectified.*

Lastly, the TLR&LR Act provides for the maintenance and updating of the register of *bargadars* (sharecroppers) in respect of every village, from time to time. The draft Model Pattadar Pass Book and Model Pattadar Pass Book Bill as circulated by the Government of India is being examined to see if the Land Pass Book Act, 1983 of the State can be improved upon by making amendments along the lines suggested in the draft Bill.

District	Physical rest	toration completed	Cases pend	ling for restoration
	Number	Area (in acres)	Number	Area (in acres
West	4,463	2,845	32	20
North	898	1,170	0	0
South	2,660	2,306	64	28
Dhalai	894	826	8	51
Total	8,915	7,147	104	99

Allotment of government-owned *khas* land, 1997–98 to 2004–05

District	Number of families	Extent (acres)
North District	448	3,848
Dhalai	10,638	10,540
West District	15,548	14,902
South District	6,915	5,308
Tripura	37,349	34,598

Extent and use of ceiling-surplus land, as of November 2004

Ceiling surplus land	Extent (in acres)	Share of total (%)
Land distributed	1,598	80.1
Land for public use	242	12.1
Land under litigation	59	3.0
Land unfit for use	96	4.8
Total land identified	1,995	100.0

^{*} Also, Tripura has not yet put into practice the resolution of the Conference of Revenue Ministers of the States held in November 2004 regarding the allotment of at least 40 percent of ceiling surplus land to women beneficiaries.

opment of agriculture were planned to include homestead cultivation (such as through mixed cropping of tree crops, tubers and vegetables as well as live fences), the potential of homesteads to contribute to incomes and nutrition could be substantial.

Land reforms

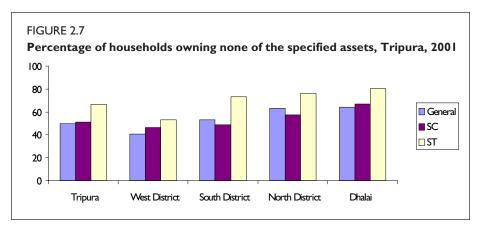
The Government of Tripura is one of the few in India (besides Kerala and West Bengal) to have been committed to land reforms (see Box 2.9).

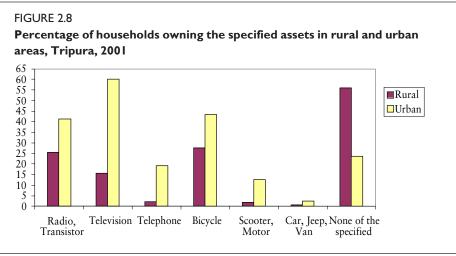
Non-land assets

Secondary data indicate low levels of ownership of non-land assets among households in Tripura. According to the Census of 2001, on average, 50 per cent of households in Tripura did not possess any of the assets specified in the Census schedule (that is, radio/transistor, bicycle, telephone, television, two- and four-wheel vehicles) (Figure 2.7). The corresponding ratio at the all-India level was 34.5 per cent.

Further, there were wide variations across districts in respect of asset ownership. In the urban areas of West District, 22 per cent of households did not own any of the specified assets, whereas 68 per cent of households in rural North District did not own any of the specified assets. There was a visible rural-urban divide, particularly marked in the case of telephones and motorised vehicles (Figure 2.8). To take an example, 2 per cent of rural households owned a telephone as compared to 19 per cent among urban households. Further, less than 3 per cent of rural households owned a motorised two- or four-wheel vehicle; the corresponding percentage among urban households was 16 per cent.

The broad pattern of asset owner-





ship was not very different among SC households. However, asset poverty was acute among ST households. Only 10 per cent of tribal households owned telephones, for example, as compared to 23 per cent of all households. In rural areas of Dhalai and North District, more than 75 per cent of households owned none of the assets specified in the Census schedule. Dasda and Damcchara in North District and Chhamanu in Dhalai were three blocks in which more than 80 per cent of households reported owning none of the assets specified in the Census schedule.

The picture on asset poverty is confirmed by our three village studies (see Box 2.10). The most striking finding from the village studies is the low level of wealth among rural households. In the two villages of setttled

Secondary data indicate low levels of ownership of non-land assets among households in Tripura.

According to the Census of 2001, on average, 50 per cent of households in Tripura did not possess any of the assets specified in the Census schedule.

agriculture, land was the primary asset. The average wealth of a household in Khakchang was only 6 per cent of that of a household in West Muhuripur, reflecting the absence of land among households in the newly resettled village of Khakchang. However, the average value of assets owned by a household even in the relatively agriculturally advanced village of West Muhuripur (Rs 1.9 lakh) was lower than elsewhere in the country. According to the All India Debt and Investment Survey of 2002, the average value of assets per rural household in India was Rs 2.65 lakh (Rs 3.72 lakh for cultivator households and Rs 1.07 lakh for non-cultivator households).

Further, there are large disparities in wealth. In West Muhuripur, for example, the ten households with the largest asset holdings constituted 10 per cent of all households and owned 37.3 per cent of all assets, whereas the households in the lowest assetowning category constituted 21.5 per cent of households and owned only 3.7 per cent of all assets in the village. Since land is the major asset in West Muhuripur village, it is the incidence of landlessness that determines the pattern of asset ownership.

2.6 Summary

Starting from a low base of per capita Net State Domestic Product (NSDP), even with an impressive annual rate of growth, Tripura has not been able to attain the average Indian per capita national income. As important as the rate of economic growth is the nature of economic growth. The pattern of growth of SDP has been sectorally unbalanced, with very limited contribution from the manufacturing and secondary sector. Agriculture in the State has the potential to dev-

elop; the performance in the past has been constrained not just by terrain but also by lack of development of irrigation, limited use of modern inputs, lack of access to extension and markets. Policy with respect to cropping must cover the specialized cultivation of field and orchard crops, mixed cropping in homesteads, and marketing structures that encompass field-based, orchard and homestead cultivation.

Access to land in Tripura is constrained by the fact of large tracts of forest land, covering 60 per cent of the geographical area. Cultivable land is limited, population pressure is high, and the majority of holdings are small in size. The Government of Tripura is one of the few governments to have implemented land reform, the most important components of which have been restoration of alienated land to tribal families and distribution of governmentowned land. Since land is the primary asset for most rural households, lack of ownership of land is closely linked to asset poverty. This was particularly marked among households (such as in Khakchang forest village) with no ownership rights to land. Poverty of productive assets compounds the problem of sustainable generation of incomes.

Monitoring changes in income poverty has been constrained by the fact that there are no estimates of expenditure poverty for Tripura, or, for that matter, for any State of the North East other than Assam. The Planning Commission and Government of India must take up this long overdue task of estimating poverty lines and prices indices for each of the North Eastern States. Official estimates of poverty – for what they are worth – indicate a high incidence of

rural poverty in Tripura, though the incidence is declining slowly.

Generating sustainable livelihoods in forest areas, particularly for tribal families traditionally dependent on jhum cultivation, is a major challenge. The State Government has taken innovative initiatives in the past, including initiating the first Joint Forest Management Committee and rubber rehabilitation schemes. The most recent initiative, and one that still needs careful assessment, is regrouping and formation of forest villages. The Scheduled Tribes and Other Forest Dwellers (Recognition of Forest Rights) Act 2006 can be a major step forward in meeting the development needs of forest dwellers. The diversification of employment of tribal people requires also that attention be paid to vocational training and to utilization of local raw materials.

Tripura's location and weak infrastructure for transport and communication are major constraints to more rapid economic growth with diversification. The State is wanting in reliable, cheap and modern means of transport and communication, and in basic infrastructure such as power generation and banking. Massive investment is required to improve connectivity, to construct railway lines, to upgrade the road network, to create links to waterways and to modernize airports. The Central Government has to play the leading role in the modernization and expansion of infrastructure in Tripura and the other States of the North East. Without provision of adequate infrastructure (roads, railways, marketing facilities), private investment will not be attracted to the State.

In a special section on banking, we examined trends in various indica-

tors, and found that the small gains made in Tripura during the period of social and development banking have been reversed in the period of financial liberalization.

Large-scale unemployment persists, particularly among youth. The high degree of unemployment is a major concern: in urban Tripura, more than one in five young men are unemployed and one in six young women is unemployed. In the rural areas, the problem is not as much open unemployment as the limited availability of work, be it in terms of number of days of employment or restricted occupational choice or precariousness of income. The high levels of un-employment pose an economic and social challenge, and generating employment with sustainable incomes is one of the biggest tasks for Tripura. Public programmes for employment generation, both wage employment and self-employment, have performed well in comparison to national standards, both in terms of reaching the vulnerable population and in terms of income generation. However, they need to be scaled up to make a dent on unemployment. More emphasis has to be placed on providing jobrelated training and skills, particularly to young men and women.





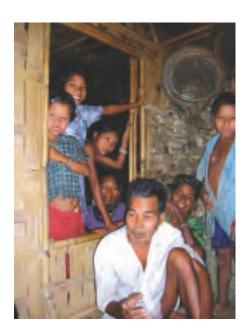
BOX 2.10

Household Assets in Three Villages

Our three-village survey collected information on assets (excluding financial assets and gold) owned by households, and the following features are of note.

- Asset holdings of households are, on average, low: less than Rs 1.9 lakh per household in West Muhuripur in South District, about Rs 1.4 lakh in Mainama in Dhalai and only Rs 12,303 in Khakchang, the forest village in North District (*Table 1*). The major determinant of the low value of asset holdings in Khakchang is the absence of ownership rights over agricultural and homestead land.
- There are substantial disparities in the asset holdings of households even at these low absolute levels of asset holdings (*Table 2*) and the inequality in the distribution of assets is reflected in the coefficients of variation of these distributions (*Table 3*).
- The asset holdings of households in West Muhuripur and Mainama are characterized by a predominance of the asset value of land holdings (this includes agricultural land, homestead land, orchards and water bodies). The landless, thus, constitute the core of the asset-poor. Land constitutes by far the largest component of household asset holdings in West Muhuripur and Mainama, 64 per cent and 70 per cent respectively of all household asset holdings. (At the national level too, land accounts for 63 per cent of the value of household assets.*) If land is excluded from asset holdings, the total value of assets declines sharply (*Table 1*).
- An important feature of asset holdings is the low absolute value and share of the means of production in agriculture and agricultural implements. In Mainama and Khakchang, the share of these assets is negligible. In West Muhuripur, where agriculture is more advanced than in the other villages, the mean absolute values and shares are low, and are also very unequally distributed. With respect to most households in the three villages, the value and distribution of these assets which consist mainly of ploughs and hand implements reflect the low development of machine technology in Tripura's agriculture.
- * Data from NSSO 59th Round on Household Assets and Liabilities in India.

(continued on facing page)





BOX 2.10 (continued)

- The second largest component of asset holdings in West Muhuripur and Mainama (and the largest in Khakchang) is housing. With respect to housing as well, while mean values are low, inequality in asset values is very high.
- The next largest component of household asset holdings is livestock (*Table 4*). In West Muhuripur and Mainama, the main components of this category are milch and draught cattle. Draught animals, which are still the mainstay of field preparation and ploughing in the two villages, are not large hefty animals: the average value of a pair in West Muhuripur was Rs 8,000 and in Mainama Rs 10,000. In Khakchang, where the dominant form of cultivation is *jhum*, draught animals are not used for preparatory tillage or threshing. Milch cattle and pigs are the main components of livestock holdings here.
- The composition and distribution of durable consumer goods shows the same features of low mean values and high inequality in respect of distribution. The distribution of these assets also reflects disparities in the domestic consumption of electricity.
- As mentioned, Khakchang, the forest village in North District, has special features. The composition and distribution of asset holdings of households in Khakchang are characteristic of the newly-settled, near-camp-like conditions here (*Table 5*). Total asset values are low; this reflects low land ownership. Most cultivation in the village is *jhum*, and households have no formal ownership rights over *jhum* land. The average values of houses, livestock, durable consumer goods and inventories and other commercial assets owned by households are very low. Housing occupies the largest share of assets; in general, however, houses are not permanent structures, and of substantially lower value than houses in areas of more settled agriculture, such as in West Muhuripur and Mainama. The average value of household livestock is less in Khakchang than in the other villages. This reflects partly the fact that animal labour is hardly used in cultivation. An interesting feature of the distribution of asset holdings in Khakchang is the share of inventories in total household asset holdings (around 15 per cent), which is higher than in the other two villages. A reason for this is that households here store the produce of *jhum* cultivation in their households all year round.

(continued on next page)







BOX 2.10 (continued)

Table 1

Average value of household asset holdings, by asset category, West Muhuripur, Mainama and Khakchang Villages, 2005 (in Rs)

Asset category	West Mu	huripur	Mair	nama	Khakchang	
	Average value per household	As % of column total	Average value per household	As % of column total	Average value per household	As % of column total
All land	121,395	64.1	99,306	69.7	negligible	negligible
Livestock	8,597	4.5	7,258	5.1	1,663	13.5
Agricultural means of production and implements	3,154	1.7	573	0.4	negligible	negligible
Buildings, incl. houses and commercial etablishments	48,544	25.6	25,080	17.6	7,555	61.4
Durable goods (incl. electrical equipment, furniture and other durable assets)	5,283	2.8	6,389	4.5	1,183	9.6
Inventories and other commercial assets	859	0.4	1,959	1.4	1,856	15.1
Means of transportation	1,665	0.9	1,937	1.3	40	0.3
All assets	189,497	100.0	142,502	100.0	12,303	100.0

 $Table\ 2$ Household asset holdings, by size category of household assets, West Muhuripur Village, South District, 2005 (in Rs)

Size category of household	Ног	ıseholds	Assets owned		
asset holding	Number	As % of column total	Value	As % of column total	
0-19,999	4	3.9	36,150	0.2	
20,000–49,999	18	17.6	683,415	3.5	
50,000–99,999	26	25.5	1827,160	9.5	
1,00,000-4,99,999	44	43.2	9572,835	49.5	
5,00,000-9,99,999	9	8.8	6091,060	31.5	
10,00,000 and above	1	1.0	1118,100	5.8	
All categories	102	100	19328,720	100.0	

Household asset holdings, by size category of household assets, Mainama Village, Dhalai District, 2005 (in Rs)

Size category of household	Ho	ouseholds	Assets owned		
asset holding	Number	As % of column total	Value	As % of column total	
0–19,999	16	9.6	156,855	0.7	
20,000–49,999	34	20.1	1217,465	5.1	
50,000–99,999	42	24.8	3095,944	12.8	
1,00,000-4,99,999	68	40.2	13437,275	55.8	
5,00,000-9,99,999	8	4.7	4773,416	19.8	
10,00,000 and above	1	0.6	1401,800	5.8	
All categories	169	100.0	24082,755	100.0	

(continued on facing page)

BOX 2.10 (continued)

Household asset holdings, by size category of household assets, Khakchang Village, North District, 2005 (Rs)

Size category of household	Ног	useholds	Assets owned		
asset holding	Number	As % of column total	Value	As % of column total	
0-4,999	43	44.3	86,305	7.2	
5,000-9,999	24	24.7	167,780	14.0	
10,000–24,999	18	18.6	283,650	23.8	
25,000-49,999	9	9.3	360,050	30.2	
Above 50,000	3	3.1	295,570	24.8	
All categories	97	100.0	1193,355	100.0	

Table 3

Coefficient of variation of assets by type of asset owned, West Muhuripur, Mainama, and Khakchang Villages, 2005

Asset category	West Muhuripur	Mainama	Khakchang
All land	131.8	146.5	
Livestock	188.7	121.0	244.0
Agricultural means of production and implements	433.4	476.0	566.7
Buildings, including houses and commercial establishment	ts 121.5	113.6	198.3
Durable goods (incl. electrical equipment, furniture and			
other durable assets)	141.5	141.0	250.7
Inventories and other commercial assets	396.5	192.4	202.7
Means of transportation	559.2	416.4	586.2
All assets	112.5	120.1	158.1

Table 4

Value of livestock owned by households, by livestock category, West Muhuripur, Mainama, and Khakchang Villages, 2005 (in Rs)

Livestock	We	West Muhuripur		Mainama		Khakchang	
category	Value	As % of column total	Value	As % of column total	Value	As % of column total	
Milch cattle	447,400	51.0	394,150	31.1	64,400	39.9	
Draught animals	336,500	38.4	670,400	53.0	3,000	1.9	
Goats	39,300	4.5	59,100	4.7	11,170	6.9	
Sheep	0	0.0	4,480	0.4	2,500	1.6	
Ducks and hens	53,710	6.1	39,660	3.1	15,255	9.4	
Pigs	0	0.0	97,800	7.7	64,960	40.3	
Total	876,910	100.0	1265,590	100.0	161,285	100.0	

Table 5

Ratio of average household assets in Khakchang to average household assets in West Muhuripur, by asset category

Ratio
negligible
0.19
negligible
0.16
0.22
2.16
0.02
0.06

THE ECONOMY 7I



3 EDUCATION, HEALTH, NUTRITION

3.1 Education

3.1.1 Improvements in Literacy

In Chapter 1 we saw that the decade of the 1990s in Tripura saw major gains in respect of extending literacy. By 2001, the literacy rates for both males and females, in rural and urban areas, were higher than the corresponding averages for India and the North Eastern States. Inequalities in achievement remain, however, across districts, social groups and gender. An illustration of both the achievements in literacy as well as the remaining disparities comes from our three-village study (Box 3.1).

The role of literacy campaigns

Direct interventions by the government and mass organizations through literacy campaigns have played an important role in improving literacy rates in Tripura. In 1994, the State Government declared its commitment to making Tripura fully literate. To this end, a Total Literacy Campaign was begun in January–February 1995 that aimed to reach 4,90,000 illiterate persons in the age group 15–45 years. The programme was jointly funded by the National Literacy Mission and the Government of Tripura. The

Total Literacy Campaign was conducted with the help of 13,000 volunteers. In each district, a District Literacy Committee (Zilla Saksharata Samiti or ZSS) was formed to coordinate the activities of the campaign. Similarly, literacy committees were formed at the block, zonal, panchayat and ward levels, to mobilize people's participation. The Total Literacy Campaign came to an end in 1996-97. An evaluation study conducted at the end of the campaign found that about 79 per cent of the target group had become literate. As many as 62 per cent of the neoliterates were women, 44 per cent belonged to Scheduled Tribes (STs) and about 19 per cent to Scheduled Castes (SCs).

Special note must be made in this context about educational deprivation among *jhumia* households in Tripura (Box 3.2). *Jhumias* are educationally one of the most deprived sections of society. Expansion of literacy among the *jhumias* has been one of the most difficult challenges for activists involved in the Total Literacy Campaign. As part of the campaign, mobile satellite literacy centres were organized for six months during the *jhum* season, so as to enable the literacy activists to reach *jhumia* households. In areas affected by

In general, the data show that Tripura has made real advances in increasing and broad-basing school enrolment. This is a great asset, and one that must provide the foundation for future development.

¹ Annexure 7 discusses the sources of data on education and their quality.

BOX 3.1

Disparities in Literacy Achievements

There are three major features of literacy in the study villages. In the two villages of settled agriculture – West Muhuripur in South District and Mainama in Dhalai – literacy is distinctly higher than corresponding levels in rural North East and in India (*Table 1*). Nevertheless, universal literacy has not been achieved in any of the villages. The literacy rates for males and females are higher than the all-India rates; and, female literacy rates being higher than the all-India rates, the gender gap in these two villages is lower than in rural India as a whole. In Mainama, literacy achievements among the Scheduled Tribe (ST) population are far higher than the corresponding figures for STs in India (*Table 1*). It is of note that educational achievements in Mainama are enhanced by the levels of achievement of its Buddhist Chakma population.

The third feature is the utter disparity in literacy indicators (and, as we shall see, other educational indicators) between West Muhuripur and Mainama, on the one hand, and the forest village of Khakchang, on the other. In Khakchang, the proportion of literate males and females above the age of 7 were 48 per cent and 19 per cent respectively (the corresponding figures for males and females in rural India in the Census of 2001 was 71 per cent and 47 per cent). The levels of literacy in Khakchang (whose population is almost entirely ST) are in fact lower than even the corresponding rates for ST males and females in rural India (which were 57.4 and 32.4 per cent) at the Census of 2001.

The village data show a better performance than the all-India rural aggregates in West Muhuripur and Mainama with respect to the median years of education, particularly in relatively young age groups, but a worse performance in Khakchang (*Table 2*). Among women, the median years of schooling was five years in West Muhuripur and four years in Mainama – the corresponding all-India average was zero.

Table 1
Literate persons above 7 years as a proportion of all persons above 7 years,
West Muhuripur, Mainama and Khakchang villages, 2005, and rural India, 2001
(in per cent)

Region		All persons				Scheduled Tribes		
	Males	Females	Persons	Gender gap (% points)	Males	Females	Persons	
West Muhuripur								
(South District)	74.3	61.7	68.4	12.6	n.a	n.a	n.a	
Mainama (Dhalai)	76.3	60.I	68.2	16.2	78.9	53.7	66.7	
Khakchang								
(North District)	48.0	19.4	34.4	28.6	47.2	18.7	33.7	
Rural India	71.4	46.7	59.4	24.7	57.4	32.4	45.0	

Note: n.a stands for not applicable.

(continued on facing page)

insurgency, personnel from paramilitary forces were inducted as literacy activists.

In 1997–98, Tripura initiated a Post-Literacy Campaign to provide continued support to the neo-literates who had benefited from the Total Literacy Campaign, and to ensure that they did not regress into illiteracy. The project came to an end in 2000. The Post-Literacy Campaign aimed to reach 3,80,000 neo-literates. An evaluation done at the end of this second phase of the literacy campaign showed that about 87 per cent of the target population benefited from it.

In 2001 Tripura launched the third phase of the literacy campaign, the Continuing Education Programme. This programme has focussed on providing further learning opportunities to neo-literates. For this purpose, a total of 1,227 Continuing Education Centres and 122 Nodal Centres have been established. Each of these centres is equipped with a library, and with facilities for sports and games, for undertaking cultural activities and for holding group meetings. Each centre has a full-time functionary, a motivator (prerak) and an assistant. The centres conduct classes for neoliterates as well as residual illiterates.

A survey conducted in November–December 2003 found that there remained a total of 1,60,000 residual illiterates in the age group 15–45 years. In 2003, the Chief Minister of Tripura launched a Nine Point Programme which aimed, *inter alia*, to achieve total literacy by the end of 2005.

In the wake of all these campaigns, levels of literacy in Tripura today are higher than those reported at the Census of 2001. An estimate prepared for the State based on a sample survey shows that the overall literacy rate is

now a commendable 80.1 per cent. Data from the National Family Health Survey (NFHS-3) conducted in 2005–06 show an overall literacy rate of 80.2 per cent for the population aged 6 and above, with literacy rates of 90.3 per cent and 78.3 per cent in urban areas and rural areas, respectively.

3.1.2 School Enrolment and Dropout Rates

As noted in Chapter 1, there were major increases in school enrolment and attendance during the 1990s. Nevertheless, all children of schoolgoing age in Tripura are still not in school. In 2001, according to the Census, 23 per cent of children in the age group 6–14 years were not attending school; the corresponding proportion in Dhalai was 34 per cent.

Single-year data on school attendance show that attendance rates peak between 9 and 11 years of age (Figure 3.1). This suggests that a large number of children in Tripura start going to school very late. Of the 1.6 lakh children in the age group 6–14 years who were out of school, about 70 per cent were below 10 years of age, suggesting that the problem may be partly of late starters rather than of drop-outs.

There is evidence that further improvements in school attendance have taken place since 2001. In 2003, the District Literacy Committees conducted a household survey in the entire State, and found that almost 89 per cent of children in the age group 6–11 years attended school.² A household survey of 2005–06 found the enrolment rate to be over

BOX 3.1 (continued)

Table 2
Median number of completed years of schooling, by age group, West Muhuripur,
Mainama and Khakchang villages, 2005, and rural India, 1998-99 (in years)

Age group	Median numb	er of completed	years of education (m	nales) in
	West Muhuripur	Mainama	Khakchang	Rural India
	South District	Dhalai	North District	
6 to 9	1.0	1.0	1.0	1.4
10 to 14	4.0	4.0	2.0	4.7
15 to 19	8.0	8.0	6.0	8.1
20 to 29	8.0	9.0	5.0	8.2
30 to 39	4.0	8.0	4.0	5.6
40 to 49	4.0	5.0	0.5	5.0
50+	0.0	3.0	0.0	0.0
All ages	5.0	6.0	2.5	4.6

Age group	Median number of completed years of education (females) in						
	West Muhuripur	Mainama	Khakchang	Rural India			
	South District	Dhalai	North District				
6 to 9	1.0	1.0	1.0	1.2			
10 to 14	4.0	5.0	2.0	4.1			
15 to 19	8.0	8.0	3.0	5.5			
20 to 29	8.0	8.0	0.0	0.0			
30 to 39	4.0	5.0	0.0	0.0			
40 to 49	4.0	0.0	0.0	0.0			
50+	0.0	0.0	0.0	0.0			
All ages	5.0	4.0	0.0	0.0			

Age group	Median numbe	Median number of completed years of education (persons) in						
	West Muhuripur	Mainama	Khakchang	Rural India				
	South District	Dhalai	North District					
6 to 9	1.0	1.0	1.0	1.3				
10 to 14	4.0	4.0	2.0	4.5				
15 to 19	7.0	8.0	5.0	7.1				
20 to 29	8.0	8.0	3.0	5.4				
30 to 39	5.0	7.0	1.5	2.1				
40 to 49	4.0	3.5	0.0	0.0				
50+	1.0	0.5	0.0	0.0				
All ages	5.0	5.0	1.0	2.6				

BOX 3.2

Jana Siksha Andolan (People's Education Movement)

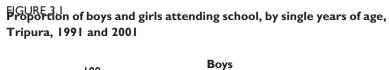
Tripura has a long history of literacy movements. The first campaign for mass literacy was begun in 1945 by Dasarath Deb and other tribal leaders in the Khowai sub-division of West District. They formed the *Jana Siksha Samiti* in order to spread literacy among the tribal people, to protect and enrich the tribal language, and to raise social and political consciousness among the people. As part of this movement, a large number of schools were started in villages in hilly and remote locations. To support the literacy movement, a weekly newspaper, *Tripurar Katha*, was started (the present form of which is the daily *Desher Katha*).

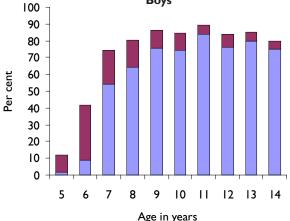
² State Literacy Mission Authority, Agartala.











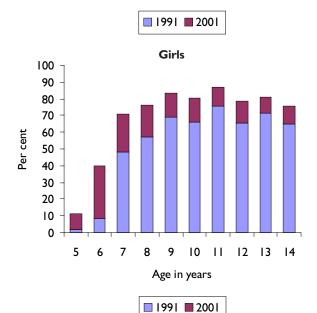


TABLE 3.1 Enrolment rates by age group and district, 2005-06

	6-11 years	II-I4 years	6-14 years
West District	98.6	97.1	98.1
North District	98.1	95.9	97.5
South District	98.7	94.5	97.5
Dhalai	95.6	91.1	94.3
Tripura State	98.2	95.8	97.4

Source: Directorate of School Education, Sarva Shiksha Abhiyan Rajya Mission, Tripura.

97 per cent among 6–14 year-old children (Table 3.1). The enrolment rates were similar in West, South and North Districts; only Dhalai lagged behind a little.

Our village surveys, conducted in late 2005, also point to near-universal school enrolment among children (see Box 3.3). School enrolment and achievement in the younger age groups show that a new foundation is being laid in terms of educational achievement. In general, the data show that Tripura has made real advances in increasing and broadbasing school enrolment. This is a great asset, and one that must provide the foundation for future development. The main tasks now are to ensure 100 per cent enrolment in the early age groups and universal retention, and to pay careful policy attention to providing adequate school infrastructure and teaching and play material, ensuring appropriate numbers of teachers, and to matters of school-level pedagogy.

Dropping-out of school remains a concern, particularly among ST households (Table 3.2). Over the last five years, the overall drop-out rate for primary school children (Classes I to V) has fallen sharply, from 50 per cent in 2001-02 to 11.6 per cent in 2005–06. However, the drop-out rate is higher among children of ST families (14 per cent). The drop-out rate is also high among Muslim children (24 per cent in 2004-05). It is noteworthy that drop-out rates are similar for boys and girls. At the upper primary level, retention in school is more difficult, and the statistics show that one-fifth of the children drop out of elementary school (Classes I to VIII). Special attention has to be paid to ensure continuation of schooling, particu-

TABLE 3.2 **Drop-out** rates among primary and upper primary schoolchildren

Category	Primary	(I to V)	Primary and (I to	Upper Primary VIII)
	2001-02	2005–06	2001-02	2005–06
All	50.4	11.6	67.9	21.4
Scheduled Castes	45.7	10.3	65.7	20.7
Scheduled Tribes	65.4	13.8	78.6	27.6

Source: Directorate of School Education, Sarva Shiksha Abhiyan Rajya Mission, Tripura.

The 1990s and early 2000s were a period of investment and improvement in school infrastructure.

larly among children from tribal and Muslim families.

3.1.3 School Infrastructure in Tripura

Establishment and maintenance of basic school infrastructure is essential for ensuring universal schooling. Most villages in Tripura have at least one school. In 2001, there were only five inhabited villages in South District, eleven inhabited villages in Dhalai and one inhabited village in North District that did not have a school. In West District, all inhabited villages had at least one school. According to the Seventh All-India School Education Survey (AISES), in 2002, 84.4 per cent of habitations either had a primary school within the habitation or within 1 km of the habitation. Data for upper primary schools show that about 82.4 per cent of habitations had an upper primary school within 3 km of the habitation.

The 1990s and early 2000s were a period of investment and improvement in school infrastructure. In 1993, 70 per cent of schools had a temporary structure, another 12 per cent had only part of the building made of *pucca* materials, and only 17 per cent had a permanent building. In 2002, around 59 per cent of the schools had a permanent or partially

permanent building. According to the District Information System for Education (DISE), in 2003–04, 66 per cent of the primary and upper primary schools had permanent (pucca) buildings. Tripura has done better than all other North Eastern States in respect of provision of pucca buildings for primary schools.

In 2002, 58 per cent of primary schools in Tripura had less than five classrooms. The deficiency in classrooms was marked in Dhalai where 83 per cent of primary schools did not have five classrooms. The student-classroom ratio (SCR) is a measure of adequacy of schooling infrastructure. According to DISE statistics, in 2003–04, the SCR in primary schools was 29 in West District, 25 in South District, 34 in Dhalai and 37 in North District. These levels more than satisfy the norm of forty students to a classroom.

In 1993, only 18 per cent of primary schools provided pupils with drinking water. By 2003–04, 68 per cent of primary schools had drinking water facilities.³ The improvement in provision of toilet facilities has been slower. In 1993, less than 11 per cent of schools had a urinal and 3 per cent

³ The corresponding number for all districts of India was 76 per cent (NIEPA, 2005).



School Enrolment

Data from the village surveys on school enrolment (*Table 1*) show that *universal enrolment in the age group 6–14* years has been achieved in one survey village (West Muhuripur), and that the level of enrolment in all three villages in the age group 6–11 years and 11–14 years is significantly higher than the corresponding figures for rural India reported in the National Family Health Survey (NFHS). In the 15–17-year age group the most striking feature is a very sharp fall-off in school enrolment among girls in the predominantly Scheduled Tribe forest village of Khakchang.

A comparison with school enrolment data from the Census of India 2001 shows similar results: achievement in all three villages is well above all-India levels and West Muhuripur has achieved universal enrolment (*Table 2*). An encouraging feature of the data is that Khakchang, which is well below India averages with respect to literacy, performs far better than rural India as a whole in respect of enrolment in the age group 6–14 years.

Table 1
Proportion of children attending school, by sex and age group, West Muhuripur, Mainama and Khakchang villages, 2005 and rural India, 1998-99

Age group	West Muhuripur		Age group		Khakchang		
(in years)	Boys	Girls	Children	(in years)	Boys	Girls	Children
6 to 10	100	100	100	6 to 10	91.9	81.8	86.4
II to I4	100	100	100	II to I4	100.0	73.7	88.9
15 to 17	85.2	94.7	89.1	15 to 17	76.2	25.0	54.1
Age group		Mainama		Age group		Rural India*	
(in years)	Boys	Girls	Children	(in years)	Boys	Girls	Children
6 to 10	93.2	89.8	91.3	II to 14	83.2	75.I	79.3
II to I4	78.6	92.5	85.4	15 to 17	78.5	61.6	70.4
15 to 17	84.2	89.3	86.4		54.8	32.8	44.0

^{*} National Family Health Survey 1998-99.

Table 2

Proportion of children in the age group 6-14 years currently attending school, by social group, in West Muhuripur, Mainama and Khakchang villages, 2005, and rural India, 2001(in per cent)

West Muhuripur, So	outh District			Khakchang (forest v	illage), North D	istrict	
Social group	Proportion of children in the age group 6 to 14 years attending school			Social group	Proportion of children in the age group 6 to 14 years attending school		
	Female	Male	All children		Female	Male	All children
Scheduled Tribe	100	100	100	Scheduled Tribe	81	95	88
All persons	100	100	100	All persons	79	95	87
Mainama, Dhalai				Rural India			
Social group	Proportion	of children in	the age group	Social group	Proportion	of children in	the age group
	6 to 1	4 years attend	ing school		6 to 1	4 years attend	ing school
	Female	Male	All children		Female	Male	All children
Scheduled Tribe	89	84	87	Scheduled Tribe	52	64	58
All persons	91	86	89	All persons	63	72	68

had a lavatory. In 2002, 19 per cent of primary schools had urinals and 11 per cent had lavatories. Most of the schools in Tripura did not have separate toilet facilities for girls. In 2002, 36 per cent of urban primary schools and 10 per cent of rural primary schools had separate lavatories for girls. There was a small improvement in this regard during the 1990s.

An important gap in school infrastructure is in respect of provision of basic teaching aids. In 2005–06, 32 per cent of schools in Dhalai, 16 per cent in North District and 12 per cent in South District did not have even a blackboard. West District was the notable exception. In respect of several components of school infrastructure, North District and Dhalai are much worse off than South and West Districts.

To sum up, there has been improvement in the provision of basic school infrastructure in the 1990s, particularly in respect of school buildings and drinking water facilities. Official data indicate big improvements in infrastructure in the last four to five years, in respect of pucca school buildings, drinking water and toilet facilities. While Tripura is now ahead of the national average in respect of some indicators such as number of classrooms per school or number of schools with at least one teacher, it lags behind in some other respects (e.g., provision of drinking water, toilets for girls and electricity connections). Also, lacunae remain, such as in respect of basic teaching aids. Further, there is large interdistrict disparity in school infrastructure. In Dhalai, only 49 per cent of primary schools had drinking water facilities in 2005-06, while the corresponding proportion in South District was 95 per cent. Similarly,

only 34 per cent of schools in North District and Dhalai had toilets; the corresponding proportion was 99.8 per cent in South District.

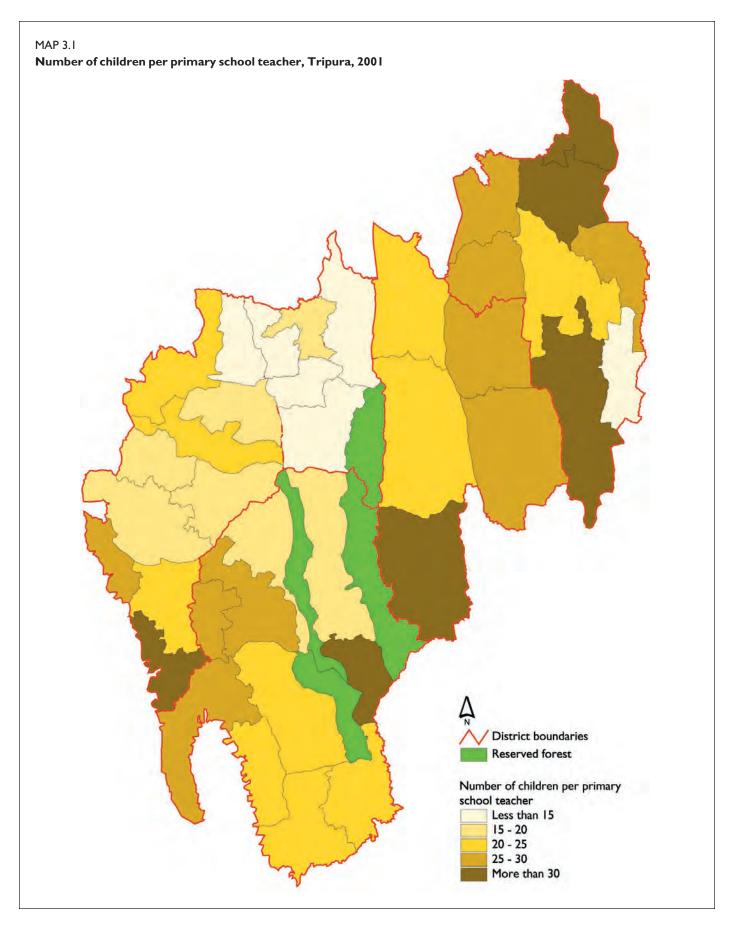
Inadequacy of teachers

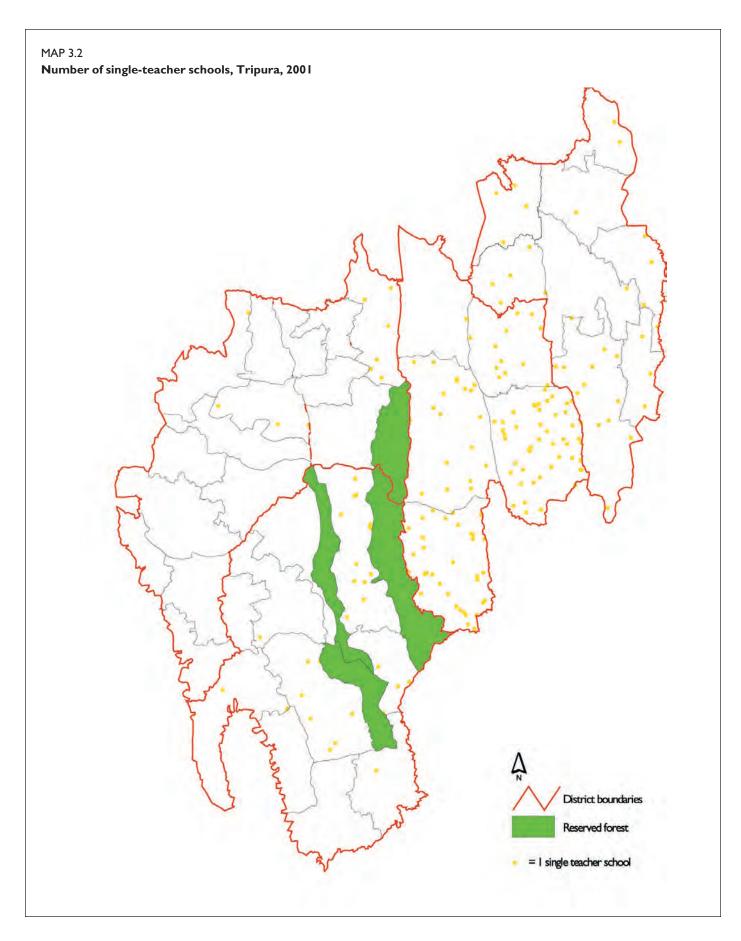
An essential requirement of a school is good teachers and good teaching. Aggregate statistics at the State, district and block levels suggest that there are adequate numbers of school teachers in Tripura. At the State level, Tripura had, on average, one primary school teacher for every twenty-three children of 6-10 years of age. There were only ten blocks in which there were more than thirty children per primary school teacher.4 A comparison with the national norm of one teacher for forty children suggests that there are adequate numbers of teachers at the primary school level in Tripura.

The disaggregated data, however, bring out a different picture and show that the norm is not met in all individual schools. The structure of habitations is such that a large number of schools are small and far removed from each other. Such schools require a minimum number of teachers to be deployed irrespective of the number of children enrolled in the school. Further, if one assumes that the presence of female teachers in schools helps the enrolment of girls, the number of women teachers in Tripura needs to be enhanced as only 18 per cent of primary school teachers in 2002 were women.

⁴ We have analysed the number of primary school teachers in relation to the population of children in the age group 6—10 years, and not in relation to the number of children attending schools in 2001. This has been done to evaluate whether the current strength of primary school teachers will be adequate if all children were attending school.

A comparison with the national norm of one teacher for forty children suggests that there are adequate numbers of teachers at the primary school level in Tripura. The disaggregated data, however, show that the norm is not met in all individual schools.





BOX 3.4

Teacher Adequacy

While the average teacher–student ratio is satisfactory, a simple statistical exercise showed that if every primary school were to have five teachers (one for each grade), there would be a shortfall of teachers. Our calculations for 2001 indicate that an additional 3,062 teachers would be needed to meet the norm of one teacher for every grade. This requirement can be met by a combination of redeploying existing teachers across schools (1,800 teachers) and hiring new teachers (1,262 teachers).

We used a regression model to identify the factors that explain the distribution of teachers across schools. The model examines whether the distribution of teachers across schools addresses the needs of small habitations, and if schools in remote areas tend to have a bigger deficiency of teachers than schools in less remote areas (*Annexure* 7).

The results of the regression analysis showed, first, that the number of teachers per grade was positively related to the number of students per grade. This implies that the number of teachers fell with the size of schools, and schools that were small in terms of the number of students enrolled faced a higher deficiency of teachers. Secondly, the number of teachers per grade was less in remote villages and in villages in forest areas. Thirdly, the model used dummy variables to capture fixed effects associated with blocks. The performance of different blocks is compared to that of Teliamura, the block with the highest teacher—pupil ratio. We found that the availability of teachers was statistically lower than in Teliamura block, in all blocks of South District, Dhalai and North District. In West District, six blocks performed better than Teliamura.

Source: Vikas Rawal (2006).

Provision of adequate incentives and facilities, and better security conditions, can help motivate teachers to shift to villages where they are most needed.

The uneven distribution of teachers in primary schools in Tripura is related to two factors. First, the habitational pattern in Tripura is such that a number of schools are very small in size. The existing strength of primary school teachers is insufficient to provide at least one teacher per grade to all schools and ensure that every school has at least one teacher for every forty students. Secondly, the problem of deficiency of teachers is particularly acute in remote villages and villages in forest areas. Schools near towns, particularly schools in West District, had low pupil-teacher ratios. Provision of adequate incentives and facilities, and better security conditions, can help motivate teachers to shift to villages where they are most needed.

Financial implications of expansion of school facilities

Notwithstanding major improvements in school facilities during the 1990s, the task of ensuring adequate quantity and quality of infrastructure for universal schooling still remains to be completed. We have attempted a preliminary calculation of the financial implications of expanding and improving school facilities in Annexure 7. The financial implications of providing improved facilities at the primary school level are substantial but feasible, we argue. Public expenditure on elementary education in Tripura is about 4.1 per cent of Gross State Domestic Product (GSDP). If the capital expenditure is spread over three years, the State will have to spend about 6 per cent of GSDP on elementary education for three years and about 5 per cent of GSDP thereafter, to ensure quality universal schooling.

Higher education and skills training

Our focus in this Chapter thus far has been on school education, particularly primary and elementary education, since this is the first step towards acquiring further knowledge.

Despite recent expansion,⁵ opportunities for higher education in the State remain limited (with only one university and a total of twenty-one colleges, mostly in West District). To generate a supply of skilled workers as well as to enhance human development, attention must be paid to high-

⁵ There was a 14 per cent increase in student strength in colleges and institutes of higher education between 1998-99 and 2006-07.

er education in the future. The State also requires a wide range of job-related skills training centres (including centres that provide training in computing skills), to address the problem of high youth unemployment.

3.2 Health

3.2.1 Health and Demography

Some of the basic indicators of the demographic and health status of a population are the total fertility rate, crude birth rate, natural growth rate, crude death rate, neonatal death rate, post-neonatal death rate, infant mortality rate and under-5 mortality rate (U5MR). In respect of all these indicators, the average figures for the State are better than the corresponding national averages. According to NFHS-3, on some indicators like total fertility rate (TFR), Tripura outperforms all other States of the North East as well.6 In terms of infant mortality, though, several other States of the North East do better than Tripura. In respect of child and infant mortality (specifically, U5MR, neonatal mortality rate and infant mortality rate), the rates are lower among girls than boys in Tripura.

As noted earlier, the natural population growth rate in Tripura in the period 1991–2001 was the lowest among all the Indian States, and the total fertility rate (1.9) was lower than the national average of 2.8, indicating commendable success in family planning.⁷

Data from the NFHS-2 survey point to a steady decline in all indicators of child mortality (Table 3.4). This trend implies that the health and nutrition environment has been con-

TABLE 3.3

Total fertility rates (TFR), crude birth rates (CBR), crude death rates (CDR), natural growth rates (NGR) and maternal morality rates (MMR)

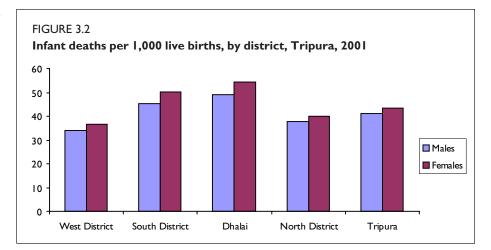
	woma	(births/ an aged years)	CBR** per 1000 population	CDR** per 1000 population	NGR** per 1000 population	MMR*** per 100,000 live births
	1998–99	2004–05	2005	2005	2005	2001
Tripura	1.9	2.2	16.0	5.7	10.3	4.05
Urban	1.4	1.7	13.8	5.8	8.0	
Rural	2.0	2.3	16.5	5.7	10.7	
India	2.8	2.7	23.8	7.6	16.3	4.4
Urban	2.7	2.1	19.1	6.0	13.1	
Rural	3.1	3.0	25.6	8.1	17.5	

Source: * NFHS-2 1998–99 and NFHS-3 2005–06; ** SRS Bulletin (October 2006); *** Registrar General of India.

TABLE 3.4 Infant and child mortality in Tripura (per 1,000 live births)

Years preceding the survey	Neonatal mortality rate	Post-neonatal mortality rate	Infant mortality rate	Under five mortality rate	
0-4	28.6	15.6	44.2	51.3	
5-9	60.4	16.2	76.7	82.4	
10-14	51.8	21.1	72.9	98.0	

Source: NFHS-2 1998-99.



In respect of all health indicators, the average figures for Tripura are better than the corresponding national averages.

⁶ Only Sikkim reported a lower TFR than Tripura in NFHS-3.

⁷ There is a small rise in TFR according to the preliminary estimate of NFHS-3.

TABLE 3.5
Estimated infant mortality rates by district and sex, 2001

mane deaths pe	er 1000 live births	
Males	Females	
33.9	36.6	
45.2	50.1	
49.2	54.3	
37.6	40.0	
41.3	43.5	
	33.9 45.2 49.2 37.6	33.9 36.6 45.2 50.1 49.2 54.3 37.6 40.0

Source: Samir Guha Roy (2005).

TABLE 3.6 Index of ageing and dependency ratio in Tripura by district and sex, 2001

District/	Sex		Dependency ratio	Index of ageing ^c	
State		Youth	Elder persons ^b	Overall	
West District	Persons	53.I	12.4	65.5	23.4
	Males	52.1	11.3	63.4	21.6
	Females	53.8	13.4	67.2	24.8
South District	Persons	59.3	12.5	71.8	21.2
	Males	58.0	11.5	69.5	19.9
	Females	60.6	13.6	74.2	22.4
Dhalai	Persons	64.7	11.6	76.3	18.0
	Males	64.2	11.2	75.4	17.5
	Females	66.0	11.9	77.9	18.1
North District	Persons	60.4	12.3	72.7	20.2
	Males	59.7	11.8	71.5	19.8
	Females	61.0	12.3	73.3	20.2
Tripura	Persons	57.I	12.4	69.5	21.7
	Males	56.2	11.6	67.8	20.6
	Females	57.9	13.4	71.3	23.1
India	Persons	62.1	11.7	73.7	18.8
	Males	62.5	11.2	73.6	17.9
	Females	61.7	12.3	74.0	19.9

Notes: ^a Youth dependency ratio = percentage of population aged 0–14/percentage of population aged 15–59 x 100.

Data from the NFHS-2 survey point to a steady decline in all indicators of child mortality.

ducive to the protection of child life in Tripura.8

New estimates of infant mortality

To obtain a disaggregated picture, special estimates of infant mortality rate (IMR) at the district level were prepared for this Report based on methods of indirect estimation and data from the Sample Registration System (SRS), NFHS and UN Model Life Tables. Indirect estimates may be more reliable than SRS estimates due to the small sample size of the SRS in Tripura. These estimates show that the infant mortality rates in Tripura were 41 and 43 infant deaths per 1,000 live births for males and females respectively (Table 3.5). Though not comparable, it may be noted that our estimates are higher than the SRS estimates (35 for males and 34 for females for the period 2000-02) for Tripura, but lower than the NFHS-3 estimates.

District-level estimates indicate that Dhalai had the highest infant mortality rate (IMR), followed by South, North and West Districts. For girls, IMR was above 50 in Dhalai and South District. Even this, however, is below the all-India IMR of 60 (according to the SRS Bulletin of April 2005).

Age dependency

As already mentioned in Chapter 1, Tripura has a demographically young age structure. The pattern of births and deaths, and the trend of fertility decline are, however, likely to accelerate the ageing of the population. We have calculated two dependency ratios, one a youth dependency ratio

^b Elder persons dependency ratio = percentage of population aged 60+/ percentage of population aged 15–59 x 100.

 $^{^{\}rm c}$ Index of ageing = percentage of population aged 60+/percentage of population aged 0–14 x 100.

⁸ The preliminary estimates from NFHS-3, however, indicate a rise in the infant mortality rate.

and the second an elderly persons dependency ratio (Table 3.6). The overall dependency ratio recorded an all-time low of 70 percent in 2001, which was lower than the national average. The State now has a lower youth dependency ratio than all other States of the North East except Manipur. It must however be noted that the true dependency load, that is, the ratio of non-workers to workers in the population in Tripura (or, for that matter, any State) is obviously somewhat higher than its demographic dependency ratio because of unemployment among working-age persons.

An index of ageing has been computed for all districts, and for males and females. The moderately high level in its value may be due to the combined effect of the decline in fertility and mortality during the last decade. There are also differentials across districts in the values of the index, and West District, the most developed among the districts, also has the highest value of the index of ageing.

The Government of Tripura started pensions for the elderly on its own initiative. From 1978 onwards, small pensions have been given to old persons, landless agricultural workers, *jhumias*, widows, blind and disabled persons, and rickshaw-pullers. The National Old Age Pension Scheme was introduced as late as 1995. Currently, the National Old Age Pension Scheme and the Tripura State pension scheme have been merged, though the Government of Tripura pays higher benefits than the national scheme. The national scheme is also restricted to the population below the poverty line. More attention will have to be paid to the care of the elderly in the future.

TABLE 3.7

Distribution of disabled persons by type of disability, 200 l

State/Country	Type of disability					
	Physical	Visual	Speech	Hearing	Mental	All types
Tripura	23.7	46.7	8.7	9.7	11.3	100
India	27.9	48.5	7.5	5.7	10.3	100
Source: Census 2001.						

TABLE 3.8

Morbidity profile of selected diseases

(number of persons suffering per 100,000 persons)

State/Country	Asthma	Tuberculosis	Jaundice during the past 12 months	Malaria during the past 3 months			
Tripura	4,981	1,157	8,203	7,618			
India	2,468	544	1,361	3,697			
Source: NFHS-2 1998–99.							

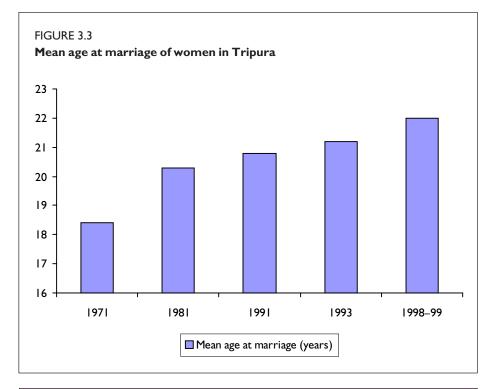
3.2.2 Disability

The proportion of disabled persons in Tripura, 1.9 per cent of the population, is similar to the national figure. The incidence of different types of disability (physical, mental, visual, speech) is also similar to the all-India averages, although hearing disabilities are significantly higher in Tripura than elsewhere (Table 3.7). A detailed analysis indicates that rates of literacy and work participation among the disabled are comparable to national averages.

3.2.3 Morbidity Profile

The morbidity profile of the population is a cause for serious concern (Table 3.8). The incidence of jaundice, malaria and tuberculosis is much higher in Tripura than in the rest of India. Tripura has the highest incidence of malaria among the North Eastern States. The prevalence of tuberculosis is two to three times higher than the national incidence.

Small pensions have been given to old persons, landless agricultural workers, *jhumias*, widows, blind and disabled persons, and rickshaw-pullers.



BOX 3.5

Two-Village Survey on Health and Nutrition

The All India Institute of Hygiene and Public Health (AIHPH) conducted a survey in two villages of Jirania block in West District to assess aspects of health and nutritional status among tribal and non-tribal populations. The two villages selected for complete census-type surveys were Sachindra Nagar Gram Panchayat and Kaichand Bari, an ADC (Autonomous District Council) village. The census-type survey covered 136 households in Sachindra Nagar, and a population of 602 persons (296 males and 306 females). The village was entirely non-tribal Bengali-speaking and comprised 38 per cent Scheduled Castes (SCs), and 30 per cent Other Backward castes. By contrast, Kaichand Bari was entirely populated by Tripuris. The survey covered 96 households and a total of 452 persons (231 males and 221 females).

In the non-tribal village, 23.8 per cent of girls were married before the age of 15; in the tribal village 16.8 per cent were married before the age of 15. However, in both villages, around 60 per cent of girls were married by the age of 18.

Source: Indira Chakravarty (2006).

The mean age at marriage of women in Tripura (22 years) was higher than the national figure (19.7 years).

In rural Tripura, in the two weeks preceding their survey, the NFHS-2 found that 12 per cent of rural children had had diarrhoea (and around 3 per cent, diarrhoea with blood). Despite this high reporting, only 76 per cent of the mothers knew about oral rehydration treatment for diarr-

hoea. There was not much difference in the incidence of diarrhoea as between persons classified as belonging to a low and medium standard of living.⁹

3.2.4 Women's Health

Age at marriage is an important factor in determining women's health, particularly since it is an important factor in determining the age of first pregnancy. The mean age at marriage of women in Tripura (22 years in 1998-99) was higher than the national figure (19.7 years). Comparative data suggest that the mean age at marriage of females has risen significantly, by about 4 to 5 years, since 1971 (Figure 3.3). This improvement is related to enhancement in literacy rates both in urban as well as rural areas. Interestingly, the mean age at marriage is higher in rural areas than in urban areas, in contrast to the pattern at the national level. This is an excellent outcome as the majority of the population lives in the rural areas. Village surveys conducted for this Report found a big difference in the age of marriage across social groups (see Box 3.5). The incidence of child marriage (that is, of girls below 15) was lower among the tribal population than among the non-tribal population.

Data indicate that the State did better than the national average in respect of some aspects of ante-natal and post-partum care of mothers, particularly in the distribution of iron folic acid tablets (IFA) and syrup. Further, pregnant women of Tripura

⁹ The NFHS classified households as belonging to low, medium or high standard of living based on scores given to household amenities (such as house structure, availability of water and toilets) and household assets (ownership of land, livestock, housing and other durable goods).

have a better chance of safe delivery, as almost 71 per cent of respondents reported receiving ante-natal checks from a health professional during pregnancy (NFHS-2 1998–99). During pregnancy, two tetanus toxoid injections were received by 66 per cent of pregnant women.

Domestic violence

Women's health and well-being are impaired by the occurrence of domestic violence. Incidents of violence related to dowry demands (specifically dowry deaths and dowry torture) accounted for over one-third of all reported incidents of crime against women in Tripura. Dowry-related violence, however, is not widespread among the tribal peoples.

3.2.5 Immunization Coverage

Immunization coverage for children aged 12-23 months was better than for children aged 24-35 months (Table 3.9). District-level data from the Reproductive and Child Health (RCH) survey indicates that West District had better immunization coverage than South and North Districts, though in all cases the coverage was not universal. 10 Vitamin A supplementation was also poor. More recently, the success rate in the Pulse Polio programme has touched 100 per cent. The NFHS-3 estimates show that only 50 per cent of children aged 12-23 months received all the recommended vaccinations (up from 41 per cent in 1998-99). Special efforts have to be put into ensuring basic immunization of young children.

3.2.6 AIDS

AIDS is as yet not a big concern in

 10 In the RCH survey, Dhalai was not treated as a separate district.

TABLE 3.9 Immunization coverage, Tripura and districts, 1998–99 (% vaccinated by age)

Туре	NFHS 1998-	99 All Tripura	RCH I	998–99 L	District
	12-23 months	24–35 months	North	West	South
Vaccination card shown	57. l	41.4			
BCG	70.8	52.9	60.3	88.6	73.I
Polio 'O'	30.6	0.0			
DPT I	70.2	51.0			
DPT 2	65.8	43. l			
DPT 3	47. l	35.9	52.7	77.I	56.6
Oral Polio I	73.3	56.5	56.5	76.3	59.0
Oral Polio 2	69.7	49.5	47.8	77.I	51.6
Oral Polio 3	52.8	41.4	35.8	66.6	42.9
Measles	31.9	19.7			
None	24.9	41.8			
Vit. A in oil supple-					
mentation (any dose)	24.3	30.0	17.4	37.8	28.9
Received all vaccinations	41.0				

Source: NFHS-2 1998-99 and RCH 1998-99.

Tripura: only five full-blown cases (and 79 HIV-positive cases) have been identified. The State is in the low-risk category in terms of HIV prevalence rates. However, it is of concern that knowledge about AIDS is thin. In the NFHS-2 survey, 56 per cent of rural women had not heard about AIDS, and 58 per cent did not know any method of prevention.

3.2.7 Health-Care Infrastructure

Tripura's health infrastructure is inadequate as per norms of the Government of India, Ministry of Health and Family Welfare. With reference to national norms for medical infrastructure, Tripura has a shortfall of 50 community health centres, 150 primary health centres and 919 subcentres. There is also a shortfall of doctors: the number of persons served by each doctor is 3,7999, which is roughly twice the norm recommended by the Bhore Committee (1 doctor for every 1,600 persons). Further,



In the NFHS-2 survey, 78 per cent of the population reported the use of health services at government or public institutions.

TABLE 3.10

Public health institutions, Tripura, by district, as of April 2007

	Sub-division hospitals	Community health centres	Primary health centres	Sub-centres	Registered doctors	Persons per doctor*	Beds per 100,000 persons*
West District	3	6	21	257	443	3460	132
North District	2	1	20	112	162	3647	67
South District	3	3	22	144	130	5903	68
Dhalai	3	_	11	66	107	2877	78
Tripura	11	10	74	579	842	3799	99
Shortfall	6*	50**	150**	919**	939**		

Notes: * Assuming one sub-divisional hospital per sub-division.

** Based on JVR Prasad Rao Committee.

Source: Government of Tripura, Department of Health and Family Welfare.

TABLE 3.11

Health care services received by source, location and standard of living index (percentage of households), 1998-99

Source		Location			Standard of living index		
	Urban	Rural	Total	Low	Medium	High	
Tripura							
Public medical sector	41.5	76.4	68.5	75.5	69.9	36.0	
NGO/Trust	1.2	0.0	0.3	0.2	0.4	0.0	
Private medical sector	56.9	23.2	30.8	23.7	29.8	63.1	
Other sources	0.4	0.3	0.3	0.6	0.0	0.9	
India							
Public medical sector	23.5	30.6	28.7	34.0	28.3	19.0	
NGO/Trust	8.0	0.6	0.7	0.7	0.6	0.8	
Private medical sector	74.8	66.2	68.6	62.5	69.3	78.8	
Other sources	1.0	2.5	2.1	2.8	1.7	1.3	

The performance of public health institutions has a profound role to play in bettering human development in Tripura.

the State has on average 99 beds per 1,00,000 persons, much below the WHO norm of 333 beds. It is only recently that a medical college and a super-speciality hospital have been established in Agartala. The people of Tripura thus face problems in respect of access to medical care. West District is the best in terms of health infrastructure.

In the NFHS-2 survey, 78 per cent of the population reported the use of health services at government or pub-

lic institutions (Table 3.11). The performance of public health institutions has a profound role to play in bettering human development in Tripura. As expected, the use of the public sector was higher in rural areas than in urban areas, and higher among less well-off households than among better-off households. At the same time, utilization of the public medical sector is higher than the national average, taking into account all categories of people in Tripura.

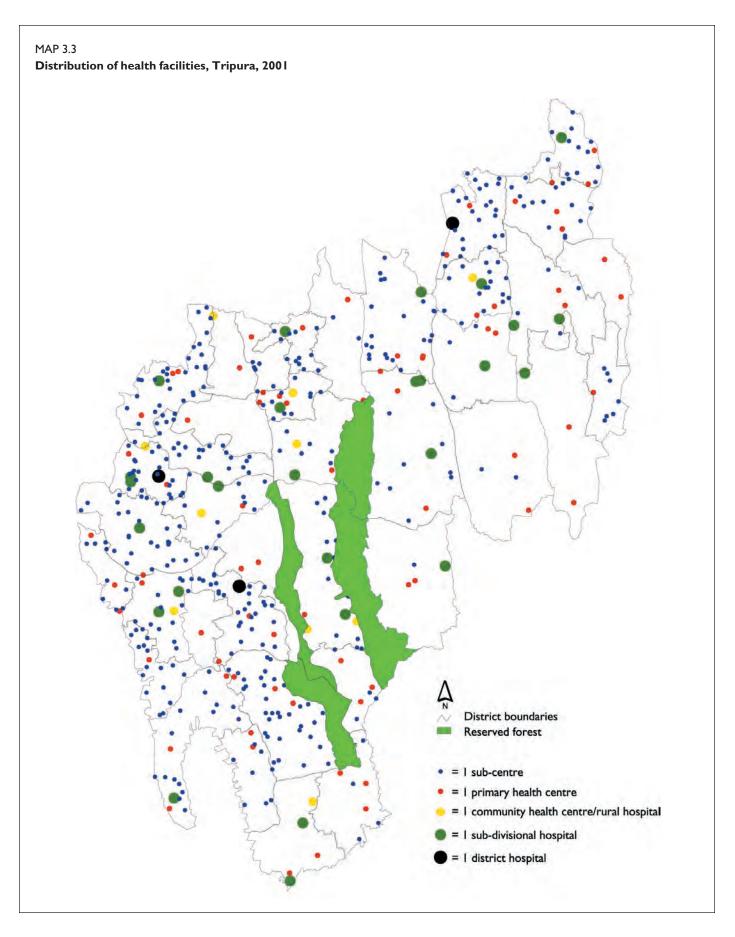
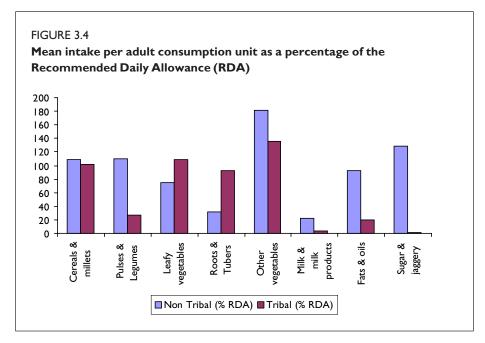


TABLE 3.12

Food group-wise mean intake per adult consumption unit as a percentage of the Recommended Daily Allowance (RDA), Tripura and selected villages

Food group	Percentage of Recommended Daily Allowance					
	Tripura, 1998	Village sur	/ey, 2005			
	Overall	Non Tribal	Tribal			
Cereals and millets	102.2	109.0	102.3			
Pulses and legumes	140.6	109.7	27.0			
Leafy vegetables	129.7	75.3	108.7			
Roots and tubers	125.2	32.1	92.4			
Other vegetables	165.9	180.9	135.1			
Milk and milk products	36.5	22.7	4.0			
Fats and oils	63.4	92.5	20.0			
Sugar and jaggery	29.8	128.4	1.2			

Source: GOI (1998), District Nutrition Profile, Women and Child Department, and Chakravarty (2006).



Among tribal households, the intake of cereals and millets, leafy vegetables and other vegetables was above the recommended daily allowance. Dietary intake of foods other than cereals and leafy vegetables was better among non-tribal families.

3.3 Nutrition and Food Security 3.3.1 *Pattern of Food and*

Nutrient Intake

Quantitative data on nutrition and food intake are hard to find. According to a survey conducted by the Government of India in 1998, the intake of cereals and millets, pulses and legumes, leafy vegetables, roots and tubers, and other vegetables by the people was inadequate (Table 3.12). The two-village survey on health and nutrition conducted for this Report shows that there are some major differences between the tribal and the non-tribal villages (Table 3.12 and Figure 3.4).¹¹ Among tribal households, the intake of cereals and millets, leafy vegetables and other vegetables was above the recommended daily allowance. There were serious deficiencies in the intake of pulses and legumes, milk and milk products, fats and oils, and sugar and jaggery in the tribal village. Dietary intake of foods other than cereals and leafy vegetables was better among non-tribal families.

Calculations based on intake of nutrients indicate that a higher percentage of tribal families was deficient in energy intake than non-tribal families (Table 3.13). It is worrying that 56 per cent of tribal families reported moderate to severe energy deficiency. Deficiencies in protein intake were present but affected fewer people.

¹¹ This calculation is based on data collected from a diet survey based on the weights of raw food. Since the energy requirements and intakes of different members of a family are different, the family is converted into adult consumption units (where each unit is the energy requirement of an adult male sedentary worker). For example, the energy requirement of a female sedentary worker is 77 per cent of that of a male sedentary worker, so such a female will be counted as 0.77 of an adult consumption unit.

Data from the NFHS also indicate that a large proportion of women did not get protein- and micronutrient-dense food every day, and this is reflected in their anthropometry and profile of anaemia. Data on the intake of macronutrients and micronutrients show high levels of deficiency (Table 3.14). For all nutrients other than Niacin and Vitamin C, the intake was deficient among both tribal and non-tribal families. The estimates of deficiency in intake are higher in the recent village surveys than in the State-level survey of 1998.

The high prevalence of underweight and stunting among young children and malnutrition among adult women (reported below) can be traced to the infrequent intake of protein and micronutrient-dense food.

3.3.2 Nutritional Anthropometry of Children and Mothers

Two commonly used anthropometric measures of undernourishment are indicators based on weight for age and height for age. In terms of the weight-for-age indicator, in 1998–99, 14.4 per cent of children were severely underweight and another 28.2 per cent were moderately underweight (Table 3.15). In the case of heightfor-age, 22 per cent were moderately undernourished and 18.4 per cent were severely stunted. While the prevalence of malnutrition is high, indicating a serious problem of stunting and wasting among young children, the incidence of malnutrition is lower in Tripura than the national average, particularly with respect to severe malnutrition in terms of weight-for-age. The anthropometric indices show Tripura in a poor light in comparison to other States of the North East. There is

TABLE 3.13

Percentage distribution of families according to various levels of energy and protein intake

		Percentage of families				
Degree of intake	Criteria	Non-tribal village		Tribal village		
	% of RDA	Energy	Protein	Energy	Protein	
Excess	125 < 150	6.25	6.25	0	12.5	
Adequate	100 < 125	25.0	18.75	6.25	18.75	
Mild deficiency	≥75 <100	43.75	43.75	37.5	25.0	
Moderate to severe deficiency	<75	25.0	31.25	56.25	43.75	
All		100	100	100	100	

Source: Chakravarty (2006).

TABLE 3.14

Mean intake profile of nutrients in Tripura (Intake as per cent of Recommended Daily Allowance)

Nutrient	Tripura, 1998*	Village surveys, 2005		
		Non-tribal village	Tribal village	
Protein	142.0	86.8	92.2	
Energy	95.1	89.6	73.5	
Calcium	302.1	-	-	
Iron	92.6	41.4	27.1	
Vitamin A	71.8	17.8	66.4	
Thiamine	128.3	94.2	53.3	
Riboflavin	91.4	43.6	35.7	
Niacin	149.4	102.8	205.1	
Vitamin C	172.9	115.8	212.3	

Source: * GOI (1998) and Chakravarty (2006).

Amidst a general picture of low nutrition, the incidence of malnutrition among girls is lower than among boys. This is particularly true of the tribal population.

TABLE 3.15

Nutritional anthropometry of children below 3 years of age (% distribution)

State/ Country	Weight for age		Height for age		
	Severe under- nutrition	Moderate under- nutrition	Severe under- nutrition	Moderate under- nutrition	
Tripura					
Total	14.4	42.6	22.0	40.4	
Male	14.5	46.6	25.1	46.5	
Female	14.3	38.7	18.9	34.4	
India					
Total	18.0	47.0	23.0	45.5	
Male	16.9	45.3	21.8	44 .1	
Female	19.1	48.9	24.4	47.0	

Note: A child is classified as moderately (severely) undernourished if the value of the index falls below two (three) standard deviations of the mean.

Source: NFHS-2 1998-1999.

TABLE 3.16 **Anaemia prevalence among young children (6–35 months)** (% distribution)

State/	Sex	Any anaemia	Mild Anaemia	Moderate anaemia	Severe anaemia
Country		(HB< 11.0	(HB 10.9 to	(HB 9.9 to	(HB<7.0
,					
		gm/dl)	10.0 gm/dl)	7.0 gm/dl)	gm/dl)
Tripura	Total	61.8	21.3	36.3	4.2
F					
	Male	58.8	23.2	35.6*	NA
	Female	64.9	19.2	45.7*	NA
India	Total	74.3	23.0	45.9	5.4
	Male	75. I	22.2	47.0	5.9
	Female	73.3	23.7	44.8	4.8

Note: * refers to the combined figure for moderate and severe anaemia. Source: NFHS-2 1998–1999.

Better methods of communicating information on health and nutrition, including doorstep counselling, need to be introduced.

some good news from NFHS-3: the incidence of malnutrition has fallen from 42.6 in 1998-99 to 39 per cent in 2005-06 in terms of weight-forage, and from 40.4 to 30 per cent in terms of height-for-age. However, serious attention has to be paid to ways of tackling nutritional deprivation among children in Tripura.

A striking feature of the Tripura data is that, amidst a general picture of low nutrition, the incidence of malnutrition among girls is lower than among boys. Our village surveys indicate that this is particularly true of the tribal population.

3.3.3 Nutrition Deficiency Diseases Anaemia is highly prevalent among young children (6–35 months) in Tripura. In fact, the incidence of anaemia is the second highest here among the North Eastern States and sixteenth among all the States of India. A significant percentage of children had severe anaemia (<7gm/dl), a matter of urgent concern (Table 3.16). For the 21 per cent of children reporting mild anaemia, the problem can be overcome with simple nutritional counselling and better dietary practices.

As in many other parts of the country, a high proportion of the women in Tripura are anaemic. The proportion of moderate to severely affected women is not very different from the national figure (Table 3.17). According to NFHS-2, the prevalence of anaemia among pregnant women was lower than among non-pregnant women. The reason may be that pregnant women consumed iron folic acid (IFA) tablets, indicating the effectiveness of the programme.

The two village surveys conducted by the All India Institute of Hygiene and Public Health indicated anaemia at high levels in all age groups and both sexes. Anaemia, therefore, is a morbidity factor that affects the entire population. The sustainable way to address anaemia is through dietary diversification, that is, through a food-based approach. For those who are severely anaemic, however, supplementary interventions are required.

Although each cell size is small, estimates of anaemia from blood samples taken during the two village

TABLE 3.17

Anaemia prevalence among ever-married women (15-49 years) (% distribution)

State/ Country	Physiological status of woman	Any anaemia (HB<11.0 gm/dl)	Moderate anaemia (HB10.9 to 7.0 gm/dl)	Severe anaemia (HB<7.0 gm/dl)
Tripura	All	59.0	14.0	1.4
	Pregnant	53.6	24.5*	-
	Lactating	60.7	15.0*	-
	Non-pregnant non-lactating	59.0	14.9*	-
India	All	51.8	14.8	1.9
	Pregnant	49.7	25.4	2.5
	Lactating	56.4	15.8	1.6
	Non-pregnant Non-lactating	50.4	13.4	1.9

Note: * refers to the combined figure for moderate and severe anaemia.

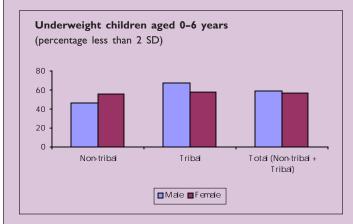
Source: NFHS-2 1998-99.

BOX 3.6

Malnutrition among Children in Two Villages

The village surveys conducted by the All India Institute of Hygiene and Public Health found that around 58 per cent of boys and girls (in the age group 0–6 years) were stunted, and 57 to 59 per cent were underweight. These are indeed high levels of malnutrition. In the non-tribal village, 56 per cent of girls and 46 per cent of boys had low weight-forage, while in the tribal village, 57 per cent of girls and 67 per cent of boys were underweight.

The village survey showed a higher incidence of malnutrition as measured by the Body Mass Index (BMI) among adolescent boys than girls. As girls grow into women, the incidence of low BMI or chronic energy deficiency shoots up. Almost one-third of adult women in the two villages had a BMI less than the norm.*



Comparative assessment in a tribal and non-tribal low Body Mass Index)		I anthropometry in a (% of population with
Village/social group	Adolescent	% of Adult women

village/social g	гоцр	BMI < 5 th Centile	with BMI<18.5 kg/m ²
Tribal	М	40.0	
	F	12.1	37.8
Non-tribal	М	14.3	
	F	11.1	22.1
Combined	М	35.9	
	F	11.9	31.3
Source: Chal	cravarty	(2006).	

^{*} This corresponds to NFHS-2 which reported that 35 per cent of mothers had a BMI less than the norm of 18.5 kg/m². The percentage was unchanged according to NFHS-3.

BOX 3.7

Iodisation of Salt

The availability of iodised salt to 90 per cent of households at an iodine level of 15 ppm (parts per million) or more is an indicator of success of the National Iodine Deficiency Disease Control Programme in the State. In Tripura, the NFHS-2 found that 70 per cent of households consumed salt with more than 15 ppm of iodine (see Table below). The village surveys found that all households consumed some iodised salt. While the overall availability of iodised salt is satisfactory, in the tribal village, 12 per cent of households consumed salt with lower iodine content than the recommended level of 15 ppm. This may be on account of a loss of iodine content due to poor storage and transport conditions, and calls for better distribution and management strategies. National data indicate that the use of adequately iodised salt improves with the standard of living. In Tripura, even among households in the low living standard category, only 10 per cent consumed non-iodised salt. The corresponding figure at the national level was 30 per cent.

Availability of iodised salt by iodine level, Tripura and village surveys (% households consuming)

State/Country/Area	0 ppm	7 ppm	I5 ppm	30 ppm
Tripura 1998-99 (NFHS)	7.6	22.5	31.0	38.8
India 1998-99 (NFHS)	28.4	21.6	16.8	32.6
Non Tribal village 2005	0.0	2.9	5.9	91.2
Tribal village, 2005	0.0	12.2	12.2	75.6

Source: NFHS-2 and Chakravarty (2006).

There is little doubt that the public distribution system has made a substantial contribution to the provision of cereals to the mass of the people in the State.

surveys indicate that among non-tribals, although overall anaemia is higher in females than in males, there is no severe anaemia in girls till the age of 12. At the onset of menarche the situation changes and 12.5 per cent of girls in the age group 12–19 years show signs of severe anaemia. Among tribal girls, the prevalence of severe anaemia is higher than among girls in the non-tribal village, in the ages 6–12 and 12–19 years.

Among major nutrition deficiency diseases, night blindness was observed among children of the age group of 6–14 years in both villages. Visible goitre was also observed. The use of iodized salt, however, was a common practice (Box 3.7). A survey conducted in West District by the National

Pilot Programme on the Control of Micronutrient Malnutrition indicated that night blindness affected 12 per cent of pregnant women.

Responses to questions on information and knowledge from respondent women in the two village surveys indicated that a sizeable proportion did not have the correct information about various nutrition-related issues. For example, 58 per cent of women in the non-tribal village and 70 per cent in the tribal village did not know the reasons for Vitamin A supplementation. Better methods of communicating information on health and nutrition, including doorstep counselling, need to be introduced.

3.3.4 Public Distribution System

Although deficiencies in energy intake exist in both villages, the village data show clearly that the mean intake of cereals and millets was adequate in both survey villages. There is little doubt that the public distribution system has made a substantial contribution to the provision of cereals to the mass of people of the State. Tripura has a strong network of ration shops, a total of 1,446, with each shop on average covering 509 ration cards and 2,212 persons (Table 3.18). There is near-universal distribution of cards although, as a result of the dispersed pattern of settlement, cardholders' access to ration shops is more difficult in less populated areas such as Dhalai.

The data on type of cards show that Dhalai (rightly so) has the highest proportion of below-poverty-line (BPL) cards; BPL and AAY (Antyodaya Anna Yojana) cards account for 60 per cent of all ration cards. In West District, by contrast, 68 per cent of cards were classified as APL or above-poverty-line.

In Tripura, fair price shops are used regularly to purchase rice. The quantity of rice purchased per person was 41 kg in West District, 50 kg in South District and 62 kg in North District and Dhalai, in 2005 (Table 3.19). The average purchase conceals differences across households. Purchases by BPL-card households were almost the same across all districts, and totalled more than 80 kg per person per year. This level of utilization is comparable to that of Kerala, the State with the best public distribution system prior to targeting. 12 Purchases from the PDS thus contributed more than 60 per cent of the cereal requirements of each individual in a BPLcard household.13

Even APL-card households purchased significant quantities from the ration shops, particularly in North District and Dhalai, indicating the dependence of all households on the PDS for purchase of food grain. The rise in prices of grain for APL households (part of the policy of Targeted PDS) would have adversely affected access to food grain to such households in these districts. Any weakening of the public distribution system, be it through exclusion of households or through rise in prices, must be checked. In this context, the new guidelines from the Central Government on the number of households eligible for BPL cards must be examined cautiously.

Our village surveys underline the role played by the public distribution system in ensuring basic food security.

The PDS continues to be important in Tripura as it is not a cereals-surplus State. Moreover, the State is isolated and dependent on supplies of grain from other parts of the country, and many areas are particularly vulnerable during the monsoon

TABLE 3.18

Number and type of ration cards, Tripura, by district, 2005

		Ration cards				Cards per	Rationing population
	Total	% APL	% BPL	% AAY	shops	shop	per shop
West District	347,966	68.3	24.4	7.3	684	478	2241
Dhalai	72,589	40.2	46. l	13.7	152	544	2025
North District	126,127	58.1	32.3	9.6	232	473	2547
South District	178,763	50.5	38.1	11.4	378	502	2030
Tripura	725,445	59.3	31.3	9.4	1446	509	2212

Notes. APL is above poverty line, BPL is below poverty line and AAY is Antyodaya Anna Yojana card.

TABLE 3.19

Offtake of rice per person from the PDS, Tripura, by district, 2005 (in kg)

	Av	Average offtake of rice			Average offtake of rice			
		per p	person			per	card	
	APL	BPL	AAY	All cards	APL	BPL	AAY	All cards
North District	46.6	82.3	74.6	62.0	349.4	809.5	572.8	510.3
Dhalai	32.5	86. I	58.0	62.4	360.9	599.5	420.5	506.1
West District	19.5	88.9	63.7	41.3	107.4	469.7	327.2	223.5
South District	9.7	86.0	70.7	50. I	38.3	439.1	312.9	222.1

Notes: APL is above poverty line, BPL is below poverty line and AAY is Antyodaya Anna Yojana card.

Source: Planning (P&C) Department, Government of Tripura.

months when the transport of grain is not assured. Tripura must be given the support necessary to strengthen the public distribution system and prevent narrow targeting. Further, from a nutritional point of view, pulses and cooking oil need to be introduced as additional items in the public distribution system.

Other nutrition interventions

In addition to the PDS, the State has introduced and rapidly expanded the Midday Meal Scheme over the last five years. By March 2006, the school meal programme covered 97 per cent of all schools and 65 per cent of all children enrolled in schools. The



Public Distribution System

The village data confirm that there is good coverage of the public distribution system (PDS) in Tripura. The distribution of ration cards was near-universal in West Muhuripur (97 per cent of households) and Mainama (98 per cent of households). In Khakchang, the newly settled forest village, 15 per cent of households had applied for a transfer or a new card and were awaiting the new ration card.

Turning to the type of card, in Khakchang, in many ways the poorest village, 73 per cent of households had either a BPL (below-poverty-line) card or AAY (Antyodaya Anna Yojana) card (see *Table 1* below). In Mainama, which is a tribal-majority village, 55 per cent of households had BPL cards and another 10 per cent had AAY cards. West Muhuripur is a multi-caste village with no tribal population; here 42 per cent of ration cards were classified as BPL and another 5 per cent as AAY cards.

The pattern of utilization of the PDS is very closely tied to the type of ration card held by a family (*Table 2*). A very high proportion of BPL and AAY card-holders purchased rice regularly from the fair-price shops. These households also turned to the fair-price shop regularly for other items including sugar, kerosene and salt. Among BPL card-holders, the few who did not purchase from the fair-price shop regularly reported 'poverty' or lack of purchasing power as the main reason for not doing so.

The pattern of purchase was different among those with APL cards: these households purchased sugar and kerosene more frequently than rice from ration shops (not surprising, since the price of rice is close to the market price for APL households). Unlike other parts of India where APL card-holders have almost fully withdrawn from the use of fair price shops for cereal purchase, in all three survey villages, APL card-holders did utilize the fair price shop for rice purchases. In Khakchang, 32 per cent of APL card-holders purchased rice from the ration shop. In a remote location such as Khakchang village, the ration shop is the most accessible location for purchasing basic necessities. It is important to ensure that all households in such remote locations are provided with BPL ration cards.

Table 1

Number and percentage of households possessing ration card by type of card

	Mair	Mainama		Khakchang		huripur
Type of card	Number	Per cent	Number	Per cent	Number	Per cent
APL	47	28.3	17	20.7	52	52.5
BPL	96	57.8	45	54.9	42	42.4
Antyodaya	17	10.2	15	18.3	5	5. I
APL and BPL	2	1.2	2	2.4	_	-
BPL and Antyodaya	2	1.2	1	1.2	_	-
Unspecified	2	1.2	2	2.4	-	_
Total	166	100.0	82	100.0	99	100.0

Table 2
Percentage of card-holders by items purchased and type of card

Type of card		Mainama					Khakchang				West Muhuripur				
	Kerosene	Rice	Sugar	Salt	Others	Kerosene	Rice	Sugar	Salt	Others	Kerosene	Rice	Sugar	Salt	Others
APL	61.2	10.2	61.2	16.3	16.3	78.9	31.6	26.3	10.5	0.0	76.9	23.I	78.8	23.I	13.5
BPL	68.0	87.0	55.0	20.0	14.0	79.2	87.5	43.8	18.8	2.1	83.3	83.3	81.0	28.6	9.5
Antyodaya	89.5	94.7	78.9	26.3	10.5	87.5	87.5	56.3	31.3	12.5	100.0	100.0	80.0	20.0	20.0
All	68.2	65.3	58.8	19.4	14.1	62.4	56.5	30.6	12.9	1.2	80.8	52.5	79.8	25.3	12.1

Source: Foundation for Agrarian Studies (2006).

annual utilization of food grain for the Scheme was over 91,000 quintals (or 17.5 kg per child).

The Integrated Child Development Services (ICDS) scheme has been in place since 1975. In March 2006, there were 3,902 Anganwadi centres in the State, covering all forty blocks and all urban areas. In April 2006, the Government announced a programme of universalization of ICDS with the aim of reaching every child and every nursing or pregnant mother. Consequently, there was massive expansion; with the opening of 2,220 new centres, in 2007, the State had 6,122 operational Anganwadi centres. The ICDS provides many services, including immunization, health check-ups, nutrition education, and supplementary nutrition to pregnant women, mothers and malnourished children. In 2006-07, supplementary nutrition was provided to 2,33,427 children in the age group 6 months to 6 years - 76 per cent of total coverage - and 38,545 women.

3.4 Housing, Sanitation and Drinking Water

Housing

Housing is of central importance to the quality of life. Living in proper shelters minimizes disease and injury,

and contributes to physical, mental and social well-being. In addition to providing basic shelter, housing and the home environment provide protection against health hazards arising from the physical and social environment. Lack of access to piped water or an alternative nearby source of safe water, and lack of sanitary facilities are often considered key indicators of unhealthy housing, leading to high disease burdens in both rural and urban areas. Factors such as poor indoor air quality, inadequate solid waste disposal facilities, poor food storage, overcrowding, poor ventilation, insufficient lighting, inappropriate construction material, building defects and pests, all influence the health of rural communities.

In Tripura, a large proportion of all families (85 per cent) reside in *kachha* or temporary houses. Only 8 per cent of families have *pucca* or permanent houses, and 6 per cent have *kachha* roofs with a *pucca* superstructure (Table 3.20). While the housing data indicate that housing conditions are poorer in Tripura than the national average (where 32.5 per cent of families live in *kachha* houses), the predominance of temporary structures in Tripura is partly explained by the traditional use of bamboo and cane in house construc-

A large proportion of all families (85 per cent) reside in *kachha* or temporary houses. Only 8 per cent of families have *pucca* or permanent houses, and 6 per cent have *kachha* roofs with a *pucca* superstructure.

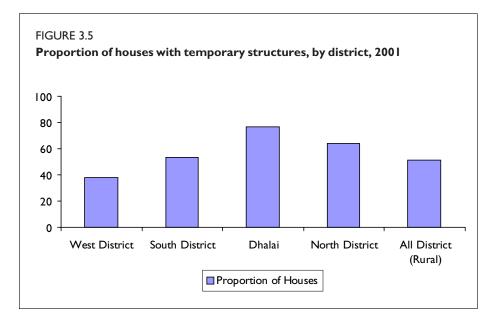
TABLE 3.20
Sanitation, fuel and drinking water facilities in households, Tripura and India

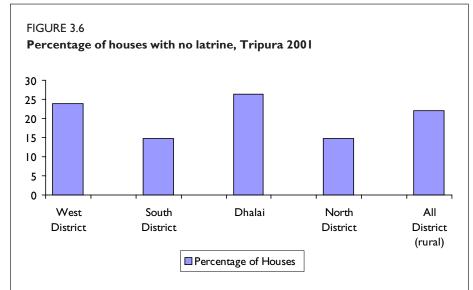
State/ country	Type of ho		ise	Crowding	Sanitary faci		Type of fuel		el	Source of drinking wate	
	Kachha	Pucca	Mixed	Persons per room	Flush and pit toilet	None	Wood	LPG	Biogas	Safe (pipeline + tube well)	Unsafe
Tripura	85.4	8.4	6.2	2.4	90.9	9.0	81.7	15.6	0.3	62.8	37.2
India	32.5	32.0	35.3	2.7	35.9	64.0	59.3	16.7	0.5	77.9	23.1

TABLE 3.21 Selected housing facilities in rural area of Tripura (percentage of houses with the specified facility)

Social group	Latrine facilities	Drainage facilities	Tap water	Electricity
General category	77.9	23.7	18.1	31.8
Scheduled Castes	88.1	24.6	22.8	33.2
Scheduled Tribes	56.5	21.5	6.1	15.9

Source: Census 2001.





tion. The mean occupancy per room in Tripura is 2.4, which is lower than the average Indian house (2.7 persons per room).

Water and sanitation

Though the availability of safe water to the household (63 per cent of houses) is not good enough, excreta disposal facilities in the area are widely available to households in Tripura. In 2001, Tripura abolished the manual cleaning of dry latrines.

Census data indicate that deprivation in respect of toilet facilities, tap water and electricity is far higher among ST households than other households (Table 3.21).

The picture is differentiated across districts. In Dhalai and North District, around 50 per cent of houses are temporary structures and defined as 'non-serviceable' in the Census of India (Figure 3.5). Attention must be paid to improving housing in these areas.

In respect of the availability of latrines, in 2001, South and North Districts have done better than West District and Dhalai (Figure 3.6). While in blocks like Kadamtala and Dukli over 90 per cent of the houses had latrines, blocks like Chhamanu and Rupaichari required special attention. Major improvements in sanitation have occurred after 2001 on account of the Total Sanitation Campaign (Box 3.10). This is reflected in the finding of NFHS-3: 97 per cent of households in Tripura reported access to a toilet facility in 2005– 06.

Facilities for waste water drainage are wanting in a majority of the blocks. Open sources of drinking water (that is, all sources other than taps, tubewells and handpumps) are utilized by 50 per cent of the house-

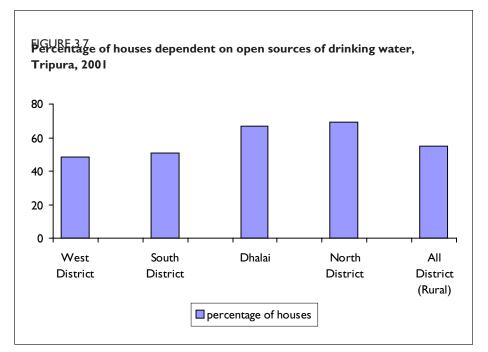
holds in West and South Districts, and over 67 per cent of houses in Dhalai and North District (Figure 3.7).

3.5 Summary

This Chapter has examined changes in the spheres of education, health and nutrition, and other basic needs (such as housing, water and sanitation).

The Government of Tripura has shown a real commitment to expansion of education. Literacy and postliteracy campaigns have been implemented with seriousness and the outcome is a significant rise in literacy. There has been steady improvement in school attendance over the last ten years and there is now near-universal enrolment of children in the age group 6–14. The commitment to universal schooling is reflected in the rising investment and expenditure on school infrastructure. Further increases in expenditure (of which estimates are made in this Chapter) are needed to ensure that the infrastructure for basic schooling is adequate and that quality schooling is provided to all children. More teachers are needed, particularly in remote locations, hilly and forested areas. Addressing the imbalance in the distribution of teachers across schools can help bridge the gaps between schools in different locations.

There was substantial progress with respect to the main demographic indicators (crude birth rate, crude death rate, infant mortality rate, total fertility rate), indicating progress in the area of public health and maternal and child care. Improvements in family planning practices can be gauged from the sharp fall in the natural growth rate of population. However, several public health problems remain. The health-care infrastructure



BOX 3.9 Rural Pollution

Although many people associate air pollution with outdoor urban environments, some of the highest concentrations actually occur in rural indoor environments in developing countries. These high concentrations are mainly due to the burning of unprocessed biomass fuels (wood, crop residues, dung) that emit considerable quantities of pollutants. In our village surveys, people in a large majority of homes reported the presence of flies, mosquitoes and smoke in their houses. Wood is the main fuel (81 per cent in the non tribal village and 90 per cent in the tribal village), and smoke in the indoor atmosphere is significant in Tripura. Satisfactory solid waste disposal was practised by 49 per cent and 31 per cent of households of the non-tribal and tribal village respectively.

TABLE | Some selected environmental characteristics in two villages, 2005

Village		ard present seholds repo	`		uel (share ach sourc		Night soil (% of all households)		
	Fly	Mosquito	Smoke	Wood	Other	LPG	Latrine	Open field	
Non-tribal	89.7	84.6	93.4	80.9	10.8	8.3	92.6	7.4	
Tribal	92.7	92.7	92.7	89.6	1.0	9.4	91.7	8.3	
Source: Ch	akravart	y (2006).							

BOX 3.10

Total Sanitation Campaign

Launched in 2001, the Total Sanitation Campaign has been a major success. Its successes are most marked in South Tripura. By the end of 2003, five out of the eleven blocks in the district were declared to have total sanitation in place. In February 2005, East Mirza Gram Panchayat, in Kakraban block of South District, was awarded the 'Nirmal Gram Purushkar' by the Prime Minister for its "success in achieving scientific sanitation in every household, school and other institution". The village has abolished open defecation. This success has been attributed to the active involvement in the campaign of panchayat members, self-help groups, teachers, students and village elders.

Source: www.tripurainfo.com

There was substantial progress with respect to the main demographic indicators, indicating progress in the area of public health and maternal and child care.

and services are inadequate and need to be strengthened, particularly in rural areas. The majority of the population of the State depends on the public medical sector. Expansion and improvement in public health institutions is thus urgently required. To accelerate the pace of expansion, the Government of Tripura intends to explore partnerships with the private sector.

Data on food and nutrition indicate serious deficits in intake of items other than cereals. Intake of cereals has been supported by provisions supplied through the fair price shops. Tripura has an effective Public Dis-

tribution System, with near-universal coverage and per capita purchase of cereals by BPL card-holders of 80 kg per annum. The PDS needs to be extended to more commodities and protected from cut-backs. Deficiencies in the intake of proteins and fats are particularly high among tribal families. As compared to the national scenario, in Tripura, female children are better nourished than male children, indicating an absence of discrimination against girls. Nevertheless, the incidence of nutrition-related diseases is high. The high incidence of anaemia needs to be addressed immediately with a multipronged approach. The State also has a high incidence of malaria, jaundice and asthma.

The provisioning of water supply and sanitation is better in Tripura than the national average, but there are wide variations across rural—urban areas and districts, and these differences need to be addressed. The physical features of the State as well as traditional methods of housing (such as use of bamboo/cane) have resulted in a large proportion of houses that are 'temporary' structures.

PROMOTING HUMAN SECURITY

4.1 Human Security and Human Development

The UNDP's *Human Development Report* of 1994 was the first of the Human Development Reports to describe 'human security' as a component of human development.¹ If development is concerned with freeing people to realize their full potential as human beings, then the absence of threats to life and limb, to means of livelihood, and to people and environments that make development possible is an integral part of the development process.

Threats to security may be external, affecting nations and societies as a whole. They may take the form of civic violence, terrorism and internal insurgency, or threats to institutions that provide means of civic cooperation and social and political dissent. There can be no development when the means to lead a life of personal physical safety and self-dignity are absent.

Human security requires the protection of people in conflict and postconflict situations, including those who are forced to move and migrate. It requires also, for example, that universal school education and basic

¹ This Chapter is based for the most part on material in the background paper prepared by Mahadev Chakravarty (2005).

health services be guaranteed. It requires that States deal with natural disaster in a people-centred way. It requires the empowerment of women, an end to discrimination against specific social groups and protection of the environment in which we live. Mahbub ul-Haq once spoke of human security as being concerned with "the security of people, not just territory," and emphasized the importance of ensuring the "security of all people everywhere - in their houses, in their jobs, in their streets, in their communities and also in their environments" (Haq 1998).²

The political history of Tripura in the last three decades provides a case study of how terrorism and insurgency feed on underdevelopment, and, in turn, create circumstances of insecurity that impede advances in human development. Official sources of data indicate that Tripura has been among the States of India seriously affected by extremist violence over the last three decades. The insurgents target the armed forces and State paramilitary organizations, as well as the public at large; their aim is to instil a sense of fear and intimidation in

² Sadako Ogata, former United Nations High Commissioner for Refugees, notes that human security seeks to complement State security, not to supplant it (Ogata 2003).

There can be no development when the means to lead a life of personal physical safety and self-dignity are absent.

The insurgents target the armed forces and State paramilitary organizations, as well as the public at large; their aim is to instil a sense of fear and intimidation in society, to attract wide publicity and attention in the media for their violent actions, and to provoke retaliation by the State.

society, to attract wide publicity and attention in the media for their violent actions, and to provoke retaliation by the State.

4.2 The Breeding Ground for Divisive Political Movements

Divisive and separatist political groups can be said to have based their early growth and influence on three inter-related aspects of the objective conditions of society in post-Independence Tripura.

The first is an inversion of the composition of the population as a result of the migration of Bengali-speaking settlers from what is now Bangladesh. Immigration of Bengali-speaking settlers has been an important feature of twentieth-century Tripura. Migration and resettlement were important consequences of Princely rule in the State (see Box 4.1). Tripura is the only State in the North East whose population has been transformed from being predominantly tribal to being predominantly non-tribal in the post-Independence period.

During the Partition and after, and following periods of communal

attacks in erstwhile East Pakistan, waves of refugees entered Tripura. Between 1952 and 1956, an estimated 1,90,000 displaced persons entered Tripura from East Pakistan.

Such migration continued until the War of Liberation in Bangladesh in 1971, with higher levels of migration during periods of civil conflict in East Pakistan – such as during the communal clashes of 1964 and the India–Pakistan conflict of 1965.

A massive exodus of refugees from Bangladesh occurred in 1971: the United Nations High Commission for Refugees (UNHCR) estimates that 13,80,000 people took shelter in Tripura at that time. The influx was almost equal to the population of Tripura then – 15,50,000. Although the majority of the refugees returned within a year to Bangladesh under the largest repatriation programme since the Second World War, the episode left a deep imprint on local economy and society.

The effect of this demographic inversion on the people of Tripura and, specifically, on the tribal people's sense of self-identify, can hardly be overestimated; indeed, one common feature of the platforms of different tribal insurgent organizations is their opposition to Bengali-speaking migrants.

The second feature of the socioeconomic situation to which we have referred is the progressive alienation of tribal people from their traditional rights in crop land and forest, and the transfer of tribal land to a nontribal Bengali peasantry. The Bengalispeaking peasantry came to dominate settled agriculture, particularly the cultivation of flooded-field rice. The occupation of fields for cultivation began during Princely rule, when the Maharaja of Tripura encouraged the

BOX 4.1

Immigration of Early Bengali Settlers

The Manikya rulers enjoyed the twin positions of King (or Maharaja) of Tripura ('Hill Tipperah') and Zamindar of plain lands of Chakla–Roshnabad (now in Bangladesh). Agricultural surpluses produced in the Chakla Zamindari by the Bengali tenants of the Maharaja were exchanged with the products of the hill people of Tripura and thus a bond of interdependence evolved over the centuries. The Chakla Zamindari once played a vital role in pushing forward the process of State formation and the economic strength and power of Tripura. The financial foundation of the Tripura Raj was largely due to the Chakla Zamindari. In order to have more land revenue (the prime source of income of Princely Tripura), the Manikya rulers openly invited non-tribal peasants of the Zamindari, through *jangal-avadi* and other systems, to settle permanently in Tripura.

Source: Mahadev Chakravarty (2005).

resettlement of Bengali settlers on land in the plains (see Box 4.1).

In the initial phases the pressure of population on the means of employment in agriculture was relatively low, and the occupation of land by a Bengali-speaking peasantry was not perceived as a threat to tribal identity. On the contrary, immigrants contributed to the development of agriculture and the economy in general. The situation changed from the 1940s onwards.

The third aspect of the socioeconomic situation is the social and economic backwardness of the State, and the perpetuation of the backwardness of the North East and Tripura by successive Governments at the Centre. Sixty years after Independence, the Indian Railways have only a token presence in the State, and the main transport lifeline of the State is National Highway 44, which is circuitous and frequently damaged by landslides, and on which traffic is controlled, slow and limited. Insurgency draws on the perception (and reality) of neglect and political marginalization by the Central Government. Further, the tribal people of the hills of Tripura have been historically deprived of access to education and their children were trapped in an intergenerational cycle of illiteracy and deprivation. During the historic Jana Siksha Andolan (People's Education Movement) begun in 1945 by tribal elites, hundreds of schools were opened in the interior areas of Tripura where most students were first-generation learners. In spite of that bright chapter in history, literacy rates among the tribal people continue to lag behind the literacy rates among the rest of the population (see Chapter 3). The school drop-out rate in Tripura, particularly amongst tribal young people, is high, especially after the primary stage. Insurgency feeds upon educational deprivation as well (and indeed the confession reports of surrendered militants indicate that most of them are school drop-outs).

There are, of course, other factors underlying the insurgency, including unemployment; the spread of education in recent years and with it new aspirations; the growth of a tribal middle class and issues of ethnic identity; the nature of domestic politics since the 1960s; a porous international border; and the instigation of external agents. All these factors have contributed to the armed conflict, waged, in recent times, by militants against all those who oppose insurgency in Tripura.

The existence of training camps in Bangladesh gives the conflict an international dimension as well.

4.2.1 Early Movements

The early movements of the tribal people, in the 1940s, were organized and led by the Gana Mukti Parishad (GMP), which later became a mass organization associated with the Communist Party. The main leader of the GMP was the inspirational Dasarath Deb, many years later the Chief Minister of the State. The GMP led struggles of the tribal people in defence of their rights to land and forest. The GMP did not allow the struggle for the rights of the tribal masses to become a divisive issue, but sought to make it an important foundation for unity in the people's movement as a whole. Large sections of tribal and non-tribal people came to support the GMP. The attempts of successive Governments to undermine the bases of the Left in the hills aggravated the sense of insecurity among the tribal people of the hills.

The early movements of the tribal people, in the 1940s, were organized and led by the Gana Mukti Parishad (GMP), which later became a mass organization associated with the Communist Party. The GMP did not allow the struggle for the rights of the tribal masses to become a divisive issue. but sought to make it an important foundation for unity in the people's movement as a whole.

After the formation of the Left Front government in 1993, insurgent activity was dominated by two outlawed groups, the National Liberation Front of Tripura (NLFT) and the All Tripura Tiger Force (ATTF). These two groups are similar in having established a bloody record of mass killings, extortion, kidnapping, intimidation and arson.

Areas set aside during Princely rule as tribal reserves were thrown open to refugee settlement, resulting in large-scale displacement of tribal people from forest lands. The Tripura Land Revenue and Land Reforms (TLR&LR) Act of 1960 (when Tripura was still a 'C' category state and directly ruled by the Centre) was amended in 1974 to legalize the transfer of all tribal lands up to 1968. The first steps towards restoring land to tribal people were taken only after the first Left Front Government came to power in 1978.

4.2.2 Phases of Insurgency

The first manifestation of separatist ethnic insurgency in Tripura was the *Sengkrak* ('Clenched Fist') movement in 1967, which was active in the Manu, Chhamanu and Kanchanpur areas of the undivided North District and some parts of Khowai in West District. *Sengkrak* activists conducted violent attacks on government officials. The movement was short-lived, however, and was brought under control by the administration in 1968.

The Tripura Upajati Juba Samiti (TUJS) emerged in 1967, a regional tribal political organization whose objective was to undermine tribal support for the Communist Party. In 1978 the TUIS formed an underground group, the Tripura National Volunteers (TNV), under the command of B.K. Hrangkhawal. The TNV, in collaboration with the Mizo National Front (MNF) of Mizoram, carried out violent insurgent activities for over a decade. In the June riots of 1980 – which were instigated by the TNV and followed by retaliatory attacks by the Bengali-chauvinist Amra Bangali (AB) - an estimated 1,800 people (tribal and non-tribal) lost their lives and thousands of dwellings were burnt to ashes. The riots left deep scars on the social fabric and affected people's ability to live together in peace, thus eroding and undermining age-old social cohesion.

After the June riots of 1980, a faction of the TNV led by Binanda Jamatia formed another extremist group called the All Tripura People's Liberation Organization (ATPLO), at Thangnan, Mayani Reserve Forest, Bangladesh. Binanda Jamatia and his followers surrendered before the State Government in 1983 and the ATPLO is now defunct.

In 1988, the Left Front was forced out of power after a campaign of unprecedented violence against the Left. Within four months of the elections, the TNV militants walked out of the jungles and signed a tripartite 'Peace Accord' with the Union Home Ministry and the new Congress(I)–TUJS Government in the State. The Accord, however, brought neither peace nor security to the people of Tripura since the militants took to violence again, this time with more sophisticated and dreadful firearms.

After the formation of the Left Front government in 1993, insurgent activity was dominated by two outlawed groups, the National Liberation Front of Tripura (NLFT) and the All Tripura Tiger Force (ATTF).

These two groups are similar in having established a bloody record of mass killings, extortion, kidnapping, intimidation and arson. Their campaigns target the common people and political leaders, particularly those belonging to the CPI(M). Both operate from bases in Bangladesh and carry out hit-and-run guerrilla strikes on civilians and security forces. Although the two groups have joined hands on some specific issues, such as the demand to expel 'refugee' from

Tripura, they are sworn enemies and have clashed with each other to gain supremacy and to extend their area of influence in the hills of the State. Such factional wars between rival insurgent groups have further threatened the security of the common people.

In the 1990s, there was a mush-rooming of small underground outfits (which eventually numbered around thirty) whose overground collaborators had links with either the NLFT or ATTF. Most of these groups no longer exist.

At one stage, the NLFT warned members of their own tribal community that they would be annihilated unless they accepted the religious doctrines and agenda of a section of the Baptist Church.³ Another key difference between the two insurgent groups is the decision by the NLFT to take part indirectly in all elections, from the TTAADC to the Assembly and Parliament. The NLFT-backed candidates of the Indigenous People's Front of Tripura (IPFT, later renamed the Indigenous Nationalist Party of Tripura or INPT) threatened voters with dire consequences if they dared to vote otherwise. The ATTF demanded that people boycott all elections and voting.

Internal security took a dangerous turn with the emergence of a militant chauvinist Bengali organization, the United Bengali Liberation Front

³ The emergence of a section of the Baptist Church as ideological mentors of the NLFT is a new feature of the situation. In 2002, Nagmanlal Halam, secretary of the Noapara Baptist Church in Tripura, was arrested by the Tripura police for having in his possession, in addition to religious publications and circulars, 50 gelatin sticks, 5 kg of potassium, and 2 kg of sulphur with which to make explosives. Halam confessed to buying and supplying explosives regularly to NLFT militants over the preceding two years.

(UBLF), in 1999. The UBLF started killing innocent tribal people and areas with mixed populations, as in the Kalyanpur and Khowai subdivisions, became centres of carnage in 2000. The UBLF chapter came to an end with the arrest of Biplab Das, the head of the organization, in April 2000.

The character of insurgency in Tripura and the demands of tribal insurgent groups have changed over the decades. Since the groups first became active, their demands have included separation from India (with the 'sovereignty of Tripura' declared to be 'non-negotiable'); the expulsion of all 'foreigners', that is, people who migrated to Tripura after 1949; peace negotiations in a third country under UN mediation; a full-fledged tribal state of Tripura within the Indian Union; and upgrading the TTAADC to the status of the Bodoland Territorial Council (BTC) in Assam.

Both the NLFT and the ATTF have now split into many factions and there is mass desertion from both camps. Following the desertion of their male cadres, women are now increasingly being used by the groups to lure tribal youth to join the militants. The NLFT even raised a 'women's army' in 2003 to attract new youth to their ranks, but that tactic backfired when young men and women began to marry in secret and ultimately fled the groups and surrendered before the authorities.

There has been a deepening criminalization of the militant outfits in recent years, and the mercenary gains of the leaders of some of the groups have become a new factor in their continued existence. With old sources of funds and support drying up, new sources of funds are sought to be tapped.

Both the NLFT and the ATTF have now split into many factions and there is mass desertion from both camps. Following the desertion of their male cadres, women are increasingly being used by the groups to lure tribal youth to join the militants.

Tripura's system for the public distribution of food was hit hard by terrorist violence in the 1990s.

The insurgents have been associated with smuggling modern arms and narcotics across the international border. Three distinct types of trafficking (of arms, narcotics and now women) pose clear dangers to human and State security. The Chief of Police of Tripura has stated that the insurgents also traffic in young tribal women, sending them to work in 'beauty parlours' in Southeast Asia. The groups also stand accused of using young women in the production of pornographic films. In December 2004, the Tripura administration accused the banned outfits, particularly the NLFT (BM), of circulating fake Indian currency in border markets with the intention of crippling the economy of the State, thus posing yet another threat to the economic security of the people.4

Even by comparison with movements in other parts of the North East, the character of insurgency in present-day Tripura is one that is devoid of any political content or philosophical conviction. Many groups, operating simply as criminals, are desperate to extend violence for financial gain. The challenges become more complex as new actors play new roles and some political parties choose to extend patronage to the militant outfits for electoral gain.

4.3 The Impact of Insurgency on Society and People's Lives

Insurgency and the measures taken by State and society to control and subdue it have had a profound and pervasive impact on society and individual lives in Tripura. This *Report* can only hope to briefly characterize as-

pects of this impact, and discuss the effect of insurgency on the provision of education, health and food, on the displacement of human beings caused by terrorism, and on the lives and conditions of living of women.

4.3.1 Education, Health, Food Distribution

In the 1990s, the militants brought kidnapping, extortion and arson to the tribal areas, particularly to remote areas or those far removed from major roads and means of communication. The fear of gun-toting militants kept children and teachers (many of the latter had to flee the villages) away from schools. In 1999, the pupils of 29 out of 181 middle schools in the tribal-dominated areas of the State were unable to write any examinations. Many schools had to be converted into refugee camps for people uprooted from their houses. And so it was that a State famed for its early movement for education, the Jana Siksha Andolan, saw almost a generation unable to go to school. (All schools have now been reopened.)

A similar campaign of intimidation and violence was conducted against health workers, including those involved in immunization and public health programmes, in remote hill locations. In many locations where no medical or paramedical personnel remain, the insurgents have instructed local people to go to traditional unqualified *ojhas* instead.

Tripura's system for the public distribution of food was hit hard by terrorist violence in the 1990s. Owners of ration shops were targeted physically and made victims of extortion. Where they found it difficult to transport supplies to shops, the shops had to be closed down.

⁴ This refers to the NLFT faction led by Biswamohan Debbarma.

4.3.2 Population Displacement

The loss of house and habitat and source of livelihood aggravates poverty and human insecurity.

The displacement and relocation of population provided, historically, an impetus for armed militancy in Tripura. Ironically, armed militancy today has caused immense suffering by forcing the displacement and relocation of large sections of the population of the State. Armed militants once claimed they had taken to the gun to defend the legitimate rights of the tribal people of Tripura. Ironically, the reality is that, in tribal-dominated areas, the tribal people of Tripura are the worst victims of terrorist violence today.

In 2004, in a statement to the State Assembly, Revenue Minister Keshab Majumdar said that extremist-led violence had led to the forced displacement of 20,494 families from seven sub-divisions. In Bishalgarh sub-division of West District, 13,000 families were forced to leave their villages of residence. According to official statistics, the number of families forced to abandon their homes and villages was 4,340 in Longtarai, 1,196 in Kanchanpur and 504 in Gandachherra sub-divisions. Other sub-divisions where forced evictions took place on a signficant scale are Khowai, Sadar, Udaipur and Belonia.

Armed terrorism has targeted tribal people and Bengalis. In June 2004, NLFT (BM) extremists were reported to have driven 12,000 tribal people from their hamlets in Gandachherra sub-division for refusing to pay extortion money ('taxes') and for not preventing the police from collecting information in the villages. Bengalispeaking residents of Takarjala, Jamuijala, Kendraichhera, Prabhapur,

Jugalkishore Nagar and other areas of West Disrict were forced to leave their villages in 2000, and had to be resettled in newly formed cluster villages.

Utterly frustrated at the gradual but continuous shrinkage of both cadre and support, different factions of both the ATTF and the NLFT, in order to make their existence felt, have carried out savage attacks on poor people in the dead of night. A recent event was the brutal killing of eight persons belonging to families of agricultural labourers at 1.30 am on 24 September 2005, at Hazaripara village under Shantinagar Gaon Sabha, Khowai sub-division, West District.

In West District, the banned NLFT militants have attacked the Manipuri community (there are about 40,000 Manipuri people in Tripura). Muslim families that live along the border are also victims of violence, and vulnerable to forced eviction.

During elections to Parliament, the Assembly, the TTAADC or panchayats, insurgent outfits, with the definite political purpose of spreading terror, fear and ethnic clashes, commit more violent crimes than at other times. During the Assembly elections held in March 2003, militant groups employed violent tactics to intimidate and coerce voters, resulting in approximately 50 deaths.

The situation in North District has further been complicated by the entry into Tripura since 1997 of some 35,000 people of the Reang tribe The loss of house and habitat and source of livelihood aggravates poverty and human insecurity.

⁵ There were matrimonial relations between the Princely families of Tripura and Manipur; in the early part of the twentieth century, Radhakishore Manikya married the Manipuri Princess Tulsibati.

BOX 4.2

Women's Fight against Terrorism in Tripura

Tripura has a special significance in the democratic women's movement because women here, particularly tribal women, have not only endured insurgency and associated terror, but also been active participants in struggles for progressive change. As pointed out by Brinda Karat, then General Secretary of the All India Democratic Women's Association (AIDWA): "Women have worked actively for peace and ethnic harmony and against the agenda of secessionist terrorist organizations. Tripura is the only State in the country today where an active women's movement is fighting directly against terrorist groups. Women activists who oppose and campaign against the terrorists do so at the risk of their lives. While women all over the country are in the midst of a struggle to increase women's participation in public life, in Tripura the struggle has an altogether different dimension" (Karat 2000).

Three AIDWA members recount their experiences in the struggle against terrorism in Tripura.

Bayjanti Koloi, Member of the Legislative Assembly: "After I was elected I have been working in my constituency Takarjala. It was the first time that a tribal woman had been elected, so all women and especially my tribal sisters were very happy. We held meetings regularly to discuss women's problems and issues. Many women who never used to go out of their homes or who never knew about government policies began to speak out strongly about their demands. Women then began to receive threats from activists of the NLFT to stop all political activities. In the ADC areas, tribals and non-tribals lived together. However, the NLFT is targeting non-tribals and forcing them to leave. Tribals were stopped from selling rice to non-tribals. If a tribal woman wore a sari or a bangle she was stopped and threatened."

Savitri D: "I was a candidate in the ADC elections and was very happy to be able to get a chance to represent the people. But the day I filed my nomination papers, I got a letter asking me to withdraw and threatening me with death unless I did so. I was also told that I would not be allowed to hold any election meetings. But I did not obey them. On the day of the elections, in many booths, my booth agents were not allowed in. I complained to the security forces but they did not listen to me. I lost the election not because of the people, but by the terrorist's gun."

Kiranbala (a tribal woman from Khowai): "I come from an agricultural worker's family. We have no land. I have been working with the Nari Samiti. On 28 March, which we observe as Martyrs Day in memory of the first three tribal women martyrs, I went to attend a meeting. When returning, I was told that three men of the UBLFT were asking about me in Shanti Bazaar. I went another way. Suddenly I head the sound of bombs exploding. There were three bomb blasts. Two tribal boys were injured. I was rushing to the road when some male comrades came running and told me that a group of tribal youth were going towards the Bengali houses to take revenge. We rushed there to stop them. When we reached the spot we saw that they were looting Bengali houses and herding out the goats. We tried to stop them but were pushed and beaten back. We immediately met the security forces and asked for a security camp in the area."

Source: AIDWA (2000).

from Mizoram. They are now sheltered in six camps in Kanchanpur subdivision, and their repatriation to Mizoram, despite successive rounds of negotiations, is yet to get underway.

The situation in Tripura makes a case for a national policy on Internally Displaced Persons (the term used in documents of the UN General Assembly), to ensure their physical safety and to ensure that they are not excluded from the development process as a whole.

4.3.3 The Impact on Women

Women are special victims of terrorism, which adds immeasurably to the burdens that they must bear and the forms of discrimination that they must endure. Women are immensely more vulnerable during periods of conflict, living in and fleeing conflict zones, and in rehabilitation camps. Crimes against women are exacerbated by social changes in a period of conflict, such as those arising from a large internally displaced population.

In all such situations, women are victims of physical and sexual abuse. Indeed, confession-notes in police records suggest that many women cadre of the NLFT and the ATTF fled from camps and hide-outs, and surrendered to the Tripura police authorities after being subjected to frequent sexual abuse by their leaders.

The nature of gender discrimination is such that female victims of sexual abuse and torture have to face the threat of ostracism.

Women in a range of circumstances face special dangers. Among such women are, for instance, female relatives of insurgents; women relatives of government employees (particularly of members of the police and para-

military forces); women who have been forced to join militant groups; women in the hills who are – or have been forced into becoming – shelterproviders for factions of rival militant groups; and women who attempt to negotiate for peace, who are immediately vulnerable to suspicion and attack by insurgent groups.

Women in Tripura have suffered, but they have also fought back with courage and tenacity (Boxes 4.2, 4.3).

4.4 Fighting Insurgency

Governments and people's movements ensure human security by means of a wide range of inter-related measures. A government's duties include the responsibility to protect people in conflict situations and assist them in post-conflict rehabilitation, besides taking steps to prevent and stop conflict. Fear stalks the insurgency-affected villages of Tripura, and to free the people from fear is a cardinal objective of human security. Implementing a policy that seeks to ensure human security in conflict situations requires special and significant policy attention and budgeting. Any genuine solution to the present situation demands that measures be taken by the Central and State Governments, and that the people themselves organize against divisive forces and terrorism.

4.4.1 National Initiatives

With regard to Central measures, the Ministry of Home Affairs of the Government of India constituted a Study Group to "keep the security situation in the entire North Eastern region under constant watch and recommend suitable measures for conflict resolution". The State Government has been categorical on two

BOX 4.3

Story of Displacement

S Deb Barma has been a member of the Tripura Nari Samiti for several years, and has worked to build unity among women of different communities to fight against extremist groups. For this reason, she has been publicly criticized by the extremists. On 12 May 2000, a group came to her and said she would have to campaign openly for the IPTF. S said: "I refused to do so. I left my house and went to stay with a relative. Two weeks later, on 26 May, they broke into my house and looted everything. They even occupied my land. My husband is unable to go to work. These are bad days but we should not lose heart." She has lost her home, belongings, land and all sources of employment.

Source: AIDWA (2000).

points: that the curtain on terrorism cannot be drawn until, first, Bangladesh stops providing overt or covert support to the insurgent groups; and, secondly, New Delhi provides more central security forces and other forms of assistance to deal with the insurgents.

India has from time to time expressed concern at insurgent groups operating from Bangladesh. In spite of the evidence, the authorities in Bangladesh have denied the presence of such groups on their territory. At the 13th Summit of the South Asian Association for Regional Cooperation (SAARC) held in Dhaka in November 2005, all member-States (India, Pakistan, Sri Lanka, Nepal, Bangladesh, Bhutan and Maldives) called for early and effective implementation of the Additional Protocol to the SAARC Convention on Suppression of Terrorism. They agreed that member-States would strengthen their cooperation in such important areas as exchange of information, coordination and cooperation among their relevant agencies. Implementing the Protocol in letter and spirit is a matter of immediate relevance to the security situation in

Any genuine solution to the present situation demands that measures be taken by the Central and State Governments, and that the people themselves organize against divisive forces and terrorism.





Tripura. The Government of India has sanctioned the building of a border fence and the construction of this 856-km barrier along the Tripura–Bangladesh border has begun. An effective fence is an impediment to smuggling and illegal trafficking, and the fencing process has generated some tension along the border (see Annexure 4).

There is a real need for broad cooperation among the North Eastern States with respect to sharing security information, pooling resources, and developing joint projects in different sectors and for an early-warning system regarding impending threats to the security of the people.

4.4.2 Police and Security Measures

The Tripura State Rifles (TSR) was created by the State Government as a counter-insurgency measure to fight the rebels, particularly to narrow the space in which terrorists operate and to cut off their sources of recruitment. As part of the security measures, twenty-eight police station areas in full and six police station areas in part have been declared as 'disturbed' areas under the Armed Forces (Special Powers) Act. To curb insurgency, major militant groups like the ATTF and the NLFT were declared illegal under the Unlawful Activities (Prevention) Act, 1967. In addition, some battalions of the CRPF and Assam Rifles have been deployed in counter-insurgency operations.

In recent times, the police and Tripura State Rifles have begun to implement a method of dealing with insurgency that includes providing security to development programmes as well as conducting usual security operations. The Tripura police have also attempted to smoke out insurgents from their hide-outs or camps **BOX 4.4**

Fighting Terrorism the UN Way

Kofi Annan, former UN Secretary-General, laid out a project of 'five Ds' for tackling the challenge of terrorism throughout the world. These 'five Ds' are:

- *Dissuade* the disaffected from choosing the tactic by involving not only all political and religious leaders but the entire civil society so that insurgency is branded as totally "unacceptable and inexcusable";
- *Deny* means, such as money and firearms through drug and arms trafficking, to the terrorists;
- *Deter* support to the terrorists;
- Develop state preventive capacity;
- Defend human rights.

BOX 4.5

Surrender of Extremists

Between April 1993 and July 2001, 5,753 extremists surrendered and the process is still continuing. Among the important reasons for surrender, the following may be mentioned:

- Frustration with life in the jungle;
- Ill-treatment by leaders and erosion of confidence of members of the extremist groups in the leaders of the groups;
- Disillusionment with extremist ideas;
- Acute financial difficulties;
- Forced religious conversion;
- Gradual erosion of support in the hills and a growing urge among the common people for restoration of peace in society;
- Mobilization of the security forces and the intensification of antiinsurgency operations with the help of information provided by the local people;
- The rehabilitation package of the State Government.

Source: Mahadev Chakarvarty (2005).

in the dense jungles by snapping their food supply lines.

4.4.3 Economic and Political Measures

The only lasting foundation for longterm peace is widely shared and equitable growth: the biggest security challenge, as stated by Chief Minister Manik Sarkar, is to raise the standards of living of the people. If insurgency is to end, the vicious circle of underThe police and Tripura
State Rifles have begun to implement a method of dealing with insurgency that includes providing security to development programmes.

Today, battered by years of terrorist activity, the people are speaking out. Braving all risks and danger, the people of even the worst-affected hill areas are now coming forward with information about the insurgents. This popular disillusionment with so-called 'liberators' has been a major development in the effort to end hostilities and find a solution to the conflict.

development and insurgency has to be broken.

The present State Government is quite clear that insurgency can be dealt with only if the problems of social and economic development are dealt with. Government initiatives include attempts to restore alienated lands to tribals; rehabilitation of the jhumias through different schemes; measures for poverty alleviation; the decentralization of administration and devolution of powers to local bodies; providing employment for tribal youth in the State sector (for instance, by filling reserved quotas); working to protect tribal languages and cultures; strengthening friendly relations with people on the other side of the border; and attempting to convince youth that legitimate sociopolitical grievances can be resolved through dialogue and within the framework of the Constitution of India.

An important issue in the context of the State of Tripura is that of recognizing the distinct identity of the tribal people, and protecting their economic, social and cultural interests. The Left in Tripura first raised the issue of tribal autonomy in the 1940s. In 1952, at a national conference called by Jawaharlal Nehru to discuss problems affecting the Scheduled Castes and Tribes, Dasarath Deb, then a Member of Parliament, proposed that a definite area of Tripura be reserved for its tribal population, an area in which the rights of nontribals to buy and sell land would be restricted. After decades of struggle, a distinctive and democratic resolution of the issue was arrived at when the Tripura Tribal Areas Autonomous District Council (TTAADC) was created under the Seventh Schedule of the Constitution, after the passage of a

Bill tabled by the Left Front Government in 1979. The first TTAADC was elected in January 1982. Subsequently, through a 1985 Constitutional amendment, the TTAADC was brought under the Sixth Schedule of the Constitution (see Chapter 5).

Tripura has begun to implement a range of forest-based livelihood programmes as part of its effort to address the economic vulnerability of jhumia households. More recently, in order to protect the tribal people from attacks of the militants and to provide basic infrastructural facilities in relatively remote areas, the State administration has begun a policy of forest villages, a policy based somewhat loosely on Mizoram's model of 'cluster villages'. In the new villages, people have been assured of houses with drinking water facilities, sanitation, basic education and employment under poverty alleviation schemes. The success of such peacebuilding efforts is yet to be studied and documented.

4.4.4 The People Resist Terrorism

In the early stages of insurgency, although the militants did not represent a mass movement, they were not completely isolated from the people. They were also able, by a variety of coercive methods, to cow down the people. Today, battered by years of terrorist activity, the people are speaking out. Braving all risks and danger, the people of even the worst-affected hill areas are now coming forward with information about the insurgents. This popular disillusionment with so-called 'liberators' has been a major development in the effort to end hostilities and find a solution to the conflict. People's initiatives to put a stop to the operations of insurgents are now bearing fruit (Box 4.6).

A measure of the political isolation of the militants is the failure of their campaign to prevent either participation in elections or people from voting for the Left Front. Despite threats to their lives, the Tripura electorate has voted repeatedly, decisively and in very large numbers in, most recently, the elections to the Legislative Assembly (2003), to the Lok Sabha (2004), to Panchayati Raj Institutions (2004), and to the TTAADC (2005). In the Lok Sabha elections of 2004, voter turnout in Tripura was 71 per cent among men and 63 per cent among women; the corresponding national figures were 62 per cent for men and 54 per cent for women. Voter turnout was even higher during the Assembly elections (see Chapter 5). The Left Front won 41 out of 68 Assembly seats in 2003, and both Lok Sabha seats in 2004. In the panchayat elections of 2004, the Left Front received a massive majority, winning 4,797 out of 5,252 Gram Panchayat seats, 285 out of 299 Panchayat Samiti seats and 81 out of 82 Zilla Parishad seats. The Left Front won 24 out of 28 elected seats in the elections to the TTAADC held in 2005.

Tripura is also a State where women have played a leading role in the struggle against terrorism.

4.4.5 The Depletion of Extremist Ranks

As a result of their isolation and large-scale desertion from their ranks, the extremist groups have been weakened severely. Data on incidents of extremist-related violence show a clear decline in such incidents in recent years, and that the number of persons kidnapped and killed in such violence declined after 2003. The Central Government's withdrawal of

BOX 4.6

Community Resistance

The case of the Jamatia tribe provides a telling example of resistance. During the past few years, the *hoda* (community council) of this closely-knit tribe has been the rallying point of many in their resistance against the 'gunpoint tactics' of the NLFT. As many as six *hoda* members were killed at Noabari on 2 September 2000 by the NLFT. The NLFT militants forcibly closed eleven institutions and uprooted a large number of Jamatia families from their homes. The previous year, on 29 December 1999, as many as twenty-one *hoda* volunteers were kidnapped *en masse* by NLFT militants (the search operation launched jointly by Jamatia youth and police personnel ultimately ensured the safe return of all of them). The tactics of the militants backfired. Some tribal community leaders have now formed the Tribal Culture Protection Committee to counter the threat posed by the NLFT and have taken the decision to not pay any 'tax' to the militants.

Source: Mahadev Chakravarti (2005).

all army units and a large part of its paramilitary forces from Tripura in 1996, that is, during a very critical period of extremist onslaught, led to a desperate escalation of their murderous operations. For that reason, insurgency-related crime figures were very high in the State in 2000.

Despite these advances, security is a continuing concern, Tripura still remains a theatre of conflict and attempts at building peace face many impediments. The extremists continue to possess sophisticated firearms and landmines, and these arms stockpiled, buried, hidden or in circulation – pose a real threat to security even in a post-conflict situation. What can be said, however, is that a combination of actions by security forces and people's resistance to terrorism has shifted the mood of the people decisively against the terrorists and terrorism.

4.5 Summary

Human security, a component of human development, refers to the ability of people to live a life of physical security and self-dignity. In A measure of the political isolation of the militants is the failure of their campaign to prevent either participation in elections or people from voting for the Left Front. Despite threats to their lives, the Tripura electorate has voted repeatedly, decisively and in very large numbers.

Lasting peace requires social, economic and political measures that lead to a more inclusive path of development. The Left Front Government of Tripura has moved in this direction by restoring alienated land to tribal families, by setting up the TTAADC to give political voice to the tribaldominated areas, and by expanding livelihood programmes for forest dwellers.

Tripura, human security has been compromised over the last three to four decades by the growth of divisive insurgent movements. Tripura, like some other States of the North East, is characterized as a violence-prone State. The two main insurgent groups operating in Tripura today are the NLFT and the ATTF. Although the scale of violence has declined over the last five to six years, insurgents continue to engage in indiscriminate acts of violence against the State and its representatives (the police, paramilitary forces), and also against ordinary people. These acts of terrorist violence impinge on day-to-day life, curtailing access to basic facilities such as health centres, schools and fair price shops. Large numbers of people have been displaced from their homes and left without access to livelihoods. People have been subjected to campaigns of extortions, different forms of physical violence and to murderous attack by the extremists. Women have faced the brunt of violence and displacement, suffering physically and mentally.

To address the problem of insurgency, it is important to understand the roots of insurgency. Three important features of the objective conditions of society in Tripura are of relevance. The first is the demographic change that resulted in the tribal population moving from a majority position in the 1940s to a minority position in the 1960s. Throughout

the last century, there have been waves of migration of Bengali-speaking settlers into Tripura. The biggest wave of migration, however, was the largescale movement of population from East Pakistan at the time of Partition. The second feature is the transfer of land from tribal to non-tribal people. This too has been a long historical process. The third important feature is the overall backwardness of the State (and of the North Eastern region as such) with limited access to education and modern skills and good jobs, and which has created a perception of deprivation, particularly among the tribal people.

Today, there is a strong political commitment by the ruling party, the CPI(M), to check insurgency through a combination of measures. In respect of police and security measures, the Central Government has a key role to play since Tripura's long international border is exploited by insurgent groups. Lasting peace, however, requires social, economic and political measures that lead to a more inclusive path of development. The Left Front Government of Tripura has moved in this direction by restoring alienated land to tribal families, by setting up the TTAADC to give political voice to the tribal-dominated areas, by expanding livelihood programmes for forest dwellers, and so on. The Government of Tripura recognizes that equitable and shared growth is the best way to lasting peace.

5 DEMOCRATIC DECENTRALIZATION

5.1 Role of Decentralized Institutions

Democratic decentralization has been accepted policy in Tripura for a longer time than in most other States.¹ Elections to local bodies have been held regularly since the Left Front was elected to govern the State in 1977. Although Agartala had been a municipality for over a century, the first elections to the Agartala Municipality were held in 1978. Since 1993, following the constitutional amendments in this regard, Tripura has had a three-tier structure of elected local bodies or Panchayati Raj Institutions (PRIs), with elected representatives at the gram, block (Panchayat Samiti) and district (Zilla Parishad) levels. In addition and uniquely, the State has the Tripura Tribal Areas Autonomous District Council (TTAADC), which is vested with powers to ensure a large degree of self-government among the tribal people of the State.

5.2 Panchayati Raj Institutions

Before Tripura merged with the Indian Union in 1949, it was a Princely State. There were traditional village-level institutions based on tribal customs, which took important decisions on matters pertaining to

tribal communities and to disputes among their members. But these institutions could hardly be described as democratic, depending as they did on the social legitimacy conferred on them by the existing power structure and social order. Women were denied the right to participate in these village councils.

The real breakthrough in democratic local self-government came with the accession to office of the Left Front Government in Tripura. For the first time, elections to panchayats were held through secret ballot and with the open participation of political parties. Tripura had a single-tier system of village panchayats till 1978, when the Left Front Government brought forward legislation to con-

Democratic decentralization has been accepted policy in Tripura for a longer time than in most other States. Elections to local bodies have been held regularly since the Left Front was elected to govern the State in 1977.

BOX 5.1	
	Political Parties in Government
Term of office	Political Party/Alliance (Seats in Legislature)
1972–77	Indian National Congress (41/60)
1977–83	Left Front (54/60)
1983–88	Left Front (39/60)
1988–93	Indian National Congress and
	Tripura Upajati Juba Samiti (31/60)
1993–98	Left Front (44/60)
1998–2003	Left Front (41/60)
2003 to the present	Left Front (41/60)
	in Tripura is led by the Communist Party of India (Marxist) te Revolutionary Socialist Party and All India Forward Bloc.

¹ This chapter draws on the background paper prepared by Venkatesh Athreya (2005).

BOX 5.2

Origins of Village Self-Governance

An attempt was made during the rule of Bir Bikram (who ruled from 1923 to 1947), to organize a new system of local administration in rural Tripura (Gan-Chaudhuri 1980). An Act was passed in 1929 under which "a number of contiguous villages were grouped together to form a Gramya Mandali to which members were nominated by the King" (ibid.). The Communist movement in Tripura brought the question of democratic local government on to the State's political agenda in the 1950s. The first statutory development with regard to the establishment of local self-government in rural Tripura was the extension of the United Provinces Panchayati Raj Act of 1947 to seventeen community development boards of Tripura, in May 1959. The first statutory Gaon Panchayat (GP) came into being in May 1962 at a village called Jirania, a few miles east of Agartala. Under the rules framed under the Act, which came into force in 1961, the Gaon Sabha (GS) was to be the basic unit of planning and development. The elected GP (elected through a show of hands and not by secret ballot) was to be the executive body of the GS. By 1967, 467 Gaon Sabhas had been constituted. In addition, by grouping together three to four Gaon Sabhas, 138 Nyaya Panchayats, which had judicial functions, were also constituted. However, for a number of reasons, the panchayats of this period remained largely ineffective.

TABLE 5.1
Panchayati Raj Institutions and elected representatives, 2004

Tier	Number of bodies	Number of elected members	No. of males	No. of females	No. of female chairpersons
Gram Panchayat (GP)	513	5352	3500	1852	216
Panchayat Samiti (PS)	23	299	193	106	8
Zilla Parishad (ZP)	4	82	54	28	2
All tiers	540	5733	3747	1986	226

Source: Directorate of Panchayats, Government of Tripura.

There are at present
4 Zilla Parishads,
23 Panchayat Samitis and
513 Gram Panchayats
under the Tripura
Panchayat Act 1993.

stitute a two-tier Panchayat system. The Tripura Panchayati Raj Act of 1983 reduced the voting age from 21 to 18 years, and made special provisions for the representation of Scheduled Castes (SCs) and Scheduled Tribes (STs).

Democratic decentralization in Tripura suffered a setback when the Congress (I)–TUJS coalition came to power in the State in 1988. The Government superseded all 698 Gaon Panchayats and appointed block development officers to supervise the functions of the panchayats. Following the 73rd Constitution Amendment Act of 1992, Tripura enacted the Tripura Panchayat Act 1993, and introduced a three-tier structure. Elections to all three tiers of panchayats have been held on schedule in 1994, 1999 and 2004.

There are at present 4 Zilla Parishads, 23 Panchayat Samitis and 513 Gram Panchayats under the Tripura Panchayat Act 1993. The number of elected members of Gram Panchayats is 5,352, the number of elected members of Panchayat Samitis 299, and the number of elected members of Zilla Parishads 82 (Table 5.1).

5.2.1 Devolution of Powers and Functions

The State government has made efforts to devolve functions and powers to the elected local bodies, and has transferred certain powers and functions in respect of twelve administrative departments (see Box 5.3).

As required by the Tripura Panchayat Act 1993, the first State Finance Commission (SFC) was set up in 1994. The SFC recommended the provision of an Untied Fund (since renamed the Panchayat Development Fund or PDF) to local bodies at the rate of Rs 100 per person within the jurisdiction of a Gram Panchayat, Rs 60 per person within the jurisdiction of a Panchayat Samiti, and Rs 40 per person within the jurisdiction of a Zilla Parishad. The State Government accepted this recommendation. The actual devolution and expenditure of Panchayat Development Funds by different levels of rural local bodies from 1997-98 to 2004-05 show that the share of the Zilla Parishads has increased steadily, while the share of all other tiers has declined.

5.2.2 People's Plan and **Local Bodies**

In 1998, the Tripura State Government reconstituted its Planning Board, with a view to providing "a clear direction to policy formulation and planning process for all-round development of the State" (Approach to People's Plan in Tripura, Government of Tripura, not dated). The Approach document visualizes considerable devolution of powers and functions to local bodies, in order to enhance people's participation and to orient the work of government departments in the direction of enabling and facilitation, with a strategic focus on improving productivity and enhancing output, especially in the primary sector.

An important feature of the People's Plan process is an attempt to formulate village development plans through participatory resource mapping. In 1999-2000, a campaign called 'Gramoday' was launched in the West District of Tripura. This attempt at decentralized planning had two components. One component was to be formulated and implemented by the Gram Panchayat, and the other component, which required resource and technical inputs from outside the village, was to be submitted to the local bodies at higher levels - the Panchayat Samiti and the Zilla Parishad – for incorporation in the consolidated district-level plan and in the State plan.

Given the long history of people's involvement in local bodies, especially since 1978, and the momentum generated by several people's movements including the mass literacy campaigns, the People's Plan initiative

BOX 5.3

Devolution of Functions to Local Bodies, 1994

Name of the Department

- 1. Rural Development
- Food
- 3. Agriculture and Horticulture
- 4. Education
- 5. Social Welfare and Social Education
- 6. Fisheries
- 7. Health and Family Welfare
- 8. Irrigation and Flood Control and Public Health Engineering
- 9. Revenue
- Animal Resources
- 11. Industries
- 12. Forests

Items devolved

- Poverty alleviation programmes
- Supervision of food provision through fair price shops
- Management of all rural markets
- Promotion of 100 per cent enrolment in primary schools
- Supervision of education programmes up to higher secondary levels
- Supervision of social education centres/ adult education centres
- Management of ICDS
- Selection of beneficiaries of old age pensions
- Construction of State Education Centres/ adult literacy centres
- Selection of beneficiaries
- · Planning and management of leases of water bodies
- Promotion of fishery development
- Supervision and management of community water bodies
- Supervision of family welfare and preventive health programmes
- Health education
- Implementing national health programmes, preventive health programmes
- Implementation and allocation of funds to Gram Panchayats/Panchayat Samitis to build seasonal bunds
- Selection of beneficiaries for allotment of land
- Overall supervision of allotment of land
- Supervision of animal resource institutions in the Zilla Parishad
- Supervision of programmes for cottage and small industries
- Selection of beneficiaries for selfemployment programmes
- Identification of community land and non-forest government land for social forestry
- Promotion and supervision of social and farm forestry activity
- Evaluation

Source: Datta (1998).

The *Gramoday*programme was extended to the entire State in 2001–02. The resource mapping exercise generated considerable enthusiasm and popular participation, and helped incorporate people's perceptions on development needs and priorities into area-based development.
programmes.

was successful. Based on the West District experience, the Gramoday programme was extended to the entire State in 2001–02. Even though the resource mapping exercise may not have been of a uniform quality or of a high level of scientific precision, the process generated considerable enthusiasm and popular participation, and helped incorporate people's perceptions on development needs and priorities into area-based development programmes. For the year 2001-02, village development plans were prepared for all the 513 Gram Panchayats and for 522 villages in the TTAADC area. In addition, consolidated block and district plans were prepared. Similar exercises were completed for 2002-03 and 2003-04 as well. The State Government incorporated the proposals of the Gramoday (and its counterpart in urban areas, Nagaroday) in its plan proposals.

5.3 Urban Local Bodies

Following the passing of the Constitution (74th Amendment) Act, 1992, and in conformity with it, Tripura enacted the Municipal Act, 1994. The Act provides for a Nagar Panchayat for a transitional municipal area, a Municipal Council for a smaller urban municipal area and a Municipal Corporation for a large urban municipal area. Elections to urban local bodies (ULBs), under the 1994 Act, were held in 1995 and 2000.

There are at present thirteen ULBs in Tripura. The capital of the State, Agartala, has one elected Municipal Council, and the other twelve are Nagar Panchayats. Agartala alone accounts for 64 per cent of the total urban population of the State. In terms of social composition, tribal

people constitute less than 5 per cent of the population in eleven of the thirteen ULBs, and their share of population exceeds 10 per cent only in Agartala. Tribals account for only 4 per cent of the population of urban Tripura. The share of the SC population in urban and rural Tripura is about 16 per cent.

The annual budgets of the twelve Nagar Panchayats are modest. During the four years from 1998-99 to 2001-02, the Nagar Panchayats received and spent a total of Rs 187 million, or Rs 46.8 million rupees per year. This works out to Rs 3.9 million per annum per Nagar Panchayat; the lowest was Amarpur at Rs 2.7 million and the highest was Teliamura at Rs 5.8 million. The Municipal Council of Agartala spent, on average, Rs 19.6 million per year. Although Agartala accounted for 64 per cent of Tripura's total urban population, its share of total expenditure on ULBs was only 30 per cent. Using the population of 2001 as denominator, the per capita annual expenditure of the Nagar Panchayats varied from a high of a little over Rs 800 in Kamalpur (the smallest) to a low of around Rs 150 in Udaipur (the biggest).

Following the recommendations of the State Finance Commission, the Government of Tripura decided to provide a grants-in-aid for ULBs under the plan account, at the rate of Rs 200 per capita (based on the year 2001 population figures). In addition, ULBs are collectively to receive 5.5 per cent of the State's tax revenue in lieu of non-plan grants.

In January 2001, following a similar initiative pertaining to rural areas, the State Government launched a programme called '*Nagaroday*' in the Agartala Municipality and all Nagar Panchayats. The main objective of

Nagaroday, described as a "programme of resource-based participatory planning", is "to ensure direct participation of people in the process of planning and implementation with a view to provide better civic amenities and facilities to people living in urban areas and for improving the quality of life, environment and economic condition". Under Nagaroday, an amount of Rs 1063.5 million has been allocated to the ULBs for the period 2002-07, for schemes, works and projects to be decided upon and implemented by them. The reports of the Nagaroday exercise indicate that, in terms of expenditure priorities, urban housing and road construction are the major activities, the other important items being urban water supply and low-cost sanitation.

While it is difficult to assess the actual extent of people's participation in development planning and plan implementation in ULBs, the focus on drinking water, sanitation, lowcost latrines, housing and urban infrastructure revealed in the expenditure patterns of the ULBs suggests the following. First, elected ULBs are responding to the felt needs of the more vulnerable segments of the urban population and to human development needs. Secondly, a conscious effort has been made in recent years to develop urban areas other than Agartala.

5.4 Tripura Tribal Areas Autonomous District Council

A unique feature of the State is the Tripura Tribal Areas Autonomous District Council (TTAADC), created in 1979 under the Seventh Schedule of the Constitution. The first TTAADC was elected in January 1982. Subsequently, through a constitutional amendment in 1985, the

TTAADC was brought under the Sixth Schedule of the Constitution.

The TTAADC is an example of the practical relevance of regional autonomy within linguistic States. The concept of "regional autonomy becomes a meaningful alternative to the endless division of States on the basis of sectional and regional demands" and is especially relevant to "the tribal compact and contiguous areas where the State Governments have a tradition of neglect of the special problems of the tribal peoples" (Karat 1993). In Tripura, both tribals and non-tribals were involved in and supported the process of formation of the TTAADC; the TTAADC was thus a product of the joint struggle of tribal and non-tribal democratic movements to protect the identity and rights of tribals. Further, unlike in some other States, the District Council in Tripura is not for a specific tribe but for all tribes, and is intended to address the problems of all tribal people.

The proposition that regional autonomy for tribal people within a State is best served by providing regional autonomy through district councils has been on the whole vindicated by the experience of the TTAADC. The enthusiastic and large-scale participation, in the face of the threat of extremist violence, of the

The TTAADC is an example of the practical relevance of regional autonomy within linguistic States. In Tripura, both tribals and non-tribals were involved in and supported the process of formation of the TTAADC: the TTAADC was thus a product of the joint struggle of tribal and nontribal democratic movements to protect the identity and rights of tribals.

BOX 5.4

Tripura Tribal Areas Autonomous District Council (TTAADC)

The TTAADC was formed

- to provide internal autonomy in compact areas inhabited overwhelmingly by tribal people;
- to protect the social, economic and cultural interests of the tribal population; and
- to promote the all-round socio-economic development of the territory covered by the TTAADC.

BOX 5.5

Structure and Powers of the TTAADC

The TTAADC has twenty-eight elected members and two tribal members nominated by the Governor of the State; it has its headquarters in Khumulwng. The TTAADC is vested with both legislative and executive powers. The Chairperson is responsible for the conduct of legislative functions. An executive council of members with a Chief Executive Member discharges the executive functions. The TTAADC is spread over all four districts of Tripura, and accounts for 70 per cent of the State's area and 30 per cent of its population. It operates through five zonal and thirty-seven sub-zonal offices. There are 526 village development committees in TTAADC territory; these committees correspond to the Gram Panchayats of the non-ADC area.

Funds provided annually to the TTAADC by the State Government rose steadily from Rs 134.9 million in 1985–86 to Rs 850.9 million in 2002–03, enabling the TTAADC to play a progressively larger role. The State Government decided to provide an 'untied' panchayat development fund to the village development committees and block advisory councils in the TTAADC area at the rate of Rs 250 per capita per year – divided into Rs 175 for the village development councils and Rs 75 for the block advisory councils. Due to financial constraints, the State Government has not always been able to ensure the scale of funding desired by the TTAADC. From 2000–01 to 2004–05, the Government transferred an average of around Rs 300 million annually by way of plan funds to the TTAADC.

A crucial indicator of women's empowerment is the extent of women's political participation. The remarkable feature of women's political participation is that the participation is very high and visible.

people of TTAADC territory in the elections to the TTAADC as recently as March 2005 stands testimony to the faith that the people have in the institution.

Nevertheless, the full potential of the TTAADC as a vehicle for the expression and fulfilment of the aspirations of tribals for self-government is yet to be realized. The TTAADC must have access to adequate resources for the development of tribal areas. The lack of commitment of some political parties to the ideal of tribal autonomy within the larger framework of the State Government, the disruptive and destabilizing role of extremists, sheer geographical and natural resource constraints, the noncontiguous nature of TTAADC jurisdiction and low base of human development are other obstacles that must be overcome.

The absence of elected local bodies at village and block levels in the areas under TTAADC jurisdiction was a factor preventing progress with respect to local development. In March 2006, however, elections were held to 526 village development committees. There was tremendous support for these elections, and voter turn-out was more than 80 per cent in 25 out of 40 blocks. The lowest turn-out was 77 per cent in Jampuii Hills in North District, and the highest was 92 per cent in Satchand block in South District. Women won 40 per cent of the 4,165 contested seats. Village development committees can now be expected to play a more active role in enhancing human development.

5.5 Political Participation of Women

A crucial indicator of women's empowerment is the extent of women's political participation (UNDP 1995). Political participation occurs in many ways; it includes participation in political mobilization, in the electoral process and in decision-making at different levels of the political system. The remarkable feature of women's political participation in Tripura is that the participation is very high and visible.²

There has been no woman Member of Parliament from Tripura and there is only one woman in the Legislative Assembly. However, in the PRIs, the number of women elected exceeds the legislated quota of one-third of seats in the case of Panchayat Samitis and Zilla Parishads (Table 5.2). There are women *Sabhadipatis* in two out of four Zilla Parishads (in

² This section draws on the background paper by Bandyopadhyay (2005).

South and West Districts) of the State (Table 5.3).

After the elections of 2004, Joynagar Panchayat (in Jirania block of West District) became the first allwoman panchayat in Tripura.

The representation of women in panchayat institutions is closely tied to the enactment of the Tripura Panchayat Act, 1993, following the Constitution (73rd Amendment) Act, 1992. The 1993 Act provides for onethird reservation for women at all levels, and among the seats reserved for Scheduled Castes (SCs) and Scheduled Tribes (STs) as well. The reservation applies both to membership and to the office of the chairperson at all levels - Gram Panchayat, Panchayat Samiti and Zilla Parishad. Following this enactment, women have had the opportunity to participate actively in politics at the grassroots. However, due to inexperience, there are problems women face in fulfilling their roles and responsibilities.

In the TTAADC areas too, recent elections have ensured good representation of women in the village committees. Women comprise 40 per cent of committee members and 40 cent of chairpersons of the newly-elected village development committees. In twenty-six blocks, more than 40 per cent of the seats were won by women. In one block, Rajnagar, there are now an equal number of male and female elected committee members.

As Table 5.4 shows, women are still grossly under-represented in executive decision-making posts.

In every Lok Sabha election, the participation of women voters has been higher in Tripura than in India (Table 5.5). In some elections, more than 80 per cent of the electorate has voted. In the Assembly elections, voter turn-out has been even higher

TABLE 5.2
Elected representatives in Gram Panchayats, Panchayat Samitis and Zilla
Parishads, 1994, 1999 and 2004

Year	Gram Panchayat			Pano	hayat S	amiti	Zilla Parishad		
	Female	Total	Female %	Female	Total	Female %	Female	Total	Female %
1994	1809	5427	33.3	67	196	34.2	24	70	34.3
1999	1895	5685	33.3	106	299	35.4	28	82	34.1
2004	1785	5352	33.3	106	299	35.4	28	82	34.1
	<u> </u>								

Source: Chakravarti and Roy (2005).

TABLE 5.3

Elected chairpersons in Gram Panchayats, Panchayat Samitis and Zilla

Parishads in Tripura, 1994, 1999 and 2004

Year	Gram Panchayat			Pan	Panchayat Samiti			Zilla Parishad		
	Male	Female	Female %	Male	Female	Female %	Male	Female	Female %	
1994	341	184	35.1	10	6	37.5	2	- 1	33.3	
1999	348	189	35.2	15	8	34.8	2	2	50.0	
2004	336	177	34.5	15	8	34.8	2	2	50.0	

Source: Chakravarti and Roy (2005).

TABLE 5.4

Women in the executive hierarchy (as of 31 March 2007)

Position/Department	Male	Female	Total	Female share %
State Cabinet (Ministers)	П	1	12	8
Executive Council of TTAADC	9	1	10	10
TTAADC Administration	8	0	8	0
Indian Administrative Service	73	3	76	4
Indian Police Service	46	0	46	0
Indian Forest Service	39	1	40	2
Tripura Civil Service	217	12	229	5
Tripura Police Service	160	3	163	2
Tripura Forest Service	27	0	27	0

Source: General Administration (Personnel and Training) Department.

In every Lok Sabha election, the participation of women voters has been higher in Tripura than in India.







than in the Lok Sabha elections (Table 5.6). This is indeed remarkable given that voters have often faced threats of violence.

Participation in political activity is not confined to participation in the formal electoral processes. Political work includes participation in massbased organizations, in trade unions, in associations, in women's organizations, and so on. Women in Tripura are active in this respect as well. Data from trade unions and mass organizations show that women participate in large numbers. The Tripura Nari Samiti, a democratic women's organization, has more than 4,00,000 members (that is, one in every two adult women in the State).3 Women have played a big role in mass movements, starting from the Jana Siksha movement (tribal literacy movement of the 1940s) to present-day movements. They have made sacrifices and suffered repression along with men. Many women have been brutally killed for their association with parliamentary political parties in extremist areas. Even simple acts such as voting involve immense bravery in the face of violence.

In 2004, the Government of Tripura published an Action Plan for the empowerment of women. In addition to the action points raised in this policy document, it is important to start appointing women to key executive posts in a systematic manner.

5.6 Special Initiatives

The Right to Information Act (RTI), 2005, provides a means of empowering citizens and augmenting people's participation in decision-making. As noted in its preamble, the Act seeks to provide a practical regime within

TABLE 5.5

Voters as percentage of electorate, Tripura and India, Lok Sabha elections

	In	dia	Trip	oura	
Year	Male	Female	Male	Female	
1977	65.6	54.9	73.7	66.2	
1980	57.7	51.3	84.4	77.7	
1984	63.6	68.2	80.9	73.6	
1989	70.1	43.1	85.I	81.9	
1991	52.5	47.4	73.0	61.6	
1996	62.5	53.4	80.6	70.5	
1998	65.9	57.7	81.2	80.5	
1999	64.0	55.6	71.0	65.I	
2004	62.2	53.6	70.6	63.3	

TABLE 5.6

Voters as percentage of electorate,
Tripura Assembly elections

Year	Male	Female	
1993	82.8	79.5	
1998	81.9	79.6	
2003	80.9	76.3	

which all citizens can secure access to information under the control of public authorities. The aim of such a regime is to promote transparency and accountability in the functioning of every public authority. Tripura constituted an Information Commission to implement the Act, and this Commission began functioning in January 2006.

Corresponding to the Millennium Development Goals, the Government of India prepared a list of National Development Goals (for the Tenth Five Year Plan) and, more recently, targets for the Eleventh Five Year Plan. The Government of Tripura has set its own goals in the area of human development as part of a Nine Point Programme. The programme was started in 2003 with the specific intention of improving human devel-

The Government of
Tripura has set its own
goals in the area of human
development as part of a
Nine Point Programme.
started in 2003. The
programme is being
undertaken in a campaign
mode, through panchayat
institutions.

³ In 2005, the membership was 4,16,200.

BOX 5.6

Nine Point Programme

The specific objectives of the Nine Point Programme are to achieve (originally by August 2005):

- 100 per cent enrolment of children in schools
- 100 per cent immunisation of children aged 0–6 years
- Total sanitation (in educational institutions and homes)
- Supply of safe drinking water to educational institutions
- Adequate tree plantation in educational institutions
- Awareness of cleanliness in educational institutions
- Sports and cultural activities in schools
- Reduction in Infant Mortality Rate and Maternal Mortality Rate
- Expansion of women's self-help groups.

The Programme began with a house-to-house survey to identify areas for intervention and the preparation of a detailed block-wise action plan. The progress report of May 2006 indicates significant achievements including 100 per cent immunisation of 0–1 year-old children and 100 per cent enrolment of 6–14 year-old children.

Source: Literacy Background and Progress Report of 9-Point Programme, State Literacy Mission Authority, Government of Tripura, September 2006.

In order for members of elected local bodies to discharge their responsibilities effectively, they need training and capacity-building in administration, accounts and other areas of governance. This is a challenging task that needs to be addressed with sensitivity.

opment, in particular, with the goal of universalizing school education and improving the school environment; reducing child mortality and improving maternal health; and improving environmental conditions through provision of drinking water and sanitation (see Box 5.6). The programme is being undertaken in a campaign mode, that is, by involving people on a large scale, particularly through panchayat institutions. The programme has set specific quantitative goals. These goals are monitored on a regular monthly basis.

5.6.1 Training and Capacity-building

It is widely recognized that formal devolution through legislative provision is only one step in the process of democratic decentralization. In order for members of elected local bodies to discharge their responsibilities effectively, they will need training and capacity-building in administration, accounts and other areas of governance. This is a challenging task that needs to be addressed with sensitivity. Many elected representatives require initial support to acquire the technical skills necessary for local-level administrative tasks (see Box 5.7). Training is one area of democratic decentralization where Tripura needs to do better.

Data on training for members of elected local bodies suggests that it is inadequate in terms of reach. There is only one State-level training institute for this purpose, the State Institute of Panchayats and Rural Development (SIPARD), and its capacity in terms of participant person-days is limited. Data from the report of the second State Finance Commission show that between 1997-98 and 2002-03, SIPARD taught only 509 PRI representatives and functionaries, with the total number of courses being only twenty and the number of training days only 109. The Institute did not conduct any training in 2002–03. The situation in respect of training conducted at the block level was, however, better. A total of 2,228 persons received training, including 155 women, between 1997-98 and 2002-03. The key task of training and capacity-building of elected local body members and chairpersons has not received the attention it needs. Nor is there adequate emphasis on the need to pay special attention to the training needs of women and persons belonging to Scheduled Castes and Scheduled Tribes in the PRIs or the TTAADC set-up.

5.7 Concluding Remarks

While most States of India have yet far to go with respect to genuine democratic decentralization, Tripura – and, more particularly, Tripura under the Left Front Governments - has made significant progress in developing and strengthening democratic government at the grassroots. Recognition of tribal aspirations in a manner that also builds unity among tribals and non-tribals is a model worthy of emulation elsewhere in India. "The unique significance of the TTAADC is that it is a product of the joint struggle by the tribal people and the democratic majority of the non-tribal people who considered the protection of the identity and rights of the tribal minority an integral part of the democratic movement of Tripura" (Karat 1993). The PRIs and the TTAADC have, over the years, become strong institutions of local government.

The participation of women in elections, in mass mobilization and other political processes in the face of insurgency-related violence is a major feature of the politics of Tripura. There is no doubt that the policy of reservations – in panchayats and, more recently, through a historic amendment in the law of election to village councils, in the ADC areas – has created an important new space for women in elected local bodies.

Tripura has initiated special programmes such as the Nine Point Programme to bring about improvements in human development indicators. The implementation of these programmes requires large-scale people's participation through elected local bodies. Such participation in development schemes and processes needs to be seen as a part of the strategy for local development. With

BOX 5.7

Pradhans and Upapradhans in Gram Panchayats

A simple questionnaire was canvassed by Jayanta Choudhury among 106 men and 24 women, all elected Gram Panchayat *pradhans* or *upapradhans*, when they underwent training at the State Institute of Panchayats and Rural Development (SIPARD) in June 2005.* Although the respondents do not, strictly speaking, constitute a statistical sample of the universe of *pradhans* and *upapradhans*, the data that the questionnaires generated are of some interest.

- 1. More than half the women were less than 40 years of age while 64 per cent of the men were older than 40. The percentage of women over 50 years of age was only 8 per cent, as against a corresponding figure of 30 per cent among the men.
- 2. In terms of social composition, a higher proportion of women than men came from the Scheduled Castes, Scheduled Tribes and the Muslim community.
- 3. Out of 106 men surveyed, 24 had graduate or post-graduate degrees; only 1 out of the 24 women was a graduate.
- 4. Only 25 per cent of the women were cultivators, while the figure for men was 70 per cent. By contrast, 17 per cent of the women and 4 per cent of the men were agricultural labourers.
- 5. One-third of the men and 58 per cent of the women were either landless or had less than 1 acre of land.
- 6. One-third of the men were first time elected representatives. The corresponding figure for the women in the sample was one-half.
- 7. In terms of involvement with mass organizations, men showed greater diversity. Three-fourths of the women worked exclusively in the women's movement, while the involvement of men in mass organizations was more evenly distributed across peasant, trade union, student and youth movements.

* See Athreya (2005).

regard to human development initiatives, popular participation can improve the functioning of local educational and health institutions. The part played here by technical training, particularly the training of representatives and functionaries of elected local bodies, is important and needs specific policy attention. Proper implementation of the Right to Information Act can enhance the quality of democratic governance.

The policy of reservations – in panchayats and in the ADC areas – has created an important new space for women in elected local bodies.



FINANCIAL CONSTRAINTS & EXPENDITURE PATTERNS

Public action in Tripura must ensure sustainable livelihoods for the people, universal schooling and an improved system of higher education, public access to widely dispersed health facilities of good quality – all in conjunction with enhanced human security. Social and economic policy must aim specifically at narrowing the gaps between tribal people and others in a range of human development achievements.

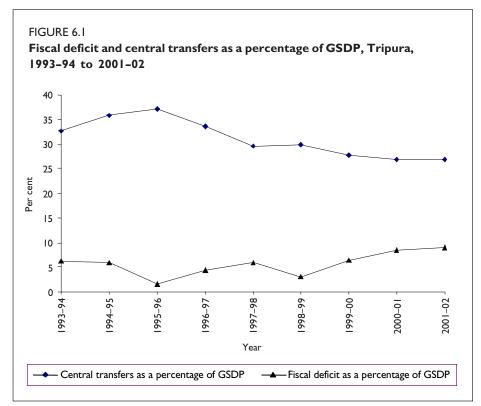
A necessary condition for human development in Tripura – and, indeed, in the entire North East – is public investment that aims at ending the *physical* isolation of the State and region by enhancing the means of transport and communication with the rest of India. This is a task that lies mainly within the province of the Central Government. The State requires large-scale investment in physical infrastructure and in scientific and technological infrastructure, as well as directly in education and health.

This Chapter, first, discusses the overall financial constraints faced by the State Government. Secondly, we examine social sector spending in detail.¹

6.1 Financial Constraints

The most important constraint on finance for human development in Tripura is the State's dependence on the Central Government for revenues. In 2002–03, the Centre provided about 85 per cent of the State's revenues (the Centre's share falls to 75 per cent if Tripura's share of central taxes is counted as State revenues). Given the big share of Central transfers in revenues of the State Govern-

Given the big share of
Central transfers in
revenues of the State
Government, fiscal
conditions in the State
are determined by the
level of Central transfers.



¹ This Chapter is based on the background paper prepared by Mita Choudhury (2005).

TABLE 6.1

Per capita central transfers to Tripura and other North Eastern States,
2002-03 (in Rs)

State	Per capita central transfers
Sikkim	12,465
Mizoram	10,307
Arunachal Pradesh	8,889
Nagaland	6,039
Manipur	4,920
Tripura	4,906
Meghalaya	4,443
Assam	1,522

BOX 6.1

Awards by the Tenth and Eleventh Finance Commissions

Source: Data released by the Twelfth Finance Commission.

The revenues to be received by Tripura as its share of central taxes and duties were overestimated by the Tenth and Eleventh Finance Commissions. At the same time, expenditure levels were grossly underestimated. The award of the Fifth Pay Commission (1996) resulted in an unforeseen rise in the revenue expenditure of the State Government. Interest payments and pension liabilities of the State Government were underestimated by the Tenth Finance Commission as well. By using underestimates of expenditure levels and overestimates of revenues, the projections of the non-plan revenue deficits of Tripura by the Finance Commissions proved to be much lower than the actual deficits. However, the relatively low estimates of revenue deficit formed the basis of Finance Commission grants to Tripura by the Tenth and the Eleventh Finance Commissions, and these proved to be inadequate.

Source: Mita Choudhury (2005).

A new concern arises from the enactment of the Fiscal Responsibility and Budget Management (FRBM) Act by the State Government.

ment, fiscal conditions in the State are determined to a large extent by the level of Central transfers. Figure 6.1 plots the fiscal deficit of the State alongside central transfers, both as a per cent of Gross State Domestic Product (GSDP). The correlation coefficient between the two was 0.7 in the period 1993–94 and 2001–02.

Per capita central transfers to Tripura are lower than to most States of the North East (Table 6.1).

In the recent past, fluctuations in

central transfers have adversely affected the fiscal situation of the State. Insufficient allocation of funds by the Tenth and Eleventh Finance Commissions has played an important part in the deterioration of the fiscal situation in the State, which in turn has limited the growth of expenditure on human development (see Box 6.1).

In recent years, there has been a tendency on the part of Finance Commissions to link transfers with the fiscal policy of States (see Box 6.2). The Eleventh Finance Commission recommended that special-category States like Tripura reduce the ratio of revenue deficit to revenue receipts by a minimum of two percentage points (or increase by two percentage points if there was a revenue surplus) to earn a fiscal incentive. Such a conditionality is problematic in States like Tripura, whose fiscal policy and manoeuvrability are determined to a large extent by central transfers. For example, the State was unable to meet the prescribed condition in 2000-01 and 2002-03 primarily due to a fall in central transfers, but qualified in 2001-02 when central transfers rose.²

A new concern arises from the enactment of the Fiscal Responsibility and Budget Management (FRBM) Act by the State Government, under pressure from the Twelfth Finance Commission. As per the FRBM Act, the State has to reduce its fiscal deficit to 3 per cent of GSDP and limit the debt stock to 40 per cent of GSDP by March 2010. If the State is to meet these conditions, it does not have any option but to restrict expenditure, including expenditure on human development.

² Rajaraman, Chakravarty and Jain 2004.

6.2 Social Sector Spending

6.2.1 Aggregate Expenditure: Levels and Trends

Public expenditure can play a critical role in enhancing human development. Although higher levels of human development are, in general, associated with higher levels of income, experiences in countries across the world have shown that significant improvements in human development can be brought about even at low levels of income through directed public investment. An analysis of the nature of public spending for human development is thus of importance.

The share of national income spent as public expenditure for human development was first used by the UNDP in its Human Development Report 1991 and termed the Human Expenditure Ratio (HER). Specifically, the HER was defined as the ratio of public expenditure in human priority areas (areas particularly important for human development) to GDP. Apart from HER, three other ratios, the product of which results in HER, were also proposed: these are the Public Expenditure Ratio (PER), Social Allocation Ratio (SAR) and Social Priority Ratio (SPR). PER refers to the ratio of public expenditure to the income of a State. SAR refers to the proportion of public expenditure directed towards the social sector. SPR is the proportion of social sector expenditure directed towards human priority areas. In addition to examining these ratios, per capita public expenditure in real terms has also been calculated to assess the absolute level of public expenditure.

Public expenditure for human development in Tripura as reflected in the HER is much higher than the level of 5 per cent recommended by UNDP

BOX 6.2

Implications of the Twelfth Finance Commission Award

The Twelfth Finance Commission imposed conditions on States in respect of fiscal performance for them to qualify for awards under various recommendations, and these impositions are likely to have an adverse impact on expenditure for human development.

The Twelfth Finance Commission (TFC) introduced a debt relief scheme to help State governments burdened with huge debt stocks. As in most Indian States, the rise in expenditure on wages and salaries brought about by the Fifth Pay Commission led to a substantial rise in the debt stock of the Government of Tripura. Much of this debt was in the form of Central loans on which interest rates were remarkably high in the 1990s. The heavy debt burden and high interest rates imposed new levels of fiscal stress on the State exchequer. Under these conditions, it was important for Tripura to look to the Finance Commission for some debt relief. For States to qualify for relief, however, the TFC mandated that the States enact a Fiscal Responsibility and Budget Management Act (FRBM Act). Under this Act, Tripura, which had an average revenue surplus of about Rs 220 million in the period 2001–02 and 2003–04, has to maintain this average revenue surplus in each of the years in the award period of the Commission (2005–06 to 2009– 10), to qualify for debt relief. Further, the State will have to reduce its fiscal deficit to about 3 per cent while ensuring that the stock of debt does not exceed 40 per cent of GSDP by March 2010.

To maintain a revenue surplus and meet the condition on fiscal deficit, the State has either to increase its revenues or decrease its expenditure. Now the Government of Tripura has very little control over its revenues, since the Centre provides about 85 per cent of the State's revenues. In the past, Central transfers have fluctuated significantly and this has led to corresponding fluctuations in the revenue and fiscal deficits of the State. A shortfall in the Centre's collection of taxes and duties has often led to a decline in Central transfers, which in turn has led to an increase in the revenue and fiscal deficits of the State. With very little control over revenues in the State, reducing the fiscal deficit to 3 per cent can be achieved only by a substantial contraction of expenditure.

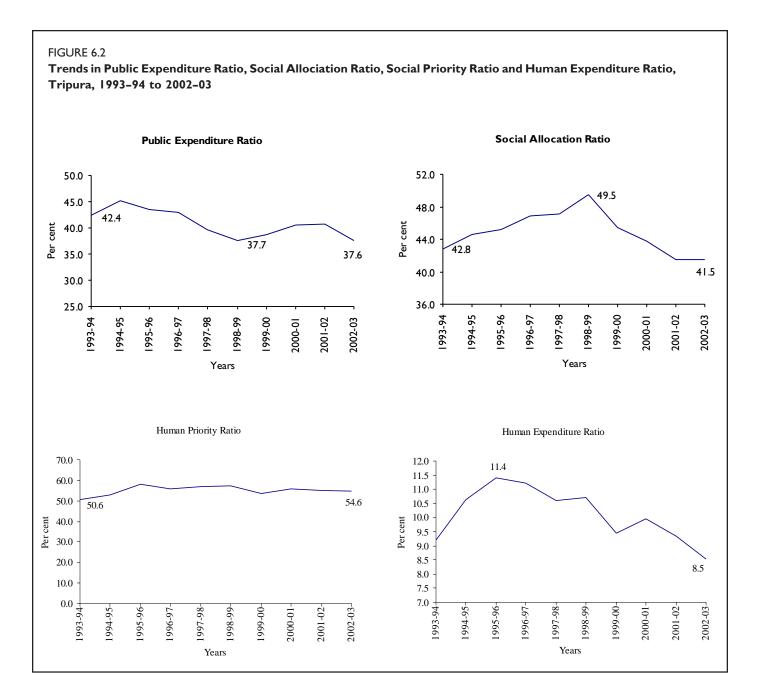
It is clear that in the coming years, the requirement of 'fiscal responsibility' (with 'responsibility' defined by the Centre) will become the most important constraint on the expansion of State expenditure on the social sectors.

Source: Mita Choudhury (2005).

(UNDP 1991).³ This indicates the commitment of the State Government to human development of the people of the State. To arrive at a level of 5 per cent in HER, UNDP suggests that PER should be around 25 per

Public expenditure for human development is much higher than the 5 per cent recommended by UNDP.

³ See Annexure 9 on definitions of various expenditure ratios.



Public Expenditure Ratio in Tripura has been higher than the suggested norm of 25 percent in all the years between 1993–94 and 2002–03.

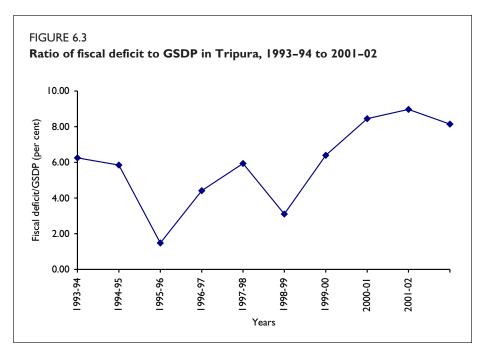
cent, SAR around 40 per cent and SPR around 50 per cent. PER in Tripura has been higher than the suggested norm of 25 percent in all the years between 1993–94 and 2002–03.

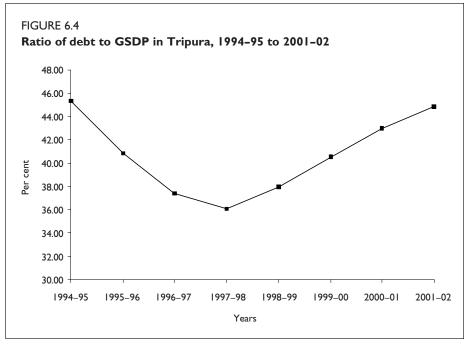
Estimates for 2001–02 show that the PER for Tripura was higher than for States outside the North East but lower than the other North Eastern States. As compared to the average PER for fourteen non-North Eastern States of 18 per cent in 2001–02, the PER in Tripura was 40 per cent. Tripura's rank among the North Eastern States was sixth in terms of PER, fourth in terms of SAR, eighth in terms of SPR and sixth in terms of HER. Similarly, per capita expenditure on the social sector and in areas of priority for human development in the State were higher than in many large States, but lower than several North Eastern States. Tripura ranked third in terms of per capita expendi-

ture on social sectors and fifth in terms of per capita expenditure on human priority areas among the North Eastern States in the year 2001–02. At 1993–94 prices, the per capita social sector expenditure in Tripura was Rs 1,778. In the same year, the average per capita social sector expenditure for eight States of the North East was Rs 950 and the average for fourteen non-North Eastern States was Rs 708.

There have been significant increases in per capita expenditure on human development in Tripura in the 1990s. In the period 1993-94 to 2002–03, per capita expenditure on social sectors (at constant 1993-94 prices) increased from Rs 1,103 to Rs 1,713. Similarly, per capita expenditure on human priority areas increased from Rs 558 to Rs 935. While per capita expenditure increased in real terms, the HER steadily declined over the period. From 1994-95 to 2002-03, HER in the State declined from 10.6 to 8.5 per cent. As the growth of GSDP over this period was high, the decline of HER reflects the fact that the increase in social sector expenditures was not commensurate with the growth of incomes in the State.

Much of the decline in HER over the period can be attributed to the decline of PER and SAR in the State (Figure 6.2). PER in the State declined from 45 per cent in 1994–95 to 38 per cent in 2002–03. The decline in PER was fast up to about 1998–99 and was partly reversed after 1998–99 because of an increase in expenditure on salaries and wages brought about in the wake of the Fifth Pay Commission. Until 1998–99, the allocation towards the social sector in Tripura increased despite a fall in PER. In 1993–94, the SAR in

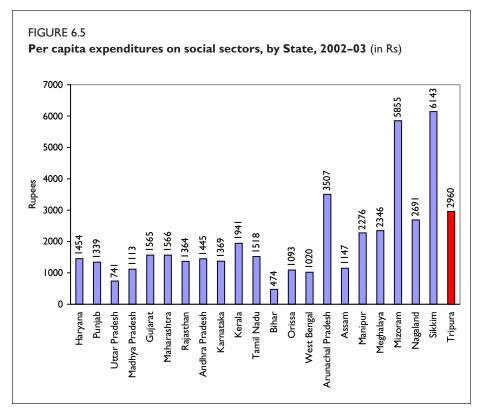


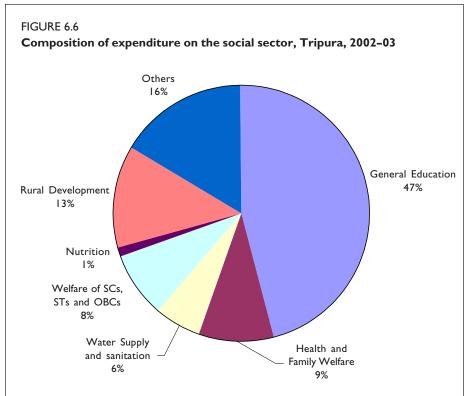


the State was 42.8 per cent; by 1998–99, the SAR had gone up to 49.5 per cent of public expenditure. This reflects emphasis in public spending on social sectors. After 1998–99, however, there was a steady and sharp decline in the share of social sector in public spending and, by 2002–03, SAR was down to 41.5 per cent.

The decline in the Social Allocation

The decline in the Social Allocation Ratio was largely due to a deterioration of the fiscal situation after 1998–99.





Ratio was largely due to a deterioration of the fiscal situation in the State after 1998-99 because of factors outside the control of the State government. With the implementation of the recommendations of the Fifth Pay Commission, there was an increase in expenditure on wages and salaries. Additionally, expenditure towards interest payments increased sharply after 1998-99. These together led to a sharp increase in the fiscal deficit of the State and a corresponding rise in the debt to GSDP ratio. The debt to GSDP ratio in Tripura increased from about 38 per cent in 1998-99 to a high of 50 per cent in 2003–04.4 The rise in expenditure on wages and salaries and the interest burden exerted a strain on the State exchequer leading to a decline in SAR in the State after 1998-99. There was however no clear trend with respect to SPR. SPR in the State fluctuated between 50 and 55 per cent between 1993-94 and 2001-02.

6.2.2 Composition of Social Sector Spending

In Tripura, expenditure on General Education accounted for nearly half the total expenditure on social sectors (47 per cent in 2002-03). Expenditure on Health and Family Welfare was a far second, accounting for 9 per cent of the total expenditure on social sectors (Figure 6.6). Expenditure on the Welfare of Scheduled Castes, Scheduled Tribes and Other Backward Classes accounted for 8 per cent, Rural Development for 13 per cent, and Water Supply and Sanitation for 6 per cent of expenditure on the social sectors. Expenditure under the budgetary head Nutrition accoun-

⁴ See Rajaraman, Chakraborty and Jain (2004).

ted for 1 per cent of social sector expenditure.

Education

In 2002-03, expenditure on education constituted 7 per cent of GSDP. This was higher than the 6 per cent target set by the National Policy on Education. In per capita terms, the expenditure on general education in Tripura was among the highest in the country. In 2003, for example, per capita expenditure on general education was Rs 1,413 in Tripura, which was more than twice the average for the fourteen most populous States of the country (Rs 538) and higher than the average for the North Eastern States (Rs 892). Per capita expenditure on education increased steadily in real terms between1993-94 and 2002-03 (Table 6.2).

Further decomposition shows that the two main components of expenditure were those on elementary and secondary education, and expenditure on both these sub-heads increased in real terms in the 1990s (Figure 6.7). In 2003, per capita expenditure on elementary education was Rs 757 and that on secondary education was Rs 471 in Tripura. The corresponding figures for the fourteen most populous States of India were Rs 270 and Rs 192 respectively.

Health and Family Welfare

The second most important component of social sector spending is spending on health and family welfare. In 2002–03, the total expenditure on health and family welfare amounted to 1.5 per cent of GSDP. It may be noted here that the national goal, to be achieved by 2010, is to spend 2 to 3 per cent of the GDP on health.

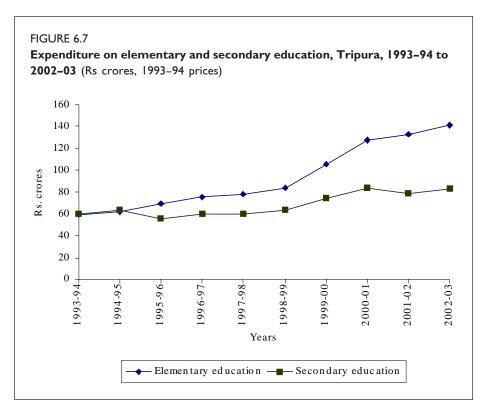
In per capita terms, expenditure on

TABLE 6.2

Per capita expenditure on social sector and its components in Tripura,
1993-94 and 2002-03 (at 1993-94 prices)

	1993–94	2002–03	
General Education	456	787	
Health and Family Welfare	124	160	
Water supply and sanitation	82	101	
Welfare of SCs, STs and OBCs	138	144	
Nutrition	24	20	
Rural Development	131	224	
Social Sector as a whole	1,103	1,713	

Source: Finance Accounts of Tripura, Accountant General, Government of India.



In 2002–03, expenditure on education constituted 7 per cent of GSDP. This was higher than the 6 per cent target set by the National Policy on Education.

In per capita terms, the expenditure on general education in Tripura was among the highest in the country.

The fiscal burden of the last few years has affected public expenditure on social sectors, and the State Government requires support in terms of additional resources from the Centre.

health and family welfare has also increased over the last decade, although at a slower pace than the increase in expenditure on education (Table 6.2). In 2002–03, the per capita expenditure by the Government of Tripura on health and family welfare was Rs 295, which was higher than the average for the fourteen most populous States (Rs 162) and the average for the North Eastern States (Rs 212).

In general, although per capita expenditure on areas related to human development has increased in the last eight to nine years, these expenditures have not kept pace with the growth of GSDP in the State. This reflects the financial problems faced by the State Government.

6.3 Summary

Expenditure by Governments of the North Eastern States including Government of Tripura depends significantly on financial support from the Central Government. Given the state of economic backwardness of Tripura, its economic infrastructure and few elastic sources of revenue for the State, the State Government faces severe constraints in resource mobilization. Only 15 per cent of the State's total revenue receipts come from its own tax and non-tax resources. In order to ensure that financial constraints do not stall expenditures on human development in the future, the Central and State Governments together need to revisit issues such as the FRBM Act.

Analysis of the level and trend in public expenditure in the State shows that public spending on human development as a proportion of State's income is substantially higher in Tripura than most States in India and above the norms recommended by the UNDP. Per capita expenditure on human development has increased in absolute terms, but it has not kept pace with the growth of GSDP in the State. As a result, despite a rise in per capita expenditure on human development, the Human Expenditure Ratio (HER) has fallen. The slow growth of expenditure on human development relative to GSDP is closely linked to fiscal deterioration. A rise in expenditure on salaries, wages and pensions following the implementation of the recommendations of the Fifth Pay Commission, and rising debt and interest payments have restricted human development expenditure in the State.

In terms of the composition of public spending, nearly one-half of the expenditure on the social sectors is directed towards education. Despite fiscal stress, the State has managed to keep spending more than 7 per cent of GSDP on education. In per capita terms, expenditure on health, education and other human development-related areas has increased. Nevertheless, as we noted in Chapter 3, there is need for additional investment to expand and enhance social infrastructure.

In conclusion, the Government of Tripura has shown itself to be serious in public provisioning of education, health, nutrition, water and sanitation. Not surprisingly, then, there are positive outcomes in respect of achievements in these spheres. Nevertheless, there are major gaps in investment (e.g., in health infrastructure) and in outcomes (e.g., malnutrition). The fiscal burden of the last few years has affected public expenditure on social sectors, and the State Government requires support in terms of additional resources from the Centre.

THE WAY FORWARD

7.1 Strengths and Achievements

The present Government of Tripura and the people of the State are committed to a policy of economic development that is sustainable, ensures growth and achieves all-round human development. Such a policy has many strengths and achievements on which to draw.

7.1.1 Demography

All the standard mortality indicators have shown steady improvement in Tripura. Fertility has declined and there was a steep fall in the rate of growth of population between 1991 and 2001. The sex ratio (ratio of females per 1,000 males), a key indicator of demographic health and gender equality, has been above the Indian average since 1971. Also, contrary to the long-term national trend, the sex ratio has risen steadily in Tripura over the last five decades. The State can now reap the dividends of a low dependency ratio and a large population in the economically active age group.

7.1.2 School Education

The State Government is committed to raising levels of literacy and ensuring universal schooling. The enthusiasm in conducting the Total Literacy Campaign and the continued follow-up through post-literacy campaigns

is one sign of this commitment. Another sign is the initiation of the Nine Point Programme, which sets a specific target of achieving 100 per cent school enrolment. As documented in this Report, there have been significant improvements in literacy, male and female, and in school enrolment for boys and girls in the 1990s. The decline of child labour is clearly linked to the expansion of school enrolment. Also, substantial investments have been made in school infrastructure over the last ten to fifteen years. Tripura has made real advances in increasing and broad-basing school enrolment. This is an invaluable asset, and one that will be crucial to future development.

7.1.3 Expenditure on Social Sectors Aggregate public expenditure for human development in the State as reflected in the Human Expenditure Ratio (HER) is much higher than the level of 5 per cent recommended by UNDP. However, after 1998–99, there has been a decline in the share of social sectors in total public spending. In the sphere of education, commendably, the allocation at 7 per cent of GSDP was higher than the 6 per cent target set by the National Policy on Education. The real expenditure per capita on education increased sub-

All the standard mortality indicators have shown steady improvement in Tripura. Fertility has declined and there was a steep fall in the rate of growth of population between 1991 and 2001. The sex ratio, a key indicator of demographic health and gender equality, has been above the Indian average since 1971.

THE WAY FORWARD 137

An important feature of rural Tripura, particularly in the aftermath of land reform, is that homes are built on homesteads that are, broadly speaking, between 0.2 and 0.4 acres in size. This is a substantial area, and homestead cultivation can become an important arena of income and nutritional enhancement.

The establishment of the TTAADC in order to provide autonomy to the tribal-dominated areas of the State was a bold step, and one that addressed the actual and perceived neglect of tribal peoples by providing a new instrument of self-government.

stantially between 1993–94 and 2001–02. The increase in spending on education was higher than the growth of GSDP; as a result, the State maintained its share of spending on education at above 7 per cent of GSDP.

7.1.4 Agricultural and Plant Resource Potential

Natural conditions in Tripura are ideal for diverse patterns of cultivation, for the cultivation of cereals, pulses and other food crops, of plantation crops, and of a rich range of agricultural and horticultural crops. Tripura's forests can become major economic and ecological assets of the people of the State.

7.1.5 Land Reform

The basis for future growth of the rural economy has been laid through land reform. An important feature of rural Tripura, particularly in the aftermath of land reform, is that homes are built on homesteads that are, broadly speaking, between 0.2 and 0.4 acres in size. This is a substantial area, and homestead cultivation can become an important arena of income and nutritional enhancement.

7.1.6 Panchayati Raj

The State has been a pioneer in the movement for democratic decentralization, and has an active three-tier structure of elected Panchayati Raj Institutions (PRIs) as well as elected Urban Local Bodies (ULBs). Powers and resources have been devolved to these institutions and they have been active in development initiatives.

7.1.7 Tripura Tribal Areas Autonomous District Council (TTAADC)

The establishment of the TTAADC in order to provide autonomy to the

tribal-dominated areas of the State was a bold step, and one that addressed the actual and perceived neglect of tribal peoples by providing a new instrument of self-government. After the recent elections to village development committees with one-third representation for women, the people's participation in local development will be stronger in the ADC areas.

7.1.8 Status of Women

The number of females per 1,000 males in Tripura is higher than the corresponding ratio for India as a whole. There have been steady improvements in female life expectancy (with corresponding reductions in female mortality). Literacy rates among girls and women have risen and exceed the corresponding national figures. Women's work participation rates are high among tribal communities. On average, wages for agricultural work are equal for men and women. The data indicate a relative absence of discrimination against girls in food and nutritional intake. Women are active participants in elected local bodies, in political movements and in the fight against insurgency. All these suggest furthering of the goal of gender equality.

These strengths and achievements, taken together with the commitment of the people and Government, have led to genuine progress in the achievement of human development goals, and to providing a firm basis for further advance.

7.2 Challenges and Problems

Nevertheless, the road ahead is still beset by problems and challenges posed by a variety of historical, socioeconomic and political circumstances.

7.2.1 *Infrastructure and Connectivity*

Historical circumstances and continued neglect by successive Central Governments have left Tripura infrastructure-poor with limited and unreliable connectivity between the State and the rest of the nation. Sixty years after Independence, Agartala remains without a railway line, and there is only a single two-lane road link between Agartala and the rest of the country. The State faces power shortages while its own natural gas wealth remains underexploited. Given the special features of Tripura's location, inadequate physical infrastructure - acutely inadequate in transport and communication – is a major obstacle to socio-economic development and progress in human security.

7.2.2 Economic Structure and Unemployment

Tripura has a relatively undiversified economy with a low manufacturing base. High and rising levels of unemployment, particularly among youth, are a matter of urgent concern. The State requires institutions to enhance scientific, technical and vocational skills among its youth.

While per capita State Domestic Product (SDP) has grown rapidly (the rate of growth has been among the fastest in India), the level of per capita income remains low and below the national average. As a consequence of national policy, some of the achievements with respect to reductions in income poverty and inequality suffered a setback in the 1990s, a period when economic growth was also unevenly distributed across regions. The majority of the rural population remains below the official poverty line.

7.2.3 The Land Constraint

The fact that 60 per cent of the State is under forests is, in important respects, an asset for the people of Tripura. At the same time, it presents a real challenge for development policy, since policy that does not directly involve forests has limited land area on which to proceed. The new legislation, the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006, has significant implications for land-use in forest areas, as well as for the livelihoods of forest-dwelling peoples.

7.2.4 Insurgency

Violent and divisive conflict triggered by armed insurgent groups is, of course, an incalculable burden on the State and its people. Such conflict affects human development directly by curtailing human security, by bringing fear and death into people's everyday lives. There are also innumerable indirect effects of such violence including the closure of schools and health facilities, the resources spent on policing, and the costs of displacement.

7.2.5 The Central Government and State Resources

The State depends heavily on resources from the Government of India, and reductions in Central transfers are immediately reflected in reductions in public spending. The experience of the last few years, as a result of the Tenth and Eleventh Finance Commissions, has been of a cutback in transfers from the Central Government. The introduction of the Fiscal Responsibility and Budget Management Act has imposed further constraints on the State Government that will have an adverse impact on the financing of human development.

Historical circumstances and continued neglect by successive Central Governments have left Tripura infrastructure-poor with limited and unreliable connectivity between the State and the rest of the nation.

The fact that 60 per cent of the State is under forests is, in important respects, an asset for the people of Tripura. At the same time, it presents a real challenge for development policy, since policy that does not directly involve forests has limited land area on which to proceed.

THE WAY FORWARD 139

Violent and divisive conflict triggered by armed insurgent groups is an incalculable burden on the State and its people.

Such conflict affects human development directly by curtailing human security, by bringing fear and death into people's everyday lives.

With the introduction of the Fiscal Responsibility and Budget Management Act, further constraints have been imposed on the State Government that will have an adverse impact on the financing of human development.

In such a situation, it is unrealistic to expect that elected local bodies can, either through devolution from the State Government or by mobilizing additional resources on their own, augment their financial resources significantly. The Centre needs to provide adequate support to what is really a model effort to promote people's participation in development, informed by a process of learning from the experiences of Kerala, West Bengal and elsewhere, as well as from the State's own experience.

7.2.6 Disparities between People of the Scheduled Tribes and Others

At various places in this Report, we have documented the gap between development achievements among people of the Scheduled Tribes (STs) and others. For example, while work participation rates are high among men and women of the STs, data on occupational structure show lower levels of occupational diversity and mobility among the tribal people. Most tribal people live in hilly and forested areas, with limited access to fertile land. Earlier chapters described the continued dependence on jhum cultivation, the returns from which are inadequate for subsistence. Assetpoverty is widespread among tribal families (and many tribal households still do not have full title to land). Tribal populations are characterized by higher-than-average sex ratios and lower-than-average levels of discrimination against girls with respect to consumption. Nevertheless, there are large deficiencies of food and nutrient intake, particularly with respect to non-cereal items of food, among the tribal people. The data showed acute deficiency with respect to the consumption of fats and oils, milk and

milk products, sugar and jaggery, and pulses and legumes. Given the geographical isolation of tribal settlements and settlement patterns, Tripura must also deal with a legacy of deprivation with respect to basic household amenities (including *pucca* housing, and access to safe drinking water and facilities for the sanitary disposal of waste).

7.2.7 Regional Disparities

The pattern of social disparity overlaps with that of regional disparity. The creation of a separate district of Dhalai arose from a recognition of the need to focus specifically on problems of regional underdevelopment. In 2001, the income per capita in Dhalai was 78 per cent of the income per capita in West District. Dhalai scored lower than all the other districts in terms of the proportion of households with a primary school within 1 km of their habitation (a measure of the dispersal of school infrastructure). Dhalai was, in fact, the least served on all major indicators of infrastructure provision.

7.3 Priorities for Planning

The list of constraints and challenges makes clear the issues to be addressed in the future. It is not the task of this *Report* to prepare a comprehensive plan for human development. However, we would like to reiterate the priorities in planning for human development.

• Raise the levels of attainment in respect of education, health and nutrition among *all* people of the State. In the sphere of education, the Government has to ensure universal school enrolment and retention, particularly in upper primary and senior schools. This requires increased investments in the expan-

- sion of school infrastructure with at least 6 per cent of GSDP to be spent on elementary education. In the sphere of health, major expanpsion of health-care infrastructure is required to ensure an effective, open-access health-care system. Resources have to be allocated for increased expenditure on health. including through partnerships with the private sector. Programmes for immunisation and nutritional support to mothers and children have to be strengthened. Success in sanitation work has to be followed by improvements in the supply of drinking water, investment in the construction of basic drainage and better housing.
- Prepare an *infrastructure plan* to address the problem of transport and communication links between Tripura and the rest of India. Historical and geographical factors and fiscal imperatives require that the Central Government play a leading

- role in implementing this plan.
- Develop an *employment strategy* that ensures growth of skilled employment and expansion of sustainable livelihoods. The strategy must aim to reduce youth unemployment, and to equip young men and women with modern skills. It should also develop new rural-based farm and non-farm livelihoods, including forest-based livelihoods. The employment growth must be based on growth in *production* – that is, economic growth that involves a growth of agricultural and agriculture-related production, rural non-agricultural production, and different types of industrial production. A transformation of the scientific and technological basis of the economy must be a medium- and long-term objective of State policy.
- Ensure *people's participation* in the planning and implementation of policies for human development.

It is unrealistic to expect that elected local bodies can, either through devolution from the State Government or by mobilizing additional resources on their own, augment their financial resources significantly. The Centre needs to provide adequate support to what is really a model effort to promote people's participation in development.

THE WAY FORWARD 141

GLOSSARY AND ABBREVIATIONS

bargadar	sharecropper	NFHS 2	National Family Health Survey 1998–99
khas	Government-owned land	NFHS 3	National Family Health Survey 2005-06
lungas	narrow valleys	NLFT	National Liberation Front of Tripura
jhum	shifting cultivation	NNMR	Neo-Natal Mortality Rate
jhumia	one who practises jhum	NREGS	National Rural Employment Guarantee Scheme
ojha	traditional healer	NSDP	Net State Domestic Product
tillas	small hillocks	NSS	National Sample Survey
		OBC	Other Backward Classes
AAY	Antyodaya Anna Yojana	PACS	Primary Agricultural Cooperative Society
ADC	Autonomous District Council	PDS	Public Distribution System
AIHPH	All India Institute of Hygiene and Public Health	PER	Public Expenditure Ratio
AISES	All India School Education Survey	PRI	Panchayati Raj Institution
APL	Above Poverty Line	RBI	Reserve Bank of India
ATTF	All Tripura Tiger Force	RCH	Reproductive and Child Health survey
BMI	Body Mass Index	SAARC	South Asian Association for Regional
BPL	Below Poverty Line		Cooperation
CBR	Crude Birth Rate	SAR	Social Allocation Ratio
CDR	Crude Death Rate	SC	Scheduled Caste
CPI(M)	Communist Party of India (Marxist)	SDP	State Domestic Product
CRPF	Central Reserve Police Force	SGRY	Sampoorna Gramin Rozgar Yojana
CSO	Central Statistical Organization	SGSY	Swarnajayanti Gram Swarozgar Yojana
DDP	District Domestic Product	SSRY	Swarnajayanti Shahari Rozgar Yojana
DISE	District Information System for Education	SPR	Social Priority Ratio
FRBM Act	Fiscal Responsibility and Budget Management	SRS	Sample Registration System
	Act	ST	Scheduled Tribe
GDI	Gender-related Development Index	TFC	Twelfth Finance Commission
GMP	Gana Mukti Parishad	TFR	Total Fertility Rate
GSDP	Gross State Domestic Product	TLR&LR Act	Tripura Land Revenue and Land Reforms Act
HDI	Human Development Index	TNV	Tripura National Volunteers
	Human Expenditure Ratio	TSR	Tripura State Rifles
HPR	Human Priority Ratio	TTAADC	Tripura Tribal Areas Autonomous District
	Integrated Child Development Services		Council
IMR	Infant Mortality Rate		Tripura Upajati Juba Samiti
	Indigenous National Party of Tripura		United Bengali Liberation Front
	Joint Forest Management		United Nations Development Programme
MMR	Maternal Mortality Rate		Urban Local Body
NABARD	National Bank for Agriculture and Rural		Under Five Mortality Rate
	Development	ZSS	Zilla Saksharata Samiti (District Literacy
NFHS 1	National Family Health Survey 1992-93		Committee)



Background Papers

- Athreya, Venkatesh B., 2005, 'Democratic Decentralization in Tripura'.
- Bandopadhyaya, Minakshi Sen (with inputs from Ratan Chakraborty), 2005, 'Status of Women'.
- Chanda, A.K., 2006, 'Background and Methodology for District Domestic Product'.
- Chakravarty, Indira, 2006, 'Health and Nutrition'.
- Chakravarti, Mahadev, 2005, 'Insurgency and Human Security in Tripura: Past and Present'.
- Chavan, Pallavi, 2005, 'A Note on Banking'.
- Choudhury, Mita, 2006, 'Public Expenditure on Human Development in Tripura'.
- Dasgupta, Malabika, 2005, 'An Overview of the Economy of Tripura'.
- Guha Roy, Samir, 2005, 'Demographic Scenarios for Tripura'. Himanshu, 2005, 'Poverty and Inequality in Tripura'.
- Prasad, Archana, 2005, 'Forestry and Tribal Development'.
- Rawal, Vikas, 2006, 'Mass Education and Literacy: Achievements of Tripura'.
- Sinha, Amitabha, 2005, 'Infrastructure'.

Village Survey

Foundation for Agrarian Studies, 2006, 'Survey on Education and Public Distribution System in Selected Villages of Tripura, 2005'. Survey design and supervision: V.K. Ramachandran, V. Surjit and Aparajita Bakshi. Data entry and processing: Aparajita Bakshi, Niladri Sekhar Dhar, Paramita Ghosh and V. Surjit. Field investigation: Aparajita Bakshi, Jibesh Chandra Das, Manas Deb Barma, Rupa Deb Barma, Sabita Deb Barma, Sukalyani Deb Barma, Niladri Sekhar Dhar, Paramita Ghosh, Parikhit Kalai, V.K. Ramachandran, Biplab Sarkar and V. Surjit.

References

- All India Institute of Hygiene and Public Health, 1999, National Pilot Programme on Control of Micronutrient and Malnutrition, Kolkata.
- All India Democratic Women's Association (AIDWA), 2000, Women against Terrorism: The Tripura Experience, New Delhi.
- Annan, Kofi, 2000, 'We the People: The Role of the United Nations in the 21st Century', United Nations, New York.

- Banerjee Asis, Malabika Dasgupta and Omkar Prasad Roy, 1986, 'The Importance of Forests in the Economic Life of Jhumias of Tripura', in Malabika Dasgupta *et al.* (eds.), *Forestry Development in North-East India*, Omsons Publications, Guwahati.
- Bhattacharya Suchintya, 1992, From Jhuming to Tapping, Department for Welfare of Scheduled Tribes, Government of Tripura.
- Brass, W., 1975, Methods for Estimating Fertility and Mortality from Limited and Defective Data, Laboratories for Population Statistics, University of North Carolina, Chapel Hill.
- Central Statistical Organisation (CSO), 1998, State Net Domestic Product 1980–81 Series, New Delhi.
- Chakravarti, Tapati, 1998, Economic Participation of Rural Tribal Women of Tripura: A Case Study, Government of Tripura, Tripura State Tribal Cultural Research Institute and Museum, Tripura Printers and Publishers Private Ltd., Agartala.
- Chakarvarti, Tapati and Manidip Roy, 2005, A Situational Analysis of Women in Tripura, prepared for the National Commission on Women, Ecoscience Society of Tripura, Agartala.
- Deb Burman, S.B.K., 1971, A Study of the Jhum and Jhumia Rehabilitation in the Union Territory of Tripura, Government of Tripura, Agartala.
- Datta, Surjit K., 1998, 'Local Self-Government Institutions in Tripura', in B.P. Maithani (ed.), Local Self-Government System in North-East India: An Appraisal, National Institute for Rural Development, Hyderabad.
- El-Badry, M.A., 1961, 'Failure of enumerators to make entries of zero errors in recording childless cases in population censuses', *Journal of the American Statistical Association*, Vol. 56, No. 296.
- Gan-Chaudhuri, 1980, *Tripura (The Land and its People)*, Leeladevi Publications, Delhi.
- Ganguly, J.B., 1969, Problem of Jhumias in Tripura, Calcutta.
- Ganguli, J.B., 1983, The Benign Hills: Study in Tripura's Population Growth and Problem, Tripura Darpan Prakashan, Agartala.
- Guha Roy, S., 1987, Population Perspective of North East India in 2000 AD, in B. Dutta Roy (ed.), North East India 2000 AD: Perspective for Futurology, Deep and Deep Publications, New Delhi.
- Guha Roy, S., 2004, 'The Demographics of the Indian Older Population', in P.V. Ramamurti and D. Jamuna (eds), *Handbook*

BIBLIOGRAPHY 143

- of Indian Gerontology, Serials Publications, New Delhi.
- Guha Thakurta, S.N., 1999, *Tripura*, National Book Trust, New Delhi, India.
- Hunter, W.W. [1873] 1973, A Statistical Account of Bengal, Vol. VI, D.K. Publishing House, Delhi.
- Mahbub ul-Haq, 1998, 'Human Rights, Security and Governance', Peace & Policy, Journal of the Toda Institute for Global Peace and Policy Research, Dialogue of Civilizations for World Citizenship, Vol. 3, No. 2.
- International Institute of Population Sciences, 'National Family Health Survey, NFHS-2 1998–1999, India and North Eastern States', available at www.nfshindia.org.
- International Institute of Population Sciences, 'National Family Health Survey, NFHS-3 2004–05, Factsheets', available at www.nfshindia.org.
- Karat, Brinda, 2000, 'Introduction' in AIDWA, Women against Terrorism.
- Karat, Prakash, 1993, 'The Concept of Regional Autonomy and its Concrete Application in India', *The Marxist*, Vol. 11, No. 2, April–June, pp. 19–31.
- Katyal, R.P., M.G. Sardana and J. Satyanarayana, 2001, 'Estimates of District Domestic Product', available at http://data.undp.org.in/hdrc/dis-srs/Domestic/estimatesofdistrictDP.pdf.
- Menon, K.D. (ed.), n.d., Tripura District Gazetteers of India, Tripura.
- Nandy, S.N. and K.S. Rao, 2001, 'Census 2001: Population Dynamics of Indian Himalaya', *ENVIS Bulletin of Himalayan Ecology and Development*, Vol. 9, No. 2.
- National Bank for Agriculture and Rural Development (NABARD), 1998, Dossier on Cooperatives 1998, Mumbai.
- National Bank for Agriculture and Rural Development (NABARD), Statistical Statements relating to Cooperative Movement in India, various issues.
- National Bank for Agriculture and Rural Development (NABARD), 1981, 1991, 2001, Cooperative Credit Structure: An Overview, Government of India.
- Ogata, Sadako, 2003, Outline of the Report of the Commission on Human Security, available at www.humansecurity-chs.org.
- Rajan, S.I. and P. Mohananchandran, 1998, 'Infant and Child Mortality Estimates – Part I', Economic and Political Weekly, Vol. 33, No. 19.
- Rajaraman, I., L. Chakraborty and D. Jain, 2004, 'Restructuring the Public Finance of Tripura', Project Report, National Institute of Public Finance and Policy, New Delhi.

- Ramakumar, R. (2005), 'Socio-economic Characteristics of Agricultural Workers: A Case Study of a Village in the Malabar Region of Kerala', Ph.D. thesis, Indian Statistical Institute, Kolkata.
- Reserve Bank of India, 1961, Report on the Trend and Progress of Banking in India 1961, Mumbai.
- Reserve Bank of India, 2004, Handbook of Statistics on Indian Economy 2002-03, Mumbai.
- Reserve Bank of India, *Banking Statistics*, various issues, Mumbai. ORG–MARG Research Limited, 2000, *Rapid Household Survey RCH Project II*, *Tripura* 1999, New Delhi.
- Sarma, Atul, 2005, 'Why the North-eastern States Continue to Decelerate', Man and Society, A Journal of North East Studies, Vol. 2, Number 1 (Spring), Indian Council of Social Science Research, North Eastern Regional Centre, Shillong, Meghalaya.
- Sastry, N.S., 2003, 'District Level Poverty Estimates: Feasibility of Using NSS Household Consumption Expenditure Survey Data', *Economic and Political Weekly*, Vol. 38, No. 4 (25 January).
- Singh, K.S., *India's Communities*, A-G, 1998, Oxford University Press, New Delhi.
- Singh, K.S., *India's Communities*, H-M, 1998, Oxford University Press, New Delhi.
- Singh, K.S., *India's Communities*, N-Z, 1998, Oxford University Press, New Delhi.
- Stewart, Frances, 'Development and Security', available at www. preparingforpeace.org/stewartdevel.htm.
- Swaminathan, Madhura, 2000, Weakening Welfare, Leftword Books, New Delhi.
- Tripura State Council for Science and Technology, 1999, *Tripura* in the Twenty First Century, Agartala.
- Trussel, T.J., 1975, 'A Re-Estimation of the Multiplying Factors for the Brass Technique for Determining Childhood Survivorship Rates, *Population Studies*, Vol. 29, No. 1, pp. 97–107.
- United Nations, 1982, *Model Life Tables for Developing Countries*, Population Studies No. 77, New York.
- United Nations, 1983, Indirect Techniques for Demographic Estimation, Manual X, New York.
- United Nations Development Programme (UNDP), 1990, Human Development Report 1990, New York.
- United Nations Development Programme (UNDP), 1991, *Human Development Report 1991*, New York.
- United Nations Development Programme (UNDP), 1995, Human Development Report 1995, New York.



Annexure I:

Estimation of District Domestic Product (DDP)

The first-ever estimates of the District Domestic Product (DDP) for the four districts of Tripura were prepared for this *Report* by the Directorate of Economics and Statistics.¹ Given data limitations, the exercise was undertaken for a few selected years.

Just as in the case of State Domestic Product (SDP), the standard methodology for estimation of DDP is based on the income-originating approach (Katyal, Sardana and Satyanarayana 2001). It is difficult to estimate DDP on the basis of the income-accruing (to residents) approach, given the free flow of goods and services across district boundaries. In the case of the commodity-producing sectors (primary sectors and registered manufacturing), estimates of DDP are based on production. The task of estimating Gross Value Added (GVA) is more difficult for the non-commodity-producing sectors (e.g., tertiary sector) and the unorganized components of the commodity-producing sectors. In the latter case, State-level estimates are often assigned to districts on the basis of apposite district-level indicators (such as size of work force).

The following assumptions were made for each sector/activity to calculate district estimates of GVA.

Agriculture

Estimates of the gross value of output of the agriculture sector were estimated, based on production, for each of the four districts, and then input values were deducted.

Animal Husbandry

In the case of animal products, the State-level GVA was allotted to districts in proportion to the number of animals of each category. The State-level increment in stock for each category of animals and birds was allocated to the districts in the same proportion.

Fishing

In the case of fishing, the district-wise value of output was worked out on the basis of production data for inland fisheries. There are no marine fisheries in the State but other categories like sun-dried fish were estimated on the basis of data available at the district level. The share of repair and maintenance is as per the ratio used for the SDP.

Forestry and Logging

The economic activities of the forestry and logging sub-sector are estimated using the production approach as at the State level. Data are not available for Dhalai for 1993–94 (since it was created in 1995 by bifurcating the North and South Districts). So, we have calculated the DDP of the forestry sector based on production of major and minor forest produce in subsequent years, and then applied a similar ratio to the forestry sector output of 1993–94. For the logging sub-sector, i.e. fuel and firewood, estimates are based on the consumption of firewood multiplied by the concerned district-level price.

Mining and Quarrying

The economic activity covered under this sub-sector comprises petroleum and natural gas. In Tripura, natural gas is the only major mineral and data on production are supplied by the Indian Bureau of Mines, Nagpur. The district-wise estimates of natural gas have been arrived at by a location approach, i.e. generation of value from the concerned district. The data for the West District were verified with the Oil and Natural Gas Corporation (ONGC).

Manufacture

Registered manufacturing

All products and by-products of factories registered under the Factories Act, 1948, are included. The value of output of the factory sector at the State level has been distributed across districts according to the number of factories registered in each district.

Unregistered manufacturing

Unregistered manufacturing covers all units that are not covered under the registered manufacturing sector. The SDP for the unregistered manufacturing sector has been allocated to districts in proportion to the work force in a district as reported in the Census of Small Scale Industry (SSI) for the SSI sub-sector and work force in non-household manufacturing and processing for the non-SSI sub-sector.

Electricity and Water Supply

Activities relating to generation, transmission and distribution of power are covered under the electricity sub-sector. Activities associated with the collection, purification and distribution of water excluding the operation of irrigation are covered under the water supply sub-sector. State-level estimates for the electricity sub-sector for a particular year have been distributed to districts in the ratio arrived at for the manufacturing sector since district-wise data on

ANNEXURES 145

 $^{^{\}rm 1}$ This note and the relevant estimates were prepared by a team led by A.K. Chanda.

salary and wages of the power sector are not available from the State Electricity Board.

Gas

Value added from bio-gas at the State level has been distributed in proportion to the number of bio-gas plants in each district, as reported by the Department of Science and Technology.

Construction

At the State level, estimates of SDP for construction activity are prepared separately for the public sector, residential buildings, non-residential buildings as well as residual sectors. Owing to problems of data availability on these separate heads under the construction sector, the aggregate State-level estimates have been allocated to districts on the basis of the work force in construction in each district, as per the Fourth Economic Census.

Trade, Hotels and Restaurants

Activities in this sector include wholesale and retail trade, purchase and sale agents including brokers and auctioneers, and services rendered by hotels, lodging places, restaurants, cafes, etc. The SDP from public sector trade has been allotted to districts on the basis of the proportion of workers of the Tripura Handloom and Handicrafts Development Corporation Limited (THHDCL) and Tripura Small Industries Corporation Limited (TSICL) in each district. Regarding the private sector, both organized and unorganized, the district-level allocation of SDP has been made on the basis of the work force engaged in such activities as per the Fourth Economic Census of 1998.

$Transport, Storage\ and\ Communications$

Transport

For railway transport, estimates at the State level are provided by the Central Statistical Organization (CSO), New Delhi, and these have been allotted to the districts in proportion to the track-length in the respective district.

Transport by other means includes road transport, both mechanized and non-mechanized, water transport and air transport, as well as services incidental to transport. The SDP for transport by other means has been allocated to each district on the basis of the work force of the transport sub-sector in each district, as per the Fourth Economic Census, 1998.

Storage

The State-level estimate has been allotted to districts on the basis of capacity of godowns in the respective districts (as reported by the Food and Civil Supplies Department).

Communications

State-level estimates are supplied by CSO, New Delhi, and these have been allocated to districts on the basis of the number of telecommunication centres in the respective districts.

Banking and Insurance

State-level estimates, provided by CSO, are distributed on the basis of the number of banking institutions in each district.

Real Estate, Ownership of Dwellings, Business and Other Services Real estate

The State-level estimates of the real estate sub-sector have been distributed across districts in proportion to the area under tea gardens in each district.

Ownership of dwellings

State-level estimates have been allocated to districts in proportion to the number of dwellings (rural/urban, separately) in each district, based on Census data.

Business services

The State-level estimates have been allocated to districts in proportion to the work force engaged in business services in a district. *Legal services*

The State-level estimates have been allocated to districts in proportion to the number of advocates in a district (information from the State Bar Council/Bar Library).

Public administration

The State-level estimates have been allocated to districts in proportion to the number of State government employees in a district. *Other services*

The State-level estimates have been allocated to districts in proportion to the combined ratio of work force as per the Fourth Economic Census, 1998 and the Census of 2001.

Conversion of Gross Value Added (GVA) to Net Value Added (NVA)

For deriving estimates on a net basis, consumption of Fixed Capital (CFC) or depreciation has been subtracted from the gross value. The value of CFC at the State level has been obtained from the CSO, and this has been allotted to all districts on a pro-rata basis.

Annexure 2:

Calculation of the Human Development Index (HDI) and Gender-related Development Index (GDI)

We report here the exact method used to calculate the Human Development Index (HDI) and Gender-related Development Index (GDI), and the assumptions made for the same. The broad methodology follows the approach taken in various *Human Development Reports* of the UNDP.

Calculation of HDI

Step I: Calculation of Dimension Indices

The four key parameters, namely, life expectancy at birth, literacy rate, gross enrolment ratio and per capita income, are normalized and converted to a scale of 0 to 1.

The following assumptions have been made.

• The education index (for the districts of Tripura) is a weighted average of two indicators.

Adult literacy (for persons aged 15 years and above), from the Census of 2001 which is given a weight of 2/3, and takes a minimum value = 0 and maximum value = 100.

The school enrolment ratio for the age group 6–14 years, from the Census 2001 which is given a weight of 1/3 weight, and takes a minimum value = 0 and maximum value = 100

 The education index for the North Eastern States is based on one indicator alone.

Literacy rate (for persons aged 7 years and above), from the 1991 and 2001 Censuses (minimum value = 0, maximum value = 100).

• The health index is based on a single indicator.

Life expectancy at birth (minimum value = 25 years, maximum value = 85 years).

For the districts of Tripura, the estimates of life expectancy at birth are those prepared by Guha Roy (2005) using Census data.

For inter-State comparisons, the estimates of life expectancy at birth are those prepared by the International Institute of Population Studies, Mumbai, using Census data.

Life expectancy at birth for India in 1991 and 2001 is taken from the Sample Registration System (SRS).

 The income index is based on a single indicator, per capita income (SDP).

For income, the minimum value is the per capita income of Bihar in 2001 and the maximum value is the per capita income of Goa in 2001. For 1993–94, the maximum and minimum values were deflated to 1993–94 prices.

For the States of the North East, data on per capita GSDP have been taken from the CSO.

For the districts of Tripura, we have used the estimates of DDP prepared by the Directorate of Economics and Statistics, Government of Tripura.

In some *Human Development Reports*, a logarithmic transformation of incomes is used, in order to give a higher weight to lower values of income. Since incomes in India, even in the State with the highest per capita income, are not high by international standards, we have not taken a logarithmic transformation of incomes.

Step II: Calculation of HDI

HDI is a simple average of the three indices.

HDI = 1/3 (life expectancy index) + 1/3 (education index) + 1/3 (income index)

Calculation of GDI

Step I

The additional procedure involved in estimating GDI is to make separate estimates of each dimension index for men and women.

- For the education index, data on the indicators are available for men and women separately. For both, the minimum and maximum values remain unchanged.
- For the health index, values of life expectancy for males and females are available separately.

Step II

To estimate the income index for men and women, the procedure followed is outlined below.

First, the share of men and women in total income is calculated as follows.

Female share of income =
$$\frac{W_f^* EA_f}{W_f^* EA_f + EA_m}$$

Male share of income = 1 - female share of income

where W_f is the ratio of female to male agricultural wages (based on agricultural wages for rural labour households taken from Rural Labour Enquiry, 1993–94 and 1999–2000); EA_f is the share of women in the total workforce; and EA_m is the share of men in the total workforce (based on Censuses of 1991 and 2001).

Using the share of men and women in total income, income indices for men and women were calculated as follows.

Income Index for Women	=	Female share of income Share of women in population	本	Aggregate income index
Income Index for Men	=	Male share of income Share of men in population	*	Aggregate income index

where aggregate income indices are the income indices calculated for the HDI.

Step III

An equally distributed index is computed for each of the dimension indices, that is, for the education, health and income indices.

The equally distributed index (EDI) is computed so as to take note of male–female disparities. The equation used is as follows.

EDI = [{Female population share* (Female index)}^{1-\varepsilon}}+ {Male population share* (Male index)}^{1-\varepsilon}}]^{1/1-\varepsilon}

where ε measures the degree of aversion to inequality (or male-female disparity).

Following convention, we use $\epsilon=2$. This reduces the equation to a harmonic mean of the male and female indices.

$$EDI = \frac{1}{(\frac{\text{Female population share}}{\text{Female index}}) + (\frac{\text{Male population share}}{\text{Male index}})}$$

Step IV

Calculation of the Gender-related Development Index (GDI), as follows:

GDI = 1/3 (EDI for Education) + 1/3 (EDI for Health) + 1/3 (EDI for Income)

Annexure 3:

List of Blocks Wholly in the Autonomous District Council

The following is the district-wise list of blocks that fall wholly under the jurisdiction of the Autonomous District Council (ADC). *West District*: Hejamara, Jampuijala, Mandai, Mungiakami, Padmabil, and Tulashikhar blocks.

South District: Ompinagar, Kila, Karbuk and Rupaichari blocks. Dhalai: Chhamanu, Salema, Ambassa, Manu and Dumburnagar blocks

North District: Damcchara, Pencharthal, Dasda and Jampuii Hills blocks.

Annexure 4:

Estimation of Birth Rates by Reverse Survival Method*

Estimates of vital rates (birth rates, death rates) are not available at the district level for Tripura. Due to an inadequate overall sample size, the Sample Registration System (SRS) does not estimate vital rates at the district level. Despite recent improvements, the civil registration system neither has complete coverage nor is fully

ANNEXURES 147

^{*} Annexure 4 is from Guha Roy (2005).

reliable, and cannot be used for accurate estimates of births and deaths at any administrative level. Therefore, for this *Report*, indirect estimation techniques are used, as for example, the 'Reverse Survival' method, to estimate birth rates (United Nations 1983).

In addition to data on the age and sex distribution of the population, this method requires estimates of person-years lived from a suitable life table. Our estimates have used the South Asia Pattern from the *United Nations Model Life Tables for Developing Countries*, 1982.

The computational procedure is as follows.

1. Estimation of growth rates (1991–2001) for age groups 0–4 and 5–9. The growth rate (r) is estimated from the Census population size at two points in time, t_o and t₁.

$$r = \ln [N_1 / N_0] / (t_1 - t_0),$$

where N_1 and N_0 are the populations aged 0–4 and 5–9 at time t_1 and t_2 respectively.

- 2. Estimation of growth rates of total population during 1991–2001, as in step 1.
- 3. Estimation of mid-period populations. Since this method is used for estimation of an annual average birth rate for the periods from t_o –5 to t_o and from t_o –10 to t_o –5, t_o being the date of enumeration (2001), an estimate of the total population at the mid-points (N_M) of these periods is required. The simplest method is to calculate N_M

$$N_M = N_0 \exp \left[r \left(t_M - t_0\right)\right]$$

where N_o is the total population of 2001. Thus, the midperiod of 1996–2001 is 1.7.1998 (t_M); t_o is 1.3.2001 and $t_M - t_o = -2$ years 8 months = -2.67 years.

Similarly for the mid-point of 1991–96, $t_{\rm M} - t_{\rm o} = -7.67$ years.

4. Estimation of annual average births for two five-year periods preceding the 2001 Census. The annual average number of births for the first period (1996–2001), from t_o – 5 to t_o, is

$$B_1 = {}_{5}N_{0} / {}_{5}L_{0}$$

ANNEXURE TABLE I Estimated annual average birth rates for 1991-96 and 1996-2001, Tripura, by district

District/State	Birth rate per 1,000 population						
		1991-96			996-200) I	
	Males	Females	Persons	Males	Females	Persons	
West District	29.5	29.9	29.7	19.1	19.4	19.2	
South District	31.5	30.6	30.8	21.5	22.1	21.8	
Dhalai	26.8	29.3	28.1	19.9	20.0	19.9	
North District	31.2	31.4	31.3	21.9	22.5	22.2	
Tripura	29.6	30.3	29.9	20.6	21.0	20.8	

where ${}_{5}N_{\circ}$ is the population, in age group 0–4, and ${}_{5}L_{\circ}$ is the life table estimate. For the period from t_{\circ} – 10 to t_{\circ} – 5 (1991–96), the equivalent average number of births is

$$B_2 = {_5N_5}/{_5L_5}$$

where ${}_{5}N_{5}$ is the population in age group 5–9 and ${}_{5}L_{5}$ is the life table estimate of person-years in the age group 5–9.

5. Estimation of annual average birth rates for the two five-year periods (1991–96 and 1996–2001). The birth rate for each period is obtained by dividing B_1 and B_2 (step 4) by the corresponding mid-period populations, N_M (step 3).

The results are given in Annexure Table 1.

Annexure 5:

Estimation of Mortality Rates by Indirect Methods*

The selected mortality parameter is the infant mortality rate (IMR) as given in the Sample Registration System (Registrar General, India, 2004), and the IMR is assumed to be approximately equivalent to the life table probability of dying q(1). On account of wide year-to-year fluctuations, due to inadequate sample size for a small State like Tripura, the IMRs available to us were based on the three-year period 2000–02. The most popular indirect method for estimation of IMR is the conversion of the proportions of children dead among those ever born into the life table probability of dying from birth to age a, q_a . We adopted the simplest method of approximating IMRs by selected model life table values, $_1q_o$, of probability of children dying before age 1.2 The approximated values are shown in Chapter 3.

Data on proportions of children dead among those ever born to mothers in standard five-year age groups are taken from the National Family Heath Survey (NFHS) to get an improved estimate independently of the life table probability of dying from birth to a specified age. A simplified version of the Brass (1975) method, based on the following equation (Rajan and Mohana Chandran 1998), was used.

$$K_i = A_i + B_i (P_1/P_2) + C_i (P_2/P_3)$$

in estimating $q_a = K_i D_i$,

where q_a = probability of dying from birth to age a; D_i = proportion of children dead in the ith age group of mother; P_1/P_2 , P_2/P_3 = ratios of average parities;

where A_i, B_i and C_i are regression coefficients for the ith age group tabulated by Trussel (1975).

Using the above method, the improved estimates of IMR for males and females were 41 and 40 respectively. In terms of life expectancy at birth (°e_o), these correspond to 71 years for males and 74 years for females in the model life tables. We also examined the earlier actuarial life table for the region and the °e_o values for

^{*} Annexure 5 is from Guha Roy (2005).

² The 2001 census data on proportions of children dead were not readily available at the time of estimation. Moreover, time constraint did not permit the essential elaborate corrections of proportions of children ever born by the well-known El-Badry (1961) method.

ANNEXURE TABLE 2 **Estimated abridged life tables for Tripura, 2000–02, males and females**(based on South Asian Patterns of United Nations Model Life Tables for developing countries)

Age	Males					Fem	nales	
(x)	q(x)	<i>I(x)</i>	L(x)	°e _x	q(x)	<i>l(x)</i>	L(x)	°e _x
0	.0413	100000	96535	71.0	.0400	100000	96679	74.0
1	.0135	95869	380282	73.1	.0118	95998	381126	76.1
5	.0033	94577	472103	70.0	.0024	94870	473778	73.0
10	.0016	94264	470938	65.3	.0011	94641	472949	68. I
15	.0021	94111	470075	60.4	.0041	94539	472374	63.2
20	.0025	93912	468987	55.5	.0017	94406	471648	58.3
25	.0032	93675	467649	50.6	.0021	94248	470774	53.4
30	.0040	93374	465988	45.8	.0028	94053	469649	48.5
35	.0060	93002	463719	40.9	.0041	93792	468071	43.6
40	.0099	92443	460129	36.2	.0066	93410	465641	38.8
45	.0169	91531	454146	31.5	.0107	92798	461730	34.0
50	.0304	89986	443695	27.0	.0190	91808	455086	29.4
55	.0510	87250	426013	22.8	.0331	90067	443542	24.9
60	.0866	82796	397278	18.8	.0583	87083	423775	20.6
65	.1332	75626	354246	15.4	.0980	82005	391360	16.7
70	.2012	65552	295903	12.3	.1593	73969	341966	13.3
75	.2858	52364	224763	9.8	.2435	62185	274356	10.3
80	.3899	37399	149953	7.7	.3678	47042	192173	
85	_	22816	137598	6.0	-	29741	173322	

Notes: q(x) = the probability of dying for an age interval x; I(x) = the number of survivors at exact age x.

L(x) = the number of years lived in an age interval x; $e_x = e_x$

the North East (Guha Roy 1987). Further, based on the mortality trend as given in the SRS and NFHS, we selected the life tables for Tripura from the model system with linear interpolation wherever necessary.

Following the above procedure, the district-level estimates of expectation of life at birth (0e_0) for 2001 are given in Chapter 1. The 0e_0 values for 1991 are simply the proportion of the corresponding values from the 2001 estimates, assuming a gain of 0.5 a year in expectation of life at birth. This is based on the experiences of mortality decline of several countries. The abridged life tables for 1991 and 2001 for the State as a whole are shown in Annexure Tables 2 and 3 respectively.

Estimation of death rates at the district level

As direct data on death rates are not available at the district level, mortality levels have been estimated by the application of indirect methods. However, relevant information such as on survivorship of children ever born, orphanhood or parent survival, widowhood

or spouse survival of a first marriage, and survivorship of brothers-sisters or sibling survival are not immediately available at the disaggregated level.

Death rates for the districts were estimated using the following procedure (Annexure Table 4).

We know that in a stationary population, the death rate (as well as birth rate) is the reciprocal of expectation of life at birth (°e_o). Symbolically, death rate = 1/°e_o. This will obviously not be the real population death rate.³ Assuming (based on actual analysis) 85 per cent completeness of death registration in the SRS, the State-level Crude Death Rates (CDRs) for 1991 and 2001 are inflated by a factor of 0.85; these adjusted death rates are divided by the corresponding life table death rates for Tripura to get adjustment factors, which are applied to each district CDR obtained from the respective life tables.

³ The life tables being generated from census age distributions, the age pattern of mortality may be similar to that of the real population, but not the level.

ANNEXURES 149

ANNEXURE TABLE 3 **Estimated abridged life tables for Tripura, males and females, 1991**(Based on South Asian patterns of UN Model Life Tables for developing countries)

Age		M	ales			Fem	ales	
	q(x)	l(x)	L(x)	⁰ е _х	q(x)	I(x)	L(x)	⁰ е _х
0	0.0618	100000	95181	66.0	0.0580	100000	95498	69.0
l	0.0254	93821	369243	69.3	0.0227	94197	371287	72.2
5	0.0060	91436	455812	67.I	0.0047	92057	459191	69.9
10	0.0028	90888	453802	62.5	0.0021	91620	457621	65.2
15	0.0035	90632	452387	57.7	0.0028	91428	456528	60.3
20	0.0042	90312	450637	52.9	0.0034	91173	455123	55.5
25	0.0053	89931	448507	48. I	0.0040	90868	453464	50.7
30	0.0065	89455	445881	43.3	0.0052	90505	451414	45.9
35	0.0096	88869	442365	38.6	0.0071	90038	448694	41.1
40	0.0150	88020	437050	33.9	0.0105	89402	444827	36.4
45	0.0243	86700	428661	29.4	0.0160	88466	439063	31.7
50	0.0414	84592	414896	25.1	0.0272	87050	429831	27.2
55	0.0659	81094	393055	21.0	0.0457	84684	414525	22.9
60	0.1072	75750	359646	17.3	0.0775	80810	389547	18.8
65	0.1606	67626	312133	14.1	0.1248	74548	350897	15.2
70	0.2362	56764	251056	11.3	0.1960	65248	295625	12.0
75	0.3254	43356	181342	9.0	0.2920	52456	224675	9.3
80	0.4284	29246	113926	7.1	0.4175	37142	146412	7.1
85	_	16718	94421	5.6	_	21635	115779	5.4

Notes: Same as Annexure Table 2.

ANNEXURE TABLE 4
Estimated annual crude death rates (CDRs), Tripura, by district, 2001

District/State	Crude Death Rates per 1,000 population					
	Males	Females	Persons			
West District	9.6	10.2	9.9			
South District	10.5	11.7	11.1			
Dhalai	14.5	14.3	14.4			
North District	10.3	10.1	10.2			
Tripura	11.4	11.6	11.5			

Annexure 6: Issues in School Education⁴

Data Sources on Education

Data on school attendance are available from the Department of School Education and the All India School Education Surveys, from the Census of India (C-series) and from the Quinquennial Surveys of Employment and Unemployment conducted by the National Sample Survey Organization (NSSO). Data from the Department of School Education and the data reported by All India School Education Surveys are based on enrolment information from schools. These estimates of school enrolment tend to overestimate enrolment because a number of children who are officially enrolled do not actually attend school. The Census of India and the NSSO surveys are more reliable as they are based on household surveys where information is collected on whether or not a person 'usually' attended school over the year preceding the interview. The limitation of the NSSO Surveys on Employment and Unemployment is that they do not give disaggregated estimates at the district or sub-district levels

⁴ This section is extracted from Vikas Rawal (2006).

ANNEXURE TABLE 5 School attendance rates, children aged 5–14 years, Census 2001 and NSS 1999–2000, Tripura

Source	Rural				Urban	
	Boys	Girls	All	Boys	Girls	All
Census, 2001	71.5	67.8	69.7	81.1	78.9	80.0
NSS, 1999–2000	85.5	82.5	84.2	90.2	80.4	85.5

because the sample size tends to become too small at these levels. For the North Eastern States, this problem is particularly severe as the sample sizes, even at the State level, are very small. The Census data are useful because they give disaggregated information at the district level. The problem in the case of Tripura is that, because of the reorganization of districts, district-level estimates from the 1991 and 2001 Censuses are not comparable.

The 55th Round Survey of Employment and Unemployment for 1999–2000 conducted by the NSS reports school attendance rates that are somewhat higher than the figures reported by the population Censuses (Annexure Table 5). In 1999–2000, 84.2 per cent of all rural children and 85.5 per cent of all urban children in Tripura attended school (as measured by the usual status definition). In comparison, according to the Census, only 69.7 per cent of rural children and 80 per cent of urban children in the age group 5–14 years were in school in 2001. The discrepancy between the NSS and the Census estimates of school attendance rates is large for rural children.

Regression to Explain the Distribution of Teachers across Schools

To estimate the requirements of the schooling system in terms of teachers, we need to be concerned not just with the total number of teachers, but also their distribution across schools. The geography of the State and the pattern of settlements entail special constraints on the distribution of teachers. We estimated a regression to examine the factors affecting the distribution of teachers across schools, and to check if schools in smaller habitations and remote locations were less well endowed than schools in large and more accessible settlements.

The following model was used to explain the distribution of teachers across schools (see Vikas Rawal 2005).

TPG = $\alpha + \beta_1 * Spline1 + \beta_2 * Spline2 + \beta_3 * Town + \beta_4 * Bus stop + \beta_5 * Forest + \beta_n * Block dummy variables$

where: TPG = Number of teachers per grade;

Spline1 = (Number of students per grade -30) if number of students per grade <30 = 0 otherwise;

Spline2 = (Number of students per grade -30) if number of students per grade £30 = 0 otherwise;

Town = Distance of the village where the school is located from the nearest town;

Bus stop = Distance of the village where the school is located from the nearest bus stop;

Forest = Proportion of area of the village that is under forests; Block dummy variables = 1 if the school is in the specified block

ANNEXURE TABLE 6
Estimates of Regression Model on Variations in
Number of Teachers per Grade

Spline (Students per grade < 40)
Spline1 (Students per grade < 40)
Spline2 (Students per grade >= 30) 0.0193 16.73 *** Distance from the nearest town −0.0052 −6.81 *** Distance from nearest bus stop −0.0428 −4.27 *** Proportion of area under forests −0.1097 −3.15 ** Dummy variables for blocks West Tripura District Bishalgarh −0.1832 −1.89 . Boxanagar −0.8305 −6.73 *** Dukli −0.3833 −3.34 *** Hezamara −0.6951 −7.02 *** Jampuijala −0.5729 −5.92 *** Jirania 0.0815 0.81 Kalyanpur −0.0184 −0.15 Kathalia −0.9508 −8.89 *** Khowai 0.0165 0.15 Nandai −0.6048 −5.77 *** Melaghar −0.7154 −7.33 *** Mohanpur −0.0427 −0.44 +0.0723 −0.7 Tulashikhar −0.0723 −0.7 −0.4179 −4.14 *** South Tripura District Amarpur −0.6265 −6.94
Distance from the nearest town -0.0052 -6.81 *** Distance from nearest bus stop -0.0428 -4.27 *** Proportion of area under forests -0.1097 -3.15 ** Dummy variables for blocks West Tripura District -0.1832 -1.89 . Bishalgarh -0.8305 -6.73 *** Boxanagar -0.8305 -6.73 *** Dukli -0.3833 -3.34 *** Hezamara -0.6951 -7.02 *** Jampuijala -0.5729 -5.92 *** Jirania 0.0815 0.81 Kalyanpur -0.0184 -0.15 Kathalia -0.9508 -8.89 *** Khowai 0.0165 0.15 Mandai -0.6048 -5.77 *** Melaghar -0.7154 -7.33 *** Mohanpur -0.0427 -0.44 -0.0723 -0.7 Tulashikhar -0.4179 -4.14 *** South Tripura District
Distance from nearest bus stop −0.0428 −4.27 *** Proportion of area under forests −0.1097 −3.15 ** Dummy variables for blocks West Tripura District Vest Tripura District Bishalgarh −0.1832 −1.89 . Boxanagar −0.8305 −6.73 *** Dukli −0.3833 −3.34 *** Hezamara −0.6951 −7.02 *** Jampuijala −0.5729 −5.92 *** Jirania 0.0815 0.81 Kathalia −0.9508 −8.89 *** Kathalia −0.9508 −8.89 *** *** Khowai 0.0165 0.15 0.15 *** Melaghar −0.7154 −7.33 *** Mohanpur −0.0427 −0.44 *** Padmabil −0.0723 −0.7 −0.4179 −4.14 *** South Tripura District Amarpur −0.0897 −10.05 *** Bagafa −0.6265 −6.94 *** Hrishyamukh −0.7593 −7.67 ****<
Proportion of area under forests -0.1097 -3.15 ** Dummy variables for blocks West Tripura District Bishalgarh -0.1832 -1.89 . Boxanagar -0.8305 -6.73 *** Dukli -0.3833 -3.34 *** Hezamara -0.6951 -7.02 *** Jampuijala -0.5729 -5.92 *** Jirania 0.0815 0.81 Kalyanpur -0.0184 -0.15 Kathalia -0.9508 -8.89 *** Khowai 0.0165 0.15 Mandai -0.6048 -5.77 *** Melaghar -0.7154 -7.33 *** Mohanpur -0.0427 -0.44 Padmabil -0.0723 -0.7 Tulashikhar -0.4179 -4.14 *** South Tripura District Amarpur -0.9897 -10.05 *** Bagafa -0.6265 -6.94 *** Hrishyamukh -0.7593
Dummy variables for blocks West Tripura District Bishalgarh -0.1832 -1.89 . Boxanagar -0.8305 -6.73 *** Dukli -0.3833 -3.34 *** Hezamara -0.6951 -7.02 *** Jampuijala -0.5729 -5.92 *** Jirania 0.0815 0.81 Kalyanpur -0.0184 -0.15 Kathalia -0.9508 -8.89 *** Khowai 0.0165 0.15 Mandai -0.6048 -5.77 *** Melaghar -0.7154 -7.33 *** Mohanpur -0.0427 -0.44 Padmabil -0.0723 -0.7 Tulashikhar -0.4179 -4.14 *** South Tripura District Amarpur -0.9897 -10.05 *** Bagafa -0.6265 -6.94 *** Hrishyamukh -0.7593 -7.67 ****
West Tripura District Bishalgarh -0.1832 -1.89 . Boxanagar -0.8305 -6.73 *** Dukli -0.3833 -3.34 *** Hezamara -0.6951 -7.02 *** Jampuijala -0.5729 -5.92 *** Jirania 0.0815 0.81 Kalyanpur -0.0184 -0.15 Kathalia -0.9508 -8.89 *** Khowai 0.0165 0.15 Mandai -0.6048 -5.77 *** Melaghar -0.7154 -7.33 *** Mohanpur -0.0427 -0.44 Padmabil -0.0723 -0.7 Tulashikhar -0.4179 -4.14 *** South Tripura District Amarpur -0.9897 -10.05 *** Bagafa -0.6265 -6.94 *** Hrishyamukh -0.7593 -7.67 ***
Boxanagar
Boxanagar -0.8305 -6.73 *** Dukli -0.3833 -3.34 *** Hezamara -0.6951 -7.02 *** Jampuijala -0.5729 -5.92 *** Jirania 0.0815 0.81 Kalyanpur -0.0184 -0.15 Kathalia -0.9508 -8.89 *** Khowai 0.0165 0.15 Mandai -0.6048 -5.77 *** Melaghar -0.7154 -7.33 *** Mohanpur -0.0427 -0.44 Padmabil -0.0723 -0.7 Tulashikhar -0.4179 -4.14 *** South Tripura District Amarpur -0.9897 -10.05 *** Bagafa -0.6265 -6.94 *** Hrishyamukh -0.7593 -7.67 ***
Hezamara
Jampuijala -0.5729 -5.92 *** Jirania 0.0815 0.81 Kalyanpur -0.0184 -0.15 Kathalia -0.9508 -8.89 *** Khowai 0.0165 0.15 Mandai -0.6048 -5.77 *** Melaghar -0.7154 -7.33 *** Mohanpur -0.0427 -0.44 Padmabil -0.0723 -0.7 Tulashikhar -0.4179 -4.14 *** South Tripura District Amarpur -0.9897 -10.05 *** Bagafa -0.6265 -6.94 *** Hrishyamukh -0.7593 -7.67 ***
Jirania 0.0815 0.81 Kalyanpur -0.0184 -0.15 Kathalia -0.9508 -8.89 *** Khowai 0.0165 0.15 Mandai -0.6048 -5.77 *** Melaghar -0.7154 -7.33 *** Mohanpur -0.0427 -0.44 Padmabil -0.0723 -0.7 Tulashikhar -0.4179 -4.14 *** South Tripura District Amarpur -0.9897 -10.05 *** Bagafa -0.6265 -6.94 *** Hrishyamukh -0.7593 -7.67 ***
Jirania 0.0815 0.81 Kalyanpur -0.0184 -0.15 Kathalia -0.9508 -8.89 Khowai 0.0165 0.15 Mandai -0.6048 -5.77 Melaghar -0.7154 -7.33 Mohanpur -0.0427 -0.44 Padmabil -0.0723 -0.7 Tulashikhar -0.4179 -4.14 South Tripura District Amarpur -0.9897 -10.05 Bagafa -0.6265 -6.94 Hrishyamukh -0.7593 -7.67
Kalyanpur -0.0184 -0.15 Kathalia -0.9508 -8.89 Khowai 0.0165 0.15 Mandai -0.6048 -5.77 Melaghar -0.7154 -7.33 Mohanpur -0.0427 -0.44 Padmabil -0.0723 -0.7 Tulashikhar -0.4179 -4.14 *** South Tripura District Amarpur -0.9897 -10.05 *** Bagafa -0.6265 -6.94 *** Hrishyamukh -0.7593 -7.67 ****
Kathalia -0.9508 -8.89 *** Khowai 0.0165 0.15 Mandai -0.6048 -5.77 *** Melaghar -0.7154 -7.33 *** Mohanpur -0.0427 -0.44 Padmabil -0.0723 -0.7 Tulashikhar -0.4179 -4.14 *** South Tripura District Amarpur -0.9897 -10.05 *** Bagafa -0.6265 -6.94 *** Hrishyamukh -0.7593 -7.67 ***
Khowai 0.0165 0.15 Mandai -0.6048 -5.77 *** Melaghar -0.7154 -7.33 *** Mohanpur -0.0427 -0.44 Padmabil -0.0723 -0.7 Tulashikhar -0.4179 -4.14 *** South Tripura District Amarpur -0.9897 -10.05 *** Bagafa -0.6265 -6.94 *** Hrishyamukh -0.7593 -7.67 ***
Mandai -0.6048 -5.77 *** Melaghar -0.7154 -7.33 *** Mohanpur -0.0427 -0.44 Padmabil -0.0723 -0.7 Tulashikhar -0.4179 -4.14 *** South Tripura District Amarpur -0.9897 -10.05 *** Bagafa -0.6265 -6.94 *** Hrishyamukh -0.7593 -7.67 ***
Melaghar -0.7154 -7.33 *** Mohanpur -0.0427 -0.44 Padmabil -0.0723 -0.7 Tulashikhar -0.4179 -4.14 *** South Tripura District Amarpur -0.9897 -10.05 *** Bagafa -0.6265 -6.94 *** Hrishyamukh -0.7593 -7.67 ***
Mohanpur -0.0427 -0.44 Padmabil -0.0723 -0.7 Tulashikhar -0.4179 -4.14 *** South Tripura District Amarpur -0.9897 -10.05 *** Bagafa -0.6265 -6.94 *** Hrishyamukh -0.7593 -7.67 ***
Padmabil -0.0723 -0.7 Tulashikhar -0.4179 -4.14 *** South Tripura District -0.9897 -10.05 *** Amarpur -0.6265 -6.94 *** Hrishyamukh -0.7593 -7.67 ***
Tulashikhar -0.4179 -4.14 *** South Tripura District Amarpur -0.9897 -10.05 *** Bagafa -0.6265 -6.94 *** Hrishyamukh -0.7593 -7.67 ***
South Tripura District Amarpur -0.9897 -10.05 *** Bagafa -0.6265 -6.94 *** Hrishyamukh -0.7593 -7.67 ***
Amarpur -0.9897 -10.05 *** Bagafa -0.6265 -6.94 *** Hrishyamukh -0.7593 -7.67 ***
Bagafa -0.6265 -6.94 *** Hrishyamukh -0.7593 -7.67 ***
Hrishyamukh –0.7593 –7.67 ***
-0.7575 -7.67
Valueban DEALA AEA XXX
Kakraban -0.5414 -4.54 *** Karbuk -1.0373 -10.37 ***
Karbuk –1.0373 –10.37 ···· Killa –0.6777 –6.5 ***
Niid -0.0777 -0.5
-0.00+5 -0.05
Najilagai -0.7766 -6.25
-0.0707 -7.15
Saccharid -0.0277 -0.07
Dhalai District
7110d55d -0.77
-0.5000 -5.21
Duffibul flagal -0.75
-0.7716 -8.06
Salema -0.7192 -7.77 ***
North Tripura District
Damchhara –0.8790 –7.78 ***
Dasada -0.6483 -6.29 ***
Gournagar -0.9049 -9.2 ***
Jampuii Hills −0.4359 −3.35 ***
Kadamtala −0.9371 −9.39 ***
Kumarghat -0.9984 -10.14 ***
Panisagar –0.8375 –8.43 ***
Pencharthal -0.9416 -8.49 ***

Signif. codes: 0 *** 0.001 ** 0.01 * 0.05 '.' 0.1 ' 1 Multiple R-Squared: 0.5967, Adjusted R-squared: 0.5874 F-statistic: 63.91 on 42 and 1814 DF, p-value: < 2.2e-16

ANNEXURES 151

= 0 otherwise (Teliamura block of West District, the block with the highest number of teachers per grade).

The model uses two spline variables to examine the relationship of teachers per grade to the size of a school, as measured by the number of students per grade. The first spline variable measures the relationship of teachers per grade to the number of students per grade in schools having less than 30 students per grade. The second spline variable measures the same relationship for schools having more than 30 students per grade. We assume that a school should have at least one teacher per grade irrespective of the number of students in the school. If this is taken care of in allocation of teachers, the relationship between number of teachers and number of students will be weak in case of schools smaller than a critical minimum (30 students per grade in this model). On the other hand, as the size of schools grows beyond the critical minimum, more than five teachers will be required to ensure that there is one teacher so that the pupil-teacher ratio is not more than 30. In regions with such schools, it is expected that the number of teachers will be significantly related to the number of students. Using other cut-off values between 20 and 40 students per teacher for the spline variables did not change the results very much.

The regression model uses two variables, distance from nearest town and distance from nearest bus stop, to capture the remoteness of the village where the school is located. In addition, we used the proportion of area that is under forest cover to check if schools in villages located in forest areas face a deficiency of teachers. Since we have used only village-level variables to capture the remoteness of a school, variations across habitations within a village are not captured.

The regression analysis is based on school-level data from the Seventh All India School Education Survey and village-level data from the 2001 Census village directory. The model was estimated using an ordinary least squares estimation. Results of the model are presented in Annexure Table 6. The regression model captures about 59 per cent of the variation in number of teachers per grade (as measured by the R square), but does not take into account variations across habitations within a village.

First, the results show that the number of teachers per grade was positively related to the number of students per grade. The coefficients for both the spline variables were statistically significant and of similar magnitude. So, the number of teachers does vary with the size of the school. Second, the number of teachers per grade was less in remote villages than in less remote ones, and in villages in forest areas as compared to those in non-forest areas. The relationship of number of teachers per grade to distance from the nearest town, distance from the nearest bus stop and proportion of area under forests was negative and highly significant. Third, the model used dummy variables to capture fixed effects associated with blocks. The results show that the availability of teachers was statistically lower than Teliamura in all blocks other than six blocks of West District. In other words, availability of teachers in all blocks of South District, Dhalai and North District was lower than in Teliamura.

To sum up, the regression results indicate that the distribution of teachers across schools can be improved, as we found that schools in smaller and remoter villages are relatively understaffed. Estimate of Costs of Expanding School Facilities

We make the following assumptions to estimate the costs of improving school infrastructure in Tripura.

We assume the State needs 1,813 new schools to ensure that all habitations have a primary school within 1 km. An additional 3,192 classrooms will be required to ensure that all existing primary schools have at least five classrooms. Further, 1,325 schools require drinking water facilities, 1,732 schools require toilet facilities for boys and 1,932 schools require toilet facilities for girls.

Cost information provided by the Department of School Education suggests that Rs 20,000 is required to provide drinking water facilities in each school. Provision of a toilet block of two units costs about Rs 40,000. It is assumed that all existing schools require, on average, blackboards and furniture worth Rs 100,000. The State will need to hire 9,065 teachers to provide five teachers in each new school that is to be constructed. If all existing primary schools were to have at least one teacher per grade and one teacher for every 40 students, the State will need 1,262 additional teachers. It is assumed that, on average, the cost of hiring teachers, including their salaries, would amount to Rs 5,000 per month per teacher. An expenditure of Rs 200 every year on provision of text books, uniforms and teaching aids for every child in the age group 6–10 years is included.

Based on the above assumptions of requirements and associated costs, our calculations, in Annexure Table 7, show that the State will need to spend non-recurring expenditure of Rs 2,430 million to provide basic infrastructure to all primary schools. This can of course be spread over, say, three years.

Although the present level of capital expenditure incurred on elementary education through the Department of School Education is small (Rs 76 million in 2002–03), the State has used expenditure under various other heads for augmenting school infrastructure. For example, funds from schemes for provision of drinking water schemes have been utilized in recent years to construct drinking water facilities in schools. Similarly, allocations under employment generation programmes have been used for school construction. It is clear, however, that a substantial increase in capital expenditure will be required to provide adequate infrastructure for primary schooling.

Further, the State will have to incur an additional annual recurring expenditure of Rs 690 million to provide an adequate number of teachers and minimum facilities for schooling. This implies a 29 per cent increase in revenue expenditure on elementary education.

These estimates are for the provision of basic minimum infrastructure in primary schools. They ignore additional costs such as that required to convert existing temporary buildings into *pucca* buildings or to provide hostel facilities for children from *ibumia* households.

To address the above-listed shortfall in school infrastructure, the Government of Tripura has to increase its spending on elementary education from the present level of around 4 per cent of GSDP to around 6 per cent of GSDP. Given the State's dependence on Central resources, it is clear that the Government of India has to enhance its allocations to the State.

ANNEXURE TABLE 7 Estimated Cost of bridging gaps in infrastructure for primary schooling, Tripura

Item			Cost
Non-recurring expenditure			
Construction of new schools ^a	Number of habitations that do not have a school within one km	1813	1,613,570,000
	Unit cost	Rs. 8,90,000 per school	
Provision of additional classrooms ^b	Number of classrooms required	3192	440,496,000
	Unit cost	Rs. 138,000/classroom	
Provision of drinking water facilities ^c	Number of schools	1325	26,500,000
	Unit cost	Rs 20,000/school	
Provision of toilets for boys ^d	Number of schools	1732	69,280,000
	Unit cost	Rs 40,000/school	
Provision of toilets for girls ^e	Number of schools	1932	77,280,000
	Unit cost	Rs 40,000/school	
Provision of furniture and blackboards ^f	Number of schools	2038	203,800,000
	Unit cost	Rs. 1,00,000/school	
Recurring expenditure			
Recruitment of teachers for new schools	Number of teachers	9065	543,900,000
	Expenditure on salaries	5000 per teacher per month	
Recruitment of additional teachers	Number of teachers required	1262	75,720,000
for existing schools ^g	Expenditure on salaries	5000 per teacher per month	
Provision of teaching aids, text books, uniforms	Total number of children in age group 6-10 years	394,720	78,944,000
	Unit cost	Rs. 200/child	
Total non-recurring expenditure			2430,926,000
Total recurring expenditure			698,564,000

Notes: a. Requirement based on data from the 7th AISES. Unit costs for a school comprising 5 classrooms, two units of toilets for boys, two units of toilets for girls, drinking water facility, furniture and blackboards.

- b. Requirement based on data from the 7th AISES and estimated for provision of at least five classrooms in each primary school. Unit costs estimated for a classroom of 400 sq. ft. (construction cost Rs. 300 per square feet) and a verandah of 120 square feet (construction cost Rs. 150 per square feet).
- c. Requirement based on data from the 7^{th} AISES. Unit costs based on figures provided by the Department of School Education.
- d. Requirement based on data from the 7th AISES. Unit costs estimated as Rs. 9000 for construction of two toilet units of 15 square feet each (construction cost Rs. 300 per square feet) and Rs. I 1000 for construction of septic tank and provision of water.
- e. Requirement based on DISE statistics for 2003-04. Unit costs estimated as Rs. 9000 for construction of two toilet units of 15 square feet each (construction cost Rs. 300 per square feet) and Rs. I 1000 for construction of septic tank and provision of water.
- f. Based on the assumption that all schools require, on average, additional furniture and blackboards worth Rs. 100,000.
- g. Based on data from the 7^{th} AISES and estimated for provision of at least one teacher per grade and less than 40 students per teacher in all schools.

ANNEXURES 153

Annexure 7: Border Fencing*

In view of the security of the State and its people, the Government of Tripura has underlined the urgent necessity of fencing the international border. Manik Sarkar, the Chief Minister of Tripura, has stated that the three frontline insurgent groups – that is, the All Tripura Tiger Force (ATTF) and two factions of the National Liberation Front of Tripura (NLFT) – have around forty-two hideouts in Bangladesh.⁵ The porous border has allowed militants based abroad to resort to killings and abductions in the State. To enhance security, the Union Ministry of Home Affairs sanctioned the fencing of the 856-km Indo–Bangladesh border in Tripura in March 2001.

Work on fencing the 856-km international border with Bangladesh is in progress (505 km had been completed by January 2006). Fencing has been sanctioned for 736 km; the remaining disputed areas will be considered later. Five agencies (Central Public Works Department, Border Roads Organization, National Buildings Construction Corporation Limited, and Public Works Departments of Tripura and Assam) are involved in the project, which is to cost Rs 11 to 13 million per km. A pilot project for flood lighting has been taken up along 126 km of the border. The possibility of building live fences is also being explored.

Increasing Tension and Violence

As fencing blocks the free movement of militants, illegal infiltration and illegal trade of goods, steps towards fencing have produced tension in the border areas. We illustrate with a few recent incidents of violence, as below.

- The ongoing work of barbed wire fencing has become a serious issue of concern because Bangladesh Rifles (BDR) has opened fire on the Sabroom border a number of times, triggering tension in the border town. The BDR wanted strict adherence to the Indira–Mujib treaty that clearly mentions that no *pucca* construction would be allowed within 150 yards from zero point.
- On 16 April 2005, Jeevan Kumar, a BSF assistant commandant (who had proved very effective in checking smuggling and illegal immigration) was first entrapped by the BDR, and then tortured and murdered in cold blood near the Lankamura border outpost in Tripura's West District. The ghastly killing created tension in the entire State and night curfew has been clamped in the 300 yards along the entire 856-km-long Tripura–Bangladesh border for an indefinite period.
- On 21 November 2005, at 8.15 am, when a group of BSF jawans were patrolling the border at Chandrakantapara under Raishyabari police station in Dhalai to provide protection to the workers of NPCC, a construction company engaged in border fencing, NLFT militants ambushed the BSF patrol; they shot dead three BSF jawans on the spot and severely injured four others. According to the police, the attack had been carried out by militants who crossed back over the border immediately after the incident. Earlier, on 11 May 2005, five persons (all belonging to the Chakma tribe) were killed and at least nineteen houses burnt to ashes

* From Mahadev Chakravarti (2005).

by the NLFT in two villages, Madanjoypara and Jogendrakarbaripara, under the same Raishyabari police station in Dhalai; the militants, after their inhuman operations, fled to their hide-outs on the other side of the border.

Genuine Concerns

There are some genuine problems in the construction of a border fence. The Government of Tripura fears that people living in border villages will be displaced or become homeless or be fenced out if the total work plan is designed according to the Indo-Bangla Treaty of 1972 (popularly known as the Indira–Mujib Pact). According to the 1972 Treaty, no country will allow any permanent construction within 150 yards of the borderline. Due to the peculiar geographical location of different sub-divisional headquarters and the demographic settlements of Tripura, nine out of fifteen subdivisional headquarters are located adjacent to the border, and towns like Kailashahar, Dharmanagar, Kamalpur, Khowai, Sabroom, Sonamura, Belonia and even the capital Agartala will be seriously affected if fencing is completed as per the original plan. In addition, large tracts of agricultural land, commercial blocks and the lone operational airport near Agartala will also be fenced out. In certain zones where important government offices, markets and schools are located close to the border, the curb on construction within 150 yards of the border cannot be strictly followed.

As many as 35,000 people (belonging to about 7,123 families) who were living along Tripura's international border have already been evicted from their homes due to the ongoing project of barbedwire fencing, and about 11,375 hectares of cultivable land have fallen outside the fence causing serious concern to cultivators.

Consequently, the task of fencing is now entangled with a law and order problem. Sensing further trouble, the Tripura Government chose to move the Union Government for a solution. The State Government and Tripura's three Members of Parliament have presented a memorandum before the Union Home Ministry with a request to see if the plan can be modified within the ambit of the bilateral treaty signed in 1972. The State Government has also proposed that Bangladesh be persuaded to bring about a change in the Pact in the interest of both countries.

These issues must be addressed speedily.

Annexure 8:

Public Expenditure Ratios*

The following expenditure ratios have been used to analyse the pattern of public expenditure.

- 1. Human Expenditure Ratio (HER) is defined as the ratio of public expenditure in human priority areas to GDP.
- 2. Public Expenditure Ratio (PER) is defined as the ratio of public expenditure to the income of a State (SDP).
- 3. Social Allocation Ratio (SAR) is defined as the ratio of social sector expenditure to total public expenditure.
- Social Priority Ratio (SPR) is defined as the ratio of public expenditure on human priority areas to total social sector expenditure

Further, the four ratios are related in the following way.

 $HER = PER \times SAR \times SPR$

For empirical estimation, the following assumptions are made.

* From Mita Choudhury (2006).

⁵ Speech at a meeting to review internal security, Ministry of Home Affairs, New Delhi, April 2005.

Expenditure on social sectors is defined as expenditure under the budgetary heads of:

- (i) Education, Sports, Art and Culture;
- (ii) Health and Family Welfare;
- (iii) Water Supply, Sanitation, Housing and Urban Development;
- (iv) Information and Broadcasting;
- (v) Welfare of Scheduled Castes, Scheduled Tribes and Other Backward Castes;
- (vi) Labour and Labour Welfare;
- (vii) Social Welfare and Nutrition;
- (viii) Other Social Services; and
- (ix) Rural Development.

The calculation of SAR for Tripura is not strictly comparable with the norms suggested by UNDP as more heads are included within the social sector than those defined by UNDP.

Human priority expenditure has been defined to include expenditure on:

- (i) Elementary Education,
- (ii) Health and Family Welfare (excluding Medical Education, Training and Research),
- (iii) Nutrition,
- (iv) Water Supply,
- (v) Sanitation
- (vi) Rural Development.

Data Issues and Limitations

The sources of data on public expenditure on social sectors are the *Finance Accounts* of Tripura and other States, budget documents of Tripura, the *Annual Financial Statement* and *Budget at a Glance* published by the Finance Department, Government of Tripura, as well as data released by the Twelfth Finance Commission. While calculating per capita expenditures, Mizoram had to be excluded as the CSO does not provide data on GSDP or NSDP at constant prices for the State.

In this *Report*, the extent of public expenditure is based on the State budget. This excludes some of the expenditure incurred by the Centre on Centrally sponsored schemes like the Sarva Siksha Abhiyan, Swarnajayanti Gram Swarozgar Yojana (SGSY) and Sampoorna Grameen Rozgar Yojana (SGRY). Funds for expenditure under these schemes are directly passed on to local bodies by the Centre and are not included in the State budget. The expenditure on these schemes is not insignificant. In 2002–03, as per data provided by the Department of Planning, Government of Tripura, funds released by the Centre for Sarva Siksha Abhiyan constituted about 1.4 per cent of expenditure in the social sector and about 2.7 per cent of expenditure in human priority areas. Similarly, funds released by the Centre for SGSY and SGRY together constituted about 3 per cent of expenditure in the social sector and about 6 per cent of expenditure on human priority areas.

Examining trends in expenditure on rural development is problematic as part of the expenditure borne by the Centre that was earlier routed through the State budget is now directly passed on to local bodies for expenditure. As a result, expenditure on rural development as reported in the State budget is not comparable over time. However, based on information provided by the Department of Rural Development, total expenditure under Centrally sponsored and State plan schemes was added to non-plan expenditure reported in the *Finance Accounts* to analyse the trend in expenditure on rural development. Figures thus arrived at show that although the per capita expenditure on rural development has increased between 1995–96 and 2001–02 as a share of GSDP, there has been a decline in expenditure on rural development from about 2.5 per cent in 1995–96 to about 2 per cent in 2001–02.

The expenditure on education refers to expenditure under the budgetary head 'General education'. Expenditure under the budgetary head 'Technical education' is not included in the analysis. General education accounts for about 99 per cent of the total expenditure on education (general and technical).

ANNEXURES 155



Population (Tables PI-PI2)

State/Districts		2001			1991	
	Persons	Males	Females	Persons	Males	Females
Rural						
West District	1,122,915	577,182	545,733	977,957	504619	47333
South District	713,293	366,333	346,960	673919	345239	328680
Dhalai	289,001	149,128	139,873	273165	141407	13175
North District	528,244	270,995	257,249	410443	211264	199179
Tripura	2,653,453	1,363,638	1,289,815	2335484	1202529	113295
Urban						
West District	410,067	208,397	201,670	315904	160957	15494
South District	54,147	28,272	25,875	44813	23078	2173
Dhalai	18,867	9,967	8,900	4300	2251	204
North District	62,669	31,951	30,718	56704	29115	27589
Tripura	545,750	278,587	267,163	421721	215401	206320
Total						
West District	1,532,982	785,579	747,403	1293861	665576	62828
South District	767,440	394,605	372,835	718732	368317	35041
Dhalai	307,868	159,095	148,773	277465	143658	13380
North District	590,913	302,946	287,967	467147	240379	226768
Tripura	3,199,203	1,642,225	1,556,978	2757205	1417930	133927

TABLE P2 Size and composition of Scheduled Tribe (ST) population of Tripura, 2001

Group/Name	Total population	Population %	Group/Name	Total population	Population %
Tripura Tribes	851803	85.7	Munda etc.	12416	1.3
Chaimal	226	0.0	Orang/Oraon	6223	0.6
Halam	47245	4.8	Santal	2151	0.2
Jamatia	74949	7.5	Assam Tribes	16587	1.7
Any Kuki Tribe*	11674	1.2	Garo	11180	1.1
Noatia	6655	0.7	Khasi	630	0.1
Reang	165103	16.6	Lushai	4777	0.5
Tripuri	543848	54.7	Northern Frontier Tribes	134	0.0
Uchai	2103	0.2	Bhutia	29	0.0
Chittagong Hill Tribes	94678	9.5	Lepcha	105	0.0
Chakma	64293	6.5	Generic Tribes	7098	0.7
Mog	30385	3.1	All	993426	100.0
Central Indian Tribes	23126	2.3	All	773420	100.0
Bhil	2336	0.2			

* Kuki sub-tribes include Balte, Belalhut, Chhalya, Fun, Hajango, Jangtei, Khareng, Khephang, Kuntei, Laiphang, Lentei, Mizeli, Hnamte, Paitu, Hrangkhole, Note: Hrangchal and Thangluia.

Source: Census of India 2001.

Share of Scheduled Tribes (ST) in total population of Tripura, 1881-2001

Year	Population of ST	Share of total population (%)
1881	49,915	52.2
1891	70,292	51.1
1901	91,679	52.9
1911	111,303	48.5
1921	171,610	56.4
1931	203,327	52.0
1941	256,991	50.1
1951	237,953	37.2
1961	360,070	31.5
1971	450,544	28.9
1981	583,920	28.4
1991	853,345	30.9
2001	993,426	31.1
Source	Chakravarti (1998)	

STATISTICAL APPENDIX 157

TABLE P4 Total population and proportion of Scheduled Castes (SC) and Scheduled Tribes (ST) in total population, Tripura, block-wise, 2001

Block/District/State	Population	SC (%)	ST (%)	Block/District/State	Population	SC (%)	ST (%)
West District	1122915	19.5	32.7	Hrishyamukh	48214	12.8	22.8
Mohanpur	158974	28.2	16.5	Bagafa	121451	12.3	43
Hezamara	32896	0.6	95.7	Karbuk	39643	6.1	82.2
Padmabil	27417	0.5	94.8	Rupaichari	39346	3.7	82.2
Khowai	62144	20.5	17.1	Satchand	78104	19.1	34.4
Tulashikhar	36027	9.2	75.2	Ompi	32720	3	85.3
Kalyanpur	41026	30.1	27.4	Dhalai	289001	16	56.8
Teliamura	49955	35	34.4	Salema	109324	31	26.6
Mandai	43876	2.5	82.4	Manu	65861	9	66.9
Jirania	128196	18.3	33.9	Ambassa	43597	5.2	72.6
Dukli	95857	29.6	6.3	Chhamanu	28097	0.5	92.8
Jampuijala	43969	0.7	91.8	Dumburnagar	42122	9.8	78.9
Bishalgarh	156410	16.2	24.1	North District	528244	14	28.2
Boxanagar	44064	22.3	6.9	Gournagar	92426	13.9	14.5
Melaghar	108018	29.8	13.2	Kadamtala	105282	17	2.5
Kathalia	54347	7.7	14.1	Panisagar	97927	16.6	7.8
Mungiakami	39739	6.3	72.3	Damchhara	20854	1.3	84
South District	713293	16.4	40.4	Pencharthal	32208	5.6	54.7
Killa	31065	0.2	97.8	Kumarghat	75256	24.1	19.8
Amarpur	48978	21.1	57.7	Dasda	94661	7.2	69.3
Matabari	124529	21.8	17.2	Jampuii hills	9630	0.2	97.7
Kakraban	66045	29.9	15.9	Tripura	2653453	17.2	36.5
Rajnagar	83198	22.5	17.3	Tripura	2000 700	77.2	50.5

TABLE P5 Total population and proportion of Scheduled Castes (SC) and Scheduled Tribes (ST) in total population, Tripura, by urban location, 2001

State/District/NPs/ CTs/MCIs	Population	SC (%)	ST (%)	State/District/NPs/ CTs/MCIs	Population	SC (%)	ST (%)
West District	410067	18.8	4.9	South District	54,147	19.3	3.1
Khowai NP	17,689	9.9	8.2	Amarpur NP	10,861	26.4	4.6
Teliamura NP	19,605	24.5	0.6	Udaipur NP	21,758	18.7	2.4
Agartala MCI	189,998	11.7	8.2	Belonia NP	15,760	15.3	1.3
Ranirbazar NP	11,003	17.9	0.1	Sabroom NP	5,768	18.8	8.2
Sonamura NP	10,074	18.2	1.5	Dhalai	18,867	18.2	11.4
Narsingarh CT	6,820	31.2	1.7	Kamalpur NP	5,143	12.7	8.3
Gandhigram CT	10,669	26.1	0.9	Kanchanpur CT	7,679	16.1	12.6
Kunjaban(part) CT	7,343	29.5	3.2	Ambassa CT	6,045	25.7	12.6
Indranagar(part) CT	17,807	14.4	0.4	North District	62,669	14.3	2.6
Jogendranagar CT	34,850	31.0	0.2	Dharmanagar NP	30,790	7.I	0.8
Pratapgarh CT	26,837	30.7	1.0	Kailasahar NP	20,286	19.7	4.2
Badharghat CT	47,713	29.3	2.4	Kumarghat NP	11,593	24.0	5.0
Gakulnagar CT	9,659	21.1	6.2	Tripura	545,750	18.3	4.7

Notes: NP stands for Nagar Panchayat, CT for Census Town, and MCL for Municipal Council. Badarghat, Jogendranagar and Pratapgarh are now part of the Agartala Municipal area.

Source: Census of India 2001.

TABLE P6
Distribution of population by religious background, Tripura, by district, 2001

	Percentage of total population								
Religious background	West District	South District	Dhalai	North District	Tripura				
Hindu	89.6	86.1	83.7	75.7	85.6				
Muslim	8.3	5.1	2.1	13.8	7.9				
Christian	1.9	3.1	4.8	5.9	3.2				
Sikh	0.1	0.0	0.1	0.0	0.1				
Buddhist	0.1	5.6	9.2	4.4	3.1				
Jain	0.0	0.0	0.0	0.0	0.0				
Other	0.0	0.1	0.1	0.0	0.1				
Not stated	0.0	0.0	0.0	0.1	0.0				
All	100.0	100.0	100.0	100.0	100.0				

Source: Census of India 2001.

TABLE P7

Decadal variation in population, Tripura and districts, 1901-2001 (percentage increase)

	1901-11	1911–21	1921-31	1931-41	1941-51	1951-61	1961–71	1971–81	1981-91	1991-2001
Tripura	32.5	32.6	25.6	34.1	24.6	78.7	36.3	31.9	34.3	16.0
Dhalai	74.3	53.8	30.0	33.8	18.3	73.6	40.2	37.1	33.7	10.9
North District	64.3	61.3	30.4	34.2	20.0	71.0	37.1	28.9	30.9	26.5
South District	-	22.6	27.6	31.5	28.3	90.3	45.6	34.6	40.3	6.8
West District	-	25.6	21.8	35.7	36.6	77.6	30.8	30.6	32.5	18.5

TABLE P8 Trends in se	ex ratio (fen	nales per	1,000 male	es), Tripur	a and Ind	ia, 1951-	-2001
	1951	1961	1971	1981	1991	2001	Exponential trend
Tripura	904	932	943	946	945	948	>1.000
India	946	941	930	934	927	933	<1.000

STATISTICAL APPENDIX 159

TABLE P9
Sex ratio of total population, of Scheduled Castes (SC) and Scheduled Tribes (ST), and child sex ratio, rural Tripura, block-wise, 2001

State/Districts/	Рорг	ulation sex	ratio	Child	State/Districts/	Population sex ratio			Child
Blocks	General	SC	ST	sex ratio	Blocks	General	SC	ST	sex ratio
West District	946	961	973	971	Hrishyamukh	936	963	967	947
Mohanpur	929	962	944	960	Bagafa	948	955	982	958
Hezamara	979	785	990	999	Karbuk	951	904	973	1008
Padmabil	978	1242	979	971	Rupaichhari	942	910	972	950
Khowai	958	1014	964	927	Satchand	950	959	964	953
Tulashikhar	973	961	996	970	Ompi	953	899	986	1007
Kalyanpur	975	974	1006	969	Dhalai	938	957	957	966
Teliamura	931	948	999	992	Salema	962	965	979	966
Mandai	973	1041	988	997	Manu	922	964	952	961
Jirania	924	938	941	980	Ambassa	939	908	962	993
Dukli	948	991	894	956	Chhamanu	903	571	948	958
Jampuijala	953	940	968	987	Dumburnagar	923	927	947	951
Bishalgarh	947	940	980	984	North District	949	960	955	972
Boxanagar	936	954	972	1004	Gournagar	963	974	957	972
Melaghar	948	961	969	944	Kadamtala	976	959	919	988
Kathalia	946	918	961	966	Panisagar	922	954	953	956
Mungiakami	931	920	978	986	Damchhara	943	898	961	973
South District	945	952	986	963	Pencharthal	940	991	933	940
Killa	993	104	1011	888	Kumarghat	956	964	978	965
Amarpur	954	932	1000	994	Dasda	937	944	955	981
Matarbari	930	952	991	953	Jampuii hills	929	_	962	1025
Kakraban	964	975	1035	961	, '	946	958	971	968
Rajnagar	939	944	991	962	All Tripura	740	738	7/1	700

Source: Census of India.

TABLE PI0
Sex ratio of total population, Scheduled Castes (SC) and Scheduled Tribes (ST) and child sex ratio, urban Tripura, by location, 2001

State/District/	Рор	ulation sex	ratio	Child	State/District/	Рорг	ulation sex	ratio	Child
NP/CT/MCL	General	SC	ST	sex ratio	NP/CT/MCL	General	SC	ST	sex ratio
West District	968	988	996	953	South District	915	945	534	920
Khowai NP	972	1036	942	857	Amarpur NP	864	907	597	902
Teliamura NP	959	960	1000	941	Udaipur NP	931	1006	_	887
Agartala MCI	1005	1023	1032	965	Belonia NP	928	872	530	957
Ranirbazar NP	945	911	_	827	Sabroom NP	921	994	688	981
Sonamura NP	928	940	-	927	Dhalai	893	959	797	951
Narsingarh CT	815	893	721	1000	Kamalpur NP	900	904	_	854
Gandhigram CT	883	956	-	859	Kanchanpur CT	911	918	900	930
Kunjaban(part) CT	702	950	888	855	Ambassa CT	865	1018	919	1044
Indranagar(part) CT	965	968	757	1018	North District	961	976	738	942
Jogendranagar CT	964	994	900	955	Dharmanagar NP	978	925	827	958
Pratapgarh CT	967	1004	993	1000	Kailasahar NP	966	1014	670	906
Badharghat CT	970	985	884	952	Kumarghat NP	911	965	812	963
Gakulnagar CT	792	910	829	1007	All Tripura	959	981	921	948

Source: Census of India.

TABLE PII
Sex ratio among major tribes,
Tripura, 2001

Tribe	Sex ratio
Tripuri	972
Reang	962
Jamatia	996
Chakma	951
Halam	980
Mog	974
Garo	992

TABLE P12
Proportionate broad age structure of population by sex, North Eastern states and India, 2001

State/Country	Sex		Broad age group	
		0–14	15–59	60+
India	Persons	35.4	57.I	7.5
	Male	36.0	57.6	6.4
	Female	35.5	57.5	7.1
Sikkim	Persons	35.2	59.9	4.9
	Male	33.6	61.2	5.2
	Female	37.1	58.3	4.6
Arunachal Pradesh	Persons	40.4	55. I	4.6
	Male	39.0	56.5	4.6
	Female	41.9	53.5	4.5
Nagaland	Persons	36.7	58.8	4.5
_	Male	36.0	59.1	4.9
	Female	37.4	58.3	4.2
Manipur	Persons	32.7	60.6	6.7
•	Male	33.0	60.3	6.7
	Female	32.4	60.9	6.8
Mizoram	Persons	35.3	59.1	5.5
	Male	34.8	59.8	5.4
	Female	35.9	58.4	5.6
Tripura	Persons	33.7	59.1	7.3
·	Male	33.5	59.7	6.9
	Female	33.9	58.4	7.7
Meghalaya	Persons	42.4	53.1	4.6
	Male	42.3	53.I	4.6
	Female	42.4	53.0	4.5
Assam	Persons	37.4	56.7	5.9
	Male	37.0	57.2	5.8
	Female	37.9	56.2	5.9

STATISTICAL APPENDIX

Education (Tables E1-E18)

TABLE EI Literacy rates, male, female and persons, aged 7 years and above, Tripura, by district, North Eastern States, and India, 1991

District/State		Rural			Urban			Total	
	Male	Female	Person	Male	Female	Person	Male	Female	Person
Tripura	67. I	44.3	56.1	89	76.9	82.9	66.3	43.6	64.5
West District	71.6	47.8	60.2	88.4	76	82.3	75.9	55.2	65.8
South District	61.9	38.6	50.6	93	80	86.7	64	41.4	50
Dhalai	59.8	37.8	60	94.3	85.6	90.2	60.4	38.6	63.I
North District	69.6	49.8	57.9	88.8	79. I	84. I	72	53.6	60.4
Arunachal Pradesh	47	25.3	37.0	77.9	62.2	71.6	51.4	29.7	41.6
Assam	58.7	39.2	49.3	84.4	73.3	79.4	61.9	43.0	52.9
Manipur	67.6	43.3	55.8	82.1	58.7	70.5	71.6	47.6	59.9
Meghalaya	44.8	37.I	41.0	85.7	77.3	81.7	53.1	44.8	49.1
Mizoram	77.4	67.0	72.5	95.1	91.6	93.4	85.6	78.6	82.3
Nagaland	63.4	50.4	57.2	85.9	79. I	83.I	67.6	54.7	61.6
Sikkim	63.5	43.9	54.4	85.2	74.9	80.9	65.7	46.7	56.9
India	57.9	30.6	44.7	81.1	64	73.I	64. I	39.3	52.2

TABLE E2 Literacy rates, male, female and persons, aged 7 years and above, Tripura, by district, North Eastern States, and India, 2001

District/State		Rural			Urban			Total		
	Male	Female	Person	Male	Female	Person	Male	Female	Person	
Tripura	78.4	60.5	69.7	93.2	85.0	89.2	81.0	64.9	73.2	
West District	81.5	63.8	72.9	92.9	84.4	88.7	84.6	69.6	77.3	
South District	77.6	58.2	68.2	95.0	87.4	91.3	78.9	60.3	69.9	
Dhalai	68.6	48.9	59.1	91.8	81.9	87.2	70.2	51.0	60.9	
North District	78.2	62.7	70.7	94.2	88.3	91.3	80.0	65.6	73.0	
Arunachal Pradesh	57.7	36.9	47.8	85.2	69.5	78.3	63.8	43.5	54.3	
Assam	68.2	50.7	59.7	89.7	80.2	85.3	71.3	54.6	63.3	
Manipur	77.3	57.0	67.3	88.7	70.0	79.3	80.3	60.5	70.5	
Meghalaya	59.2	53.2	56.3	89.0	83.5	86.3	65.4	59.6	62.6	
Mizoram	84.9	77.3	81.3	96.4	95.8	96.1	90.7	86.7	88.8	
Nagaland	67.6	57.5	62.8	87.4	81.4	84.7	71.2	61.5	66.6	
Sikkim	74.5	58.0	66.8	87.8	79.2	83.9	76.0	60.4	68.8	
North East	69.I	52.4	61.0	90.0	80.7	85.7	72.6	57.0	65.I	
India	71.4	46.7	59.4	86.7	73.2	80.3	75.8	54.2	63.4	

TABLE E3
Literacy rates among Scheduled Tribes (ST), persons aged 7 years and above,
Tripura, North Eastern States and India, 1991

State		Rural			Urban		Total		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
Tripura	52.2	26.4	39.5	89.9	82. I	86.3	52.9	27.3	40.4
Arunachal Pradesh	41.5	22.9	32.1	82.0	60.2	71.7	44.0	24.9	34.4
Assam	57.9	37.9	48. I	84.5	70.7	78.2	58.9	39.0	49.2
Meghalaya	44.1	37.7	40.9	85.2	78. I	81.5	49.8	43.6	46.7
Mizoram	78.5	67. I	72.9	96.5	92.0	94.3	86.7	78.7	82.7
Nagaland	63.6	50.8	57.4	85.9	82.9	84.5	66.3	54.5	60.6
Sikkim	64.7	48. I	56.8	87.4	74.9	81.8	66.8	50.4	59.0
India	38.4	16.0	27.4	66.6	45.7	56.6	40.6	18.2	29.6

TABLE E4
Literacy rates among Scheduled Tribes (ST), persons aged 7 years and above,
Tripura, by district, North Eastern States and India, 2001

District/State		Rural			Urban			Total	
	Male	Female	Person	Male	Female	Person	Male	Female	Person
Tripura	67.2	43.4	55.5	94.5	89.3	92.0	68.0	44.6	56.5
West District	77.2	53.7	65.6	97.3	91.1	94.2	78.3	55.8	67.2
South District	63.2	38.2	50.8	85.0	88.8	86.3	63.4	38.4	51.0
Dhalai	56.5	32.8	44.9	87.0	76.9	82.6	57.0	33.3	45.5
North District	61.1	38.3	49.9	84.9	79.6	82.7	61.4	38.7	50.3
Arunachal Pradesh	54.3	35.8	45.0	85.9	69.0	77.4	58.8	40.6	49.6
Assam	71.3	51.0	61.3	92.4	80.6	86.8	72.3	52.4	62.5
Manipur	72.4	57.6	65.I	87.9	74.3	80.9	73.2	58.4	65.9
Meghalaya	58.7	54.0	56.4	89.0	84.6	86.7	63.5	59.2	61.3
Mizoram	86. I	77.7	82.0	97.5	96.0	96.8	91.7	86.9	89.3
Nagaland	67.I	57.7	62.6	91.6	85.6	88.7	70.3	61.3	65.9
Sikkim	72.3	58.0	65.4	89.3	80.6	84.9	73.8	60.2	67.I
India	57.4	32.4	45.0	77.8	59.9	69.1	59.2	34.8	47. l

TABLE E5
Literacy rates among Scheduled Castes (SC), persons aged 7 years and above,
Tripura, North Eastern States and India, 1991

State		Rural			Urban		Total		
	Male	Female	Person	Male	Female	Person	Male	Female	Person
Tripura	66. l	43.7	55.2	73.4	54.4	64. l	67.2	45.4	56.7
Arunachal Pradesh	65.0	37.3	55.3	69.4	50.4	62.0	66.3	41.4	57.3
Assam	62.2	40.7	52.0	73.7	56.7	65.7	63.9	43.0	53.9
Manipur	65.4	47.5	56.7	65. I	47.3	56.2	65.3	47.4	56.4
Meghalaya	47.3	24.4	37.I	63.3	39.7	53.0	54.6	31.2	44.3
Mizoram	74.8	82.5	75.5	83.2	75.0	82.3	77.5	79.7	77.8
Sikkim	55.3	39.1	47.5	84.2	68.7	76.6	58.7	42.8	51.0
North East	62.9	41.3	52.6	73. I	55.5	64.7	64.5	43.5	54.5
India	45.9	19.5	33.2	66.6	42.3	55.1	49.9	23.8	37.4

TABLE E6
Literacy rates among Scheduled Castes (SC), persons aged 7 years and above,
Tripura, by district, North Eastern States and India, 2001

District/State		Rural			Urban			Total	
	Male	Female	Person	Male	Female	Person	Male	Female	Person
Tripura	81.0	65.9	73.6	85.8	73.I	79.5	81.8	67.2	74.7
West District	80. I	64.3	72.3	84.3	71.3	77.8	81.2	66.2	73.8
South District	83.3	67.4	75.6	91.3	78.9	85.3	84.0	68.4	76.4
Dhalai	76.8	62.7	69.9	85.2	70.5	78.0	77.4	63.2	70.5
North District	82.6	70.3	76.6	92.5	83.5	88.0	83.7	71.8	77.9
Arunachal Pradesh	73.8	54.4	65.9	78.6	55.6	69.3	76.3	55.0	67.6
Assam	74.2	54.9	64.9	84.I	69.1	76.9	75.7	57.I	66.8
Manipur	79.8	61.4	70.8	82.9	63.8	73.I	81.8	63.0	72.3
Meghalaya	61.8	40.6	51.9	72.7	53.0	63.6	65.9	45.2	56.3
Mizoram	88.3	100.0	88.9	88.5	91.7	89.3	88.4	92.2	89.2
Sikkim	67.6	52.6	60.2	87.9	76.I	82.0	70.2	55.7	63.0
India	63.7	37.8	51.2	77.9	57.5	68.1	66.6	41.9	54.7

TABLE E7
Proportion of literates among males, females and persons, aged 7 years and above, rural Tripura, block-wise, 2001

State/District/Block		Rural		State/District/Block	(Rural		
	Persons	Males	Females		Persons	Males	Females	
West District	72.9	81.5	63.8	Hrishyamukh	71.7	80.0	62.7	
Mohanpur	73.9	81.5	65.6	Bagafa	68.4	77.6	58.7	
Hezamara	61.2	71.7	50.4	Karbuk	48.9	61.1	35.8	
Padmabil	74. I	84.5	63.4	Rupaichhari	52.4	64.8	39.1	
Khowai	80.6	86.8	74.2	Satchand	74.7	83.9	64.9	
Tulashikhar	68.9	78.2	59.3	Ompi	57.5	68.6	45.6	
Kalyanpur	79.3	87.I	71.2	Dhalai	59.1	68.6	48.9	
Teliamura	75.I	84.I	65.4	Salema	72	79.4	64.3	
Mandai	65.6	76.4	54.6	Manu	61.9	72.8	50.0	
Jirania	76.5	84.4	68.0	Ambassa	54.8	64.3	44.5	
Dukli	80.2	87.I	72.9	Chhamanu	33.1	46.I	18.5	
Jampuijala	63.3	77.0	48.8	Dumburnagar	41.5	53.0	28.9	
Bishalgarh	76.2	85.2	66.6	North District	70.7	78.2	62.7	
Boxanagar	65.6	74.4	56.1	Gournagar	66.I	73.9	58.0	
Melaghar	71.2	79.6	62.4	Kadamtala	77.2	84. I	70.0	
Kathalia	61.9	69.9	53.3	Panisagar	82.6	88. I	76.7	
Mungiakami	61.5	71.6	50.7	Damchhara	49.9	62.8	36.2	
South District	68.2	77.6	58.2	Pencharthal	69.3	78.2	59.8	
Killa	53.7	64.8	42.8	Kumarghat	78.8	85.0	72.2	
Amarpur	59.0	70.9	46.4	Dasda	53.4	63.1	42.9	
Matarbari	74.3	82.I	65.9	Jampuii hills	74.0	81.0	66.3	
Kakraban	76.6	84.6	68.3	Tripura	69.7	<i>78.4</i>	60.4	
Rajnagar	74.3	83.0	65.1	Пірша	07.7	70.7	00.7	

TABLE E8
Proportion of literates among males, females and persons, aged 7 years and above, urban Tripura, by location, 2001

State/District/NP/CT/ MCI	Persons	Males	Females	State/District/NP/CT/ MCI	Persons	Males	Females
West Tripura	88.7	92.9	84.4	South Tripura	91.3	95.0	87.3
Khowai NP	94.6	97.1	92.1	Amarpur NP	88.3	92.4	83.5
Teliamura NP	90.3	93.8	86.6	Udaipur NP	92.0	95.2	88.5
Agartala MCI	92.2	95.6	88.8	Belonia NP	92.4	96.2	88.4
Ranirbazar NP	86.2	92.4	79.7	Sabroom NP	91.6	95.7	87.I
Sonamura NP	82.6	87.6	77.I	Dhalai	87.2	91.8	81.9
Narsingarh CT	78.I	85.3	69.1	Kamalpur NP	90.4	92.9	87.6
Gandhigram CT	82.7	87.9	76.8	Kanchanpur CT	91.3	95.2	86.9
Kunjaban (part) CT	86.2	93.0	76.3	Ambassa CT	79.0	86.7	69.9
Indranagar (part) CT	85.7	90.9	80.2	North Tripura	91.3	94.2	88.3
Jogendranagar CT	82.8	88.1	77.3	Dharmanagar NP	92.7	95.2	90.2
Pratapgarh CT	81.3	86.9	75.4	Kailasahar NP	89.8	92.9	86.6
Badharghat CT	88.3	92.8	83.6	Kumarghat NP	90.2	93.8	86.2
Gakulnagar CT	77.8	85.3	68.0	Tripura	89.2	93.2	85.0

Note: NP stands for Nagar Panchayat, CT stands for Census Town and MCI stands for Municipal Council. Source: Census of India 2001.

TABLE E9
Gender gap in literacy rates, Tripura, by district and location, North Eastern States and India, 1991 and 2001 (percentage points)

District/State	R	ural	Ur	ban	To	otal
	1991	2001	1991	2001	1991	2001
Tripura	22.7	17.9	12.4	8.2	21.0	16.1
West Tripura	23.8	17.7	12.4	8.5	20.7	15.0
South Tripura	23.3	19.4	13.0	7.6	22.6	18.6
Dhalai	22.0	19.7	8.7	9.9	21.8	19.2
North Tripura	19.8	15.5	9.7	5.9	18.5	14.4
Arunachal Pradesh	21.7	20.8	15.8	15.7	21.8	20.3
Assam	19.5	17.5	11.1	9.5	18.8	16.7
Manipur	67.6	20.3	23.4	18.7	24.0	19.8
Meghalaya	7.7	6.0	8.4	5.5	8.3	5.8
Mizoram	10.3	7.6	3.5	0.6	7.0	4.0
Nagaland	13.1	10.1	6.8	6.0	12.9	9.7
Sikkim	19.5	16.5	10.3	8.6	19.1	15.6
India	27.3	24.7	17.1	13.5	24.8	21.6

TABLE E10
Rural-urban gap in literacy rates, Tripura, by district, North Eastern States and India, 1991 and 2001 (percentage points)

District/State	М	ale	Fen	nale	Per	son
	1991	2001	1991	2001	1991	2001
Tripura	22.0	14.8	32.3	24.5	26.9	19.5
West Tripura	16.8	11.4	28.2	20.6	22.1	15.8
South Tripura	31.1	17.4	41.4	29.2	36.1	23.1
Dhalai	34.5	23.2	47.8	33.0	40.9	28. I
North Tripura	19.2	16.0	29.3	25.6	24.1	20.6
Arunachal Pradesh	31.0	27.5	36.9	32.6	34.6	30.5
Assam	25.7	21.5	34.1	29.5	30.1	25.6
Manipur	14.5	11.4	58.7	13.0	14.7	12.0
Meghalaya	40.9	29.8	40.2	30.3	40.7	30.0
Mizoram	17.8	11.5	24.6	18.5	21.0	14.8
Nagaland	22.5	19.8	28.7	23.9	25.9	21.9
Sikkim	21.7	13.3	31.0	21.2	26.5	17.1
India	23.2	15.3	33.4	26.5	28.4	20.9

TABLE EII

Proportion of children attending schools, boys and girls aged 6-II years,
Scheduled Tribes (ST), Tripura, North Eastern States and India, 2001

		Rural			Urban			Total	
	Boys	Girls	All	Boys	Girls	All	Boys	Girls	All
Tripura	71.2	64.1	67.7	91.3	85.9	88.6	71.5	64.5	68. I
Arunachal Pradesh	60.3	52.9	56.7	88.2	81.2	84.6	64.2	57. I	60.7
Assam	71.1	67. I	69.2	90.1	85.9	88.1	71.9	68.0	70.0
Manipur	73.3	70.0	71.7	88.I	87. I	87.6	74.0	70.7	72.4
Meghalaya	51.7	54.9	53.3	87.9	88.4	88.1	56.9	59.9	58.4
Mizoram	75.6	73.0	74.3	92.1	91.4	91.8	83.0	81.4	82.2
Nagaland	69.9	67.8	68.9	89.4	88. I	88.8	72.4	70.5	71.5
Sikkim	79.4	79.4	79.4	89.2	80.8	84.8	80.0	79.5	79.8
North East	66.9	64. I	65.5	89.8	88. I	88.9	69.5	66.9	68.2
India	64.0	51.7	58.0	78. I	73.2	75.7	65.I	53.4	59.4

Source: Census of India, 2001, Table C 10.

TABLE E12

Proportion of children attending schools, boys and girls aged 6-11 years,
Scheduled Castes (SC), Tripura, North Eastern States and India, 2001

		Rural			Urban			Total		
	Boys	Girls	All	Boys	Girls	All	Boys	Girls	All	
Tripura	82.I	79.7	80.9	83.8	80.5	82.2	82.4	79.8	81.1	
Arunachal Pradesh	67.0	58.6	62.9	79.1	75.7	77.4	73.2	67.4	70.4	
Assam	70.5	66.5	68.6	79.9	76.3	78. I	71.8	67.8	69.8	
Manipur	78.2	77.5	77.8	88.4	87.7	88.0	84.6	84.0	84.3	
Meghalaya	57.3	52.3	54.9	52.1	47. I	49.6	55.3	50.3	52.8	
Mizoram	-	-	-	100.0	100.0	100.0	100.0	100.0	100.0	
Sikkim	77.5	76.4	77.0	84.4	78.4	81.4	78.2	76.6	77.4	
North East	73.I	69.5	71.3	81.2	77.9	79.6	74.3	70.8	72.6	
India	70.4	60.3	65.6	77.6	73.8	75.8	71.8	62.9	67.6	

Source: Census of India, 2001, Table C 10.

TABLE E13

Proportion of habitations with access to primary and upper primary schools, Tripura, block-wise, 2002

District	Block		Primary so	hooling facilities	Upper primary schooling facilities		
		Number of habitations	Within the habitation	Within or up to 1 km from habitation	Within the habitation	Within or up to 3 km from habitation	
Dhalai	Ambassa	198	38.4	64.1	5.6	40.4	
	Chhamanu	154	61.0	85.1	3.9	27.3	
	Dumburnagar	238	28.6	65.5	3.4	50.4	
	Manu	239	46.4	69.9	10.9	69.5	
	Salema	283	41.7	74.9	15.5	78.4	
	Total	1112	42.0	71.3	8.5	56.7	
North District	Damchhara	79	44.3	68.4	6.3	35.4	
	Dasada	215	52.6	63.7	9.8	50.2	
	Gournagar	212	38.2	76.9	13.2	89.2	
	Jampuii Hillls	25	88.0	88.0	24.0	48.0	
	Kadamtala	157	47.8	80.9	17.2	94.3	
	Kumarghat	144	51.4	79.9	17.4	92.4	
	Panisagar	169	45.6	72.8	18.3	84.6	
	Pencharthal	65	63.1	64.6	20.0	66.2	
	Total	1066	48.6	73.5	14.6	75.4	
outh District	Amarpur	201	33.3	56.7	8.5	58.2	
	Bagafa	435	34.3	77.2	11.3	91.7	
	Hrishyamukh	160	43.8	80.0	14.4	90.6	
	, Kakraban	130	32.3	66.9	16.9	99.2	
Ka	Karbuk	219	26.0	61.2	4.6	79.5	
	Killa	95	54.7	89.5	14.7	71.6	
	Matabari	269	27.9	88.1	12.3	93.7	
	Ompi	155	38.1	78.1	8.4	71.6	
	Rajnagar	217	40.1	77.4	14.3	82.5	
	Rupaichhari	157	48.4	80.3	8.3	71.3	
	Satchand	300	34.3	87.7	11.3	91.3	
	Total	2338	35.8	76.9	11.1	83.8	
Vest District	Bishalgarh	416	28.1	78.8	14.7	97.1	
	Boxanagar	82	40.2	92.7	18.3	90.2	
	Dukli	152	31.6	82.9	19.1	99.3	
	Hezamara	247	24.7	65.6	4.9	68.8	
	Jampuijala	194	38.1	89.2	9.3	67.0	
	Jirania	384	24.5	74.7	10.2	89.6	
	Kalyanpur	139	30.9	70.5	14.4	97.1	
	Kathalia	118	39.8	92.4	14.4	96.6	
	Khowai	134	46.3	96.3	19.4	100.0	
	Mandai	170	30.6	47.1	8.2	64.7	
	Melaghar	249	35.3	82.3	14.1	94.4	
	Mohonpur	294	32.3	83.3	15.0	98.0	
	Mungiakami	121	25.6	46.3	3.3	39.7	
	Padmabil	154	39.6	83.8	11.7	89.6	
	Teliamura	56	78.6	98.2	48.2	96.4	
	Tulashikhar	130	48.5	76.2	13.8	88.5	
	Total	3040	33.3	77.5	13.1	87.0	
Tripura		7556	37.5	75.9	12.0	79.9	

Note: AISES defines a habitation as a distinct cluster of houses existing in a compact and contiguous manner; with a local name, and having a population not be less than 25 in plain areas and not less than 10 in hilly/desert/sparsely populated areas. In villages having more than one such cluster of houses, these clusters are not treated as separate habitations unless the convenient walking distance between them is more than 200 metres.

Source: Seventh All India School Education Survey.

TABLE E14
Proportion of primary schools having permanent buildings and drinking water facilities, Tripura, North Eastern States and India, 1993 and 2002

		Percentage of	of schools w	ith permane	ent buildings		Pe	rcentage o	f schools w	vith drinkir	ng water fac	ility	
		1993			2002			1993			2002		
State	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	
Arunachal Pradesh	25.8	54. I	26.7	45.9	73	47.4	39.9	64.9	40.7	45. I	68.9	46.4	
Assam	13.9	21.4	14.2	35.2	45.7	35.7	18.8	39.4	19.8	53.9	60.6	54.2	
Manipur	9	13.6	9.6	16.3	31.6	18.6	15.9	15.9	15.9	38.3	50.4	40.0	
Meghalaya	20.7	40.6	21.6	51.8	62.9	52.5	9.2	34.4	10.3	21.1	59.6	23.5	
Mizoram	0.9	6.1	2.4	19.1	38.1	23.9	23.8	51.1	31.9	48.1	72.7	54.3	
Nagaland	3.6	15.9	4	10.9	20.6	11.6	12.3	34.1	13.1	15.0	49.5	17.4	
Sikkim	17.4	_	17.4	53.8		53.8	56.1	0	56.1	42.4		42.4	
Tripura	16.7	28.7	17.2	59.2	53.4	59	17	51.7	18.5	42.2	69.0	43.0	
India	64.2	72.1	65.I	80.3	83.4	80.7	41.4	67.2	44.2	75.7	83.7	76.7	

Source: Sixth and Seventh All-India School Education Survey.

TABLE E15
Distribution of schools by number of classrooms, Tripura, by district, 2002 (per cent)

Number of classrooms	West District	South District	Dhalai	North District	Tripura	
0	1.2	0.0	11.1	0.5	2.5	
1	6.3	6.4	19.9	9.6	9.5	
2	12.4	18.2	34.4	32.0	22.0	
3	13.3	19.7	10.9	15.2	15.1	
4	8.1	9.3	6.7	9.6	8.5	
5	26.0	15.1	6.2	12.4	16.5	
6–7	28.7	26.1	8.8	14.5	21.5	
8–9	2.7	2.6	1.0	4.4	2.7	
10 and above	1.3	2.6	1.0	1.8	1.7	
All schools	100	100	100	100	100	
	(670)	(610)	(387)	(387)	(2054)	

 $\it Note:$ Figures in parenthesis give total number of schools covered.

Source: Seventh All India School Education Survey.

TABLE E16
Proportion of primary schools having urinals and lavatories, Tripura, North Eastern States and India, 1993 and 2002

		Proportion of schools having urinals				Proportion of schools having lavatories						
		1993			2002			1993			2002	
State	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Arunachal Pradesh	12.2	51.4	13.4	12.7	74.3	16.1	7	24.3	7.6	7.6	40.5	9.4
Assam	10.8	38.9	12	27.7	54.6	29.0	1.5	10.5	1.9	6.4	15.9	6.8
Manipur	15.4	25.2	16.9	13.2	25.7	15.0	6	19.5	8	4.5	14.1	5.9
Meghalaya	8.4	35	9.6	12.5	59.6	15.5	1.8	17.8	2.5	3.0	30.4	4.8
Mizoram	67.9	83.6	72.5	42.0	61.6	46.9	28.8	42.5	32.9	15.8	35.9	20.8
Nagaland	21.7	38.6	22.3	19.7	67.0	23.0	5.1	13.6	5.4	3.6	37.1	6.0
Sikkim	31.9	0	31.9	60.0		60.0	9.9	0	9.9	18.7		18.7
Tripura	9.3	48.3	10.9	18.0	69.0	19.5	2	27.6	3.1	10.0	36.2	10.7
India	14	58.5	18.9	29.6	65.5	33.9	6.4	46.9	10.9	25.5	58.2	29.5

Source: Sixth and Seventh All-India School Education Survey.

TABLE E17

Proportion of primary schools having separate urinals and lavatories for girls, Tripura, North Eastern States and India, 1993 and 2002

	Proportion of schools having separate urinals for girls				girls	Propo	ortion of so	hools havi	ng separat	e lavatory f	or girls	
		1993			2002			1993			2002	Total
State	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
Arunachal Pradesh	3	21.6	3.6	13.3	74.3	16.8	2.2	13.5	2.5	7.9	40.5	9.8
Assam	1.4	7	1.6	27.7	54.5	29.0	0.3	2	0.4	6.4	15.7	6.8
Manipur	3.1	8.4	3.9	13.2	25.7	15.0	1.2	6.4	1.9	4.5	14.1	5.9
Meghalaya	1.4	12.2	1.9	12.5	59.0	15.4	0.4	5.6	0.6	3.0	29.8	4.7
Mizoram	15.8	18.9	16.8	5.1	9.2	6.1	5.9	8.6	6.7	1.6	4.1	2.2
Nagaland	11.2	15.9	11.4	19.7	67.0	23.1	3.9	9.1	4.1	3.6	37.1	6.0
Sikkim	9.9	0	9.9	60.0		60.0	2.7	0	2.7	18.7		18.7
Tripura	1	16.1	1.6	18.1	69.0	19.5	0.2	9.2	0.5	10.0	36.2	10.8
India	5.5	33.9	8.7	29.0	64.6	33.2	2.4	27	5.1	24.9	57.3	28.8

Source: Sixth and Seventh All-India School Education Surveys.

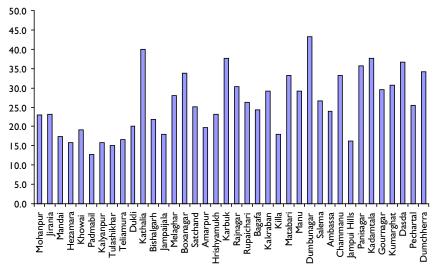
TABLE E18
Schooling infrastructure in primary and upper primary schools, Tripura, by district, 2005-06 (percentage of schools)

	With drinking water facilities	With toilets	With separate toilets for girls	With blackboards	Without permanent buildings
Primary schools					
West District	51.1	40.7	10.1	100	16.7
South District	95	99.8	13.5	88	51.2
Dhalai	59.3	34.3	0.5	57.4	51.8
North District	58.8	34.4	4.8	84	66.4
Primary and upper primary schools					
West District	68	61	19.8	100	17.8
South District	96.5	100	27.4	96	29.2
Dhalai	74.4	59	6.4	60.9	55.5
North District	71	49.5	4.3	85.3	65.2

Source: District Information System for Education.

FIGURE

Population of children aged 6-10 years per primary school teacher, block-wise, Tripura, 2001/2002



Notes: Age-wise population data from Census 2001 had been released only at the district level at the time of writing this paper. The block-wise population of children aged 6–10 years was estimated for this figure on the basis of assumption that the proportion of 6–10 year olds is constant across blocks in a district.

Source: Data on number of primary school teachers was taken from the Seventh AISES and population of children was estimated using data from the Census 2001.

Health and Nutrition (Tables HI-HI4)

TABLE HI
Total fertility rate (TFR), infant mortality rate (IMR) and under-5 mortality rate (U5MR) in Tripura, North Eastern States and India, 1998-99 and 2005-06

State	TI	TFR IMR		1R	U5MR
	1998-99	1998–99 2005–06		2005–06	1998–99
Arunachal Pradesh	2.5	3.0	63	61	98.1
Assam	2.3	2.4	70	66	89.5
Manipur	3.0	2.8	37	30	56.1
Meghalaya	4.6	3.8	89	45	122.0
Mizoram	2.9	2.9	37	34	54.7
Nagaland	3.8	3.7	42	38	63.8
Sikkim	2.7	2.0	44	34	71.0
Tripura	1.8	2.2	44	52	51.3
India	2.8	2.7	68	57	94.9

Notes: IMR and U5MR are per 1000 live births and based on 5 years preceding the survey. TFR is defined as the number of births per woman in the age group 15–49 years based on births in 3 years preceding the survey.

Source: NFHS-2 1998-99 and NFHS-3 2005-06.

TABLE H2
Neonatal mortality rate (NNMR), post neonatal mortality rate (PNNMR), under-5
mortality rate (U5MR and infant mortality rate (IMR), Tripura and India, 1998-99

State/country	NNMR	PNNMR	U5MR	IMR	
Tripura					
Male	50.6	13.1	73.5	63.7	
Female	41.6	18.9	63.4	60.4	
India					
Male	50.7	24.2	97.9	74.8	
Female	44.6	26.6	105.2	71.1	

Source: NFHS 1998–1999. Data are for deaths per 1000 live births during the preceding 10 years.

TABLE H3

Proportion of disabled persons, literacy rate and work participation rate among disabled persons, Tripura, by district, and India, 2001

District/State/ Country	Incidence of disability (% of total population)			icy rate disabled	Work participation rate among		
	Urban	Rural	Male	Female	Physically disabled	Mentally disabled	
Dhalai	2.4	1.7	52.4	33.4	27.8	25.4	
West District	1.8	1.7	65.3	43.1	27.1	18.8	
South District	1.9	1.9	58.0	35.4	27.1	22.7	
North District	2.2	2.1	63.4	44.3	27.5	27.3	
Tripura	1.9	1.8	61.9	40.6	27.3	22.2	
India	1.9	2.2	58.2	37.3	29.5	21.5	

Source: Census 2001.

TABLE H4
Antenatal and post-partum care of mothers by selected indicators, 1998-99, Tripura and India (percentage of mothers reporting)

Type of antenatal and postpartum care	Tripura	India
Tetanus toxoid (TT) injections (two or more)	65.7	66.8
Iron folic acid (IFA) Tablets received (3+ months)	80.0	47.5
Mothers who received more than one antenatal checkup	63.9	65.4
Mothers who received post partum checkups within two months of birth	24.1	16.5
Deliveries at health facility	45.2	33.6
ANM/ nurse/ midwife-assisted deliveries (any place)	13.7	11.4
Home deliveries	54.2	65.4

Source: Census of India 2001 and NFHS-2 1998–1999.

TABLE H5 **Health manpower in Tripura** (as on 31.3.2005)

Category	Persons in position
Medical officers (Allopathic)	460
Medical officers (Ayurvedic)	44
Medical officers (Homeopathic)	62
Dentist / Dental Surgeon	43
Special Medical Officer	287
Staff nurse	801
Pharmacist	252
Laboratory technician	112
Radiographer	33
Inspector of Drugs	9

TABLE H6
Women's food consumption in Tripura, 1998-99

(percentage distribution of ever married women by frequency of consumption of specific foods)

Type of food		Frequency	of consumption				
	Daily	Weekly	Occasionally	Never			
Milk or curd	32.9	18.1	34.0	14.9			
Pulses or beans	52.7	33.4	12.6	1.3			
Green leafy vegetables	58.1	33.1	8.7	0.1			
Other vegetables	76.5	15.0	7.9	0.6			
Fruits	9.1	30.7	56.7	3.4			
Eggs	4.1	52.2	35.5	8.3			
Chicken, meat or fish	14.1	50.8	32.1	2.6			

Source: NFHS-2 1998–1999.

TABLE H7
Nutritional status (weight for age and height for age) of children under the age of 3 years, Tripura, North Eastern States and India, 1998-99 and 2005-06

State	W	eight for age		He	ight for age	
	Percentage below 3SD		entage v 2SD	Percentage below 3SD	0	
	1998–99	1998-99	2005–06	1998-99	1998-99	2005–06
Assam	13.3	36	40	33.7	50.2	35
Arunachal Pradesh	7.8	24.3	37	11.9	26.5	34
Manipur	5.3	27.5	24	11.2	31.3	25
Meghalaya	11.3	37.9	46	24.5	44.9	42
Mizoram	5.0	27.7	22	13.9	34.6	30
Nagaland	7.4	24.1	30	11.7	33.0	30
Tripura	14.4	42.6	39	22.0	40.4	30
Sikkim	4.2	20.6	23	9.7	31.7	29
India	18.0	47.0	46	23.0	45.5	38

Source: NFHS-2 1998-1999 and NFHS-3 2005-06.

TABLE H8
Comparative assessment of nutritional anthropometry of young children of 0-6 years, Tripura, 2005 (% of children)

Village	Sex	Underweight (below 2SD)	Stunted (below 2SD)
Non-tribal	Male	46.4	55.2
	Female	56.0	60.0
Tribal	Male	67.4	62.5
	Female	57.7	52.9
Combined	Male	59.2	58.8
	Female	56.9	58.1

Source: Chakravarty (2006).

TABLE H9
Nutritional anthropometry of ever married women, Tripura and India, 1998-99

	State/country	Mean height (cm)	Women with height below 145 cm (%)	Mean Body Mass Index (BMI)	Women with BMI <18.5 (%)	
	Tripura	149.2	19.8	20.3	35.2	
	India	151.2	13.2	20.3	35.8	
1						

Source: NFHS-2 1998-1999.

TABLE HI0

Anaemia prevalence by age and sex (from Hb estimated by colorimetric [cyanomethemoglobin] method), Tripura, 2005 (% reporting)

Age	Sex		Non-tribal v	rillage		Tribal village	
		No.	Any anaemia (%)	Severe anaemia (%)	No.	Any anaemia (%)	Severe anaemia (%)
6 months-6 years	М	9	66.5	3.3	14	100.0	0.0
	F	13	100.0	0.0	5	100.0	0.0
6-12 years	М	24	87.5	12.5	15	80.0	0.0
	F	19	100.0	0.0	9	100.0	11.0
12-19 years	М	20	80.0	0.0	14	85.6	14.3
	F	16	100.0	12.5	9	77.8	22.2
19-45 years	М	24	75.0	0.0	21	71.4	0.0
	F	39	84.7	0.0	24	91.7	0.0
45-60 years	М	8	100.0	0.0	20	70.0	0.0
	F	18	100.0	0.0	16	100.0	0.0
	Р	26	100.0	0.0	36	100.0	0.0

TABLE HII

Prevalence of selected nutritional deficiency diseases, Tripura, 2005 (% of age group)

Nutritionaldeficiency			No	n-tribal	village				Tribal	village		
or symptom	0-6 y	ears	6–14	years	14-45	years	0–6 y	ears/	6-14	years l	4–45 ₎	rears
	М	F	М	F	М	F	М	F	М	F	М	F
Night blindness	0	5.5	9.5	10.0	4.3	12.7	0	0	11.1	15.0	7.4	5.4
Bitot's spot	0	0	0	0	0	0	0	0	0	0	0	0
Spongy and bleedingum	g 0	0	4.8	5.0	8.6	17.0	0	0	11.1	5.0	0	16.2
Angular stomatitis	0	0	0	10.0	4.3	6.4	0	0	5.5	10.0	0	5.4
Visible goitre	0	0	0	5.0	0	2.1	0	0	0	0	0	0
Follicular hyperkeratosis	0	0	4.8	10.0	0	6.4	0	0	0	0	0	0
Source: Chakrav	arty (2	006).										

TABLE HI2	
Incidence of nutritional deficiency diseases, Tripura, West District, 1998	

Disease	Prevalence (%)
Visible goitre, children of 6-14 years of age	2.4
Bitot's spot (6-71 months of age)	1.7
Night blindness	
Children of 24-71 months of age	3.0
Pregnant women	12.0
Spongy bleeding gum (15–44 years)	7.3
Dental flurosis	2.3

Source: National Pilot Programme on Control of Micronutrient Malnutrition, All India Institute of Hygiene and Public Health, 1998.

TABLE H13

Percentage of women respondents having correct knowledge/information about various nutrition-related issues, Tripura, village surveys, 2005

Knowledge/information	Village	Correct knowledge	Wrong knowledge	Don't know
I. Why Vitamin A supplementation is given	Non-tribal Tribal	41.9 30.2	11.8 23.9	46.3
2. Dietary reasons for night blindness	Non-tribal	61.0	5.9	45.8
	Tribal	34.4	4.2	33.1
3. Why Folifer tablets are given	Non-tribal	53.7	10.3	61.5
	Tribal	34.4	15.6	36.0
 Cheap source of Vitamin A or C in locally	Non-tribal	26.5	33.8	50.0
available vegetables	Tribal	20.8	17.7	39.7
Breast-feeding during diarrhoeal disease	Non-tribal	36.0	63.9	61.4
of a child	Tribal	28.1	71.9	0.0
6. How to cut and wash green leafy vegetables	Non-tribal	29.4	39.7	30.9
	Tribal	34.4	21.9	43.7
7. Food factors to protect from night blindness	Non-tribal	58.1	12.5	29.4
	Tribal	39.6	16.7	43.7
8. How to identify a bag containing iodised salt	Non-tribal	51.5	10.3	38.2
	Tribal	34.7	3.8	62.4
9. Why is salt iodised	Non-tribal	33.8	5.1	61.0
	Tribal	16.7	15.6	67.7
10. Micronutrient deficiency leading to anaemia	Non-tribal	44.2	25.7	30.1
	Tribal	32.3	17.7	50.0

TABLE HI4 lodine level in salt (parts per million) by standard of living index, Tripura and India, 1998-99 (% of households)

Standard of living index	State/country	0 ppm	7 ppm	I5 ppm	30 ppm
Low	Tripura	10.4	33.1	34.6	21.8
	India	30.0	28.1	18.6	16.5
Medium	Tripura	6.4	18.1	29.6	45.7
	India	28.6	21.5	17.5	31.7
High	Tripura	3.1	3.9	22.3	70.6
	India	12.8	9.2	11.6	66.0

Source. NFHS-2 1998-99.

Note: The standard of living index is defined by NFHS.

TABLE LI Work participation rate, persons, males and females, Tripura, North Eastern States and India, 1991

State	Persons	Male	Female
Tripura	34.7	46.9	14.9
Arunachal Pradesh	46.2	53.8	37.5
Manipur	42.2	45.3	39.0
Mizoram	48.9	53.9	43.5
Assam	36.1	49.4	21.6
Sikkim	41.5	51.3	30.4
Meghalaya	42.7	50.1	34.9
Nagaland	42.7	46.9	38.0
India	37.5	51.6	22.3

TABLE L2
Work participation rate for the general population, Scheduled Castes (SC) and Scheduled Tribes (ST), Tripura, by district, 1991

State/District		Total		R	ural			Irban	
	General	SC	ST	General	SC	ST	General	SC	ST
Tripura									
Persons	34.7	28.7	35.8	31.5	29.0	35.9	28.9	27.3	33.0
Males	46.8	47.4	45.9	47.5	47.6	45.9	47.7	46.3	47.5
Female	14.9	8.9	25.3	14.6	9.2	25.5	9.3	7.5	16.5
West District									
Persons	30.3	27.9	35.0	30.8	28.1	35.I	28.8	27.0	31.9
Males	48.0	47.0	47.2	48.1	47.3	47.3	47.7	46.3	46. l
Female	11.5	7.6	22.4	12.3	7.8	22.6	9.2	7.0	16.7
North District									
Persons	32.5	31.0	39.1	32.7	31.1	39.1	30.3	30.3	37. I
Males	49.4	49.3	50.0	49.4	49.3	49.9	49.3	49.2	54.6
Female	14.6	11.7	27.6	15.0	11.7	27.8	10.2	10.7	13.8
South District									
Persons	31.3	28.5	34.6	31.5	28.7	34.6	27.6	26.4	36.2
Males	45.I	46.7	42.2	45.1	46.9	42.2	45.7	44.0	46.6
Female	16.8	9.4	26.9	17.3	9.5	26.9	8.4	7.9	20.0

TABLE L3
Work participation rate for the general population, Scheduled Castes (SC) and Scheduled Tribes (ST), Tripura, by district, 2001

50.6 21.1 36.2 50.5 18.4 34.9	50.1 14.4 32.5 49.2 12.4 31.1	47.6 37.5 42.7 48.0 36.5 42.4	50.4 22.9 37 50.1 20.5 35.7	50.3 14.8 32.9 49.4 12.5 31.3	47.7 38 42.9 48.2 37.5 42.9	51.6 12.4 32.5 51.7 12.7 32.5	48.9 12.3 30.8 48.6 12.3 30.6	45.3 18.4 32.4 44.8 19.3 32.1
21.1 36.2 50.5 18.4 34.9	14.4 32.5 49.2 12.4 31.1	37.5 42.7 48.0 36.5	22.9 37 50.1 20.5	14.8 32.9 49.4 12.5	38 42.9 48.2 37.5	12.4 32.5 51.7 12.7	12.3 30.8 48.6 12.3	18.4 32.4 44.8 19.3
21.1 36.2 50.5 18.4 34.9	14.4 32.5 49.2 12.4 31.1	37.5 42.7 48.0 36.5	22.9 37 50.1 20.5	14.8 32.9 49.4 12.5	38 42.9 48.2 37.5	12.4 32.5 51.7 12.7	12.3 30.8 48.6 12.3	18.4 32.4 44.8 19.3
36.2 50.5 18.4 34.9	32.5 49.2 12.4 31.1	42.7 48.0 36.5	37 50.1 20.5	32.9 49.4 12.5	42.9 48.2 37.5	32.5 51.7 12.7	30.8 48.6 12.3	32.4 44.8 19.3
50.5 18.4 34.9	49.2 12.4 31.1	48.0 36.5	50.1 20.5	49.4 12.5	48.2 37.5	51.7 12.7	48.6 12.3	44.8 19.3
18.4 34.9	12.4	36.5	20.5	12.5	37.5	12.7	12.3	19.3
18.4 34.9	12.4	36.5	20.5	12.5	37.5	12.7	12.3	19.3
34.9	31.1							
		42.4	35.7	31.3	42.9	32.5	30.6	32. I
F2 I								
E2 I								
32.1	51.7	49.5	52.1	51.8	49.5	52.3	50.1	44.4
26.3	18.3	41.4	27.3	18.8	41.5	11.9	12.7	13.2
39.6	35.4	45.5	40.1	35.7	45.5	33.0	31.9	33.5
52.3	50.7	50.5	52.2	50.5	50.5	54.5	52.8	51.8
29.3	15.6	40.I	30.5	16	40.4	10.0	10.5	14.2
41.2	33.5	45.4	40.1	35.7	45.6	33.5	31.9	35.2
48.0	50.1	40.0	47.7	50.3	39.9	50.1	48.6	44.0
17.2	14.4	29.9	17.8	14.7	30.0	11.9	12.4	16.5
33.0	32.6	35.0	33.1	32.9	35.I	31.4	30.7	32.3
	52.3 29.3 41.2 48.0 17.2	52.3 50.7 29.3 15.6 41.2 33.5 48.0 50.1 17.2 14.4	52.3 50.7 50.5 29.3 15.6 40.1 41.2 33.5 45.4 48.0 50.1 40.0 17.2 14.4 29.9	52.3 50.7 50.5 52.2 29.3 15.6 40.1 30.5 41.2 33.5 45.4 40.1 48.0 50.1 40.0 47.7 17.2 14.4 29.9 17.8	52.3 50.7 50.5 52.2 50.5 29.3 15.6 40.1 30.5 16 41.2 33.5 45.4 40.1 35.7 48.0 50.1 40.0 47.7 50.3 17.2 14.4 29.9 17.8 14.7	52.3 50.7 50.5 52.2 50.5 50.5 29.3 15.6 40.1 30.5 16 40.4 41.2 33.5 45.4 40.1 35.7 45.6 48.0 50.1 40.0 47.7 50.3 39.9 17.2 14.4 29.9 17.8 14.7 30.0	52.3 50.7 50.5 52.2 50.5 50.5 54.5 29.3 15.6 40.1 30.5 16 40.4 10.0 41.2 33.5 45.4 40.1 35.7 45.6 33.5 48.0 50.1 40.0 47.7 50.3 39.9 50.1 17.2 14.4 29.9 17.8 14.7 30.0 11.9	52.3 50.7 50.5 52.2 50.5 50.5 54.5 52.8 29.3 15.6 40.1 30.5 16 40.4 10.0 10.5 41.2 33.5 45.4 40.1 35.7 45.6 33.5 31.9 48.0 50.1 40.0 47.7 50.3 39.9 50.1 48.6 17.2 14.4 29.9 17.8 14.7 30.0 11.9 12.4

TABLE L4

Work participation rate for total, main and marginal workers, males and females, urban Tripura by location, 2001

District		Males			Females	
Census Town/Nagar	Total	Main	Marginal	Total	Main	Marginal
Panchayat/ MCI	workers	worker	worker	workers	worker	worker
West District	51.7	48.7	2.8	12.7	10.9	1.8
Agartala MCI	62.8	49.2	1.9	14.9	13.9	1.0
Badharghat CT	52.4	46.7	3.5	9.2	7.7	1.5
Gakulnagar CT	58.5	57. I	1.4	14.5	11.2	3.3
Gandhigram CT	52.4	50.4	2.0	9.7	7.8	1.9
Indranagar (part) CT	58.5	45.I	6.0	9.7	7.8	1.9
Jogendranagar CT	52.3	48.4	3.8	12.7	8.5	4.3
Khowai NP	52.8	48.9	3.8	19.3	15.4	3.9
Kunjaban (part) CT	62.8	58.3	4.5	11.3	8.8	2.5
Narsingarh CT	53.1	50.5	2.6	7.5	5.4	2.2
Pratapgarh CT	53.1	49.3	1.5	8.4	6.1	2.3
Ranirbazar NP	51.4	46.3	5.1	10.6	7.7	3.0
Sonamura NP	52.8	45.6	4.6	9.0	7.4	1.6
Teliamura NP	51.4	48.0	3.4	7.7	6.4	1.4
South Tripura	52.3	49.0	3.3	11.9	10.5	1.4
Amarpur NP	51.4	50.2	3.8	9.5	8.0	1.5
Belonia NP	51.4	45.9	2.9	11.8	10.3	1.5
Sabroom NP	51.1	47. I	4.8	13.1	10.8	2.3
Udaipur NP	51.1	51.2	2.8	12.9	11.8	1.0
Dhalai	54.5	51.2	3.3	9.9	8.5	1.4
Ambassa CT	50.2	56.6	2.7	9.0	8.4	0.6
Kamalpur NP	48.8	46.3	2.5	11.5	10.3	1.2
Kanchanpur CT	50.2	50.1	4.3	9.7	7.4	2.2
North Tripura	50. I	47.3	2.8	11.9	9.8	2.1
Dharmanagar NP	49.2	46.3	2.9	11.4	9.3	2.2
Kailasahar NP	47.6	45.4	2.2	12.2	11.1	1.1
Kumarghat NP	56.7	53.1	3.6	12.5	8.9	3.7
Tripura (Urban)	51.6	48.8	2.8	12.4	10.7	1.8

TABLE L5
Work participation rate for total, main and marginal workers, males and females, Tripura, rural, block-wise, 2001

District/Block		Males			Females	
	Total workers	Main worker	Marginal worker	Total workers	Main worker	Marginal worker
West District	50. I	44.7	5.5	20.5	10.1	10.4
Bishalgarh	49.7	45.5	4.2	16.2	8.4	7.8
Boxanagar	47.0	41.9	5.1	10.0	3.5	6.5
Dukli	51.0	47.5	3.6	10.5	6.2	4.2
Hezamara	48.0	42.4	5.6	41.2	18.9	22.3
Jampuijala	48.7	44.0	4.7	42.3	21.4	20.9
Jirania	51.5	47.2	4.3	20.1	12.2	7.9
Kalyanpur	49.9	45.2	4.8	18.5	7.1	11.4
Kathalia	47.6	40.3	7.3	11.0	3.0	8.0
Khowai	51.9	46.4	5.5	17.9	9.7	8.2
Mandai	47.8	40.7	7.1	36.3	16.3	20.0
Melaghar	49.5	43.0	6.5	18.5	7.2	11.3
Mohanpur	50.5	44.7	5.9	13.1	7.7	5.5
Padmabil	48.6	39.5	9.1	38.2	17.2	21
Teliamura	52.7	47.8	4.9	20.3	11.2	9.1
Tulashikhar	51.6	43.2	8.5	42.3	19.2	23.2
Mungiakami	52.4	44.9	7.5	35.6	15.7	19.9
South District	52.1	45.4	6.7	27.3	12.5	14.8
Amarpur	53.9	46.2	7.6	37.4	23.1	14.3
Bagafa	52.6	46.5	6.I	25.8	11.9	13.9
Hrishyamukh	54.8	47.I	7.7	21.1	6.8	14.3
Kakraban	52.8	46.2	6.6	29.6	9.9	19.7
Karbuk	52.8	43.5	9.3	43.7	17.9	25.8
Killa	50.4	43.7	6.7	49.4	17.7	30.7
Matarbari	52.5	46.7	5.8	18.6	8.4	10.2
	52.0	44.9	5.6 7.1	15.5	6.2	9.3
Rajnagar Rupaichhari	49.I	42.3	6.8	40.7	19.5	21.2
Satchand	49.6	42.6	7.I	21.7	9.8	12.0
	47.6 51.7	47.6	7.1 4.1	41.4	9.6 29.5	12.0
Ompi <i>Dhalai</i>	51.7 52.2	47.6 45.6	4.1 6.6	30.5	29.5 13.4	12.0
Ambassa	54.3	46.9	6.6 7.4	30.5 40	20.5	17.1
Chhamanu	5 4 .3 56.6	46.9 47.4	7. 4 9.2	46.8	20.5 19.9	19.5 26.9
	36.6 49.1	47.4	9.2 5.9	33.8	19.9	26.9
Dumburnagar Manu						23. 4 17.6
	51.3	45.8 45.4	5.5	31.6	14.0 9.7	
Salema	51.9		6.5	20.8		11.0
North District	46.9	42.0	5.7	15.6	9.5	8.3
Damchhara	39.8	33.5	6.3	30.7	13.9	16.7
Dasda	37.2	32.0	5.2	21.6	9.3	12.3
Gournagar	49.0	42.8	6.2	15.6	8.7	6.9
Jampuii hills	52.9	47.6	5.3	48.5	37.2	11.4
Kadamtala	49.0	43.5	5.5	10.9	7.9	3.0
Kumarghat	54.3	48.0	6.3	27.0	12.0	15.0
Panisagar	50.6	45.7	4.9	7.9	5.4	2.5
Pencharthal	50.3	43.0	7.3	26.7	13.4	13.3
Tripura (Rural)	50.4	44.4	6.0	22.9	11.0	11.9

TABLE L6
Age-specific usual worker (principal and subsidiary status together) population ratio for
Tripura and North Eastern states, 1993–94 and 1999–2000 (per 1000 persons)

State	Age group		1993	-94			1999-	2000	
			Rural	U	rban	R	ural	U	rban
		Male	Female	Male	Female	Male	Female	Male	Female
Tripura	5–9	3	0	0	0	0	6	0	0
	10-14	34	29	28	25	31	3	0	10
Arunachal Pradesh	5–9	0	2	0	0	19	10	4	10
	10-14	43	31	0	0	38	51	0	0
Assam	5–9	5	2	0	4	2	6	5	0
	10-14	57	37	52	77	65	25	47	114
Manipur	5–9	0	0	0	0	2	0	3	0
	10-14	12	13	0	9	32	3	6	0
Meghalaya	5–9	4	3	0	0	0	0	0	0
	10-14	61	70	12	5	96	41	0	36
Mizoram	5–9	26	0	0	0	0	33	0	0
	10-14	53	53	7	0	87	164	0	0
Nagaland	5–9	4	0	0	0	0	0	0	0
	10-14	35	37	14	0	36	36	29	60
Sikkim	5–9	0	0	0	0	0	0	0	23
	10-14	13	13	13	0	12	19	51	260
All India	5–9	П	14	5	5	6	7	3	2
	10-14	138	141	66	45	91	96	49	36

TABLE L7

Distribution of main workers by four-fold occupational classification, persons, males and females by social group, Tripura, 2001

			General		Sch	eduled C	Caste	Sch	eduled T	ribe
		Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
Total	Cultivators	27.7	27.5	28.5	20.1	21.4	11.9	45.9	45.9	45.9
	Agricultural labourers	18.5	17.1	24.3	17.7	17.8	17.7	29.7	27.7	34.4
	Workers in household industries	2.2	1.6	4.5	3.4	2.3	9.6	1.1	0.9	1.7
	Other workers	51.6	53.7	42.7	58.8	58.5	60.8	23.2	25.5	17.9
	All	100.0	99.9	100.0	100.0	100	100.0	99.9	100.0	99.9
Rural	Cultivators	33.4	33.3	34.1	24.3	25.7	15.4	47.1	47.I	47.1
	Agricultural labourers	22.2	20.6	29	21.3	21.1	22.6	30.5	28.5	35.3
	Workers in household industries	2.4	1.8	4.9	3.7	2.6	11.1	1.1	0.9	1.7
	Other workers	42	44.3	32	50.6	50.6	50.9	21.2	23.5	15.9
	All	100.0	100.0	100.0	99.9	100.0	100.0	99.9	100.0	100.0
Urban	Cultivators	1.4	1.5	0.5	1.7	1.9	0.4	1.7	2.2	0.2
	Agricultural labourers	1.5	1.6	1.1	2.5	2.7	1.6	2	2.5	0.8
	Workers in household industries	1.4	1.1	2.7	1.8	1.3	4.5	0.9	0.8	0.9
	Other workers	95.7	95.8	95.7	94	94.1	93.5	95.4	94.5	98.1
	All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE L8

Distribution of main workers by four-fold occupational classification, persons, males and females by social group (percentage of total main workers), Tripura, 1991

			General		Sch	eduled C	aste	Sch	eduled T	ribe
		Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
Total	Cultivators	38.1	38.2	37.5	30.8	32.5	17.0	57.3	58.6	54.2
	Agricultural Labourers	23.4	21.9	30.5	28.8	28.3	32.5	29.9	27.2	36.6
	Household industries	1.4	1.2	2.5	2.1	1.6	6.0	0.3	0.3	0.5
	Others	37.1	38.7	29.4	38.3	37.6	44.5	12.4	13.9	8.6
	All	100.0	100.0	99.9	100.0	100.0	100.0	99.9	100.0	99.9
Rural	Cultivators	44.1	44.3	43.1	35.2	37.1	20.2	58.3	59.6	55.0
	Agricultural Labourers	26.5	24.8	34.7	31.6	30.9	37.2	30.3	27.6	37.1
	Household industries	1.5	1.2	2.6	2.2	1.7	6.6	0.3	0.3	0.5
	Others	27.9	29.7	19.6	30.9	30.3	36.0	11.1	12.5	7.5
	All	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	100.0
Urban	Cultivators	3.8	4.3	0.9	6.7	7.5	1.5	2.6	2.9	1.7
	Agricultural Labourers	5.7	6.1	3.1	13.5	14.0	9.2	6.2	6.0	6.7
	Household industries	1.2	1.1	2.0	1.4	1.1	3.4	0.2	0.2	0.2
	Others	89.3	88.5	94.0	78.4	77.4	85.8	91.0	90.8	91.4
	All	100.0	100.0	100.0	100.0	100.0	99.9	100.0	99.9	100.0

TABLE L9

Distribution of female main workers by four-fold occupational classification, Tripura, rural, by block, 2001

District/Block	Cultivators (%)	Agricultural labourers (%)	Workers in household industries (%)	Other workers (%)	District/Block	Cultivators (%)	Agricultural labourers (%)	Workers in household industries (%)	Other worker (%)
West District	28.9	31.3	6.3	33.5	Hrishyamukh	23.8	39.6	6.8	29.8
Mohanpur	7.3	10.9	4.8	77.0	Bagafa	32.7	39.8	2.4	25.1
Hezamara	51.0	34.5	1.1	13.4	Karbuk	51.2	37.3	0.6	10.9
Padmabil	35.5	42.9	2.0	19.6	Rupaichhari	45.5	37.8	1.4	15.3
Khowai	15.9	38.1	6.6	39.4	Satchand	27.4	36.1	2.3	34.1
Tulashikhar	18.5	20.7	0.6	5.5	Ompi	35.9	30.2	0.3	4.7
Kalyanpur	7.6	15.7	1.4	13.5	Dhalai	39.0	30.7	2.5	27.7
Teliamura	17.5	18.9	1.1	17.8	Salema	19.2	26.0	3.6	51.2
Mandai	43.5	39.3	5.5	11.7	Manu	40.3	28.7	4.5	26.5
Jirania	27.4	25.2	6.0	41.5	Ambassa	56.1	23.9	1.0	19.0
Dukli	18.1	13.6	6.9	61.4	Chhamanu	24.2	65.9	1.5	8.4
Jampuijala	46.0	43.3	1.5	9.2	Dumburnagar	69.4	16.7	0.2	13.8
Bishalgarh	28.5	25.8	12.9	32.7	North District	30.6	11.8	8.5	49.0
Boxanagar	24.9	22.5	12.2	40.3	Gournagar	14.5	7.8	2.9	74.8
Melaghar	19.8	28.2	21.3	30.6	Kadamtala	7.4	4.8	6.7	81.2
Kathalia	13.7	38.8	2.0	45.5	Panisagar	10.9	7.4	6.1	75.6
Mungiakami	14.3	21.5	1.7	6.7	Damchhara	68.2	17.7	3.4	10.7
South District	40.7	34.9	2.0	22.4	Pencharthal	30.5	18.9	12.6	38.0
Killa	65.9	27.3	0.3	6.5	Kumarghat	26.9	20.4	22.2	30.4
Amarpur	37.0	17.6	0.6	6.5	Dasda	50.9	12.3	5.9	30.9
Matarbari	27.3	27.8	4.1	40.8	Jampuii hills	81.2	7.8	0.6	10.4
Kakraban	32.8	36.8	2.8	27.6	Tripura	34.1	29.0	4.9	32.0
Rajnagar	18.3	29.1	2.3	50.3	•				

179

TABLE LI0 Distribution of male main workers by four-fold occupational classification, Tripura, rural, by block, 2001

State/District/ Block	Cultivators (%)	Agricultural labourers (%)	Workers in household industries (%)	Other workers (%)	State/District/ Block	Cultivators (%)	Agricultural labourers (%)	Workers in household industries (%)	Other workers (%)
West District	29.0	20.7	2.3	48.0	Hrishyamukh	38.7	31.5	1.0	28.8
Mohanpur	17.3	9.7	2.3	70.7	Bagafa	33.6	27.4	1.2	37.7
Hezamara	45.6	34.5	0.7	19.1	Karbuk	43.9	30.5	0.7	24.9
Padmabil	34.1	30.1	1.5	34.3	Rupaichhari	47.9	28.3	1.1	22.7
Khowai	29.4	26.1	3.0	41.6	Satchand	32.8	26.1	1.3	39.8
Tulashikhar	35.0	28.4	0.5	19.7	Ompi	41.4	30.0	0.8	19.9
Kalyanpur	34.1	25.5	1.8	29.1	Dhalai	37.2	24.7	1.2	36.9
Teliamura	28.2	20.4	1.6	40.5	Salema	31.8	22.2	1.4	44.6
Mandai	45.0	24.7	1.0	29.4	Manu	36.3	20.0	1.7	42.0
Jirania	16.0	11.9	2.9	69.2	Ambassa	47.5	20.9	0.7	30.9
Dukli	14.2	8.7	1.9	75.2	Chhamanu	18.2	58.9	0.5	22.4
Jampuijala	46.4	31.7	0.7	21.3	Dumburnagar	55.8	18.2	0.7	25.3
Bishalgarh	30.6	20.2	3.2	46.0	North District	33.6	13.1	1.8	51.5
Boxanagar	41.4	29.3	2.1	27.3	Gournagar	31.2	12.0	1.0	55.8
Melaghar	34.5	26.2	4.3	35.0	Kadamtala	21.5	8.2	1.9	68.4
Kathalia	42.5	28.7	1.4	27.4	Panisagar	24.6	14.0	1.0	60.4
Mungiakami	29.0	28.1	0.7	27.9	Damchhara	57.9	16.2	1.7	24.2
South District	38.1	23.9	1.2	36.8	Pencharthal	45.5	19.6	2.3	32.6
Killa	69.0	13.6	0.4	17.0	Kumarghat	39.5	15.7	3.4	41.5
Amarpur	40.I	19.4	0.7	25.6	Dasda	44.6	15.0	1.5	38.9
Matarbari	24.9	17.6	1.5	56.0	Jampuii hills	70.4	6.3	0.8	22.4
Kakraban	36.2	22.4	1.5	39.9	Tripura	33.3	20.6	1.8	44.3
Rajnagar	45.2	19.2	1.1	34.4	Tripura	33.3	20.0	1.0	77.3

TABLE LII Distribution of main workers other than cultivators and agricultural labourers by industrial classification, Tripura, 2001

Industrial category		Total			Rural			Urban	
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
Agriculture, hunting, forestry & fishing	8.8	7.5	15.5	11.9	9.9	22.7	2.5	2.6	2.2
Mining, quarrying	0.4	0.4	0.6	0.4	0.3	0.9	0.3	0.4	0.0
Manufacturing & repairs	11.2	10.4	15.3	12.7	11.5	19.0	8.1	8.0	8.7
Electricity, gas & water supply	1.2	1.4	0.4	1.0	1.1	0.3	1.6	1.8	0.6
Construction	5.0	5.7	1.8	5.2	5.9	1.2	4.7	5.1	2.7
Wholesale and retail trade	18.2	20.8	4.8	17.4	19.7	5.7	19.7	23.3	3.4
Hotels and restaurants	1.3	1.5	0.4	1.3	1.4	0.5	1.3	1.5	0.4
Transport, storage, & communications	6.7	7.9	1.0	6.2	7.2	0.6	8.0	9.3	1.7
Financial intermediation, real estate & business	2.0	2.2	0.9	1.1	1.2	0.3	3.8	4. I	2.1
Public administration, education, health,									
other community services, etc.	45.2	42.4	59.2	42.8	41.8	48.8	50.0	43.9	78. I
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

TABLE L12
Usual status (US), current weekly status (CWS) and current daily status (CDS) unemployment rates for Tripura, North Eastern States and India, urban areas, 1993-94 and 1999-2000 (per 1000 persons)

Urban			1993-9	4					1999-	2000		
		Males			Female	s		Males			Female	es
	US	CWS	CDS	US	CWS	CDS	US	CWS	CDS	US	CWS	CDS
Tripura	60	70	82	174	85	215	54	57	57	85	89	96
Arunachal Pradesh	17	17	18	73	72	73	14	24	22	100	91	65
Assam	55	57	65	256	267	256	77	84	99	189	197	219
Manipur	48	48	50	32	27	31	69	66	66	62	68	76
Meghalaya	10	14	16	31	32	41	34	34	35	68	68	69
Mizoram	5	2	4	5	4	5	34	29	38	24	24	31
Nagaland	69	69	69	64	68	67	93	97	98	87	98	104
Sikkim	12	25	19	62	62	49	67	59	64	100	125	107
All India	40	25	19	62	62	49	45	56	73	57	73	94

Source: NSSO, different Rounds.

TABLE LI3
Usual status (US), current weekly status (CWS) and current daily status (CDS) unemployment rate for Tripura, North Eastern States, and India, rural areas, 1993-94 and 1999-2000 (per 1000 persons)

Rural			1993-	94					1999-	-2000		
		Males			Female	s		Males			Female	s
	US	CWS	CDS	US	CWS	CDS	US	CWS	CDS	US	CWS	CDS
Tripura	14	21	34	58	85	104	7	9	17	4	6	57
Arunachal Pradesh	16	18	19	2	4	4	8	-11	13	- 1	- 1	1
Assam	46	54	70	77	111	124	32	45	64	66	88	125
Manipur	12	17	22	7	7	- 11	21	25	24	15	27	26
Meghalaya	4	5	6	0	0	2	5	5	6	3	3	5
Mizoram	14	14	10	4	5	5	14	18	19	3	4	5
Nagaland	21	20	21	0	6	6	26	26	28	20	22	31
Sikkim	6	6	6	16	9	17	32	31	33	19	20	25
All India	14	30	56	8	30	56	17	39	72	10	37	70
Source: NSSO, o	differe	nt Rour	nds.									

TABLE L14
Usual status (US) and current weekly status (CWS) unemployment rate for educated persons in Tripura, North Eastern States, and India, urban areas, 1993-94 and 1999-2000 (per 1000 persons)

Rural		199	3–94			1999-	2000	
		1ales	Fer	males	M	ales	Fer	males
	US	CWS	US	CWS	US	CWS	US	CWS
Tripura	108	119	31	215	70	71	117	127
Arunachal Pradesh	6	214	171	172	5	22	164	131
Assam	97	465	449	433	110	115	285	299
Manipur	89	94	86	89	106	101	123	134
Meghalaya	10	17	73	76	50	50	108	107
Mizoram	10	9	12	- 11	65	53	54	45
Nagaland	100	101	89	92	140	140	150	150
Sikkim	33	43	125	121	89	95	172	214
All India	60	70	182	196	62	69	143	158

TABLE L15
Usual status (US) and current weekly status (CWS) unemployment rate for educated persons in Tripura, North Eastern States, and India, rural areas, 1993-94 and 1999-2000 (per 1000 persons)

Rural		199	3–94			1999-	2000	
	M	lales	Fe	males	Ma	ales	Fen	nales
	US	CWS	US	CWS	US	CWS	US	CWS
Tripura	97	104	337	430	28	37	78	71
Arunachal Pradesh	358	59	118	6	3	20	49	61
Assam	226	251	390	103	112	138	366	456
Manipur	46	57	37	45	51	52	90	160
Meghalaya	17	16	0	0	14	13	68	69
Mizoram	102	110	58	100	62	67	0	0
Nagaland	30	30	6	3	49	53	99	110
Sikkim	18	18	87	70	128	123	99	96
All India	65	83	160	198	56	73	146	169

Source: NSSO, different Rounds.

TABLE L16
Usual status (US), current weekly status (CWS) and current daily status (CDS) unemployment rate among youth (15-29) in Tripura, North Eastern States and India, urban areas, 1993-94 and 1999-2000 (per 1000 persons)

States			1993-	94					1999-	2000		
		Males			Female	s		Males			Females	;
	US	CWS	CDS	US	CWS	CDS	US	CWS	CDS	US	CWS	CDS
Tripura	178	185	206	345	436	444	219	228	231	167	157	182
Arunachal Pradesh	30	31	31	121	123	126	91	72	73	185	158	141
Assam	159	156	170	461	453	439	189	185	224	375	384	427
Manipur	163	168	173	60	65	83	199	203	216	150	154	168
Meghalaya	38	53	60	99	113	120	119	119	121	177	176	182
Mizoram	16	10	12	14	14	15	108	91	100	51	45	63
Nagaland	175	174	174	73	82	83	307	307	310	195	213	234
Sikkim	30	37	39	121	175	110	153	136	144	299	335	296
All India	96	114	137	150	185	212	108	124	147	139	166	191

TABLE L17
Usual status (US), current weekly status (CWS) and current daily status (CDS)
unemployment rate (per 1000) among youth (15-29) in Tripura, North Eastern States,
and India, rural areas, 1999-2000 and 1993-94 (per 1000 persons)

State			1993-	94					1999-	2000		
		Males			Females	5		Males		F	emales	
	US	CWS	CDS	US	CWS	CDS	US	CWS	CDS	US	CWS	CDS
Tripura	48	52	69	126	153	181	26	30	44	125	131	157
Arunachal Pradesh	43	49	50	6	6	8	23	31	34	4	2	2
Assam	118	134	166	160	214	238	71	96	123	140	189	249
Manipur	40	58	65	14	18	24	49	56	57	45	72	75
Meghalaya	10	10	-11	0	0	2	- 11	- 11	13	7	7	10
Mizoram	36	36	25	8	13	- 11	34	39	41	6	12	- 11
Nagaland	54	54	55	0	18	18	88	85	93	59	62	85
Sikkim	16	15	17	42	24	42	92	91	94	47	52	62
All India	35	58	90	19	48	76	43	73	Ш	27	68	106

TABLE L18

Number of beneficiaries of SGSRY, Tripura, by social group, 1999-2000 to 2004-05

	Total b	peneficiaries	Beneficiaries according to characteristic below						
Year/District	Target	Achievement	ST	SC	OBC	Religious minorities	Other	Women	Physically handicapped
1999-00 to 2003-04									
West District	21072	17278	5674	3404	583	378	7239	6885	93
North District	14184	10514	3267	1729	1923	1162	2433	2390	1
South District	15523	14044	5474	2558	356	901	4755	3669	22
Dhalai	9332	7433	3960	1612	101	117	1643	1911	П
Tripura	60111	49269	18375	9303	2963	2558	16070	14855	127
2004 –05 (P)									
West District	241	128	38	24	62	16	2	2	-
North District	258	-	-	-	-	-	-	-	-
South District	93	50	17	9	8	13	5	П	-
Dhalai	-	-	-	-	-	-	-	-	-
Tripura	592	178	55	33	70	29	7	13	-

Source:Rural Development Department, Government of Tripura.

TABLE L19
Number of self-help groups formed under SGSY, Tripura, 1999-2000 to 2004-05

	Tot	al groups			Groups a	according to char	acteristics of	members	
Year/District	Target	Achievement	ST	SC	OBC	Religious minorities	Other	Women	Physically handicapped
1999-00 to 2003-04									
West District	3110	6206	2055	1092	205	145	2709	4429	_
North District	1630	1446	385	270	372	126	293	824	_
South District	2071	3918	1530	811	738	167	672	2218	42
Dhalai	1309	1159	705	181	92	29	152	932	3
Tripura	8120	12729	4675	2354	1407	467	3826	8403	45
2004-05(P)									
West District	780	1051	340	202	60	35	419	637	5
North District	400	700	204	141	189	104	62	385	
South District	500	821	321	187	145	33	135	562	9
Dhalai	320	413	270	73	19	П	40	248	1
Tripura	2000	2985	1135	603	413	183	656	1832	15

 ${\it Source}. \quad {\it Rural Development Department, Government of Tripura}.$

TABLE L20
Number of person days generated under Sampoorna Gramin Rozgar Yojana and other
employment programmes, Tripura, 2001 to 2006 (in lakhs)

District/State	2001–02 JGSY+EAS	2002–03 SGRYI+II	2003–04 SGRYI+II	2004–05 SGRY	2005–06* SGRY
West District	29.7	36.88	48.4	41.39	0.71
South District	16.81	24.47	34.92	28.48	0.21
Dhalai	11.92	29.22	23.91	23.39	2.03
North District	15.15	8.89	20.75	17.2	1.6
Tripura	73.58	99.46	127.98	108.46	4.55

Notes: * is upto June 2005.

T.B. E.

JGSY: Jawahar Gram Samridhi Yojana. EAS: Employment Assurance Scheme.

SGRY: Sampoorna Gramin Rozgar Yojana.

 ${\it Source}. \quad {\it Rural Development Department, Government of Tripura.}$

ECONOMY AND INFRASTRUCTURE (TABLES E&I 1-E&I 26)

TABLE E&I | Gross State Product and District Domestic Product of Tripura at factor cost at current and constant prices (1993-94 series) (in Rs. lakhs)

Years	Tripura	West District	South District	Dhalai	North District
Current prices					
1993-94	177,723	87,218	43,583	15,596	31,380
1999-2000	454,373	227,381	107,249	38,728	82,369
2000-01	527,007	265,486	123,445	42,827	95,439
2001-02	599,929	295,325	141,383	49,190	111,027
Constant prices					
1993-94	177,723	87,218	43,583	15,596	31,380
1999-2000	275,564	139,977	64,179	22,233	50,083
2000-2001	326,115	163,467	77,980	24,975	60,513
2001-2002	335,136	167,756	83,505	26,515	62,395

TABLE E&I 2
Absolute level of per capita Gross State/District Domestic Product of Tripura at factor cost at constant prices (1993–94 series) (in Rs.)

Year	Tripura	West District	South District	Dhalai	North District
1993-94	6,073.9	6,215.2	6,232.4	5,534.6	6,097.9
1999-00	8,671.0	9,183.1	8,448.0	7,263.3	8,519.0
2000-01	10,216.6	10,677.8	10,221.5	8,124.7	10,242.5
2001-02	10,479.5	10,937.3	10,925.7	8,608.8	10,722.6

TABLE E&I 3

Growth rate of per capita NSDP, 1993-94 to 2001-02, Tripura and States of India (in descending order)

	State	Compound annual growth rate		State	Compound annual growth rate
1	Tripura	6.4	16	Manipur	2.7
2	Goa	5.8	17	Maharastra	2.1
3	Karnataka	4.9	18	Punjab	2.0
4	West Bengal	4.9	19	Orissa	1.9
5	Sikkim	4.5	20	Madhya Pradesh	1.8
6	Delhi	4.2	21	Uttaranchal	1.8
7	Andhra Pradesh	4.1	22	Jammu & Kashmir	1.6
8	Himachal Pradesh	4.1	23	Chattisgarh	1.4
9	Tamil Nadu	3.8	24	Jharkhand	1.2
10	Rajasthan	3.7	25	Bihar	1.1
- 11	Meghalaya	3.6	26	Uttar Pradesh	1.1
12	Kerala	3.4	27	Arunachal Pradesh	0.8
13	Gujarat	3.4	28	Assam	0.7
14	Nagaland	2.8		India	3.8
15	Haryana	2.8			

Note: Data are not available for Mizoram. Source: Data from the CSO website.

TABLE E&I 4
Sectoral components of NSDP of Tripura, 1990-91 and 2002-03 (in per cent)

	Sector	1990-91	2002–03	Sector 19	90–91	2002–03
- 1	Primary	36.9	30.0	2.4 Mining and quarrying	0.7	0.9
1.1	Agriculture and animal husbandry	29.7	25.9	3 Tertiary	52.8	51.4
1.2	Forestry and logging	3.5	1.4	3.1 Trade, hotels and restaurants	19.5	15.6
1.3	Fishing	3.7	2.7	3.2 Transport, storage and communications	4.6	3.9
2	Secondary	10.3	18.6	3.3 Finance, banking and insurance	2.8	5.3
2.1	Manufacturing	3.0	2.4	3.4 Community, social and other services	26.0	26.7
2.2	Electricity, gas and water supply	-2.2	0.3	Aggregate	100.0	100.0
2.3	Construction	8.8	15.0			

Source: Directorate of Economics and Statistics, Planning (Statistics) Department, Govt. of Tripura.

TABLE E&I 5

Percentage distribution of State/District Domestic Product of Tripura and districts at constant prices (1993-94 series) at factor cost by kind of economic activity, 1993-94

	Activity	Tripura	West District	North District	South District	Dhalai
- 1	Primary sector	36.0	28.6	39.0	44.3	48.4
1.1	Agriculture and allied activity	35.3	27.1	39.0	44.3	48.4
1.2	Mining and quarrying	0.7	1.5	0.0	0.0	0.0
2	Secondary sector	10.2	10.7	12.2	9.8	5.1
2.1	Manufacturing	3.4	4.0	3.4	2.4	2.5
2.2	Electricity, gas and water supply	0.4	0.4	0.5	0.4	0.5
2.3	Construction	6.4	6.3	8.3	7.0	2.1
3	Tertiary sector	53.7	60.7	48.8	45.9	46.5
3.1	Trade, hotels and restaurants	16.1	17.9	14.1	14.9	12.4
3.2	Transport, storage and communication	5.3	6.3	5.9	2.7	4.9
3.3	Finance, banking and insurance	4.5	4.9	4.1	4.3	4.2
3.4	Community, social and personal services	27.9	31.6	24.6	24.0	25.0
	Grand total	100.0	100.0	100.0	100.0	100.0

TABLE E&I 6

Percentage distribution of State/District Domestic Product of Tripura and districts at constant prices (1993–94 series) at factor cost by kind of economic activity, 2001–02

	Activity	Tripura	West District	North District	South District	Dhalai
1	Primary sector	25.4	20.8	26.2	28.6	38.0
1.1	Agriculture and allied activity	24.6	19.1	26.2	28.6	38.0
1.2	Mining and quarrying	0.8	1.7	0.0	0.0	0.0
2	Secondary sector	21.8	20.1	28.2	22.1	12.7
2.1	Manufacturing	2.8	3.2	3.0	1.7	2.5
2.2	Electricity, gas and water supply	1.9	2.1	2.1	1.0	2.1
2.3	Construction	17.2	14.8	23.1	19.4	8. I
3	Tertiary sector	52.8	59.1	45.6	49.3	49.3
3.1	Trade, hotels and restaurants	12.8	14.1	10.7	11.7	11.0
3.2	Transport, storage and communication	6.6	7.5	7.2	4.0	6.6
3.3	Finance, banking and insurance	4.8	5.8	4.1	3.5	3.2
3.4	Community, social and personal services	28.5	31.7	23.6	30.0	28.5
	Grand total	100.0	100.0	100.0	100.0	100.0

TABLE E&I 7
Sectoral rate of growth of GVA for State/District Domestic Product of Tripura and districts at constant prices (1993–94 series) at factor cost by kind of economic activity

Period/Sectors	Tripura	West District	North District	South District	Dhalai
1993-94 to 1999-2000					
Primary sector	3.3	4.7	3.6	2.0	2.8
Secondary sector	13.7	12.4	15.3	14.8	14.1
Tertiary sector	6.7	6.9	6.7	6.3	17.3
1993-94 to 2001-02					
Primary sector	3.2	3.8	3.2	2.4	3.3
Secondary sector	16.7	15.3	18.5	17.7	17.5
Tertiary sector	7.1	7.2	7.1	8.4	6.8
1999-2000 to 2001-02					
Primary sector	1.8	0.5	1.3	2.4	3.2
Secondary sector	17.8	16.7	19.4	17.5	19.1
Tertiary sector	5.5	5.5	5.7	10.2	6.2

TABLE E&I 8

Compound annual growth of components of NSDP of Tripura at factor cost (constant prices), 1980-81 to 2002-03

Years	Primary	Secondary	Tertiary
1980-81 to 1990-91	2.6	4.8	7.9
1990-91 to 2000-01	2.2	17.2	6.4
1990-91 to 2002-03	2.7	13.2	6.7
1980-81 to 2002-03	2.8	9.7	7.6

TABLE E&I 9

Cropping pattern in Tripura and districts, 2004–05 (percentage of total gross cropped area)

Crop	West District	South District	Dhalai	North District	Tripura
Rice	93.4	90.5	86.3	90.2	91.0
Wheat	0.4	0.3	0.5	0.3	0.3
Maize	0.5	0.8	2.8	1.0	1.0
Pulses	2.7	2.8	3.4	3.0	2.9
Oilseed	1.0	1.3	2.4	1.7	1.4
Sugarcane	0.2	0.5	0.6	0.3	0.4
Jute and Mesta	0.5	0.9	1.4	0.6	0.8
Cotton	0.1	0.2	1.1	0.6	0.4
Potato	1.2	2.7	1.5	2.2	1.9

Source: Department of Agriculture, Government of Tripura.

TABLE E&I 10 Production of cereals, Tripura and districts, 2004–05 (in thousand metric tonnes)

District/State	Rice	Wheat	Maize	Cereals	Share in total cereal production (%)	Pulses	Foodgrain	Share in total foodgrain production (%)
West District	241.8	0.8	0.5	243.1	42.2	1.8	244.9	42.1
South District	188.8	0.4	0.7	189.9	32.9	1.6	191.5	32.9
Dhalai	57.9	0.4	1.2	59.5	10.3	8.0	60.3	10.4
North District	83.2	0.3	0.6	84.1	14.6	1.0	85.1	14.6
Tripura	571.7	1.9	3.0	576.6	100.0	5.2	581.8	100.0

TABLE E&I II

Area, production and yield by crop, Tripura and districts, 2004-05

District/State/Crop	Area (in ha)	Production (in MT)	Yield (kg/ha)	District/State/Crop	Area (in ha)	Production (in MT)	Yield (kg/ha)
West District				Oilseeds	876	607	693
Rice	98946	241816	2444	Sugarcane	211	9756	46237
Wheat	387	843	2178	Jute & Mesta	494	3986	8069
Maize	574	518	902	Cotton	391	604	1545
Pulses	2890	1826	632	Potato	547	8490	15521
Oilseeds	1050	717	683	North District			
Sugarcane	182	9332	51275	Rice	45596	83198	1825
Jute & Mesta	578	4088	7073	Wheat	140	320	2286
Cotton	117	180	1538	Maize	507	600	1183
Potato	1253	23918	19089	Pulses	1517	984	649
South District				Oilseeds	869	587	675
Rice	80299	188769	2351	Sugarcane	174	8430	48448
Wheat	222	406	1829	Jute & Mesta	327	2941	8994
Maize	701	687	980	Cotton	319	462	1448
Pulses	2442	1564	640	Potato	1087	16577	15250
Oilseeds	1144	786	687	Tripura			
Sugarcane	463	22895	49449	Rice	256078	571659	2232
Jute & Mesta	829	6383	7700	Wheat	944	1924	2038
Cotton	218	309	1417	Maize	2790	2967	1063
Potato	2393	44487	18590	Pulses	8071	5157	639
Dhalai				Oilseeds	3939	2697	685
Rice	31237	57876	1853	Sugarcane	1030	50413	48945
Wheat	195	355	1821	Jute & Mesta	2228	17398	7809
Maize	1008	1162	1153	Cotton	1045	1555	1488
Pulses	1222	783	641	Potato	5280	93472	17703

Source: Department of Agriculture, Government of Tripura.

TABLE E&I 12

Distribution of operational land holdings by size class, Tripura, North Eastern States and India, 1985-86 and 1990-91

		NI. (C) III	1985–86		0/	NI. CL. III	1990–91	A	0/
		No. of holdings in 000s	%	Area operated in 000 ha	%	No. of holdings in 000s	%	Area operated in 000 ha	%
[ripura	Marginal	211	67.6	107	33.6	217	68. I	87	28.2
	Small	70	22.4	114	35.8	69	21.8	106	34.4
	Semi-medium	27	8.7	74	23.3	28	8.9	77	24.8
	Medium	3	1.0	14	4.4	4	1.1	18	6.0
	Large	Neg		8	2.5	0.2	0.1	20	6.5
	All sizes	312	100.0	318	100.0	318	100.0	308	100.0
Assam	Marginal	1451	60.0	600	19.0	1451	60.0	600	19.0
	Small	546	22.6	761	24.1	546	22.6	761	24.1
	Semi-medium	324	13.4	874	27.6	324	13.4	874	27.6
	Medium	92	3.8	481	15.2	92	3.8	481	15.2
	Large	6	0.2	445	14.1	6	0.2	445	14.1
	All sizes	2419	100.0	3161	100.0	2419	100.0	3161	100.0
Manipur	Marginal	67	47.9	37	21.3	69	48.6	38	21.7
	Small	48	34.3	66	37.9	49	34.5	67	38.3
	Semi-medium	21	15.0	54	31.0	21	14.8	55	31.4
	Medium	3	2.1	16	9.2	3	2.1	15	8.6
	Large	Neg		1	0.6	Neg		1	0.6
	All sizes	140	100.0	174	100.0	142	100.0	175	100.0
Meghalaya	Marginal	59	34.5	32	10.6	59	36.4	32	11.0
	Small	51	29.8	68	22.5	42	25.9	58	19.9
	Semi-medium	46	26.9	117	38.7	46	28.4	117	40.I
	Medium	13	7.6	72	23.8	13	8.0	71	24.3
	Large	1	0.6	13	4.3	1	0.6	13	4.5
	All sizes	171	100.0	302	100.0	162	100.0	292	100.0
Nagaland	Marginal	8	6.4	3	0.3	13	9.2	9	0.9
	Small	19	15.2	24	2.6	21	14.8	30	3.1
	Semi-medium	19	15.2	49	5.3	26	18.3	76	7.9
	Medium	42	33.6	260	27.9	47	33.1	298	30.8
	Large	36	28.8	596	63.9	33	23.2	556	57.4
	All sizes	125	100.0	933	100.0	142	100.0	968	100.0
Arunachal Pradesh	Marginal	14	16.5	9	2.6	16	17.0	10	2.9
	Small	16	18.8	24	7.0	17	18.1	26	7.4
	Semi-medium	27	31.8	75	21.8	30	31.9	84	24.0
	Medium	23	27.1	138	40.1	26	27.7	147	42.0
	Large	5	5.9	98	28.5	5	5.3	82	23.4
	All sizes	85	100.0	344	100.0	94	100.0	350	100.0
Mizoram	Marginal	21	40.4	15	18.3	29	47.5	18	21.4
	Small	19	36.5	28	34.1	23	37.7	36	42.9
	Semi-medium	H	21.2	31	37.8	9	14.8	25	29.8
	Medium	1	1.9	6	7.3	1	1.6	4	4.8
	Large	Neg		İ	1.2	Neg		Neg	
	All sizes	52	100.0	82	100.0	61	100.0	84	100.0
ndia	Marginal	56147	57.8	22042	13.4	62106	59.0	24616	14.9
	Small	17922	18.4	25708	15.6	19962	19.0	28701	17.3
	Semi-medium	13252	13.6	36666	22.3	13913	13.2	38350	23.2
	Medium	7916	8.1	47144	28.6	7630	7.2	45052	27.2
	Large	1918	2.0	33002	20.1	1668	1.6	28899	17.4
	All sizes	97155	100.0	164562	100.0	105278	100.0	165619	100.0

Note: Marginal (Below 1 ha); Small (1.0–2.0 ha); Semi-medium (2.0–4.0 ha); Medium (4.0–10.0 ha); Large (10.0 ha and above). Source: Ministry of Agriculture, Agricultural Situation in India, Directorate of Economics & Statistics.

TABLE E&I I3 Distribution of area operated by size class, Tripura, by district, 1990–91 (in ha)

		Number of	f holdings	Area op	erated
Tripura	Marginal	216826	68.1	87093	28.2
	Small	69217	21.8	106150	34.4
	Semi-medium	28432	8.9	76597	24.8
	Medium	3571	1.1	18356	6.0
	Large	166	0.1	20180	6.5
	All	318212	100.0	308376	100.0
West District	Marginal	93474	68.5	37046	28.4
	Small	31495	23.1	50719	38.9
	Semi-medium	9939	7.3	25980	19.9
	Medium	1517	1.1	7948	6.1
	Large	77	0.1	8586	6.6
	All	136502	100.0	130279	100.0
South District	Marginal	72159	70.1	26312	28.4
	Small	18550	18	26371	28.5
	Semi-medium	10696	10.4	30429	32.9
	Medium	1455	1.4	7245	7.8
	Large	48	0.0	2248	2.4
	All	102908	100.0	92605	100.0
North District	Marginal	51193	65	23735	27.8
	Small	19172	24.3	29060	34
	Semi-medium	7797	9.9	20188	23.6
	Medium	599	0.8	3163	3.7
	Large	41	0.1	9346	10.9
	All	78802	100.0	85492	100.0

 $\textit{Source}. \hspace{0.2in} \textbf{Department of Agriculture, Government of Tripura.}$

TABLE E&I 14 Real wages for agriculture in Tripura, Assam and West Bengal (in 1986-87 rupees)

Years		Tripura	ι		West Ben	gal		Assam	
	Male	Female	F/M (%)	Male	Female	F/M (%)	Male	Female	F/M (%)
1964–65	9.0	5.0	56.0	11.3	9.6	84.2	11.2	7.9	70.0
1965-66	8.3	4.5	54.9	9.8	8.6	87.7	10.2	8.1	80.0
1966-67	7.8	6.0	77.I	10.3	9.4	90.8	9.3	7.8	83.3
1967-68	8.1	6.7	83.3	9.7	9.1	93.6			
1968-69	8.5	7.1	83.3	10.3	9.4	91.4	8.5	8.5	100.0
1969-70	9.5	7.9	83.3	10.0	8.9	88.5	9.5	9.5	100.0
1970–71		8.3		9.9	8.8	89.0	8.7	8.7	100.0
1971-72	10.4	8.0	76.7	10.7	9.5	89.4	8.3	8.3	100.0
1972–73									
1973–74	9.1	6.8	75.0	8.9	8.0	90.6	7.6	8.3	110.0
1974–75	8.4	6.3	75. I						
1975–76	7.8	7.5	95.8	10.8	9.4	87.0	9.8	7.8	80.0
1976–77	8.0	8.0	100.0	10.9	9.7	89.0			
1977–78	8.1	8.1	100.0	11.5	11.1	96.8	11.2	9.3	83.3
1978-79	8.9	8.9	100.0	12.0	11.7	97.4	11.2	9.4	84.1
1979-80	9.5	9.4	99.3	11.3	11.0	96.9	11.8	10.5	89.5
1980-81	10.9	10.9	100.6	11.9	11.6	97.0	15.3	13.7	89.3
1981-82	11.7	11.7	100.0	11.5	10.9	94.7	15.2	15.2	100.0
1982-83	11.2	11.7	103.6	10.3	10.1	98.9	16.8		
1983-84	13.1	13.1	100.0	13.1	13.1	100.0	19.5		
1984–85	11.9	11.9	100.0				12.9		
1985-86	13.2	13.2	100.0				15.3		
1986–87	13.9	14.1	101.8	16.3	15.1	92.5	15.6		
1987–88	15.5	15.5	100.0	18.8	15.6	83.1	17.7		
1988-89	16.0	16.0	100.0	17.5	14.9	85. I	18.7		
1989–90	17.4	17.4	100.0	17.4	14.2	81.5	22.7		
1990–91	16.0	16.0	99.8	22.2			20.7		
1991–92	13.7	13.7	100.0	22.6	14.1	62.1	18.0		
1992–93	12.9	12.9	100.1	28.1	14.6	51.9	19.9		
1993–94	11.9	11.9	100.2	28.1	13.0	46.3	18.0		
1994–95	10.6	10.6	100.0	26.3	12.6	47.7	16.8		
1995–96	10.6	10.6	99.4	23.4	12.1	51.9	15.9		
1996–97	11.0	11.5	104.3	22.1	13.0	59.0	15.4		
1997–98	11.8	11.8	99.9						
1998–99	13.7	13.7	99.6						
1999–200	15.9	15.9	100.0						
2000-01	16.5	16.5	100.0						
2001-02	16.5	16.5	100.0						

Notes: Blank cells refer to missing observations.

For Tripura, there is only one centre, Lembuchera. For West Bengal, we have taken the centre in Barddhaman and for Assam, we have taken the centre in Sibsagar. The deflator used is the Consumer Price Index for Agricultural Labourers.

Source: Agricultural Wages in India (different issues), compiled by Pallavi Chavan.

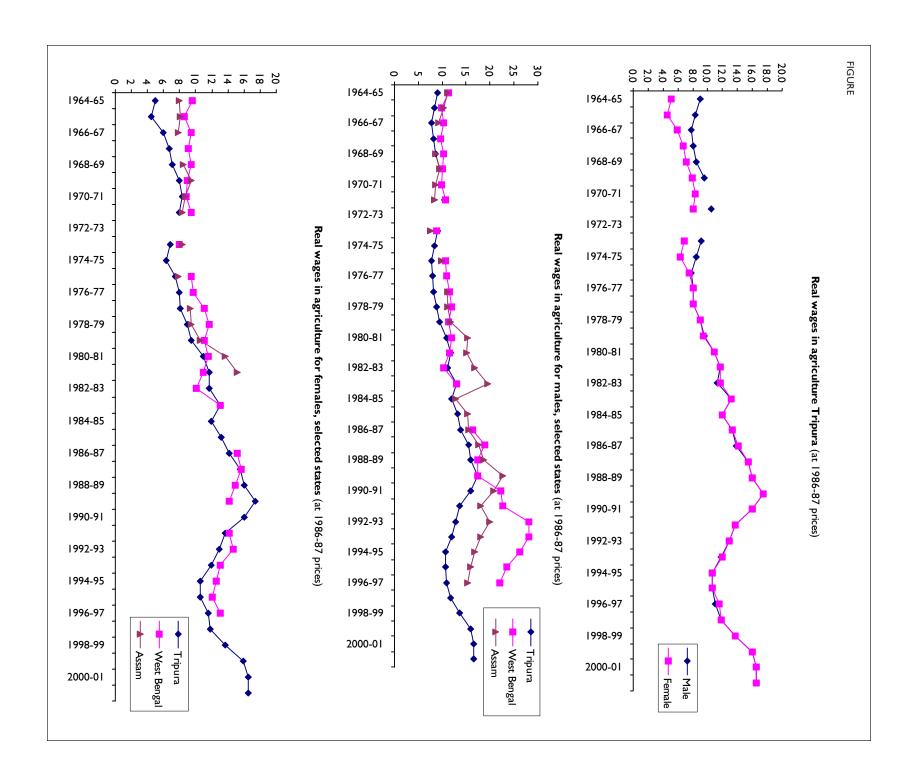


TABLE E&I 15
Wage earnings of agricultural workers, Rural Labour Enquiry, different years, for Tripura, West Bengal and Assam (in 1986–87 rupees)

		Tripura			West Bengal			Assam		
Years	Males	Females	F/M(%)	Males	Females	F/M(%)	Males	Females	F/M(%)	
1964–65	8.9	6.2	69.5	8.3	6.2	75.I	9.9	7.6	76.9	
1974-75	7.2	5.6	77.3	7.4	6.0	81.1	9.2	7.0	76.0	
1977–78	7.2	5.5	77.3	8.0	7.0	87.0	9.5	8.2	86.5	
1983	8.6	5.3	61.8	5.4	5.4	99.3	10.5	10.4	98.7	
1987-88	13.4	10.1	75.6	11.3	10.2	90. I	10.8	9.9	92.2	
1993-94	12.6	7.8	62.0	13.3	11.5	86.7	13.9	11.7	84.0	
1999-2000	15.2	11.3	73.9	14.3	12.3	85.9	14.1	12.1	85.8	

Note: CPIAL deflator is used.

TABLE E&I 16

Average daily wages for casual workers of age 5 years and above engaged in other than public works, Tripura, North Eastern States and India, 1999-2000 (in Rs)

		Rural			Urban	
State	Male	Female	Persons	Male	Female	Persons
Tripura	49. I	38.7	47.8	60.8	46.2	59.1
Arunachal Pradesh	67.1	42.7	57.6	136.6	250.0	159.1
Assam	48.8	35.6	46.6	70.9	51.6	65.6
Manipur	59.5	47.4	56.9	71.2	40.9	65.9
Meghalaya	57.7	43.1	51.3	75.7	61.1	72.1
Mizoram	97.8	66.2	92.3	86.7	64.2	79.2
Nagaland	71.9	46.7	68.2	81.5		81.5
Sikkim	50.7	40.6	49.2	57.8	43.5	54.3
All India	44.8	29.0	39.6	62.3	37.7	56.9

Source: NSSO.

TABLE E&I 17
Estimated number of jhumia families, Tripura, by district and sub-division, 1999

District/Sub-division	Hardcore jhumia	Partly jhumia	District/Sub-division	Hardcore jhumia	Partly jhumia
Kanchanpur	6,739		Sabroom	3,914	516
Kailasahar	198		Belonia	2,724	949
Dharmanagar	653		Udaipur	2,609	
North District	7,590		South District	15,854	
Longtorai valley	5,413		Sonamura	875	
Ambassa	3,666		Bishalgarh	2,175	
Kamalpur	929		Sadar	2,452	
Gandacherra	6,041		Khowai	4,808	
Dhalai	16,049		West District	10,307	
Amarpur	6,607		Tripura	49,800	1,465

Source: Government of Tripura, Department of Tribal Welfare, 1999.

TABLE E&I N umber o		st Management	Committe	es, Tripu	ıra, as on 3	1.3. 2007	
Total no.	Project	Area under			of families in		
	area (ha)	cover (ha)	ST	SC	General	OBC	Total
472	128,221	43,070	26,891	9741	5772	2478	44,882
<i>Note</i> . ST	is Scheduled	Tribes, SC is Scho	eduled Caste	s and OBC	is Other Ba	ckward Cl	asses.

Population in For	est (Regrouped) Villages	, Tripura, March 2007	
State/District	No. of families	Population	No. of JFMs
North District	745	3177	2
Dhalai	1709	4605	6
Vest District	824	4522	7
outh District	630	2943	8
- - - - - - -	3908	15,253	23

Annual per capita co	nsumption	of electricity, T	ripura and regions of	India, 2002-03 (in Kwh)			
State/Region	Utilities	Non-Utilities	Total	State/Region	Utilities	Non-Utilities	Total
Tripura	111.3	0	111.3	Southern Region	441.1	53.7	494.8
North Eastern Region	90.3	23.5	113.7	Western Region	460.2	83.6	543.8
Northern Region	291.0	35.3	326.3	All India	321.9	51.1	373.0
Eastern Region	146.7	41.5	188.2				

. .	V.1. (: 1	_	
State	Value of index	State	Value of index
Arunachal Pradesh	69.7	Mizoram	82.1
Assam	77.7	Nagaland	76.1
Manipur	75.4	Tripura	74.9
Meghalaya	75.5	All India	100

egion/State/District	1961	1975	1980	1990	2000	2003
Dhalai	-	_	-	_	19.2	20.5
North District	-	95.0	28.4	16.2	17.9	17.9
South District	-	57.1	25.5	17.8	16.6	16.6
Composite (1+2+3)	-	70.9	26.9	17.0	17.5	17.7
West District	_	83.5	25.6	17.0	17.4	17.2
Tripura	275.0	77.9	26.3	17.0	17.5	17.4
North Eastern Region	276.1	79.0	37.1	17.4	19.6	20.3
India	99.0	32.5	20.8	13.8	14.9	15.1

Notes:
1. Figures have been worked out using population estimates from the Population Census for all five years starting from 1961.
2: North-Eastern region includes Tripura, Assam, Manipur, Mizoram, Meghalaya and Nagaland depending on the availability of data for each State for every year reported in the Table.

Source: Reserve Bank of India. Banking Statistics, various issues; RBI (1961); GOI (1981, 1991 and 2001).

TABLE E&I 23

Distribution of total bank credit and total population, by region and State, 1975-2003 (in per cent)

Region	1975	1980	199	0	200	00	200	3
	Total credit	Total credit	Total population	Total credit	Total population	Total credit	Total population	Total credit
Northern region	15.5	21.2	11.7	16.9	12.1	20.0	12.8	20.4
Haryana	1.3	1.7	1.9	2.0	1.9	1.6	2.0	1.6
Himachal Pradesh	0.2	0.2	0.6	0.4	0.6	0.3	0.7	0.3
Jammu and Kashmir	0.3	0.5	0.9	0.5	0.9	0.6	1.0	0.6
Punjab	2.4	3.0	2.4	3.7	2.4	3.3	2.4	3.1
Rajasthan	1.7	2.2	5.0	2.6	5.2	2.4	5.4	2.3
Delhi	9.6	13.6	0.9	7.8	1.1	11.8	1.4	12.4
North Eastern region	0.6	0.7	3.4	1.3	3.2	0.7	3.3	0.6
Assam	0.6	0.6	2.9	1.1	2.6	0.6	2.6	0.5
Manipur	0.02	0.02	0.2	0.1	0.2	0.04	0.3	0.02
Meghalaya	0.03	0.03	0.2	0.1	0.2	0.05	0.2	0.1
Nagaland	0.01	0.02	0.1	0.1	0.1	0.03	0.2	0.02
Mizoram	0.001	0.003	3.9	0.02	3.7	0.02	3.6	0.02
Tripura	0.02	0.07	2.4	0.20	2.4	0.07	2.4	0.07
Eastern region	16.6	13.9	22.0	13.4	22.0	8.9	21.5	8.4
Bihar	2.8	2.6	10.2	2.9	10.2	1.8	10.0	1.0
Jharkhand	_	_	-	_	_	_	_	0.7
Orissa	0.7	1.0	3.9	2.0	3.7	1.2	3.6	1.3
West Bengal	13.1	10.3	8.0	8.5	8.0	5.9	7.9	5.5
Central region	9.0	8.6	23.8	11.1	24.2	8.4	25.1	6.7
Chattisgarh	_	_	-	_	_	_	_	0.5
Madhya Pradesh	2.4	2.5	7.6	4.2	7.8	3.3	8.0	2.3
Uttar Pradesh	6.6	6.1	16.1	6.9	16.4	5.1	17.1	4.4
Uttaranchal	_	_	-	_	_	_	_	0.4
Western region	30.1	27.7	14.1	27.4	14.2	33.3	14.0	35.2
Gujarat	6.1	5.5	5.0	5.6	4.9	5.1	4.8	4.3
Maharashtra	24.0	22.1	9.2	21.8	9.3	28.2	9.1	30.9
Southern region	24.6	24.2	24.1	28.3	23.3	26.9	22.2	25.7
Andhra Pradesh	4.9	5.4	7.8	7.2	7.9	6.5	7.6	6.0
Karnataka	6.5	5.9	5.4	6.6	5.3	6.3	5.2	6.2
Kerala	3.1	3.9	3.7	4.0	3.5	3.5	3.2	3.4
Tamil Nadu	10.2	9.0	7.1	10.5	6.6	10.6	6.2	10.1
India	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Notes: I. Sum may not add up exactly to 100 per cent due to the exclusion of few States/U.T.

Source: Reserve Bank of India, Banking Statistics, various issues, GOI (1981, 1991 and 2001).

TABLE E&I 24

Proportion of households having access to commercial banking services, Tripura, district-wise, 2001, in per cent

Region	Total	Scheduled Castes	Scheduled Tribes	Region	Total	Scheduled Castes	Scheduled Tribes
Tripura	26.5	23.5	15.2	Dhalai	16.4	16.1	11.4
West District	30.4	24.3	17.6	North District	18.1	16.7	14.8
South District	25.3	26.7	13.6	Urban Tripura	52.2	36.3	57.9
Dhalai	18.4	17.5	12.0	West District	52.7	35.2	60.5
North District	21.6	19.1	15.3	South District	55.6	43.5	51.5
Rural Tripura	20.6	20.5	13.8	Dhalai	44.7	34.3	51.2
West District	21.6	20.3	14.8	North District	47.4	36.5	46.2
South District	22.5	25.0	13.3				

Source: CD Rom of the Population Census of India, 2001 for the North-Eastern region.

^{2.} The percentage shares of each region/State in total population have been computed for 1980, 1990 and 2000 taking data from the Population Census of India of 1981, 1991 and 2001 respectively. The proportions of population have not been computed separately for 1975 and 2003.

TABLE E&I 25

Size class distribution of blocks by percentage of households using commercial banking services, Rural Tripura, 2001, in number

Percentage of households using	Number of blocks							
commercial banking services	West District	North District	Dhalai	South District	All			
per cent < 20	7	4	5	4	20			
20 < per cent < 30	7	3	-	5	15			
30 < per cent < 40	I	-	-	1	2			
40 < per cent < 60	-	I	-	-	I			

Note: - Nil.

Source: CD Rom of the Population Census of India, 2001 for the North-Eastern region.

TABLE E&I 26 Number of villages and rural population per PACS, Tripura, North Eastern region and India, 1970-2000

Region	1970	1980	1990	2000	
Number of villages per PACS	5				
Tripura	12	-	2	3	
North Eastern region	8	3	15	22	
India	4	6	7	7	
Rural population per PACS in	thousand				
Tripura	3.6	-	6. l	8.1	
North Eastern region	4.2	6.7	10.8	19.1	
India	2.7	5.7	7.2	8.6	

Notes: I. PACS indicates Primary Agricultural Credit Society.

- 2. Figures have been worked out using number of inhabited villages and rural population taken
- from the Population Census of India from 1971 onwards. 3. Between the Census of 1971 and 1981, there was a decline in the number of villages in
- Tripura from 4727 to 856. In 1991, the number of villages in the State was 855. 4. North Eastern region includes Tripura, Assam, Manipur, Mizoram, Meghalaya and Nagaland
- depending on the availability of data for each State for every year reported in the Table. - Not available.

Source: NABARD, Statistical Statements relating to Cooperative Movement in India, various issues; NABARD, Cooperative Credit Structure: An Overview, GOI (1981, 1991, 2001).

LIVING CONDITIONS (TABLES LC I-LC 10)

TABLE LC I
Distribution of households by ownership of assets, Tripura and districts, 2001

	Radio, transistor	Television	Telephone	Bicycle	Scooter, motorcycle, moped	Car, jeep, van	None of the specified assets
Total							
West District	33.2	31.8	7.6	36.8	5.8	1.3	40.6
South District	28.2	18.0	3.1	29.7	2.4	0.8	52.9
Dhalai	22.9	13.3	1.5	18.9	1.2	0.8	64.2
North District	19.1	15.3	3.7	21.0	2.6	1.0	63.3
Tripura	28.5	23.7	5.2	30.6	3.9	1.1	49.9
Rural							
West District	29.2	19.9	2.4	34.2	2.4	0.8	48.0
South District	27.2	14.3	2.0	27.8	1.8	0.7	55.6
Dhalai	21.9	11.1	1.3	17.9	1.1	0.8	66.3
North District	17.4	10.0	1.9	18.3	1.8	0.8	67.9
Tripura	25.6	15.5	2.1	27.6	2.0	0.8	55.9
Urban							
West District	43.3	62.I	21	43.4	14.2	2.6	22.0
South District	39.4	58.0	15.4	50.7	8.9	2.1	23.5
Dhalai	37.2	42.7	3.3	32.1	2.7	0.9	36.0
North District	31.5	53.9	17.1	40.6	8.7	2.4	30.0
Tripura	41.3	60.0	19.3	43.5	12.6	2.5	23.6

TABLE LC 2 Distribution of households by ownership of assets among Scheduled Castes (SC), Tripura and districts, 2001

	Radio, transistor	Television	Telephone	Bicycle	Scooter, motorcycle, moped	Car, jeep, van	None of the specified assets
Total							
West District	27.7	24.4	3.7	34.1	3.1	8.0	46.4
South District	28.6	15.5	2.1	34.5	1.8	0.6	48.9
Dhalai	23.8	13.1	1.5	27.0	1.1	1.2	57.5
North District	16.9	10.8	2.2	19.2	1.7	0.9	67.I
Tripura	26.0	19.3	2.9	31.4	2.4	8.0	51.0
Rural							
West District	26	17.6	2.0	33.7	1.8	0.6	50.0
South District	28.2	12.3	1.4	33.7	1.4	0.5	50.5
Dhalai	23.5	11.8	1.5	27.3	1.1	1.2	58.0
North District	15.7	7.0	1.4	17.3	1.2	0.8	70.4
Tripura	24.7	13.9	1.7	30.5	1.5	0.7	54.1
Urban							
West District	32.3	42.9	8.6	35.2	6.8	1.4	36.6
South District	32.8	46.0	8.5	42.2	5.1	1.1	33.7
Dhalai	27.2	29.2	2.1	22.3	1.4	0.5	50.9
North District	25.3	37.5	7.4	32.7	5.3	1.2	43.7
Tripura	31.5	42.2	8.2	35.3	6.2	1.3	37.5

TABLE LC 3 Distribution of households by ownership of assets among Scheduled Tribes (ST), Tripura and districts, 2001

State/District		Perce	ntage of hous	eholds ow	ning specified	assets	
	Radio, transistor	Television	Telephone	Bicycle	Scooter, motorcycle, moped		None of the specified assets
Total							
West District	29.8	16.6	2.4	29.1	3.0	0.9	52.9
South District	19.4	7.6	0.9	11.7	1.4	0.7	73.I
Dhalai	17.1	6.5	0.6	9.3	0.7	0.4	76.2
North District	13.5	6.4	1.0	6. l	1.2	0.5	80.2
Tripura	22.4	10.9	1.5	17.5	1.9	0.7	66.5
Rural							
West District	28.5	13.4	1.1	28.4	2.0	0.7	55.1
South District	19.3	7.3	0.9	11.6	1.4	0.6	73.3
Dhalai	16.7	5.9	0.6	9.0	0.7	0.4	76.9
North District	13.2	5.6	0.8	5.7	1.1	0.4	81.1
Tripura	21.6	9.2	0.9	16.9	1.5	0.6	67.9
Urban							
West District	50.4	64.8	22.9	39.4	18.1	2.9	19.6
South District	36.8	36.6	6.3	27.9	6.1	2.3	38.2
Dhalai	42.1	41.4	1.9	28.2	1.9	0.4	31.0
North District	33.4	48.7	7.4	29.6	6.8	1.7	32.1
Tripura	47.3	59.5	18.7	36.9	14.9	2.6	22.9

TABLE LC 4 Distribution of households by ownership of assets, rural Tripura, by block, 2001 $\,$

	Radio, transistor	Television	Telephone	Bicycle	Scooter, motorcycle, moped	Car, jeep, van	None of the specified assets
West District							
Dukli	31.3	28	2.1	41.8	3.4	0.9	38.3
Jirania	39.5	27.8	4	36.1	3.6	1	39.7
Mohanpur	31.1	28	3.4	39.6	3.9	0.6	42.3
Khowai	27.6	15.5	3.4	44.9	1.7	0.5	43.3
Mandai	36.4	16.7	0.9	35.2	2.2	0.8	44.9
Bishalgarh	31.5	23.3	2.1	33.7	2.2	I	46.3
Pabmabil	28	14.9	0.3	43.I	2.5	0.4	48.5
Melaghar	24.9	16.8	2.6	34.3	1.6	0.8	48.9
Kathalia	22.6	14.2	1.9	33.7	1.6	0.5	51.6
Hezamara	26.6	10.9	0.6	29.1	1.3	0.2	56.3
Jampuijala	29.5	12.5	0.8	22.5	2.3	0.6	57
Kalyanpur	25.3	12.3	4.5	26.8	2.5	2.8	58
Teliamura	22.6	13.2	2.2	23.4	1.2	0.7	60.1
Tulashikhar	16.8	7.4	0.4	31.4	1.4	0.4	61.6
Boxanagar	22.1	11.4	0.7	17.5	1.3	0.6	63.8
South District							
Matarbari	34.7	20.7	2.5	36.6	2.6	0.6	44.1
Kakraban	31.8	16	1.8	38	2.2	0.9	45.4
Rajnagar	26.7	11.1	2.1	34	ı i	0.6	51.7
Hrishyamukh		13.7	2.1	30	1.3	0.6	53.5
Bagafa	25.3	16.5	2.9	29.9	1.9	0.6	55.2
Satchand	27.8	13.6	1.6	29.9	1.7	0.8	55.4
Killa	29.5	14	3.8	17.1	5.6	3.5	62.7
Amarpur	20	10.4	1	13.9	0.7	0.5	68.4
Rupaichhari	18.7	5.5	0.3	11.4	0.8	0.3	74
Karbuk	18.7	8.8	0.5	4.9	0.4	0.3	75.3
Dhalai							
Salema	26	14.8	1.7	33.5	1.4	0.8	53.5
Ambassa	20.5	10.5	0.7	16	1.1	0.6	70.1
Manu	21.5	11.2	1.9	7.2	1.4	1.4	71.8
Dumburnaga		7.8	0.8	5.9	0.2	0.4	74.3
Chhamanu	10.9	2.3	0.3	J.,	0.5	0.4	86.6
North District	10.7	2.3	0.5		0.5	0.1	00.0
	10 5	12.0	2.4	24.2	2.1	0.7	(1.2
Panisagar	18.5 19.2	12.8 11	2.4 1.7	24.2 24.9	1.9	0.7 0.5	61.3 62.6
Gournagar							
Kadamtala	17.3	11.2	2.4	26.1	2.3	0.6	63.3
Jampuii hills	30 21.5	12 9.1	5.2 1.7	1.4 16.6	5.5	1.2 0.4	65.9
Kumarghat	16.3	9.1 10.5		16.6	1.5 1.3	0.4	66.8
Pencharthal			1.5				72.8
Dasda Damchhara	11.6 12.3	6.4 4.5	1.1 0.2	6.3 2.3	l 0.5	1.6 0.4	80.7 83.3

TABLE LC 5 Distribution of houses by source of lighting, rural Tripura, by block, 2001 (per cent of houses)

Block/District/State	With electricity	Block/District/State	With electricity
West District	35.4	Satchand	27.7
Mohanpur	48.4	Amarpur	26.8
Jirania	46.2	Rajnagar	26.1
Dukli	46.2	Killa	14.4
Kathalia	39.5	Rupaichhari	9.6
Bishalgarh	38.4	Dhalai	28.1
Khowai	37.4	Ambassa	31.7
Melaghar	35.7	Salema	31.4
Boxanagar	33.6	Dumburnagar	27.4
Mandai	24.3	Manu	26.7
Teliamura	24.1	Chhamanu	14.3
Kalyanpur	24.1	North District	27.6
Jampuijala	21.3	Jampuii hills	63.6
Pabmabil	12.4	Pencharthal	37.I
Hezamara	10.9	Gournagar	33.3
Tulashikhar	8.3	Panisagar	29.6
South District	30.5	Kumarghat	25.4
Matarbari	42.3	Kadamtala	24.9
Hrishyamukh	36.4	Dasda	20.6
Bagafa	33.3	Damchhara	17.6
Kakraban	30.5	Tripura	31.7
Karbuk	29.1	Tipula	31.7

Source: Census of India 2001.

TABLE LC 6 Distribution of houses by source of lighting, urban Tripura, Nagar Panchayats, Census Towns and Municipal Corporations, 2001 (per cent of houses)

State/District/NP, CT, MCIs	Source of lighting Electricity	State/District/NP, CT, MCIs	Source of lighting Electricity
West District	86.2	South District	89.4
Agartala MCI	97.1	Udaipur NP	92.7
Pratapgarh CT	83.3	Belonia NP	90.3
Sonamura NP	82.5	Amarpur NP	85.6
Khowai NP	82.1	Sabroom NP	82.8
Badharghat CT	81.6	Dhalai	76.1
Kunjaban(part) CT	77.7	Kamalpur NP	85.3
Indranagar(part) CT	76.8	Kanchanpur CT	80. I
Teliamura NP	76.4	Ambassa CT	60.3
Ranirbazar NP	74.5	North District	87.3
Jogendranagar CT	72.3	Dharmanagar NP	91.8
Narsingarh CT	65.0	Kailasahar NP	86.3
Gandhigram CT	60.5	Kumarghat NP	77.2
Gakulnagar CT	48.4	All Tripura (Urban)	86.5

Source: Census of India 2001.

TABLE LC 7 Distribution of houses by type of structure, Tripura, rural, by block, 2001 (per cent of houses)

State/District/	Permanent	Semi-	Ter	nporary	State/District/	Permanent	Semi-	Temporary		
Block		permanent	Serviceable	Non-serviceable	Block		permanent	Serviceable	Non-serviceable	
West District	4.4	57.5	20.0	18.0	Karbuk	1.5	18.4	28.1	52.0	
Jirania	8.8	66.0	13.1	12.0	Rajnagar	1.5	52.4	27.9	18.1	
Mohanpur	6.5	63.8	19.0	10.6	Amarpur	1.3	29.9	28.9	39.7	
Bishalgarh	6.4	63.8	19.3	10.4	Rupaichhari	1.2	25.4	13.8	59.6	
Boxanagar	4.1	55.6	26.5	13.7	Killa	0.9	47.0	16.1	35.9	
Khowai	3.8	57.8	17.4	20.9	Dhalai	2.2	21.3	25.0	51.5	
Dukli	3.8	74.5	12.4	9.2	Salema	3.3	28.4	31.6	36.7	
Melaghar	3.6	54.2	24.7	17.5	Manu	2.0	18.9	28.6	50.5	
Kalyanpur	3.1	50.2	17.3	29.5	Ambassa	1.6	18.6	18.5	61.2	
Teliamura	2.5	44.7	18.0	34.7	Dumburnagar	1.1	16.3	21.5	61.1	
Kathalia	2.2	58.9	24.6	14.3	Chhamanu	0.7	10.1	5.4	83.9	
Mandai	1.8	55.7	24.1	18.3	North District	5.7	30.5	16.3	47.6	
Jampuijala	1.0	39.2	35.6	24.1	Jampuii hills	16.6	46.4	0.3	36.7	
Tulashikhar	0.9	30.9	20.7	47.4	Panisagar	8.8	38.6	15.9	36.7	
Hezamara	0.7	37.8	29.2	32.2	Kadamtala	8.1	35.6	15.0	41.3	
Pabmabil	0.6	48.4	23.6	27.4	Gournagar	6.2	32.4	18.8	42.6	
South District	2.5	43.9	21.9	31.7	Kumarghat	3.7	31.0	20.9	44.4	
Matarbari	5.1	54.8	17.3	22.8	Pencharthal	2.5	28.4	25.2	43.9	
Kakraban	3.4	53.6	22.5	20.5	Damchhara	2.1	16.0	3.2	78.7	
Bagafa	2.5	40.6	19.8	37. l	Dasda	1.7	15.7	13.2	69.3	
Hrishyamukh	2.2	50.1	15.7	32.0		3.9		20.4	31.0	
Satchand	1.8	44.1	25.5	28.5	All Tripura (Rural)	3.7	44.7	20.4	31.0	

 $\it Note.$ The rows many not add up to 100 because of some unclassified structures. $\it Source.$ Census of India 2001.

TABLE LC 8 Distribution of houses by type of latrine within the house, Tripura, rural, by block, 2001 (per cent of houses)

State/ District/		Type of latrine		No latrine	State/ District/		Type of latrine		No latrin
Block	Pit latrine	Water closet	Other latrine		Block	Pit latrine	Water closet	Other latrine	
West District	66.6	4.1	5.4	23.9	Satchand	59.4	5.6	7.8	27.1
Dukli	86.0	3.0	1.9	9.3	Amarpur	56.6	6.5	8.8	28.1
Mohanpur	77.0	5.7	4.0	13.0	Killa	43.6	7.1	16.9	32.4
Khowai	76.8	3.0	5.0	15.1	Karbuk	52.0	3.0	8.5	36.5
Melaghar	75.5	5.2	2.1	17.1	Rupaichhari	40.I	1.0	11.1	47.9
Bishalgarh	66.2	4.0	10.4	19.5	Dhalai	60.6	4.0	9.0	26.3
Jirania	62.6	7.4	9.9	20.2	Salema	71.0	3.6	10.1	15.3
Kathalia	74.1	3.1	0.9	21.9	Manu	67.2	5.4	11.8	15.6
Kalyanpur	68.0	3.8	4.8	23.4	Ambassa	58.3	3.4	5.3	33.0
Boxanagar	66.0	7.6	2.8	23.6	Dumburnagar	44.5	4.3	9.0	42.2
Teliamura	59.9	2.7	7.4	29.9	Chhamanu	31.1	3.3	4.1	61.4
Mandai	55.0	1.7	5.2	38.0	North District	73.3	5.0	6.9	14.9
Pabmabil	50. I	0.3	1.9	47.7	Kadamtala	88.3	4.9	1.6	5.1
Hezamara	49.6	0.8	1.8	47.8	Panisagar	80.3	7.2	4.7	7.8
Tulashikhar	37.0	0.8	6.6	55.6	Kumarghat	78.6	6.5	5.2	9.7
Jampuijala	34.1	1.6	4.0	60.3	Pencharthal	68.8	4.9	11.4	14.9
South District	73.3	5.0	6.9	14.9	Damchhara	63.4	1.4	16.1	19.1
Kakraban	78.9	2.6	10.9	7.61	Dasda	67.3	3.4	9.0	20.2
Matarbari	74.5	6.3	6.5	12.8	Gournagar	57.8	4.2	9.4	28.5
Hrishyamukh	65.0	4.3	13.0	17.7	Jampuii hills	43.5	0.7	18.9	36.9
Rajnagar	69.6	4.2	6.6	19.5	,				
Bagafa	54.4	7.0	14.3	24.2	All Tripura (Rural)	66.0	4.6	7.3	22.1

Source: Census of India.

TABLE LC 9 Distribution of houses by type of drainage connectivity for waste water, Tripura, rural, by block, 2001 (per cent of houses)

District /Block	Different type	of connectivity fo	r waste water	District /Block	Different type	of connectivity fo	r waste water
	Closed drainage	Open drainage	No drainage		Closed drainage	Open drainage	No drainage
West Tripura	2.2	22.5	75.3	Killa	0.4	19.1	80.5
Boxanagar	0.7	40.9	58.3	Rajnagar	1.0	14.5	84.4
Kalyanpur	1.0	34.3	64.7	Hrishyamukh	0.2	15.2	84.5
Hezamara	0.3	29.0	70.7	Bagafa	0.6	14.2	85.2
Bishalgarh	2.9	26.1	71.0	Satchand	2.2	8.1	89.6
Dukli	2.6	26.4	71.0	Dhalai	2.1	26.9	71.0
Devekhowai	3.8	23.4	72.8	Ambassa	4.7	32.5	62.8
Jampuijala	1.0	25.8	73.1	Salema	1.1	28.5	70.4
Jirania	3.7	23.0	73.3	Manu	2.7	26.0	71.3
Teliamura	3.0	23.7	73.3	Chhhamanu	2.8	22.9	74.3
Mohanpur	1.9	20.5	77.6	Dumburnagar	0.5	20.9	78.5
Mandai	1.7	16.9	81.4	North Tripura	1.9	23.6	74.6
Tualshikhar	0.2	16.6	83.2	Jampuii hills	15.0	30.4	54.6
Melaghar	2.2	12.5	83.3	Kumarghat	1.7	27.I	71.1
Kathalia	0.4	13.0	86.6	Panisagar	1.6	25.4	73.0
Pabmabil	0.0	8.5	91.4	Dasda	2.5	24.1	73.6
South Tripura	1.1	17.9	81.1	Pencharthal	0.9	22.7	76.3
Amarpur	0.8	26.5	72.7	Gournagar	2.1	21.2	76.7
Matarbari	1.5	22.2	76.3	Kadamtala	0.7	21.2	78.1
Kakraban	1.8	20.4	77.8	Damchhara	1.3	18.8	79.8
Karbuk	0.5	21.2	78.2				
Rupaichhari	0.7	20.1	79.2	All Tripura (Rural)	1.8	21.2	76.3

TABLE LC 10 Distribution of houses by source of drinking water, Tripura, rural, 2001 (per cent of houses)

District/Block			ce of drinking water	District/Block	Distribution of house	s by source of c	Irinking water
	Тар	Hand pump and tube well	Other open sources		Тар	Hand pump and tube well	Other open sources
West Tripura	19.5	31.9	48.5	Satchand	18.7	24.8	56.5
Khowai	48. I	18.2	33.7	Rajnagar	15.0	32.7	52.2
Dukli	27.1	33.6	39.3	Karbuk	9.2	11.0	79.9
Kalyanpur	24.6	28.3	47.1	Killa	6.5	23.2	70.4
Bishalgarh	21.4	30.3	48.3	Rupaichhari	5.4	13.0	81.5
Kathalia	21.2	50.5	28.3	Dhalai	12.9	20.0	67.1
Teliamura	21.1	34.0	45.0	Salema	17.7	28.9	53.4
Jirania	20.7	40.0	39.7	Ambassa	13.4	15.5	71.1
Boxanagar	20.2	63.8	16.0	Dumburnagar	- 12.3	22.3	65.4
Mohanpur	19.2	33.2	47.6	Manu	9.3	11.4	79.2
Mandai	15.1	12.2	72.8	Chhamanu	2.7	7.8	89.5
Melaghar	13.0	48.4	38.6	North Tripura	12.8	18.1	69.2
Jampuijala	4.4	16.7	78.8	Dasda	15.8	14.4	69.8
Tulashikhar	2.1	14.2	83.7	Gournagar	14.6	28.1	57.4
Hezamara	2.1	2.7	95.2	Kadamtala	13.2	17.9	68.9
Pabmabil	0.7	6.9	92.4	Panisagar	12.8	11.4	75.8
South Tripura	21.4	28.1	50.5	Kumarghat	12.1	16.0	71.9
Kakraban	37.3	37.0	25.7	Pencharthal	9.7	30.6	59.6
Matarbari	30.0	36.7	33.3	Damchhara	0.2	19.5	80.3
Bagafa	23.5	21.4	55.1	Jampuii hills	0.1	0.6	99.3
Hrishyamukh	21.4	29.5	49.1	All Tripura (Rural		26.9	55.0
Amarpur	19.7	31.7	48.6	All Tripura (Nura	10.1	20.7	55.0

Source: Census of India, 2001.

TABLE FI
Public Expenditure Ratio (PER), Social Allocation Ratio (SAR), Social Priority Ratio (SPR) and Human Expenditure Ratio (HER), selected States, 2001-02 (per cent)

	PER	SAR	SPR	HER		PER	SAR	SPR	HER
North Eastern States					Gujarat	18.6	39.8	36.2	2.7
Arunachal Pradesh	72.6	31.6	63.3	14.5	Haryana	17.1	29.6	50.3	2.5
Assam	22.1	40.9	63.2	5.7	Karnataka	20.1	35.0	53.0	3.7
Manipur	45.4	36.I	60.7	9.9	Kerala	17.0	39.3	51.7	3.5
Meghalaya	33.8	41.3	66.9	9.3	Madhya Pradesh	17.6	39.5	56.2	3.9
Mizoram	67.0	40.6	56.2	15.3	Maharashtra	15.4	36.5	55.2	3.1
Nagaland	40.2	29.1	64.9	7.6	Orissa	26.0	35.0	55.9	5.1
Sikkim	71.7	38.2	58.6	16.0	Punjab	19.7	23.2	39.3	1.8
Tripura	39.7	39.9	52.8	8.4	Rajasthan	20.2	42.7	61.9	5.4
Average for North					Tamil Nadu	16.4	38.2	53.2	3.3
Eastern States	31.8	38.4	61.2	7.5	Uttar Pradesh	18.8	32.0	65.6	3.9
Other States					West Bengal	16.8	35.7	45.0	2.7
Andhra Pradesh	18.9	36.4	55.0	3.8	Average for				
Bihar	24.5	35.5	69.3	6.0	other States	18.2	35.8	53.8	3.5

Notes: PER= Public Expenditure/GSDP.

SAR= Expenditure in the social sector/GSDP.

SPR= Expenditure in Human Priority Areas/Expenditure in the Social sector.

HER= PER*SAR*SPR.

Expenditure under different heads has been estimated as the sum of revenue expenditure and capital expenditure (including loans and advances net of

repayments).

Source: Finance Accounts of Tripura, Accountant General, Government of India.

TABLE F2
Per capita public expenditure on social sector and human priority sector, selected States, 2001–02 (Rs. at 1993–94 prices)

	er capita social tor expenditure	Per capita social priority expenditure		Per capita social sector expenditure	Per capita social priority expenditure
North Eastern States			Gujarat	1181	428
Arunachal Pradesh	2276	1440	Haryana	828	416
Assam	625	395	Karnataka	916	485
Manipur	1322	802	Kerala	802	414
Meghalaya	1498	1002	Madhya Pradesh	611	343
Mizoram	-	-	Maharashtra	941	519
Nagaland	1455	944	Orissa	624	349
Sikkim	3450	2020	Punjab	786	309
Tripura	1778	938	Rajasthan	855	529
Average for North Eastern Stat	es 950	585	Tamil Nadu	895	477
Other States			Uttar Pradesh	399	262
Andhra Pradesh	819	450	West Bengal	685	308
Bihar	340	236	Average for other State	es 708	381

TABLE F3 Indicators of expenditure on human development in Tripura, 1993-94 to 2002-03 (per cent)

Year	Public Expenditure ratio	Social allocation ratio	Social priority ratio	Human expenditure ratio
1993–94	42.4	42.8	50.6	9.2
1994-95	45.3	44.5	52.7	10.6
1995-96	43.5	45.2	58.1	11.4
1996-97	42.9	46.8	55.8	11.2
1997–98	39.6	47. l	56.8	10.6
1998-99	37.7	49.5	57.4	10.7
1999-00	38.7	45.5	53.7	9.5
2000-01	40.5	43.8	56.0	9.9
2001-02	40.7	41.4	55.3	9.3
2002-03	37.6	41.5	54.6	8.5

Notes: PER= Public Expenditure/GSDP.

SAR= Expenditure in the social sector/GSDP.

SPR= Expenditure in Human Priority Areas/Expenditure in the Social sector.

HER= PER*SAR*SPR.

Source: Finance Accounts of Tripura, Accountant General, Government of India.

TABLE F4

Per capita real expenditures on human development in Tripura at 1993-94 prices, (in rupees)

Year	Per Capita Public Expenditure	Per Capita Social Sector Expenditure	Per Capita Social Priority Expenditure
1993–94	2,576	1,103	558
1994–95	2,685	1,196	630
1995–96	2,747	1,241	721
1996-97	2,955	1,384	773
1997–98	2,966	1,398	794
1998-99	3,072	1,522	874
1999-00	3,357	1,527	820
2000-01	4,143	1,815	1,016
2001-02	4,307	1,785	987
2002–03	4,125	1,713	935

Note: Expenditure under different heads has been estimated as the sum of revenue expenditure and capital expenditure (including loans and advances net of repayments).

Source: Finance Accounts of Tripura, Accountant General, Government of India.

Source: Finance Accounts of Tripura, Accountant General, Government of India.

TABLE F5
Total expenditure on social sector and its components as a per cent of GSDP in Tripura, 1993-94 to 2002-03

	1993- 94	1994– 95	1995– 96	1996– 97	1997– 98	1998– 99	1999– 2000	2000– 01	2001- 02	2002– 03
General Education	7.5	7.9	7.4	7.2	6.7	6.5	7.5	7.4	7.3	7.2
Health and Family Welfare	2.0	2.0	1.9	2.1	1.9	1.7	1.7	1.6	1.5	1.5
Water supply and sanitation	1.3	1.9	1.7	1.8	1.1	1.4	1.1	1.4	1.1	0.9
Welfare of SCs, STs and OBCs	2.3	2.5	2.4	2.0	1.7	1.6	1.6	1.5	1.5	1.3
Nutrition	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2
Rural Development	2.1	2.9	4.0	3.6	4.2	4.3	2.7	2.9	2.7	2.0
Social Sector as a whole	18.2	20.2	19.6	20.1	18.6	18.7	17.6	17.8	17.0	15.6

TABLE F6
Per capita expenditure on social sector and its components in Tripura, 1993-94 to 2002-03 (at 1993-94 prices)

	1993- 94	1994- 95	1995- 96	1996- 97	1997- 98	1998- 99	1999- 2000	2000- 01	2001- 02	2002- 03	
General Education	456	470	466	498	502	532	653	752	760	787	
Health and Family Welfare	124	118	117	142	139	140	150	167	161	160	
Water supply and sanitation	82	113	108	123	80	110	98	142	Ш	101	
Welfare of SCs, STs and OBCs	138	151	153	136	129	131	140	156	158	144	
Nutrition	24	24	17	18	17	14	14	17	26	20	
Rural Development	131	174	251	249	312	349	231	295	281	224	
Social Sector as a whole	1103	1196	1241	1384	1398	1522	1527	1815	1786	1713	

 ${\it Source:} \ \ {\it Finance Accounts of Tripura, Accountant General, Government of India.}$

TABLE F7
Composition of Social Sector Spending, 2002-03, Selected States (per cent of total expenditure spent on each category)

	General Education	Health and Family Welfare	Water Supply and Sanitation	Welfare of SC, ST and OBCs	Nutrition	Rural Development	Other
Andhra Pradesh	35.3	12.8	7.4	10.6	3.2	12.3	18.4
Arunachal Pradesh	38.2	16.0	16.2	0.0	2.9	6.6	20.1
Assam	62.4	10.5	5.4	1.8	1.2	7.0	11.8
Bihar	52.3	11.0	3.8	1.6	0.6	21.7	8.9
Chhattisgarh	28.1	10.6	6.7	22.3	2.2	13.1	16.9
Goa	38.7	15.3	21.6	0.2	0.3	4.3	19.7
Gujarat	42.8	10.6	6.9	4.9	2.9	7.1	24.8
Haryana	43.9	11.1	15.7	1.4	1.4	4.3	22.2
Himachal Pradesh	48.2	15.3	17.1	0.8	0.6	4.7	13.4
Jammu & Kashmir	37.0	19.2	17.5	1.1	0.2	7.2	17.8
Jharkhand	39.7	9.4	8.8	8.1	0.1	19.4	14.6
Karnataka	47.7	14.1	4.8	7.6	1.2	7.3	17.3
Kerala	45.1	13.0	3.1	5.4	0.0	17.4	16.0
Madhya Pradesh	32.6	11.7	6.6	14.0	1.6	12.8	20.7
Maharashtra	55.9	11.5	4.4	5.6	2.4	5.9	14.4
Manipur	48.2	11.2	17.4	5.7	0.3	3.8	13.5
Meghalaya	40.3	16.9	17.1	0.2	1.6	11.0	12.9
Mizoram	36.5	13.8	15.1	10.3	1.3	5.9	17.2
Nagaland	33.9	15.9	16.6	1.6	1.2	4.5	26.3
Orissa	45.4	12.2	6.1	6.5	1.9	11.5	16.5
Punjab	60.7	18.4	6.8	1.6	0.0	2.2	10.3
Rajasthan	41.0	11.5	17.2	1.8	2.7	7.8	18.0
Sikkim	41.1	12.7	11.9	2.6	1.9	5.4	24.4
Tamil Nadu	43.1	13.4	7.1	5.6	5.7	6.6	18.4
Tripura	47.7	10.0	6.3	9.0	1.3	8.4	17.4
Uttar Pradesh	47.1	12.5	2.3	7.7	0.0	16.1	14.3
Uttaranchal	54.3	10.8	8.6	2.6	0.0	9.7	14.0
West Bengal	51.2	16.4	3.6	2.2	0.7	7.3	18.4

TABLE F8

Area, Population and Expenditure of Urban Local Bodies, Tripura

Name of Urban Local Body	No. of wards	Total Area (sq. km)	Population 2005	Population Density (persons/ Sq.km)	Share of SC in total population (%)	Share of ST in total population (%)	Average annual Expenditure, 1998– 99 to 2001–02 (in Rs lakhs)	Per capita average annual expenditure (Rupees)
Agartala Municipal Council	17	62.6	355,129	5,673	18.7	4.9	196	103.5
Nagar Panchayats								
Dharmanagar	15	7.8	30,785	3,962	8.6	0.7	48.6	157.8
Kailashahar	- 11	6.2	20,279	3,276	19.7	4.2	40.7	200.8
Kumarghat	9	3.5	11,591	3,312	32.4	8.9	42.9	369.9
Kamalpur	9	10.1	10,633	1,047	19.1	2.9	41.4	805.7
Khowai	13	5.8	20,435	3,512	5.9	4.5	35.1	199.1
Teliamura	15	3.7	19,606	5,228	14.9	0.1	58.1	296.4
Ranirbazar	9	1.9	11,878	6,091	19.7	0.1	32.4	294.1
Sonamura	9	4.1	10,335	2,502	17.7	0.8	38.6	386.4
Udaipur	9	6.1	31,023	5,086	16.5	0.7	33.2	152.6
Amarpur	9	8.5	10,863	1,270	28.5	4.7	27.8	256.3
Sabroom	9	2.5	5,766	2,279	20.1	4.8	35.8	620.2
Belonia	9	4.1	15,687	3,798	13.5	0.2	32.9	210.1
All Urban Bodies	143	127.2	554,010	4,356	17.8	3.9	663.5	179.6

Source: Director of Urban Development, Government of Tripura.

TABLE F9
Devolution of Untied Funds or Panchayat Development Funds by Tier, Tripura, 1996-97 to 2004-05 (in rupees lakhs)

Year	Funds	Gram Panchayat	Panchayat Samiti	Village/BAC	Zilla Parishad	Total
1996–97	Amount	552.4	100.4	161.0	38.9	852.7
	Share	64.8	11.8	18.9	4.6	100.0
1997–98	Amount	2650.9	919.5	2218.0	844.6	6633.0
	Share	39.9	13.9	33.4	12.7	100.0
1998-99	Amount	807.7	754.0	1795.7	1911.7	5269.2
	Share	15.3	14.3	34.1	36.3	100.0
1999-2000	Amount	1326.9	686.5	1211.5	1444.6	4669.6
	Share	28.4	14.7	25.9	30.9	100.0
2000-01	Amount	903.5	586.3	1080.9	2098.5	4669.2
	Share	19.3	12.6	23.1	44.9	100.0
2002-03	Amount	1063.2	631.5	1712.5	2423.7	5830.9
	Share	18.2	10.8	29.4	41.6	100.0
2003-04	Amount	580.1	339.3	914.0	3129.2	4962.7
	Share	11.7	6.8	18.4	63.0	100.0
2004-05	Amount	407.1	238.3	634. I	4875.0	6154.4
	Share	6.6	3.9	10.3	79.2	100.0
All years	Amount	8291.8	4255.7	9727.9	16766.2	39041.7
	Share	21.2	10.9	24.9	42.9	100.0

Note: All numbers have been rounded off to the first digit.

POLITICAL PARTICIPATION AND VIOLENCE (TABLES 01-07)

TABLE OI Violent Incidents and Casualties in the North Eastern States, 2004 and 2005

State	Inci	Incidents		Extremists killed		Security Forces killed		s killed
	2004	2005	2004	2005	2004	2005	2004	2005
Assam	267	398	104	74	17	7	194	173
Tripura	212	115	51	21	46	- 11	67	28
Nagaland	186	192	55	70	-	1	42	28
Manipur	478	554	134	202	36	50	88	158
Mehgalaya	47	37	22	23	8	-	17	1
Arunachal Pradesh	41	32	35	15	2	1	6	3
Mizoram	3	4	3	-	1	_	_	2

Source: Government of India, Ministry of Home Affairs, Annual Report 2005-2006, Annex II (available at www.mha.nic.in/Annual-Reports/ar0506-Eng.pdf).

TABLE O2
Extremist-related Incidents in Tripura, 2001 to May 2007

Type of Incident	2001	2002	2003	2004	2005	2006	2007
Number of civilians killed by extremists	107	135	203	81	30	13	5
Number of persons kidnapped	134	145	194	90	62	43	13
Number of persons released by extremists	76	63	72	35	36	31	3
Number killed after kidnapping	8	15	24	12	0	- 1	1
Number of kidnapped persons untraced so far	57	63	124	72	32	- 11	8
Arrest of hardcore extremists	169	57	133	100	68	67	23
Number of force personnel killed	31	42	38	41	8	14	4
Number of extremists killed	44	31	62	59	22	27	8
Number of service weapons recovered	22	64	116	83	67	76	24

Source: Official website of Tripura Police (tripurapolice.nic.in/aachieve.htm).

Reported Number of Crimes against women, Tripura, by district, 2004

Type of crime	West	South	Dhalai	North	Tripura
Dowry torture	28	117	20	63	228
Dowry death	11	8	1	0	20
Torture	62	10	0	0	72
Abetment to suicide	24	1	1	3	28
Rape	48	51	17	38	154
Kidnapping	8	18	6	22	54
Other sexual assault	26	69	5	42	142
All types of crime	207	274	50	167	698

Source: Tripura Police, 2005.

TABLE O4
Elected Chairpersons (Pradhans) in Gram Panchayats by sex and social group, Tripura 1994, 1999 and 2004

Year	Number of Scheduled C		uled Caste	te Scheduled Tribe			eneral	Overall		
	Panchayats	Male	Female	Male	Female	Male	Female	Male	Female	
1994	525	53	34	177	341	184	184	341	184	
1999	537	54	31	253	348	189	189	348	189	
2004	513	97	46	226	336	177	177	336	177	

TABLE O5
Elected Chairpersons in Panchayat Samitis by sex and social group, Tripura 1994, 1999 and 2004

Year	Number of	r of Scheduled Caste		Sched	Scheduled Tribe General			Overall		
	Samitis	Male	Female	Male	Female	Male	Female	Male	Female	
1994	16	3	0	2	3	5	3	10	6	
1999	23	2	2	3	2	10	4	15	8	
2004	23	4	3	- 1	0	10	5	15	8	

TABLE O6
Elected Chairpersons in Zilla Parishads by sex and social group, Tripura 1994, 1999 and 2004

Year	Number of	Scheduled Caste		Scheduled Caste Scheduled Tribe G		General O		Overall	
	Zilla Parsishads	Male	Female	Male	Female	Male	Female	Male	Female
1994	3	I			I	I		2	- I
1999	4	- 1			1	- 1	1	2	2
2004	4		1			2	1	2	2

TABLE O7	
Elected representatives of Urban Local Bodies, Tripur	a. 2007

	Male	Female	Total	Female (%)
Nagar Panchayats				
Chairperson	8	4	12	33
Vice-Chairperson	10	2	12	17
Members	103	57	160	36
Agartala Municipal Council				
Chairperson	1	0	1	0
Vice-Chairperson	0	I	I	100
Members	23	12	35	34