Chronic Poverty in India: Overview Study

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Abstract
This paper tries to summarise the current state of knowledge about chronic poverty in India and identify the agenda for further research. An overview of the trends in incidence of income poverty in India is provided so as to place chronic poverty in context. It views chronic poverty in terms of severity, extended duration and multidimensional deprivation. It tries to identify the states and regions that have a high incidence of people with incomes severely below the poverty line so as to focus attention on areas that are spatial poverty traps. Those unable to access even two square meals a day are considered to be the most severely deprived and hunger exists even in the supposedly better parts of India. Policy action is needed to address this. Attention is also drawn to the importance of identifying those who are vulnerable to extreme poverty due to inability to absorb the impact of shocks.

The incidence of chronic poverty in the duration sense is studied on the basis of analysis of panel data sets in the literature. Casual agricultural labourers are the largest group and cultivators the second largest among the chronically poor. The bulk of the chronically poor depend on wages.

Poverty is the sum total of a multiplicity of factors that include not just income and calorie intake but also access to land and credit, nutrition, health and longevity, literacy and education and safe drinking water, sanitation and other infrastructural facilities. The paper presents and analyses estimates of multidimensional indicators of poverty that reflect human and gender development and empowerment as also infant mortality estimates and female literacy. An attempt is made to see if areas suffering from a high incidence of severe income poverty also suffer deprivation in access to literacy, knowledge, nutrition, voice and infrastructure.

The disproportionately high incidence of chronic poverty among historically marginalised groups such as scheduled castes, scheduled tribes, the elderly, women and the disabled is analysed. The multiple deprivations suffered by these groups make it harder for them to escape from poverty.

The paper tries to examine the extent and nature of chronic poverty within the spatial poverty traps or remote rural areas. Two sets of remote rural regions are considered: dryland regions characterised by frequent failure of crops and employment opportunities leading to high level of unprotected risks of livelihood security among the poor; and secondly, the `forest based' economies, especially in hilly regions with predominance of tribal population with limited access to natural resources on the one hand, and information as well as markets on the other. Factors affecting chronic poverty in these regions are analysed, the relationship between chronic poverty and agro-climatic conditions, agronomic features, human capabilities, social structure and infrastructure studied and variations in the dynamics of poverty across the two sets of regions are identified.

The paper briefly looks at policy interventions in the context of poverty reduction as also attempts by communities to demand accountability and transparency in government

spending in the name of the poor. It concludes with a summary of the key findings and agenda for further research.

Contents

Abbreviations

APP	Anti Poverty Programmes
BIMARU	Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh
BPL	Below Poverty Line
CERFE	Gruppocerfe or CERFE Research Programmes on Poverty
CPRC	Chronic Poverty Research Centre
DFID	Department for International Development
DPAP	Drought Prone Area Programme
EAS	Employment Assurance Scheme
FCI	Food Corporation of India
GDI	Gender Development Index
GDP	Gross Domestic Product
GEM	Gender Empowerment Measure
HDI	Human Development Index
HDR	Human Development Report
HPI	Human Poverty Index
IBRD	International Board for Reconstruction and Development
ICDS	Integrated Child Development Scheme
ICRISAT	International Council for Research in Semi Arid Tropics
IMR Q1	Infant Mortality Rate between 0 and 1 year of age
IMY	Indira Mahila Yojana
JGSY	Jawahar Gram Samridhi Yojana
MKSS	Mazdoor Kisan Sangharash Samiti
MPCE	Monthly Per Capita Expenditure
NCAER	National Council for Applied Economic Research
NDTV	New Delhi Television
NGO	Non Government Organisation
NIRD	National Institute for Rural Development
NSAP	National Social Assistance Programme
NSSO	National Sample Survey Organisation.
PDS	Public Distribution System
PMGY	Pradhan Manti Gramodaya Yojana
RMK	Rashtriya Mahila Kosh
RRA	Remote Rural Area
SAT	Semi Aird Tropics
SC/ST	Scheduled Castes/Scheduled Tribes
SJGSY	Swarana Jayanti Gram Swarozgar Yojana
SJSRY	Swarna Jayanti Rozgar Yojana
TPDS	Targeted Public Distribution System
UNDP	United National Development Programme
WCP	Women's Component Plan
WDR	World Development Report

I. INTRODUCTION

Poverty has been described as a situation of "pronounced deprivation in well being" and being poor as "to be hungry, to lack shelter and clothing, to be sick and not cared for, to be illiterate and not schooled…Poor people are particularly vulnerable to adverse events outside their control. They are often treated badly by institutions of the state and society and excluded from voice and power in those institutions." (IBRD, 2000-2001: 15.) Using income as a measure of poverty, the World Development Report (2000-01: 3) refers to the "deep poverty amid plenty" in the world and states that a fifth of the world's people live on less than $ 1 a day, and 44% of them are in South Asia.

Lack of access to resources or assetlessness is a unifying characteristic of poverty in all its manifestations. The poor lack ownership of or access to assets such as land, water, forest, dwelling units, credit, literacy, longevity, voice and capital-both physical and social.

Those who are severely below the poverty line are largely involved in subsistence type activities for which they get exploitatively poor returns despite suffering extreme physical hardship and undertaking grave risks so as to earn a meagre income. Since earnings are below even the margins of existence, expenditure and survival needs exceed income. This often results in the need to borrow small amounts of money at usurious interest rates of as much as 120% per annum (Mehta, 1996b: WS 82) When borrowing is not possible, hunger is suffered. Their inability to change the power relationships results in scarcely available common resources (such as even drinking water) or public funds meant for poverty alleviation being misappropriated and diverted through manipulation by the locally powerful or corrupt. Since there are no mechanisms for grievance redressal this could result in social tension, despair or a combination thereof.

The poor can be classified into two sub groups - those who are poor over an extended duration or chronically poor and those who are transiently poor. The Chronic Poverty Research Centre tries to focus on the chronically poor segment of those who are deprived so as to draw attention to those who find it hardest to emerge from poverty. The Chronic Poverty Research Centre defines chronic poverty in terms of – severe poverty, extended duration poverty and multidimensional poverty.

- Severe poverty is viewed in three ways:
  - i) those who are chronically or severely below the poverty line or with incomes that are 75% of the poverty line or less; and
  - ii) those suffering hunger or not getting even two square meals a day as an extreme form of deprivation.
  - iii) inability to absorb the impact of shocks can also lead to extreme poverty, starvation and suicide.

- Extended duration or non transitory poverty can be estimated by looking at the same households over the span of 5, 10, 15 or more years. This can be done

through use of panel data sets to identify households that have remained in poverty over time and supplemented on the basis of life histories. Published literature on chronic or long duration poverty based on panel data will be used in this paper to draw some tentative inferences about those suffering non transitory poverty.

?? The chronically poor are likely to suffer deprivation in many ways. Poverty is the sum total of a multiplicity of factors that include not just income and calorie intake but also access to land and credit, nutrition, health and longevity, literacy and education and safe drinking water, sanitation and other infrastructural facilities. Hence the need to look at multidimensional indicators of poverty such as indicators reflecting human and gender development and empowerment. State level estimates of HDI, GDI, GEM and HPI as also infant mortality estimates are presented and analysed to see if those located in areas that have a high incidence of severe income poverty also suffer deprivation in access to literacy, knowledge, nutrition, voice and infrastructure.

Section II of the paper provides an overview of the trends in incidence of income poverty in India, in the states where most of India's poor are concentrated and that have a large percentage of their population in poverty, as also the differentials in the extent to which different states have succeeded in decreasing the proportion of their population that is in poverty. An attempt is then made to spatially map the chronically poor in the severity sense so as to try to identify the states that have high incidence of people severely below the poverty line and the regions within these states that are spatial poverty traps as well as those with a high incidence of people unable to access even two square meals a day, as the starkest of indicators of chronic poverty in the severely deprived sense. Attention is also drawn to the importance of identifying those who are vulnerable to extreme poverty due to inability to absorb the impact of shocks. The section then looks at the incidence of chronic poverty in the duration sense on the basis of analysis of panel data sets in the literature and before presenting an analysis of multidimensional indicators of chronic poverty such as human and gender development indicators and infant mortality rates. Section III focuses attention on the disproportionately high incidence of chronic poverty among historically marginalised groups such as scheduled castes, scheduled tribes, the elderly, women and the disabled and the fact that the multiple deprivations suffered by these groups make it harder for them to escape from poverty.

Section IV tries to examine the extent and nature of chronic poverty within the spatial poverty traps or remote rural areas. Two sets of remote rural regions are considered: firstly the large tracts of dryland regions characterised by frequent failure of crops and employment opportunities and thereby leading to high level of unprotected risks of livelihood security among the poor; and secondly, the `forest based' economies, especially in hilly regions with predominance of tribal population with limited access to natural resources on the one hand, and information as well as markets on the other. Factors affecting chronic poverty in these regions are analysed, the relationship between chronic poverty and agro-climatic conditions, agronomic features, human capabilities, social structure and infrastructure studied and variations in the dynamics of poverty across the two

sets of regions are identified. Section V provides a brief overview of policy interventions in the context of poverty and attempts by communities to demand accountability and transparency in government spending in the name of the poor. Finally section VI provides the agenda for future research on chronic poverty in India on the basis of the findings presented in this paper.

II. ANALYSIS OF POVERTY AND CHRONIC POVERTY IN INDIA

II.1 Trends And Incidence Of Income Poverty In India

The Planning Commission estimates the incidence of poverty in India on the basis of household consumer expenditure surveys conducted by the National Sample Survey Organisation. Six large sample consumer surveys have been conducted by the NSS on a quinquennial basis since 1973-74.

During the period between 1973-74 and 1999-2000, the incidence of poverty expressed as a percentage of people below the poverty line declined continuously from 54.9 per cent to supposedly 26 per cent. (See table 1). However, the pace of reduction in poverty varied considerably during this period with a large decline in the percentage of the population in poverty throughout the 1980s, a slowdown in the pace of poverty reduction in the early 1990s, and a reported but contested sharp 10% decline in poverty in the second half of the 1990s. No such secular decline occurred in the numbers of those in poverty. The number of people below the poverty line increased by 8 million during the 1970s, decreased by 21.8 million during the 1980s, increased by 13 million during the early 1990s and reportedly decreased by a massive 60 million during the mid to late 1990s.

Table 1: Incidence of Poverty – Percentage of Population and Number of People Below the Poverty Line 1973-74 to 1999-2000

1973-74	54.9		321.3	
1977-78	51.3	-3.6	328.9	-3.6
1983	44.5	-6.8	322.9	-6.8
1987-88	38.9	-5.6	307.1	-5.6
1993-94	36	-2.9	320.3	-2.9
1999-2000	26.1	-9.9	260.2	-9.9

Source: Planning Commission Draft Ninth Five Year Plan (1997-2002) and Government of India, Poverty Estimates for 1999-2000, Press Information Bureau, 22nd February, 2001.

Considerable progress was made in poverty reduction especially during the 1980s and this is reflected in terms of

- a decrease in the numbers of people below the poverty line from a high of 328.9 million in the 1970s to 307.1 million towards the end of the 1980s.

- a decrease in the percentage of population in poverty from 54.9% in the early 1970s to 39% during the second half of the 1980s.
- an increase in the rate of poverty reduction from 3.6% in the late 1970s to around 6% in the 1980s.

The early 1990s saw a reversal in some of these gains as the numbers of those in poverty increased to 320 million and the pace of decrease in poverty incidence declined from around 6% to 2.9%. Several researchers have attributed this to the effects of the financial crisis in 1991 and the liberalization measures that were adopted as part of the reforms package.

The poverty related estimates reported by the Planning Commission for 1999-2000 reflect a substantial decrease in poverty in terms of both numbers (down to 260 million) and incidence (down to 26.1%) due to a trebling of the pace of poverty reduction from 2.9% in 1993-94 to 9.9% in 1999-2000. If the controversial estimates reported by the Planning Commission on the basis of the 1999-2000 survey are accepted, then it could be claimed that a major dent has been made in the incidence of poverty during the second half of the 1990s as the incidence of poverty reached an all time low of 26.1%; the numbers of those below the poverty line was at its lowest ever at 260 million; and the decrease in the percentage of population in poverty between 1993-94 and 1999-2000 was three times faster at 9.9% as compared with the 2.9% decline between 1987-88 and 1993-94. A leading financial newspaper reports that "if the 55th round of the household consumer expenditure survey of the National Sample Survey Organisation is to be believed, there has been a 10% decline in the estimates of population below the poverty line compared with the 1993-94 all India figure of 36 percent." (Economic Times, 2001).

There is considerable skepticism about the accuracy of the estimates as the methodology adopted by the NSSO for the latest large quinquennial sample (1999-2000) is under question. There has been a change in methodology of data collection, (i.e., data pertaining to consumption expenditure over the last seven and over the last 30 days was collected from the same households.) One report states that "critics of the reforms view the latest estimates as "statistical jugglery", in line with the trend of official agencies publishing data that suit the establishment rather than the objective needs of society. (V.Sridhar, 2001). Serious flaws in the methodology adopted for the latest survey have been alleged.

The postulated sharp decline in poverty after 1993-94 is at variance with what Sheila Bhalla calls an "economic development disaster" reflected in the decline in per capita consumption expenditure in constant prices in rural areas in every year of the 1990s after 1991 except for 1997. (S. Bhalla 2000c).

The bulk of India's poor are located in rural areas (as shown in the section below). Hence, if real consumption expenditure in rural areas has been declining during most of the 1990s then the large reduction in poverty that is postulated by the NSS 1999-2000 round is difficult to accept.

However, even the 10% decrease is below the 16% targeted by the Planning Commission. The slower than targeted performance in reducing poverty in the 1990s has been explained in terms of "sluggish agricultural growth which was also less well spread out; inadequate reach of Targeted Public Distribution System (TPDS) to the poorest in the northern and eastern states, failure of watershed development and poverty alleviation schemes, fiscal crisis caused by the Fifth Pay Commission that led to reduced ability of the states to spend on social sector and maintenance of assets, and declining governance leading to inefficient utilisation of resources and even leakages" (N.C.Saxena, 2000).

Rural – Urban Distribution of the Poor

Over 80% of the poor were located in rural areas in the 1970s. The substantial decrease in the number of rural poor by 32.4 million between 1977-78 and 1987-88 changed the distribution of the poor between rural and urban areas in that the proportion of the rural poor declined steadily from 80.3% in 1977-78 to 75.5% in 1987-88. The number of urban poor increased by 10.6 million during the same ten year period partly due to migration of the poor from rural areas. There was therefore an increase in the relative share of urban poverty from 18.7% to 24.5% during the period from 1973-74 to 1987-88 and it has fluctuated around this estimate since then. Table 2 shows the distribution of the poor between rural and urban areas.

Table 2: Rural - Urban Distribution of the Poor in India, 1973-74 to 1993-94

Year	No of Poor in Rural Areas (in Million)	No of Poor in Urban Areas (in Million)	Total Population Below the Poverty Line (in Million)	% of India's Poor Located in Rural Areas	% of India's Poor Located in Urban Areas
1973-74	261.3	60.0	321.3	81.33	18.67
1977-78	264.3	64.6	328.9	80.36	19.64
1983	252.0	70.9	322.9	78.04	21.96
1987-88	231.9	75.2	307.1	75.51	24.49
1993-94	244.0	76.3	320.3	76.18	23.82
1999-2000	193.2	67	260.2	74.3	25.7

Source: Planning Commission Draft Ninth Five Year Plan (1997-2002), Government of India, Poverty Estimates for 1999-2000, Press Information Bureau, 22nd February, 2001 and own calculations

II.2 Poverty in the States

Where are India's poor spatially located? This section attempts to identify the states in which
1) the largest percentage of India's poor are located in 1999-2000.
2) that had a large percentage of their own population in poverty in 1993-94.

3) that had a relatively poorer record of reducing the percentage of their population in poverty between 1973-74 and 1993-94.

In which states are most of India's poor concentrated?

Almost half of India's poor and one third of India's population are concentrated in the three states of Uttar Pradesh (including Uttaranchal), Bihar (including Jharkhand) and Madhya Pradesh (including Chhatisgarh). The exact estimates are 48% of India's poor and 35.6% of India's population are in these three states. (See table 3). Three states - Maharashtra, West Bengal and Orissa - account for another 22.5% of those in poverty. 71.65% of India's poor and half of the population are therefore located in six states. Further, while the share of the poor exceeds the share of the population in all these states except Maharashtra, in the case of Bihar, Madhya Pradesh and Orissa their relative share of those in poverty is *substantially* larger than their share of India's population. No major reduction in poverty in India is possible unless interventions for poverty alleviation are intensified in these states. Future CPRC research will focus on the constraints on improved anti poverty interventions in some of these states.

Table 3: Percent of India's poor and of population in 6 high poverty states

State	% of India's Poor in 1999-2000	% of Population in 2001
Uttar Pradesh*	20.36	17
Bihar*	16.36	10.69
Madhya Pradesh*	11.47	7.91
Maharashtra	8.76	9.42
West Bengal	8.20	7.81
Orissa	6.50	3.57

* including the districts in the now newly formed states.

Source: Calculated based on Government of India, Poverty Estimates for 1999-2000, Press Information Bureau, 22nd February, 2001 and Government of India, 2001 Provisional Population Tables.

Which states have a large percentage of their population in poverty?

In 1993-94, 37.2% of persons living in rural areas and 32.2% of persons in urban areas were below the poverty line. The percentage of population of a state that was in poverty or the poverty ratio was above the all-India average for rural areas in seven states – Bihar, Orissa, Uttar Pradesh, Madhya Pradesh, Maharashtra, Assam and West Bengal. Urban poverty was also above the all India average for the first five of these states as also for Karnataka, Tamil Nadu and Andhra Pradesh.

Changes in the Incidence of Poverty in India's States: 1973-74 to 1993-94

The track record of different states of India in decreasing the proportion of their population that is in poverty has varied considerably as can be seen from tables 4 and 5. On the one hand, three states experienced a substantial reduction in the percentage of

their population that was in poverty over the entire twenty-year period from 1973-74 to 1993-94 - Kerala, Andhra Pradesh and Punjab. The numbers of those below the poverty line declined by 58% in Punjab, 57% in Kerala and 55% in Andhra between 1973-74 and 1993-94. In addition, the states of Gujarat, West Bengal and Rajasthan were also able to accomplish a substantial reduction in the incidence of poverty - by 50%, 44% and 41% respectively as did Karnataka (39%) and Tamil Nadu (36%).

Table 4: States with a faster pace of reducing the percentage of their population in poverty - 1973-74 and 1993-94.

State	% population in poverty in 1973-74	% population in poverty in 1993-94	% reduction in poverty
Punjab	28.15	11.77	58%
Andhra Pradesh	48.86	22.19	55%
Gujarat	48.15	24.21	50%
Kerala	59.79	25.43	57%
Rajasthan	46.14	27.41	41%
Karnataka	54.47	33.16	39%
Tamil Nadu	54.94	35.03	36%
West Bengal	63.43	35.66	44%

Source: Planning Commission, Press Release, March 1997.

The substantial reduction in poverty in West Bengal could be attributed to institutional reforms brought about by the Left Front government. They include "land reform (in particular, Operation Barga), effective political decentralisation through the Panchayati Raj, implementation of poverty alleviation programmes through the panchayats, and political mobilisation of the rural poor through *kisan sabhas* and political parties" (Tendulkar and Jain, 1996) and rapid agricultural growth because of notable increases in area under irrigation through substantial private investment in pump sets and tube wells (Bhalla and Singh, 1997). However, despite the substantial decrease in the incidence of poverty in West Bengal, the state still gets included among the seven states that have a large proportion of their population in poverty listed in table 5.

Table 3 identifies six states in which more than 71% of India's poor are concentrated. These six states had 35% to 55% of their population in poverty even in 1993-94 (see table 5 below). The worst poverty scenarios occurred in Bihar, which had more than half its population in poverty (55%) in 1993-94 and Orissa, with (49%). Bihar was able to reduce the percentage of its population in poverty by a marginal 11% over the 20 years. Assam (as is the case for several states in the North East) gets added to the group of 6 high-share- of- India's- poor states listed above since 41% of its population is in poverty. Clearly Bihar, Orissa, Madhya Pradesh, Assam and Uttar Pradesh have suffered long duration poverty or chronic poverty since more than 40% of the population of these has been in poverty for over 20 years.

Table 5: Percent Poverty Reduction in States with a large percentage of their population in poverty, 1973-74 and 1993-94.

State	1973-74	1993-94	% reduction in poverty
Bihar	61.91	54.96	11%
Orissa	66.18	48.56	27%
Madhya Pradesh	61.78	42.52	31%
Assam	51.21	40.86	20%
Uttar Pradesh	57.07	40.85	28%
Maharashtra	53.24	36.86	31%
West Bengal	63.43	35.66	44%

Source: Planning Commission, Press Release, March 1997.

While every state has its own reasons for success or failure in poverty reduction, it could be postulated that "higher growth rates in agricultural yields and real non-agricultural output per capita, lower rates of inflation and higher growth in state development expenditure all led to higher rates of progress in both raising average consumption and reducing … absolute poverty." (Datt and Ravillion, 1996). Inter-state differences in initial conditions of human and physical resource development, higher initial irrigation intensity, higher literacy rates and lower initial infant mortality rates were identified by them as poverty reducing. Initial inequalities in access to physical and human infrastructure were also an important factor in longer-term rates of poverty reduction. Citing the case of Bihar they note that while the poor suffered from the slow growth in agricultural yields, the state's poor initial conditions were also an important factor (Ravallion and Datt, 1996).

Bhalla and Singh (1997:A-15) attribute the fact that Bihar and Orissa are still lagging in terms of growth to the low level of input use especially of fertiliser and credit, the weak input delivery system, lack of research and development, lack of appropriate extension services, and especially in Bihar the outdated tenurial relations. Kurian (2000) refers to the scarcity of water due to lower precipitation and lack of other perennial sources of water as causing backwardness of parts of Maharashtra, Andhra Pradesh and Karnataka. Kurien also associates the backwardness of certain regions in Gujarat, Madhya Pradesh, Bihar and Orissa "with the distinct style of living of the inhabitants of such regions who are mostly tribals and the neglect of such regions by the ruling elite".

Regressing head count measures of poverty for the period 1960-61 to 1993-94 at the all-India level in both urban and rural areas against several variables, Abhijit Sen (1996) identified

- agricultural incomes as important not only for rural but also urban poverty.
- non-agricultural impulses, particularly public expenditure, are not only important but that they are especially so in the determination of rural poverty.
- the relative price effect is if anything much more important than the effect of inflation per se.
- the initial conditions with respect to physical and human infrastructure, in terms of irrigation, female literacy and infant mortality, with which that state began. Thus, of

> the difference of 1.8 per cent per annum between the rates of poverty reduction in Kerala and Madhya Pradesh, fully 1.6 per cent per annum could be attributed to the fact that Kerala began with higher female literacy (1 per cent) and lower infant mortality (0.6 per cent)." (Datt and Ravillion cited in Sen, Abhijit, 1996).

In both rural and urban areas the broader enabling environment does not adequately support the needs of the poor. Rural poverty can be associated with isolation, lack of roads, poor infrastructure and limited institutional presence while urban poverty is generally associated with poor quality housing, over crowded, unsanitary slum settlements, ill-health related to spread of infectious diseases, the threat of exposure to environmental hazards and fear of eviction from illegal squatter settlements in precarious locations. (Loughhead, S, et. al., 2000: 7 to 9)

The World Bank India Country study refers to the wide disparity in poverty across Indian states and their uneven progress in poverty reduction and points out that in most instances, better-off states remained relatively affluent and reduced poverty, while poorer states remained poor and made less progress in poverty reduction. It notes that there are also cases where poorer states made major progress in poverty reduction and growth. "In Kerala, for example, rural poverty declined at 2.4 per cent per annum between the early 1970s and early 1990s. Other states where poverty incidence fell substantially (as a percentage of the original level) include West Bengal, Andhra Pradesh, Orissa, and, to a lesser extent, Gujarat and Tamil Nadu. Notably poor performers include Bihar and Uttar Pradesh" (IBRD, 2000: 12).

The report highlights the growing rural poverty differential between India's five lowest income states (Bihar, Uttar Pradesh, Madhya Pradesh, Orissa, and Rajasthan) and the rest of India's thirteen largest states, using state-by-state poverty figures.(IBRD, 2000:17) The gap was 7-8 percentage points in the 1980s. By 1997, the gap in poverty incidence between the two groups of states had reached nearly 18 percentage points, and poverty incidence in the low-income states was over 50 per cent higher than poverty in other large states.

Corroborating the explanations offered in the literature, this report also attributes the differential performance across states in poverty reduction to the lower growth in poor states, the characteristics of agricultural growth in the 1990s, the problems of infrastructure, social services, and poverty programmes, especially in poorer states which are linked to their increasing fiscal problems, poor incentive frameworks, and weaknesses in governance and institutions. (IBRD, 2000:2)

The track record of different states of India has varied considerably in decreasing the proportion of their population that is in poverty. While some states were able to accomplish a substantial reduction in the incidence of poverty, other states made less progress in poverty reduction during the last three decades. The CPRC will examine the trends with respect to *chronic* poverty, explore the reasons for differentials in chronic poverty reduction and also try to understand the social, political and economic processes that increase/decrease vulnerability to chronic poverty.

II.3 Chronic Poverty In India

II.3.1 Chronic Poverty: Severity

The poor are a heterogeneous group and the use of the term "the poor" actually refers to "different sociological realities". (Gruppocerfe, 2001) The CERFE Research Programme on Poverty draws attention to the need to differentiate between the following four categories

- ?? The prone-to risk, who, not being poor, are subject to the risk of impoverishment;
- ?? The borderline poor, who are below the poverty line but whose capacity to control their own environment is practically intact;
- ?? The overall poor, whose capacity to control the environment has been eroded, in relation to their state of deprivation in terms of resources and/or social relations;
- ?? The extreme poor, who are distinguished by their incapacity to act and their extreme vulnerability.

On similar lines, Kozel and Parker (2001) point out that "poverty is not a simple, one-dimensional or uniform phenomenon…. three distinct categories of the poor emerged:

- ?? the *destitute poor*, who have experienced idiosyncratic shocks, catastrophes, or other major problems that have left them without a livelihood or chronically indebted;
- ?? the *structural poor.* who not only lack economic resources but whose poverty is strongly linked to social identity (caste was the primary determinate of social identity); and
- ?? the *"mobile" poor*, who have more resources than either of the two other groups, are virtually debt-free, and have the greatest potential for upward mobility.

Risk and vulnerability emerged as important concerns for all categories of the poor, but most critically for the destitute and structural poor."

The three subsections that follow try to focus attention on chronic poverty in the severity sense by drawing attention to some segments of the poor that suffer extreme poverty, i.e.:
a) the spatial distribution of those estimated to be earning incomes that are less than or equal to three fourths of the poverty line so as to try to identify the states that have high incidence of people severely below the poverty line and the regions within these states that are spatial poverty traps
b) those who are unable to access even two square meals a day, as the starkest of indicators of chronic poverty in the severely deprived sense.
c) those who are vulnerable to extreme poverty due to inability to absorb the impact of shocks.

a) Spatial distribution of the Chronically, Severely or Very Poor

Of the 260 to 320 million people who are below the poverty line (depending on whether the 1993-94 or 1999-2000 estimates are used) a large subset consists of those who are substantially or severely below the norms identified as necessary for survival. In 1993-94, the poverty line was set at Rs. 205.84 per capita per month for rural and Rs. 281.35 for urban areas. 15.2% of the rural population and 14.85% of the urban population were estimated to be earning incomes that were less than or equal to three fourths of the poverty line. Therefore roughly 134 million people can be considered to be chronically below the poverty line in the severity sense.

Table 6 below uses 1993-94 NSS estimates to identify the proportion of persons in each state that constitute the (a) very poor, i.e., with income that is three fourths of the poverty line or less; and (b) the poor. The incidence of severe rural poverty was higher than average in 5 out of 7 income poverty states. 27.67% of the rural population in Bihar, 21.77% in Orissa, 19.55% in Uttar Pradesh 17% in Madhya Pradesh and 16% in Maharashtra were severely below the poverty line. In other words a higher percentage of people in rural areas in these states have a level of income that is less than three fourths of the poverty line than the all India average.

Table 6: Estimates of Very Poor and Poor in Rural and Urban Areas in the States:1993-94 (in %)

	Rural		**Urban**	
State/Regions	**Very Poor**	**Poor**	**Very Poor**	**Poor**
Andhra Pradesh	4.18	15.89	16.78	38.34
Assam	13.12	45.00	1.16	7.74
Bihar	27.67	58.17	14.14	34.65
Gujarat	6.67	22.29	11.18	27.93
Haryana	9.32	28.02	5.02	16.37
Karnataka	11.11	29.89	22.13	40.18
Kerala	9.42	25.68	10.08	24.50
Madhya Pradesh	17.11	40.72	25.69	48.35
Maharashtra	16.17	37.90	18.72	35.08
Orissa	21.77	49.79	22.99	41.72
Punjab	3.12	11.85	2.22	11.40
Rajasthan	8.66	26.48	12.98	30.53
Tamil Nadu	12.67	32.55	18.67	39.78
Uttar Pradesh	19.55	42.31	16.91	35.34
West Bengal	13.62	40.87	7.51	22.38
All India	15.26	37.23	14.85	32.28

Source: K.L. Datta and Savita Sharma, Level of Living in India, Planning Commission, 2000.

The same five states have had both the highest levels of severe rural poverty and the lowest rates of poverty reduction, with the exception of Assam, which is not far behind on the severe poverty headcount. Apart from these five or six states, the incidence of severe poverty is greater than 10% of the population only in Karnataka and Tamil Nadu (for both urban and rural), West Bengal (rural) and Kerala and Rajasthan (for urban). This analysis makes it imperative that the CPRC focus most of its effort on the five or six states, while not neglecting the different pattern of severe urban poverty

Severe Poverty: Spatial Poverty Traps

While chronic poverty in the duration, severity and multi dimensionality sense characterises several parts of India, pockets of severe poverty or spatial poverty traps exist at the regional level even in the more developed states.

Rural poverty was severest or the proportion of those who were very poor was largest in South Western Madhya Pradesh, Southern Uttar Pradesh, Southern Orissa, Inland Central Maharashtra, Southern Bihar, Northern Bihar and Central Uttar Pradesh. These seven regions had between 26% and 42% of their population in severe poverty and had a squared poverty gap ranging from 5 to 9.7. (See table 7).

Table 7: Regions with very high incidence of very Poor and Poor in Rural Areas : 1993-94

State/Regions	Very Poor	Poor	SPG
South Western M.P.	42.24	68.2	9.678
Southern U.P.	39.7	66.74	7.9559
Southern Orissa	34.08	69.02	6.8299
Inland Central Maharashtra	28.91	50.02	6.6877
Southern Bihar	31.57	62.44	5.5061
Northern Bihar	27.62	58.68	5.0692
Central U.P.	26.79	50.2	4.9439

Source: Based on K.L. Datta and Savita Sharma, Level of Living in India, Planning Commission, June, 2000.

Similarly urban poverty was severest in Inland Central Maharashtra, South Western Madhya Pradesh, Inland Eastern Maharashtra, Southern Uttar Pradesh, Inland Northern Karnataka, Central Madhya Pradesh , Inland Northern Maharashtra, Southern Orissa and Southern Madhya Pradesh. 27 to 42% of the population of these regions was in Chronic severe poverty with a squared poverty gap between 5.5 and 11. (See table 8).

Table 8: Regions with very high incidence of very Poor and Poor in Urban Areas : 1993-94

State/Regions	Very Poor	Poor	SPG
Inland Central Maharashtra	42.62	60.13	11.0036
South Western M.P.	36.6	57.14	8.8297
Inland Eastern Maharashtra	38.99	59.32	8.6218
Southern U.P.	37.54	72.52	7.9317
Inland Northern Karnataka	36.49	57.63	7.6765
Central M.P.	32.93	53.68	7.1517
Inland Northern Maharashtra	32.28	56.94	6.6407
Southern Orissa	33.53	45.64	6.29
Southern M.P.	27.9	51.23	5.542

Source: Based on K.L. Datta and Savita Sharma, Level of Living in India, Planning Commission, 2000.

At a regional level, then, spatial poverty traps seem to exist in several rural pockets of Madhya Pradesh, Uttar Pradesh, Orissa, Bihar and Maharashtra. If we map the regions on the basis of severe poverty the heartland of chronic poverty in the severity sense seems to be constituted by the central Indian (and virtually contiguous) regions of South Western Madhya Pradesh, spreading in the southern direction into all of Inland Maharashtra except the western segment and in the northern direction into Central and Southern Madhya Pradesh, Southern, Central and Eastern Uttar Pradesh, all of Bihar and all of Orissa. Pockets of severe poverty also exist in Tamil Nadu, Rajasthan and West Bengal.

Similarly, urban spatial poverty traps seem to exist in some regions of Andhra Pradesh, Bihar, Karnataka, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal, most regions in Maharashtra and all regions in Madhya Pradesh and Orissa. However urban poverty is specially severe in Inland Central, Eastern and Northern Maharashtra, Southern Uttar Pradesh, Inland Northern Karnataka, South Western and Central Madhya Pradesh and Southern Orissa.

In future research, the CPRC will extend the analysis to changes in the regional incidence of severe poverty over time to identify which chronically poor areas have improved their position and why as also analyse the existing situation at the district level so as to spatially map the location of the chronically poor and increase the understanding of the social, political and economic structures and processes that affect vulnerability to chronic poverty.

b) Hunger And Lack Of Availability Of Two Square Meals A Day

The Report of the State of Food Insecurity in the World, 1999 estimates that in the developing world, 790 million people do not have enough to eat. India alone has more undernourished people (204 million) than all of sub-Saharan Africa combined. The South Asian region accounts for more than one-third of the world total. The report states that during the period from 1990-92 to 1995-97, 37 countries achieved a reduction of 100 million in the number of undernourished people, while in the developing world the number of hungry people actually increased by almost 60 million. The Report stresses that there is no single prescription for action to combat hunger and concrete objectives are needed at the local, national and regional levels where people and their leaders can take action that will guarantee the birthright of everyone on this planet – enough to eat.

In the Indian context three most basic needs are identified as crucial for survival even in political slogans commonly heard at election time. These are 'roti, kapada aur makaan' or food, clothing and shelter. Recognising the importance of access to food, the Prime Minister noted that 268 million people are still considered food insecure in India, almost half the women in the age group of 15-49 and three fourths of children are anaemic and "a hungry stomach questions and censures the system's failure to meet what is a basic biological need of every human being". (Times of India, 25th April 2001)

It is estimated that India accounts for 40% of world's malnourished children while containing less than 20 percent of the global child population. (Anthony Measham and Meera Chatterjee, 1999). Three main causes of malnutrition among young children and pregnant women – the most vulnerable groups – include:

- ?? inadequate food intakes;
- ?? disease, including common diarrhea; and
- ?? deleterious caring practices, such as delayed complementary feeding.

Poverty and gender inequality are among the most important factors responsible for the high level of undernourishment (Anthony Measham and Meera Chatterjee 1999). Empirical research on the nutritional condition of children below five years in two villages of West Bengal provides firm evidence of the remarkably high incidence of undernourishment and also of systematic sex bias reflected in higher deprivation of girls vis-à-vis boys (Amartya Sen and Sunil Sengupta, 1983).

While access of all to adequate quantities of nutritive food is extremely desirable, within the 204 million people identified as undernourished in India by the Report of the State of Food Insecurity in the World, 1999 state failure is reflected in that there is a subset that is unable to access even two square meals a day. It is this subset to which we attempt to draw attention through estimates of those unable to access even two square meals a day, as the starkest of indicators of chronic poverty in the severely deprived sense.

The NSS 50th round (1993-94) provides data regarding distribution of rural-urban households on the basis of availability of two square meals a day:

a. throughout the year

b. only during some months of the year
c. not getting two square meals a day even in some months of the year.
The question asked was whether there was access to two full meals and did not try to capture either calories or cultural variations in the type of food consumed.

Hunger was more widespread in rural than in urban areas. 4.2% of rural and 1.1% of urban households reported getting two square meals a day only in some months of the year. Those not getting two square meals a day even in some months of the year constituted 0.9% of rural and 0.5% of urban households. (See table 9).

As expected, the proportion of households reporting two square meals a day only in some months, category (b), or not even in some months of the year, category (c), was highest in the lowest monthly per capita expenditure (mpce) class. i.e., 11.8% of rural and 4.5% of urban households in the lowest mpce class were estimated to be in category (b) while 3.4% of rural and 3.3% of urban households in this class were in category (c). The lowest monthly per capita expenditure class was less than Rs. 120 in rural and less than Rs. 160 in urban areas. This is less than 60% of the poverty line set at Rs.205 (per capita per month) for rural and Rs 281 for urban areas in 1993-94.

Table 9: Percentage distribution of households by availability of two square meals a day at the National level

Households getting two square meals a day				
	Throughout the year	**only in some months of the year**	**not even in some months of the year**	**All**
RURAL INDIA				
Less Than Rs. 120 MPCE	84.2	11.8	3.4	100
ALL CLASSES	98.5	4.2	0.9	100
URBAN INDIA				
LessThan Rs. 160 MPCE	91.9	4.5	3.3	100
ALL CLASSES	98.1	1.1	0.5	100

Source: NSS 50th Round (1993-94) Report No. 415

Table 10 below provides data on inadequacy of food intake for 15 major states. Inadequacy of food intake was especially severe in rural households in Orissa, West Bengal, Kerala, Assam, Bihar and Maharashtra and urban households in Kerala, Orissa, West Bengal and Assam. Hunger emerges as a serious issue in Kerala and Assam and the reasons for this will be explored in future research.

Table 10: Percentage distribution of households by availability of two square meals a day for 15 states

RURAL		
State	**Only in some months of the year**	**Not even in some months of the year**
Orissa	14.9	0.5
West Bengal	11.1	3
Kerala	7.4	0.4
Assam	6.1	3
Bihar	5.1	1.5
Maharashtra	4.1	0.4
Uttar Pradesh	2.9	0.5
Karnataka	2.7	0.8
Madhya Pradesh	2.5	0.3
Andhra Pradesh	1.7	1.2
Tamil Nadu	1.5	0.9
Gujarat	0.9	0.4
Haryana	0.8	0
Rajasthan	0.6	0
Punjab	0.1	0
India	4.2	0.9

URBAN		
Kerala	4.8	1.1
Orissa	3.3	0.7
West Bengal	2	1.5
Assam	1.2	0.6
Bihar	1.1	0.9
Maharashtra	1.1	0.4
Karnataka	1	0.3
Tamil Nadu	1	0.6
Andhra Pradesh	0.9	0.7
Madhya Pradesh	0.9	0.3
Gujarat	0.8	0.7
Uttar Pradesh	0.8	0.2
Haryana	0.6	0
Rajasthan	0.2	0
Punjab	0.1	0.1
India	1.1	0.5

Source: NSS 50th Round, (1993-94) Report 415 p. 15

In rural areas non-availability of two square meals peaked in the months of June, July, August and September. More than 5 % of households reported non- availability of two square meals a day in the following states and calendar months.

?? West Bengal - for eight months from April to November with the estimates increasing to the highest for any state at 8.7% households in September.

?? Orissa for 6 months from May to October with an estimate as high as 7.8% households in September.

?? Kerala for 3 months from June to August with an estimate of 6.6% in July.

?? Assam for 4 months of June -July and September- October.

In urban areas too, the percentage of households reporting non-availability of two square meals was highest during the June to September months, but the estimates were substantially lower than those for rural areas at 0.9% to 1.1%. The states, number of months in which this occurred and maximum at any time on average for the state are given below:

?? Andhra Pradesh in 4 months for a maximum of 1.2% households.

?? Assam in 3 months for a maximum of 1.4% households.

?? Bihar in 11 months for a maximum of 1.3% households.

?? Gujarat in 2 months for a maximum of 1.1% households.

?? Kerala in 12 months for a maximum of 5.2% households.

?? Orissa in 8 months for a maximum of 2.4% households.

?? West Bengal (in 12 months and maximum 2.8 %).

In sharp contrast, while Haryana had just 0.6% households reporting non-availability in the month of January and none during the rest of the year, Punjab had just 0.1% households reporting non-availability throughout the year except in February when the estimate was 0.2%. Rajasthan was also a special case with just 0.2% households reporting non-availability in the months of July and August and none in the rest of the year.

In the lowest expenditure class (less than Rs.120), there were 11.8% rural households getting meals only in some months of the year and 3.4% of rural households getting no meals throughout the year at the all-India level. (See table 11). However, sharp disparities emerge when the data is disaggregated at the state level. The states of West Bengal and Kerala reported as many as 25% of rural households getting meals only in some months of the year in the lowest expenditure class. In addition, estimates for the states of Bihar, Orissa, Maharashtra and Assam, show that 19.8%, 17.2%. 15.7% and 15.3% of rural households respectively, were reported as getting meals only in some months of the year - all more than the all-India average of 11.8%. On the other hand, Punjab, Rajasthan, Haryana, Goa, Gujarat and Himachal Pradesh had no rural households reporting non-availability of meals in some months of the year even in the lowest expenditure category.

A staggering 45.5% of rural households in the lowest expenditure class in Assam did not get two square meals throughout the year. The corresponding estimates were 21.2%, 7.6% and 5.5% for rural households in West Bengal, Karnataka and Kerala - above the all India average at 3.4%.

Table 11: Percentage of households in the lowest expenditure class in the rural areas of major states who did not have access to two square meals a day throughout the year

Rural Households with access to two square meals:			
	only in some months	**not even in some months**	**Cols 2+3**
(1)	**(2)**	**(3)**	**(4)**
MPCE class < Rs. 120			
ASSAM	15.3	45.5	60.8
WEST BENGAL	25.3	21.2	46.5
KERALA	24.9	5.5	30.4
BIHAR	19.8	3	22.8
ORISSA	17.2	0.4	17.6
KARNATAKA	8.8	7.6	16.4
MAHARASHTRA	15.7	0.4	16.1
MADHYA PRADESH	7.9	1.7	9.6
UTTAR PRADESH	6.5	3.0	9.5
TAMIL NADU	4.6	3.2	7.8
ANDHRA PRADESH	3.7	0.9	4.6

SOURCE: NSS 50th Round, (1993-94) REPORT 415.

It can therefore be concluded that hunger is a more serious problem in rural India and is especially severe in rural Orissa, West Bengal, Kerala, Assam and Bihar. Non-availability of two square meals a day peaks in the summer months from June to September with longer duration suffering in West Bengal and Orissa. If we narrow our attention only to the lowest expenditure group in rural areas then the incidence of hunger among such groups assumes extremely high proportions in Assam, West Bengal, Kerala, Bihar, Orissa, Karnataka, Maharashtra, Uttar Pradesh and Tamil Nadu.

In this context, Jean Dreze (The Hindu, 26.2.2001) refers to the anomalous situation where we have on the one hand the accumulation of massive stocks of 50 million tonnes of foodgrains in the godowns of Food Corporation of India and considerable state expenditure in holding these stocks and starvation related deaths on the other. He questions, as have several others, why these stocks have not been utilised to generate food for work programmes. He draws attention to the fact that "the poor have never counted for much in India's lop-sided democracy", are marginalised and their "political invisibility" is enhanced by the "social distance" between Government officials and drought affected people.

Orissa is currently in the national news with twenty people reportedly dying from lack of food. The National Human Rights Commission has issued a notice to the Orissa government asking it to explain what steps it was taking to prevent further deaths. NDTV (August 30, 2001) reports that "there is currently 150 tonnes of food grain in godowns in Kashipur in Orissa. But people are eating poisonous mango kernel which eventually kills

them because they do not have anything else yet politicians insist they are doing this out of choice and there is no shortage of food."

Several of these states are among those with the highest income poverty. However, the high incidence of hunger in states that have a lower incidence of income poverty such as Kerala, Karnataka and Tamil Nadu underlines the fact that hunger exists even in the supposedly better parts of India and policy action is needed to address this. Further work will focus on factors leading to lack of access to food and therefore chronic poverty in the severity sense in spatial poverty traps. The approach will be to use literature and interviews with key players to gain an understanding of the nexus between failure of the market, state, community and voice leading to lack of access to food and therefore chronic poverty in the severity sense. The way in which and degree to which food insecurity feeds into long term poverty will also be established. The intention will be to revisit India's food security policies, from the perspective of chronically poor people.

II.3.2 Shocks

Distress and severe chronic poverty could result from transient phenomena and sudden shocks such as crop failure. The impact of such shocks can be transient in the event of the household being able to sell assets or borrow or generate income from alternative employment opportunities that enable it to wait for income from the next harvest. However, if the household has no assets to sell or no access to credit, or is able to borrow at exploitative rates of interest and gets into a debt trap, shocks can have long duration ramifications in terms of pushing households below the poverty line.

Shocks can also result from factors such as chronic health related problems of income earners, policy changes such as the withdrawal of state support, technological change and global competition changing market demand and rendering traditional skills redundant, development related displacement, ecological factors, etc. "Governments themselves are often a source of shocks to households. This comes about through the way governments influence the economic, legal and political settings within which the household is embedded." (Baulch and Hoddinott, 2000). Policy changes such as globalisation can also be sources of shock.

Recently there have been several reports in the media of starvation led suicide by powerloom weavers of Sircilla. The reports highlight the hopelessness and despair faced by the weavers despite their skills, their lack of alternative income earning opportunities for earning a livelihood; or of access to assets and other resources that can help survive delayed payments due to market determined fluctuations; or even access to safety nets based on public support and action. Access to food from the market necessarily requires purchasing power of some kind – based on income, wealth or debt. Timely help from the state requires 'voice', connections and committed, sensitive, responsive governance.

Chronic conditions of ill health such as tuberculosis and HIV/AIDs are drivers of poverty. Evidence from a very small panel data set in Vijaywada in Andhra Pradesh from revisiting households interviewed in 1993 showed that 50% of the vulnerable households

had serious health related incidents over a four year period. Ill health and shock reduces the income earning potential and increases expenditure on medication, thereby causing asset depletion and debt and worsening poverty. (P. Amis, 2001)

The despair caused by hunger and poverty, lack of assets, ill health, responsibility for elderly and other dependents, and lack of perceived avenues for employment by Konda Kistiah at the young age of 32, (see box below) or any hope in the future for his children, is repeatedly seen in many reports and needs attention in any discussion of chronic severity poverty.

Starvation drives 4 of family to Suicide

Karimnagar, April 3, The spate of suicides of powerloom weavers in Sircilla town is continuing with four more members of a powerloom weaver's family, including an eight-year old girl, committing suicide on Monday night following starvation. With this, the number of deaths of powerloom weavers in Sircilla town alone has gone up to 32 from January 2000 to till date.

According to the local residents, Konda Kistalah (32), a powerloom weaver of Rajivnagar in Sircilla town, was unable to feed his family, including aged parents and two children, and resorted to the extreme step of committing suicide by consuming pesticide. His wife had died six months ago due to tuberculosis and he was not getting employment for over three months and the debts were increasing.

The State Government has constituted a powerloom weavers' problems to formulate short-term and long-term plans. The district administration has responded to the cause only after the Union Minister of State for Home Affairs, Mr. Ch. Vidyasagar Rao, visited Sircilla and announced an ex-gratia of Rs.5,000 to 20 bereaved weavers' families.

The district administration announced an ex-gratia of Rs. 10,000 under the National Family Benefit Scheme to the kin of the deceased weavers, and widow pensions and old age pensions to the weavers' families, but nothing has taken shape. The administration also announced conducted counselling of the weavers' community but failed to take off due to obvious reasons. But after the distribution of ex-gratia to five families, it was stopped abruptly following political interference. The local elected representative instructed the administration to stop the distribution of ex-gratia till his arrival as he was busy with some programmes.

Source: **The Hindu, 4.4.2001**

Baulch and Hoddinott (2000) distinguish between idiosyncratic and covariant shocks. Covariant shocks could affect all households in this locality while an idiosyncratic shock may be restricted to only a given household. They point out that the "absence of detailed studies on the cumulative impact of shocks represents a particularly serious lacuna in our knowledge of processes of economic mobility" that there are a "myriad ways in which both positive and negative shocks – including pure bad luck, thefts loss of employment, and the cumulative effects of droughts – lead to impoverishment" and that households with greater endowments and greater returns will tend to be less vulnerable to shocks.

What is the impact of shocks caused by globalisation, policy change, health related problems, development related displacement and agricultural fluctuations in generating and maintaining chronic poverty? What sort of policy-based social protection can be developed against such shocks? These issues will be researched in phase 2 on the basis of in depth case studies that will analyse the impact of shock on increasing vulnerability to chronic poverty.

II.3.3 Chronic Poverty: Duration

The distinction between chronically poor and temporarily poor is seldom made in the literature on poverty. The Indian literature does not emphasise this distinction because most empirical analysis is based either on National Sample Survey estimates or on village surveys for specific years (Gaiha 1989). Determination of poverty as chronic or temporary requires that the same households be tracked over time through a panel data set as well as use of other qualitative approaches.

There is very little analysis in India based on panel data that longitudinally track the same households. Two panel data sets that have been used in India are the NCAER panel data for rural households and the ICRISAT data for semi arid areas. Some of the findings from both sets of panel data are given below.

Gaiha (1989) uses data from a panel survey of 4118 rural households of India, carried out by the National Council of Applied Economic research in 1968-69, 1969-70 and 1970-71. Given the poverty cut-off points (or poverty line) for the three years, the number of households whose per capita income/expenditure was less than or equal to the cut-off point in all the three years is determined. The proportion of such households in the aggregate sample of rural households was considered to measure the incidence of chronic poverty. In other words, Gaiha identified the chronically poor as households that were below the poverty line in each of the three years under consideration.

He notes that 'what characterizes the chronically poor is not so much low per capita income/expenditure in any year as low variation in it (in absolute terms) over time' and that this low variation is due to low/negligible endowments (e.g. cultivable land, labour power, skills) and/or inability to augment substantially the earnings from them.

Gaiha's analysis shows that:

?? About 47 per cent of the poor in 1968 (on an income criterion) were chronically poor.

?? The chronically poor were not necessarily the poorest. A substantial number were only moderately poor. Further, the poorest were not necessarily chronically poor.

?? Casual agricultural labourers were the largest group and cultivators were the second largest among the chronically poor. Except artisans, all other occupational groups were relatively small among the chronically poor. (See table 12 below)

Table 12: Chronically Poor by Primary Source of Income in Rural India

Primary Source of Income (1968)	Percentage of total chronically poor
Cultivators	26.90
Casual Agricultural Labourers	56.27
Casual Non-agricultural labourers	4.36
Permanent wage earners	2.28
Artisans	8.52
Dependent on transfer income	1.67

Source: Raghav Gaiha, Are the Chronically Poor also the Poorest in Rural India, Development and Change, Vol. 20, 1989.

- The bulk of the chronically poor were either landless or near-landless.
- The chronically poor depended more on wages than the just poor; landlessness/near-landlessness was higher among the former; while household size was about the same, dependency burden was slightly higher among the later; and, finally, illiteracy was higher among the former.
- The increases in both household income (about Rs.395 among the poor as against over Rs.147 among the chronically poor) and per capita income (about Rs.90 among the poor as against Rs.16 among the chronically poor), were much larger among the poor than among the chronically poor over the period in question.
- A comparison of per capita income with consumption expenditure of the chronically poor shows that at low levels of per capita income, expenditure exceeded income while at higher levels of income the divergence virtually disappeared. Consequently, average per capita expenditure displayed a smaller range of variation. It is plausible that at very low levels of income the excess of expenditure over income was financed, in part, by borrowing.
- The bulk of the chronically poor (over 79 per cent) depended on wages. This implies that much of the change in the household income of the chronically poor depended critically on how the wage component changed over the period in question.

Factors that were more decisive in restricting income among the chronically poor were wages and income from cultivation. A rise in wages was restricted mainly by a slight reduction in wages per worker (without an appreciable increase in the number of workers). Failure of wages per worker to rise could also be due to the lack of formal schooling/skills. Increase in income from cultivation per hectare was constrained partly by the near-absence of investment in agriculture.

Singh and Binswanger (1993) used longitudinal data collected from 218 rural households from six villages in three agro-climatic regions of India's semi-arid tropics (SAT) for a period of nine cropping years from 1975-76 to 1983-84. They found that:

- Poverty was closely associated with the resource base of the people in addition to their personal characteristics (Singh, 1990). Compared to the non-poor households, the poor cultivating households had poorer quality land, poorer

resource base, lower risk bearing capacity, stronger subsistence orientation and a stronger preference for coarse gains in their cropping pattern (Jodha and Singh, 1982).

- ?? The initially poor, who escaped poverty experienced a decline in their family size by more than one member. At the same time, the initially non-poor households, who became poor, experienced an increase in their family size by more than one member.
- ?? Poor households who remained poor neither accumulated wealth nor reduced liabilities.
- ?? Households who remained poor or became poor lost considerable operational area while those who escaped poverty were able to maintain their operational holding sizes in the face of increased demographic pressure. The same group was also able to increase its irrigation level.
- ?? The percentage gains in income over the period did not differ much across these caste groupings.
- ?? In the regions studied, poverty is clearly not a permanent household characteristic. Out of 218 rural households studied over time, 131 were initially poor. After nine years, 48 of these households had income above the poverty line threshold. Nine of the initially 87 non-poor households became poor despite considerable growth in the average income of the sample.

However, they point out that generalizations of these results should be made with caution because the sample selected for the study could not remain truly representative after a period of nine years.

Many of those who are not able to move out of poverty or are chronic long duration poverty tend to be stuck in a low wage-high drudgery-tough job groove with little opportunity for escape as can be seen from the excerpt given below.

Beyond the Margin : The Risky Climb of Ratnapandi

Ratnapandi Nadar lives in Ramnad in Tamil Nadu and has what must rank as one of the tougher jobs in the world. He climbs fifty date palm trees daily, some of them thrice a day to tap juice for panaivellam (date palm jaggery). That could mean 150 trips - up and down - trees that might be twenty feet in height. His work begins at 3 in the morning and lasts up to sixteen hours. He can earn as little as five to eight rupees a day… Prosperity is reserved for the middlemen, traders and wholesalers in the jaggery business. Ratnapandi does not own or control a single one of the trees he risks his neck to climb. He has never gained from any anti-poverty schemes and enjoys no risk insurance in a trade where a single slip could spell death.

On a lighter day, Ratnapandi has to attend to at least forty trees. Even if these were shorter ones, between fifteen and twenty feet, it means he could be climbing up to 5,000 feet a day. This is roughly equivalent to walking up and down a building of 250 floors daily, using the staircase. Only Ratnapandi isn't using a staircase. Nor even a ladder. He shins up using his hands and legs. The risks accompanying him are also, quite obviously, far greater.

Ratnapandi's wife, boils and cooks the juice he collects in their huge open vessel. She then pours the paste into empty coconut shells where it solidifies into neatly shaped lumps of date palm jaggery. That huge vessel they use is their only possession of any worth. They own no land and their hut has no belongings of even minimal value. They sell their jaggery to a commission agent to whom they are already indebted. This ensures a much lower price for the tappers than what the agent will command on the market. But the panalyri Nadars are not only very poor, they are also quite backward, and often illiterate. 'They have the toughest job, the lowest pay and the maximum danger," says a Tamil Nadu Kisan Sabha activist. 'But no development schemes - and there aren't any, anyway - will help improve their conditions. Not unless we can break the debt cycle, place them in control of these trees and fight for decent prices.'

Source: Sainath, P., (1996:1136-1141)

Chronic Poverty and Wage Rates

Sheila Bhalla (2000c) identifies the poorest segments at the rural all India level as agricultural labourers and construction workers. The NCAER panel data clearly show that income of the chronically poor is critically dependent on increases in wages. Gaurav Datt and Martin Ravallion (1998:79-80) also establish the reduction in poverty incidence caused by higher real wages and higher farm yields, and with about the same elasticity. Between 1974-75 and 1986-87, the wages of agricultural workers adjusted for inflation, grew at a remarkable average rate of 5.35 per cent and this worked towards sharp reduction in poverty during this period. Between 1987-88 and 1990-91, real wages rose at 2.5 per cent. In 1991-92 these declined by an average of 6.3 per cent and decreased in 11 out of 17 states. This corroborates the increase in poverty in 1992. (Papanek, 1996).

Dev (1988:14) attributes the higher incidence of poverty among agricultural labour households to their earnings from wage employment being too low to enable them to reach the poverty line and suggests that their annual earnings can be raised by increasing wages and/or days of employment. Wages paid to agricultural labour in ten states (that account for three-fourths of agricultural labour households in rural India) are less than 3 kg. of cereals even for male workers, thereby leaving very little surplus over the cereal consumption for meeting food and non-food needs (Parthasarthy, G., 1996 : 163). Large regional variations occur in wages. For instance, Acharya, (1989 : 133) finds that the ratio of maximum to minimum wages is three to four times in the case of male wages and even higher for female wages. He attributes this to the general immobility of people and resources on the one hand and differential productivity (and demand) on the other. (Acharya, S.,1989:137). Fixation of minimum wages, their periodic revisions and most importantly use of bargaining power to demand their effective implementation become extremely important specially during the slack season when wages fall. (Parthasarthy, G., 1996).

Since prices affect purchasing power of incomes and wages, higher prices of food and other essential items are likely to aggravate rural poverty unless the poor are protected from such price increases (Gaiha 1995). Sudden consumer price increases increase the hardships of especially low income households as they are forced to buy on a daily basis even when prices are high (Gaiha 1989). Given the stickiness of money wage rates in the face of inflation, for the vast majority of the rural population, an increase in prices would erode real incomes and push them below, or further below, the poverty line. (Saith 1981). In distress situations those who get paid in kind such as share croppers, may be less affected by sharp increases in food prices than will agricultural labour that receives cash wages that are not indexed to inflation.

IBRD (2000) India Country Study on Reducing Poverty provides some estimates of annual average growth in wage rates of unskilled male agricultural labourers. The data show that in real terms the rate of growth of real daily wages in rural areas slowed in the 1990's, suggesting that agricultural growth in the 1990's may have been less poverty reducing (IBRD 2000).

Table 12a: Annual Average Growth in Wage Rates of Unskilled Agricultural Male Labourers

(per cent)

	Nominal	**Real**
1980/1-1990/1	12.0	4.6
1990/1-1997/8	12.2	2.4
1993/4-1997/8	12.7	2.5
1980/1-1997/8	12.1	3.2

Note: (i) Consumer Price Index for Agricultural Labourers used to deflate nominal wages;

(ii) Exponential trend growth rates were calculated using Ordinary Least Squares.

Source: IBRD (2000:17) India Country Study on Reducing Poverty, Accelerating Development, OUP, Delhi.

Possible explanations for the slower growth in wages include:

(a) slower growth of demand for agricultural labour in the 1990s, associated with the new crops that account for the continued high agricultural growth;
(b) a slowdown in productivity growth in agriculture, possibly related to environmental issues and the need for private investment, such as generation sets, to make up for a poorly performing public infrastructure and
(c) a less well distributed agricultural growth, with the eastern states, where poverty is concentrated, experiencing a slow-down. (IBRD, 2000:17)

In view of the high incidence of chronic poverty among agricultural households the income of the chronically poor is critically dependent on increases in real wages. While the 'kulak' lobbies are able to exercise their power over their political representatives to force increases in prices at which food grains are procured by the state (Saith 1981) agricultural labour households are unorganized and lack the voice necessary to force state derived entitlements and increases in real wages.

There is no recent data and analysis on chronic (duration) poverty in India so future work in this area will fill an important gap. Analysis of panel data and data pertaining to and changes in prices and wage rates as factors restricting income of the chronically poor and landlessness will also be undertaken. This will be complemented by qualitative data collection through life histories and case studies in the areas identified for indepth field work in phase 2.

II.3. 3 Multidimensional or Non Income Measures of Poverty

Poverty is usually defined in a limited way in terms of an income based poverty line. However, poverty has several dimensions and the poor suffer deprivation in multiple ways and not just in terms of availability of income. Several forms of human deprivation, including poor survival chances, unjust employment of children, child prostitution, bonded labour, environmental pollution, domestic violence, and social

exclusion arising out of caste and gender discrimination, are not related to income in a predictable manner (UNDP,1997). The poor also lack access to assets such as credit, literacy, longevity, voice, land, water, and forests.

India has a growing literature on human and gender development indicators. The Human Development Index, Gender Development Index, Gender Empowerment Measure and Human Poverty Index. The indices estimated by UNDP improve on income-based indicators as measures of well being. HDI is an average of three indices representing income, longevity and knowledge; GDI measures gender-based disparities in attainment of income, longevity and knowledge; GEM captures the degree to which women and men participate in economic, professional and political activity and take part in decision making and HPI estimates deprivation in longevity knowledge and overall economic provisioning. Estimates of these indices at the state level are available in the literature. Three states of India (Madhya Pradesh, Karnataka and Rajasthan) have brought out Human Development Reports at the district level. The rankings of the major states on the basis of the HDI, GDI, GEM and HPI indices estimated by different researchers in India are given in table 13 below:

Table 13: State Rankings: HDI, GDI, GEM and HPI

Rank	HDI	GDI	GEM	HPI
1	Kerala	Kerala	Kerala	Kerala
2	Punjab	Maharashtra	Maharashtra	Tamil Nadu
3	Maharashtra	Gujarat	Himachal	Punjab
4	Haryana	Himachal	Gujarat	Maharashtra
5	Gujarat	Punjab	Karnataka	Haryana
6	West Bengal	Karnataka	Haryana	Gujarat
7	Himachal	Tamil Nadu	West Bengal	Karnataka
8	Karnataka	West Bengal	Tamil Nadu	West Bengal
9	Tamil Nadu	Andhra	Rajasthan	Andhra Pradesh
10	Andhra	Haryana	Madhya Pradesh	Orissa
11	Assam	Assam	Punjab	Madhya Pradesh
12	Orissa	Orissa	Andhra	Rajasthan
13	Rajasthan	Madhya Pradesh	Uttar Pradesh	Assam
14	Bihar	Rajasthan	Bihar	Uttar Pradesh
15	MadhyaPradesh	Bihar	Orissa	Bihar
16	Uttar Pradesh	Uttar Pradesh	Assam	15 States

Source: For HDI and GDI - AK Shiva Kumar, Gender Equality and Political Participation: Implications for Good Health', mimeo, 1996
For GEM - Aasha Kapur Mehta, Recasting Indices for Developing Countries, EPW, 1996
For HPI - K. Seetha Prabhu and Sangita Kamdar (1997) On Defining Poverty from a Human Development Perspective, University of Mumbai, mimeo.

Kerala has the highest rank on all four indices, while Maharashtra is 3rd on HDI, 2nd on GDI and GEM and 4th on HPI. Punjab and Haryana have high scores on HDI (ranked 2nd and 4th) and HPI (3rd and 5th) but lose out on GDI (5th and 10th) and GEM (11th and 6th). However, Orissa, Uttar Pradesh, Bihar, Madhya Pradesh and Assam – 5 out of the 7 high income poverty states – have the lowest ranks or perform equally poorly on HDI, GDI, GEM and HPI. Rajasthan ranks better on income poverty but performs dismally on all four multidimensional indicators.

Table 14: State Rankings: HDI and Population below the Poverty Line

Rank	HDI	Population below poverty line
1	Kerala	Punjab
2	Punjab	Andhra Pradesh
3	Maharashtra	Gujarat
4	Haryana	Haryana
5	Gujarat	Kerala
6	West Bengal	Rajasthan
7	Himachal	Himachal Pradesh
8	Karnataka	Karnataka
9	Tamil Nadu	Tamil Nadu
10	Andhra	West Bengal
11	Assam	Maharashtra
12	Orissa	Uttar Pradesh
13	Rajasthan	Assam
14	Bihar	Madhya Pradesh
15	MadhyaPradesh	Orissa
16	Uttar Pradesh	Bihar

Source: Table 13 and Planning Commission Press Release, March, 1997.

Income poverty incidence and performance on human development indicators seem to follow a similar pattern for most of India's 16 large states the exceptions being Andhra, Rajasthan, Maharashtra and Kerala. Low attainments on literacy result in Andhra's rank plummeting from 2 on proportion of population below the poverty line to 10 on HDI and Rajasthan's from 6 to 13. Conversely, Maharashtra's rank improves from 11 on poverty to 3 on HDI and Kerala's from 5 to 1 primarily due to high levels of literacy in these states.

Comparing state ranking on HDI and HPI shows that the major change in rank occurs in the case of Tamil Nadu and Madhya Pradesh. Tamil Nadu improves 7 ranks on HPI relative to HDI due to low health deprivation and low deprivation on economic provisioning. Madhya Pradesh improves 4 ranks from HDI to HPI due to low health deprivation. Comparison of HDI and GDI shows large changes in ranks in case of Punjab and Haryana due to severe gender bias. GEM shows a worsening performance

for Punjab, Assam and Orissa and gains for Himachal, Karnataka, Ranjasthan and Madhya Pradesh on the basis of participation of women in political life.

Infant Mortality

Persistent spatial variations in the infant mortality rate could be considered to be a reflection of deprivation or one outcome indicator of chronic poverty. Lack of access to inputs such as food and health care due to low income/assets/purchasing power could be associated with higher probability of a new born child dying between birth and one year of age times 1000 (IMR Q1). Data presented in UNDP's HDR 2000 show that in 1998 in Norway, Sweden, Japan and Finland the IMR was as low as 4. Australia, Iceland, Netherlands, France, Switzerland, Germany, Slovenia and Czech Republic had an IMR of 5 while Canada, UK, Belgium, Ireland, Italy, Spain, Israel, Greece and Malta an IMR of 6. In comparison, the IMR for India for 1998 was 69.

Using information obtained from the 1991 census, Rajan and Mohanachandran (1998), have estimated infant mortality rates for the states and districts of India. The average IMR (Q1) for India in 1991 was 74. Sharp interstate disparities existed with IMR estimates as high as 108 for the state of Orissa and 107 for Madhya Pradesh on the one hand and relatively low IMR estimates of 37 for Kerala. (see table 15 below).

Table 15: State level Infant Mortality Rates, 1991 Q (1)

States	Total	Male	Female
INDIA	74	71	75
Kerala	37	36	38
Andhra Pradesh	49	51	45
Tamil Nadu	53	52	53
Punjab	54	53	55
Haryana	55	52	56
Maharashtra	58	59	55
Karnataka	60	62	57
West Bengal	67	65	69
Gujarat	69	63	72
Bihar	70	61	79
Himachal Pradesh	75	76	70
Rajasthan	81	79	83
Assam	85	86	83
Uttar Pradesh	89	84	94
Madhya Pradesh	107	105	10
Orissa	108	106	110

Source: Rajan, Irudaya and Mohanachandran, P., Economic and Political Weekly, Special Statistics, May, 1998.

Even sharper disparities occurred at the district level. Estimates of IMR (Q1) depicted a massive spread from 23 for Hyderabad in Andhra Pradesh to 154 for Shivpuri in Madhya Pradesh. What is of considerable concern is the fact that there were 37 districts in the country that had IMR estimates far worse than or the same as Orissa's 108. These included one district in Assam, 7 districts in Uttar Pradesh, 7 in Orissa and as many as 23 in Madhya Pradesh. The worst performing districts were Baleshwar in Orissa and Shivpuri in Madhya Pradesh with IMR (Q1) of 151 and 154 respectively. All districts of Madhya Pradesh and Orissa had IMR levels above the all-India average.

The average male IMR was 71 and female IMR was 74 at the all India level. The best performing state with respect to male IMR was Kerala (36). On the other hand the worst performers were Orissa (106) and Madhya Pradesh (105). Madhya Pradesh and Orissa had the highest female IMR at 110. Sharper disparities are encountered on analysing district level data. Estimates of male IMR ranged from 24 in Hyderabad to 184 in Betul (South Western Madhya Pradesh) and female IMR from 21 in Hyderabad to 181 in Baleshwar in Orissa.

In the case of all the districts in the state of Bihar, female IMR was more than male IMR. On the other hand, in all the districts of Himachal Pradesh and Maharashtra, female IMR was less than male IMR.

The worst performing state with regard to male IMR was Orissa with an estimate of 106. However, district level data shows that as many as 24 districts in Madhya Pradesh, 7 in Uttar Pradesh, 6 in Orissa, 3 in Rajasthan, 2 in Assam and one in Maharastra had male IMR estimates worse than the Orissa state average.

Again, the worst performing state with respect to female IMR was Orissa with an estimate of 110. However district level data shows that as many as 22 districts in Madhya Pradesh, 13 in Uttar Pradesh and 10 each in Rajasthan and Bihar, had female IMR estimates above the average for Orissa.

Female Literacy and Infant Mortality Rates (Mehta, 1998:16-17)

Basic education, especially female education, has a powerful influence on fertility and mortality. Maternal education results in increased knowledge about nutrition, hygiene and health care. Basic education helps mothers to take advantage of public health-care services, thereby reducing child mortality Murthi, Guio and Dreze (1996).

Based on data for a sample of 296 districts in 14 states accounting for 94% of India's population, Murthi, Guio and Dreze (1996) find that female literacy has a negative and statistically significant effect on child mortality. Female literacy has a negative effect on both male and female child mortality, but the effect on female child mortality is larger. As expected, they find that higher levels of poverty are associated with higher levels of child mortality.

Figure I arranges Indian states on the basis of four levels of attainment in female literacy - over 80%, 46% to 55%, 35% to 45% and less than 35% and five levels of infant mortality at age 1, viz., less than 40, 40-55, 56-75, 76 to 100 and more than 100. The figure shows clear association between levels of female literacy and IMR with most states clustering around the diagonal. States with high female literacy are not characterised by high infant mortality in even a single case. However Andhra Pradesh has succeeded in attaining low IMRs despite low female literacy.

Figure I: Distribution of Indian States by Female Literacy and Infant Mortality Rates

Female Literacy

		High >80%	Medium 46% to 55%	Low 35% to 45%	Severely Low <35%
IMR Q1	Very Low <40	Kerala			
	Low 40-55		Tamil Nadu, Punjab	Haryana	Andhra Pradesh
	Medium 56-75		Maharashtra Gujarat, Himachal, W. Bengal	Karnataka	Bihar
	High 76-100			Assam	Rajasthan, Uttar Pradesh
	Severely High >100				Orissa, Madhya Pradesh

Source: Table 15 and Government of India, Economic Survey.

In sum then, several of the high income poverty states such as Uttar Pradesh, Madhya Pradesh, Bihar, Orissa, and Assam also have the worst record on multidimensionality indicators such as HDI, GDI, GEM and HPI. Data pertaining to Infant Mortality Rates reinforces this further with extremely high state averages of infant mortality for Orissa and Madhya Pradesh as also for a large number of districts in Uttar Pradesh and Rajasthan. However, some states have managed to achieve more in reducing infant mortality than in reducing the incidence of poverty. High literacy seemed to play an important role in decreasing IMRs in most states.

What emerges from analysis of chronic poverty looked at in terms of severit y, duration and multi dimensionality is the fact that while chronic poverty in the duration sense is a characteristic that persists as a "hard core" in all most all states of the country, it could be postulated that the proportion of the poor who suffer long duration and inter generationally transmitted poverty is likely to be significantly higher in those parts of the country that suffer greater incidence of severe poverty and multi dimensional deprivation.

III. VULNERABLE GROUPS

Chronic poverty seems to be disproportionately high among historically marginalised groups such as scheduled castes, scheduled tribes, the elderly, women and the disabled. The multiple deprivations suffered by these groups make it harder for them to escape from poverty. Different forms of disadvantages tend to be mutually reinforcing so that people in groups 'jammed' by one log are likely to face others as well. (de Haan, A. and Lipton, M., 1998: 29). Mainstream development theories, policies and strategies supposedly analyse poverty through a neutral lens. However, most approaches are in fact not neutral because they assume the average male actor as the standard and consider the male actor as representative of the human actor. Consequently, policies that are supposedly neutral across all groups actually discriminate against vulnerable groups, (whether identified in terms of caste or tribe or disability or age or gender) as they address the lived experiences of these groups only to the extent to which they conform to or overlap with the norms set by the male actor (Adapted from Kabeer 1995). The Chronic Poverty Research Centre seeks to recognize the differing needs and "differential incorporation" (Colin Murray[1]) or social exclusion/inclusion of each of these groups that are more vulnerable to chronic poverty so as to influence policy action.

Scheduled Castes and Scheduled Tribes

Caste and tribe are structural factors which pre dispose certain groups to long term poverty and deprivation. The scheduled castes are a collection of castes that suffered the socially oppressive practice of untouchability. While some of them are small and marginal farmers, most of the scheduled caste families in rural areas work largely as agricultural labour. In the urban areas, a large proportion of unorganized workers are from the scheduled castes. The scheduled tribes were identified on the basis of certain well defined criteria including distinctive culture and pre-agricultural modes of production. Two third of the bonded labourers (essentially chronically poor with likelihood of intergenerational transmission of poverty) identified in the country are from scheduled castes and scheduled tribes. (Sankaran, S.R., 2000).

Scheduled castes are concentrated especially in the states of Uttar Pradesh, West Bengal, Bihar, Tamil Nadu, Andhra Pradesh, Madhya Pradesh, Rajasthan and Karnataka. Scheduled tribes are primarily in 6 states – Bihar, Gujarat, Madhya Pradesh, Maharashtra, Orissa and Rajasthan.

[1] Based on discussions led by Colin Murray at a CPRC Research Design Workshop in Capetown, July 2001.

Qualitative research corroborates the greater vulnerability of scheduled castes and tribes to poverty. For example, Kozel and Parker (2001) identified a typical poor household as one which is at the low end of the caste hierarchy - most often a member of the Scheduled Castes or Scheduled Tribes. Lanjouw and Stern (1991) also postulate a strong correlation between caste and poverty in India. Based on a case study of Palanpur, they note with concern that among this group, poverty remains endemic. This is considered to be a reflection not only of poor endowments of productive assets, but also of low educational standards and vulnerability to caste-based discrimination resulting in, among other things, little access to any kind of regular employment outside the village. In other words, lower levels of access to physical, human and social capital result in greater likelihood of these groups being vulnerable to persistent or chronic poverty.

The relatively greater vulnerability to poverty of scheduled castes and tribes is also evident from the data in tables 16 and 17. On average one out of two persons belonging to scheduled caste and tribe groups is poor as compared with an average for the general population of less than one in three. Whereas 31.4% rural non SC/ST households were below the poverty line, the corresponding estimates were 52% for Scheduled Tribes and 48% for Scheduled Castes. In other words, the incidence of rural poverty was 35 to 40% greater for these groups. Similarly, poverty incidence among these groups in urban areas was also relatively high.

Estimates of severe poverty show that whereas 12% of non SC/ST rural households were severely below the poverty line as many as 22% scheduled castes and 25% scheduled tribe households were in severe poverty. Similarly in urban areas 13% non SC/ST household experienced severe poverty whereas 26% scheduled caste and 20% scheduled tribe household were very poor.

Table 16: Poverty and Inequality by Socio Economic Groups, 1993-94

S.No.	Description	Very Poor	Poor
Rural	1	2	4
1	Scheduled Tribe	24.77	51.96
2	Scheduled Caste	21.79	48.32
3	Others (Non-SC/ST)	11.45	31.43
4	All Population	15.26	37.23
Urban			
1	Scheduled Tribe	20.06	40.74
2	Scheduled Caste	25.67	49.84
3	Others (Non-SC/ST)	12.42	29.44
4	All Population	14.85	32.28

Source: Datta and Sharma, (2000) Working Paper no.7, Planning Commission

Similarly, almost half of the main workers [2] who were from scheduled castes and a third of those from scheduled tribes were agricultural labourers as compared with an average

[2] Main workers are defined as those with more than 183 days of work in the year.

of one fifth for the aggregate population. Agricultural labourers have been identified in the literature as the group that is the most susceptible to chronic poverty.

Table 17: Occupational classification of main workers among SCs/STs and Total Population in 1991

Items	Total	SC	ST
Cultivators	39.74	25.44	54.5
Agricultural Labourers	19.66	49.06	32.69
Household Industry	2.56	2.41	1.04
Other workers	38.04	23.08	11.76

Source: National Commission for Scheduled Castes and Scheduled Tribes Fourth Report 1996-97 and 1997-98, Volume 1, Page 13.

Estimates of all-India mean consumption expenditure for 'Others' or non SCST groups exceeds that for the SCST group by a proportion of nearly 32 percent. These substantial disparities between the scheduled castes and tribes on the one hand and the rest of the population on the other emphasise not only the relative but also the absolute disadvantage experienced by the former group (Jayaraj and Subramanian, 1999.) (See Table18 below).

Table 18: State wise Data on Mean Consumption Expenditure in Rural India, 1983

State	Mean Consumption Expenditure (in rupees) of		
	Scheduled castes & tribes	Others	The entire population
India	91.64	120.71	112.31
Andhra Pradesh	96.94	122.08	115.57
Assam	108.76	114.46	113.07
Bihar	77.63	99.61	93.75
Gujarat	92.47	131.54	119.26
Haryana	113.62	159.68	149.13
Karnataka	91.15	126.03	118.14
Kerala	105.06	152.80	145.22
Madhya Pradesh	82.06	116.11	101.75
Maharashtra	91.58	116.59	110.98
Orissa	78.68	111.00	97.48
Punjab	132.04	182.32	170.31
Rajasthan	101.33	140.76	127.48
Tamil Nadu	87.84	120.32	112.21
Uttar Pradesh	88.58	108.63	104.26
West Bengal	92.70	110.77	104.61

Source: D. Jayaraj and S. Subramanian (1999) p.213

As another example of deprivation of SC ST groups, they show that at the all-India level the proportionate gap between the mean consumption for the SCST group and the poverty line is just about 15 per cent while the corresponding figure for the 'Others' is 51 per cent. They therefore draw the conclusion that on average, the SCST group is 'living in circumstances not far removed from the standard of absolute impoverishment widely used in the Indian literature on rural poverty.' In two states - Bihar and Orissa - the mean consumption level is actually less than the poverty line. The poverty line estimated by the Planning Commission was Rs. 97.48 for rural Bihar and Rs. 106.3 for rural Orissa for 1983-84.

The deprivation suffered by these groups is corroborated by the main findings of the NSS Report No. 422 (1993-94 Round) which show that:

?? Barring a few states, the MPCE position of the SC and ST groups in every state was consistently poorer than that of the general population of the state, as evidenced by proportion of persons falling in the lower MPCE ranges. This was true of both rural and urban areas of states where persons belonging to these social groups were present in significant numbers.

?? Among the states with large ST populations, the ST group was specially depressed (relative to the general population) in Orissa and Madhya Pradesh.

?? Among the household types the proportion of the poor is the highest among "agricultural labour" households in almost all states. The MPCE levels of casual labour households were substantially lower than either self-employed or regular wage/salary earning households.

Clearly therefore, chronic poverty seems to be disproportionately high among marginalised groups such as scheduled castes and scheduled tribes and this is an area that will be explored further in the in-depth case studies and commissioned papers in future research.

Gender

In no society do women enjoy the same opportunities as men (UNDP, HDR, 1995 p.2) The Human Development Report states that poverty has a woman's face – of the 1.3 billion people in poverty, 70% are women. Income poverty in India is generally measured at the household level and as a result gender segregated data on women in poverty is available only for households that are headed by women. However, poverty does have a gender dimension and the deprivation suffered by women is partially captured by the glaring gaps in statistical indicators. Gender inequalities are explicit in statistics depicting differences in the sex ratio, child infanticide, literacy rates, health and nutrition indicators, wage differentials and ownership of land and other assets. Implicit gender inequalities are located in the household and are far harder to capture in statistics. Intra-household inequalities result in unequal distribution of resources; of control and decision-making; and unfair, unequal distribution of work, drudgery, and even food.

Gender discrimination exacerbates the impact of poverty on women due to unequal allocation of food, lower wage rates, and lack of inheritance rights (Padmanabhan, 1999:22-24). Even in households that are above the poverty line on average, women may

suffer severe deprivation as for example, in the case of a small family including a widow and her son, where the son's earnings are the main source of household income. While he leads the relatively privileged life of those who have daily access to a substantial sum of cash, the widowed mother leads a severely deprived life (Lanjouw and Stern, 1991). Economic dependence is extremely high especially among elderly women and a large proportion of older persons suffer chronic illness and some type of disability. Rural women in India in 1983 had a 12% higher probability of being poor than male though this was offset by the excess of men among the poorest urban adults (de Haan, A. and Lipton, M., 1998 : 21)

Women in poverty were found in all three categories of poverty – destitute, structural and mobile - in proportions at least equal to those of men. A disproportionate number of the destitute, however, were said to be female-headed households, and many of these women were destitute for structural reasons in that their identity as women closed most occupations to them (Kozel and Parker). Women may be hired as agricultural workers, but are commonly paid only a half to two-thirds of the wage received by men performing the same work.

The combination of low entitlements, dependency and societal limitations that prevent realization of their capabilities due to denial of access to for example, literacy and education combined with 'market discrimination' result in their being concentrated in the low-paid end of the market. Their unequal situation in the labour market is linked to their increasing poverty.

?? Activities which are in the male domain such as ploughing, irrigation, levelling etc. are paid more. Those in the female domain, eg. weeding, transplanting, winnowing etc. are paid less.

?? Operations which use machinery and draught animals are performed by men. Those which demand direct manual labour are performed by women.

?? In rice cultivation for example, seeding, transplanting, weeding and threshing are women's jobs. Ploughing is done by men. In mining and quarrying they are engaged in stone quarrying as irregular casual workers. In the secondary sector in household industries they work as helpers. In construction work, men do the skilled work of brick laying while women mix mortar and carry head loads.

?? Wages paid to women are lower than the wages paid to men. In some villages where the husband is a permanent labourer, the wife works for the same employer without a contract.

Bina Agarwal (1989: WS 50-51), lists several of reasons cited above that explain why women are much more disadvantaged in their access to employment and earnings than men. These include:

a) lesser job mobility due to their primary and often sole responsibility for child-care, the ideology of female seclusion, and the vulnerability to caste/class-related sexual abuse;

b) more limited access to information on job opportunities due to lower literacy levels, lesser access to mass media, and less interaction with the market place;

c) confinement to casual work in agriculture;

d) lower payments often even for the same tasks, made possible by the ideological assumptions (usually shared by both employers and workers) that women's earnings are supplementary to the family of that women are less productive, than men, and by the lack of unionisation among female workers.

e) the form in which payment is made - a Karnataka study of rural labour found that 70 per cent of male labour contracts and only 20 per cent female labour contracts involved meal provisions;

f) exclusion from productivity increasing machinery, the induction of which typically displaces women, who are rarely trained in its use and who thus remain confined to manual tasks.

Not surprisingly then, given the double jeopardy of artificially low wages combined with the downward bias in estimating female work force participation, the contribution of females in the national income works out to be so low (Shramshakti 1998:30).

Women work longer hours to achieve given levels of poverty with additional responsibility for home and family duties. They have less chance to escape poverty than men with higher levels of illiteracy among those below the poverty line. Their lack of education is partly responsible for the lower likelihood of women moving to towns than men. Their disadvantage lies in less leisure, fewer opportunities, greater vulnerability, worse health and less education. (de Haan, A. and Lipton, M., 1998 : 22).

Poor, trebly disadvantaged women are intimately involved in household survival and risk minimization. Migration is potentially powerful force in poverty reduction. But poor women often stay put when men migrate; when they migrate they have few opportunities open to them. They are less likely than men to diversify occupationally, and therefore increase their value. The absence of positive change in poor women's position and in their skills and education often results in a culture of poverty being transmitted to the next generation. Future research will explore the ways in which women's development (education, health, income) may enable the interruption of intergenerational transmission of chronic poverty as how chronically poor women (and men) transmit their vulnerability to poverty to their children.

Older Persons

Age, and high levels of economic dependence and/or disability combine to create high levels of vulnerability to chronic poverty. While old age pension schemes are in place neither the small amounts made available nor the hassle of accessing them make this a solution to the problem of chronic poverty among the elderly. With the high incidence of chronic ailments and health care needs of the elderly, declining family size, migration and breakdown of traditional family structures that provided support, this group of the population is extremely vulnerable to poverty.

The 1991 census showed that approximately 7.6% of India's rural and 6.3% of India's urban population was above the age of 60. 7.8% males and 7.4% females in rural and 6.2% males and 6.6% females in urban areas were in the category of the aged.

Rajan, Mishra and Sarma (2000) project the proportion of older persons in India to be 7.08 in 2001 and 9.87 in 2021. The proportion of old-old (70 plus) in India is expected to increase from 2.40 percent in 1991 to 3.75 percent by 2021. The total number of elderly persons in India is projected to increase to 136 million by 2021 from the current level of 55 million in 1991. This has significant implications for social security policies.

The NSS data show that in both rural and urban areas, roughly 50% of aged persons were fully dependent on others, 13 to 16 % were partially dependent and only 30% were economically independent. Economic independence was far greater among males than among females. Close to half the elderly males and only 12% of elderly females were economically independent. In contrast, more than 70% of older females and only about 30% of older males were fully dependent on others.

High levels of economic dependence at low household income levels mean that meager resources need to be stretched thinner and thereby increase vulnerability to poverty of physically and financially dependent older persons. Inadequate financial resources are a major concern of the Indian elderly (Desai 1985 cited in Rajan et. al., 2000) and more so among the female elderly (Dak and Sharma 1987 cited in Rajan et. al., 2000). In many situations, the rural elderly continue to work though their number of working hours comes down with increasing age (Singh, Singh and Sharma 1987 cited in Rajan et. al.,2000). Financial problems are more common among widows and among the elderly in nuclear families. Economic insecurity was the sole concern of the elderly in barely sustainable households in rural India (Punia and Sharma 1987 cited in Rajan et. al.,2000). The worries of the elderly are on two fronts: fears of sickness or disability and financial worries. Almost half the elderly reported suffering from a chronic ailment that required medical attention. 40% of rural and 35% of urban elderly persons reported having some type of disability.

The Disabled

The Planning Commission[3] estimates that there were about 16 million physically disabled persons in India in 1991 as compared with 13.7 million in 1981. 12.73% of physically disabled persons suffered from more than one of the following disabilities, i) visual disability ii) hearing disability iii) speech disability iv) locomotor disability. The estimates show that among the different types of physical disabilities, the number of persons having locomotor disability was highest (almost 50%) followed by the number of persons with visual and hearing disability.

Analysing the spatial distribution patterns of the disabled population of Uttar Pradesh, R.K. Shukla estimated that 14.71% of the total disabled population of the country was located in U.P. in 1981. There were 1,64,556 disabled persons in the study region and 91.14% lived in rural areas. The spatial analysis of the disabled population revealed that

[3] Planning Commission, Indian Planning Experience, A Statistical Profile, p.179.

high, medium and low level disablement was observed in 13, 38 and 5 districts respectively of the state.

13 districts of the state had high disability (2% and above). The lack of iodine accelerated the percentage of disability in the hill districts of the state. Similarly, poliomyelitis and lathyrism diseases were also responsible for high levels of disability. Generally, malnutrition, poverty and paucity of health care facilities in the rural areas were the variables augmenting incidence of disability. The mechanisation of agriculture in the fertile plain districts and criminal offences in Etawah, Hardoi, Unnao and Banda districts played an important role in enhancing the high level of disability. 38 districts of the state had medium disability (1%-2%). The districts falling in this group were characterised by low level of urbanisation and health care facilities. 5 districts had low disability (below 1%). These districts were characterised by high literacy, better health facilities and urbanization, while areas of high disability had under developed health services and low level of nutrition. There is clearly need for giving priority to disability prevention and rehabilitation services.

Barbara Harriss – White (1999) refers to the close and positive relationship between disability and poverty in that mechanisms of poverty like malnutrition lead to disability. Hence poverty which is an 'economic disability' (Sen cited in Barbara Harriss - White) leads to 'social disability (exclusion and stigma) and medicalised (physical) disability. Chronic sickness and disability affect both short term and long-term poverty. She uses data from three villages in northern Tamil Nadu, to show a positive association of disability and poverty. She also notes that factors in the physical environment may predispose towards disability as may the social and spatial environment.

The NSS 36th Round in 1981 showed that certain states have much higher than average concentrations of disabled people. The prevalence of locomotor handicap is strongly associated with agriculturally advanced regions; that of deafness and dumbness with northern regions and Himalayan valleys. The incidence of leprosy is strongly concentrated in tribal regions of Bihar and West Bengal and in Tamil Nadu and Andhra Pradesh in the south. This concentrated distribution is attributed to environmental factors (lack of iodine), diseases (poliomyelitis and lathyrism), social and economic factors (low levels of urbanisation, high levels of food insecurity and poverty).

Since chronic poverty seems to be disproportionately high among marginalised groups such as scheduled castes, scheduled tribes, older persons, women and the disabled and these social groups suffer multiple deprivations even in households that are above the poverty line, the research in phase 2 will use panel and NSS data to identify vulnerable groups and their correlates. Papers will be commissioned on groups especially vulnerable to chronic poverty such as agricultural labourers, scheduled castes, scheduled tribes and intra household inequalities. And qualitative methods such as in depth case studies and life histories will be used to supplement the findings and develop an understanding of the social, political and economic processes underlying their continued deprivation.

IV. CHRONIC POVERTY IN REMOTE RURAL AREAS

The analysis in section II.3 clearly indicated concentration of severe poverty in seven regions spread over Bihar, Orissa, Madhya Pradesh, Uttar Pradesh and Maharashtra. While these regions constitute the major spatial poverty traps in India, patches of spatial poverty traps exist even in the states/regions that generally do not exhibit chronic poverty at least in the severity sense. While inland Maharashtra is a glaring example of such a phenomenon, a similar pattern is likely to exist in several other parts of the country especially, in the large tracts of dry land-drought prone regions in the western and southern states. Besides these, pockets of chronic poverty seem to exist in the hilly-forest based regions located within the central and eastern states characterized by high incidence of poverty. This section tries to examine the extent and nature of chronic poverty within the spatial poverty traps.

Drought prone regions are affected by frequent failure of crops and livelihood base. There is intensification of political upsurge among the socially and physically isolated tribal hilly regions. Prima facie, the phenomenon of chronic poverty, including high degree of uncertainties of livelihood base, seems to have emanated from the structural factors that get reinforced by the low endowment of 'geographical capital' in these regions. This is manifested in terms of adverse agro-climatic conditions, inadequate infrastructure, physical isolation, and social alienation (Bird et.al, 2001). Together these factors seem to have widened the existing gulf between the mainstream economic system and the lagging regions forming spatial poverty traps in the remote rural areas (RRAs).

IV.1 Identifying the RRAs:

Two regions that can be defined as remote rural areas on the basis of agro-ecological and socio-economic conditions are:

- ?? the large tracts of dryland regions characterised by frequent failure of crops and employment opportunities and thereby leading to high level of unprotected risks of livelihood security among the poor; and
- ?? the `forest based' economies, especially in hilly regions with predominance of tribal population with limited access to natural resources on the one hand, and information as well as markets on the other.

This characterisation of RRAs can be justified since agricultural growth is the most crucial factor for reducing rural poverty directly and also for fostering the conditions of pro-poor growth in the (urban and rural) non-farm sectors (Ravallion, 2000). Further, higher productivity in agriculture is positively associated with the HDI and GDI; and negatively associated with total fertility rate (Chaudhari, 2000).

In the absence of agricultural growth, workforce diversification may also reduce poverty to a limited extent. During the second half of the nineties, employment growth in rural areas was negative. Employment growth had taken place in the urban areas partly due to the shift of non-farm employment from rural to urban locations (Bhalla, 2000a). It is further noted that `due to relentless build of demographic pressures' except in Punjab,

Haryana, Kerala, and West Bengal, the damaging impact of slowing down of agricultural growth has led to a reversal of the trends in changing workforce diversification in rural India (Bhalla, 2000b). Reflecting on the effectiveness of rural-urban movement of labour force, it is further noted that `when all fails, under-employed farm workers gravitate to construction labour as the last resort'. But, if this continues in the long run it renders distress migration to urban areas unsustainable in the absence of agricultural growth.

While the criticality of agriculture for reducing rural poverty has been fairly well demonstrated by the recent experiences of growth in some of the lagging states like West Bengal, Madhya Pradesh and Rajasthan (Bhalla, G.S. 2000), how effectively it percolates to the chronically poor, needs to be closely scrutinised. The earlier analysis of the first round of Green Revolution in India did not provide a very encouraging experience. For instance, as noted earlier in the paper, Gaiha (1989) noted that growth alone would not shift the chronically poor out of the low-income traps hence, employment generation and public distribution system policy interventions were needed. The recent experience of agricultural growth in some of these `high potential' but high poverty states therefore needs a closer examination.

Figure II provides a broad typology, of the factors determining the extent and nature of chronic poverty in two sets of remote rural regions.

Certain inherent differences in the three important components of geographical capital viz. agronomic, physical infrastructure and social structure occur across the two sets of regions. Ideally, these differences should be analysed at a more disaggregated, regional level. But, this is difficult because the identification of drought prone or forest-based regions does not match with the schematic of the NSS-regions for which details for important indicators are readily available. In what follows we try to map-out some of the important indicators of geographical capital for the major states, which can be broadly categorised as drought prone and forest based regions. To a large extent, they represent low and high potential regions respectively, as defined by Fan and Hazell (2000) based on their classification of districts within the 20 agro-climatic zones in India.

Figure II: Factors Affecting Chronic Poverty in Remote Rural Areas

Factors	**Remote Rural Areas**	
	Drought Prone	**Flood Prone and Hilly**
Major States/ Regions	Rajasthan (92%)*, Gujarat (88%), Maharashtra (81%), Karnataka (68%), Andhra Pradesh (65%), Tamil Nadu (61%)	Assam (31%)**- Hills Orissa (30%) – South Madhya Pradesh (30%) – South Western Bihar (15%) – South Uttar Pradesh (Uttarakhand – (80%) North East States – Entire Region
Social Alienation	Higher Proportion of Scheduled Caste Households	Predominance of Scheduled Tribes
Structural	Ryotwati*** Land Relation Low Incidence of Landless and Semi Landlessness	Feudal Land Relations High Incidence of Landlessness
Population Growth and Access to Natural Resources and Modern Production Technology	Large but less productive land holdings Higher degree of commercialization and Neglect of Common Property Resources, Break Down of Collective Institutions Low Population Pressure Due High Outmigration Low Untapped Agronomic Potential Over Utilisation of Natural Resources viz; Water, CPLRs	Limited Access to Forest Resources; High Dependence of Common Property Resources; Collective Institutions Subsistence Crops, Low Level of Input Use High Population Pressure Moderate to High Agronomic Potential Moderate Use of Natural Resources viz; Water, Forests
Sectoral and Infra-structural Development	Relatively more diversified Economies with developed industrial and/or mining sectors	Less diversified Economies Despite the Substantial Mineral Resources
Access to Markets	Better development of Physical Infrastructure like road, electricity, communications and input-output markets for farm sector	Low development of physical infrastructure and markets

Figure II (continued): Factors Affecting Chronic Poverty in Remote Rural Areas

Factors	Remote Rural Areas	
	Drought Prone	**Flood Prone and Hilly**
Policy Support	Special Programmes for Nutrition Security in Tamil Nadu, Andhra Pradesh; Employment Guarantee Schemes in Maharashtra; Good Network of Drought Relief in Gujarat Generally Weak Public Distribution System	Very Little Impact of State Level Extremely weak Public Distribution System
Coping Strategy	Workforce Diversification in Industrially Developed States High Incidence of Inter-state Migration from Less Industrialised States Increased Private Water Investment in Grand	Limited Avenues for Workforce Diversification Relatively Lower Incidence of Inter-State Migration Negligible Private Investment in Agriculture
Nature of Poverty	Poverty with Non-Sustainable Coping up Strategies because of the Higher Depletion of Natural Resources and Significant Social Cost of Outmigration	Chronic Poverty with Significant Scope for Increasing the Total Earnings from the given Land and Water Base and Improved Management of Forests with Participation Of the Poor

* Indicates area under Dry land Conditions
**Indicates area under Forests
*** Refers to a system where tillers have ownership of land and pay land tax directly to the State.

IV.2 Agro-Climatic Conditions and Poverty

Table 19 provides basic features of the major states in India across the two categories of states i.e., the dry land and the forest based regions The incidence of poverty is generally lower among the drought prone relative to the forest based regions. To an extent, this is due to relatively lower land productivity in the states like Bihar, Orissa and M.P. as compared to drought prone states like A.P., Gujarat and Karnataka, where higher valued crops like oilseeds and pulses predominate. But the relatively higher land productivity in some of the drought prone regions - Gujarat, Rajasthan and Maharashtra is accompanied

by very high instability in crop production compared to the rest of India (except Orissa). In fact, West Bengal and Assam have only moderate instability in crop production (WFP, 2001).

Table 19: Important Features of the Major States with Significant Proportion of Drought Prone and Forest Based Economies

States	Growth of SDP (%) 1970-71 to 1995-96	Non-Farm Employ-ment (% to main workers) 1991	Land Producti-vity Rs./ha. 93-94	Labour Producti-vity Rs. /worker (UPS)* 93-94	Average No. of Days of Farm Employment in a Year	Agricultural Wage Rate in 1993-94 at 1970-71 Prices
DROUGHT PRONE						
Andhra Pradesh	1.9	29.6	13,419	2340	257	4.68
Gujarat	2.7	40.6	10,188	3457	261	4.71
Karnataka	2.2	33.3	12,194	3499	278	3.79
Maharashtra	3	38.9	6,639	3381	251	5.19
Rajasthan	1.9	29.3	4,876	2922	273	4.64
Tamil Nadu	2.4	38.6	26,084	2723	236	4.11
FOREST BASED						
Assam	1.7	N.A	11,962	3080	285	5.11
Bihar	1.8	28.9	7,864	1675	304	4.32
Orissa	N.A	25.2	6,317	2368	265	3.93
Madhya Pradesh	1.3	23.2	6,371	2664	286	4.15
Uttar Pradesh	1.8	27.1	10,690	3495	243	4.11
West Bengal**	2.3	44.2	13,628	5416	253	6.89
***UPS=Usual Principal States as Main Worker in Agriculture.**						
****West Bengal has been included as till early 1990s it shared features like**						
High poverty, high agronomic potential and low agricultural productivity.						

Sources: Central Statistical Organisation, National Accounts Statistics (Various Issues), New Delhi; Government of India, Population Census 1991, New Delhi; NIRD (2000); Bhalla, Sheila (2000a); Indian Labour Bureau, Reports of the Rural Labour Enquiry, 1993-94, Ministry of Labour, Government of India, Shimla.

Besides land productivity, the major factors causing high incidence of poverty in states like Orissa, M.P. and Bihar is relatively lower labour productivity in agriculture resulting in lower earnings as well as lower wage rates from agriculture among the rural labour households (See Table 19). This is an outcome of relatively high demographic pressure, and frequent division of land holdings especially among tribal communities, accompanied by lower economic growth and limited workforce diversification in the states like Bihar, M.P. and Orissa in the `forest based' category. The issue of surplus family labour of course, has to be related to the land holding size, access to irrigation (even on a part of the cropped land), cropping pattern, and ownership of livestock. It is

quite likely that many of the tribal households do not have `surplus' labour because of the prevalence of nuclear families and high infant mortality. The issue of demographic pressure seems to be community as well as region specific and is very complex in nature. Hence it warrants detailed probing.

Agricultural wage rates (for male workers) are not significantly lower in the high poverty states like Bihar, Assam, M.P. and U.P. than in the dry land and low poverty states like Gujarat and Andhra Pradesh. However, the actual number of wage paid days in both farm and non-farm activities are lower than in the dry land states, so that earnings from wage labour are lower. This is supported by a recent study comparing dry and wet regions in rural Tamilnadu (Rajuladevi, 2001). The important issue here is that a higher wage rate in conjunction with relatively lower productivity of agricultural labour (except in U.P.) and non-farm employment suggests high incidence of surplus family labour, as noted earlier by Bhalla (2000a).

The above phenomenon is corroborated by the fact that states in the forest based categories have high land productivity but low labour productivity in agriculture. This may be a result of the higher proportion of landless and semi-landless households in these regions. Low overall economic growth in these states aggravates the situation in these high poverty regions.

A More Disaggregated Analysis

A more disaggregated analysis at district/region level may help understanding the phenomenon in a better light. District level data has been used for the drought prone regions. Since such data are not easily available for the forest-based regions hence NSS region level data have been used for capturing the dynamics of forest-based economies.

Poverty in Drought Prone Areas: A District Profile

According to the official sources, there are 125 districts identified as drought prone areas or DPAP districts. They are spread over 12 out of the 16 major states, including the high poverty states like Bihar, M.P. and U.P. However, only 32 out of these 125 drought prone districts have a high or very high incidence of poverty. Conversely, of the 156 districts with high and very high incidence of poverty, only 27 districts are drought prone as shown in Table 20.

Table 20: Poverty - DPAP Interface

States	Total Districts	Districts Under Drought Prone Area Programme (Nos.)			Districts with High/Very High Poverty	
		Total	High Poverty	V. High Poverty	Total	DDP
Andhra Pradesh	23	8				
Assam	23				13	
Bihar	42	8	5	2	42	7
Gujarat	19	12				
Haryana	16	6				
Himachal Pradesh	12					
Karnataka	20	15				
Kerala	14					
Madhya Pradesh	45	11		4	23	3
Maharashtra	30	12	4		15	4
Orissa	13	4		2	13	3
Punjab	12					
Rajasthan	27	17	3		3	3
Tamil Nadu	21	12	1		5	1
Uttar Pradesh	63	17	6	5	34	6
West Bengal	17	3			8	
Total	397	125	19	13	156	27

Source: NIRD (2000)

How do the people in these drought prone regions fight against the adverse agronomic conditions? This can be gauged with help of some of important indicators presented in Table 21.

Table 21: Drought Prone District in India (1993)

State/ District	Relative Growth Index	Rate of Population Growth (%)	Urbanisation (%)	Literacy (%)	% of Main Workers in Agriculture	Average Operational Holding (hec.)	Value of Output of Major Crops	Production of Food grains kgs./per capita	Share of Manufacturing in NSDP 1993-94
Andhra Pradesh	99	2.2	26.9	44.1	70.4	1.7	4392	150	10.5
DPAP Districts	80.9	4.6	22.5	42.1	74.1	2.4	3376.6	106.3	
Bihar	43	2.1	13.1	38.5	81.1	0.9	3017	118	15.1
DPAP Districts	38.1	2.1	9.3	40.5	84.3	1.1	2948.8	152.4	
Gujarat	114	1.9	34.5	61.3	59.3	3.3	2446	77	30.9
DPAP Districts	99.8	1.8	30.5	58.4	62	4.2	2193.7	81.6	
Karnataka	117	1.9	30.9	56	66.7	2.4	3495	146	16.7
DPAP Districts	91.5	1.8	22.7	504	75.7	2.5	3798.2	162.9	
Madhya Pradesh	73	2.4	23.2	44.2	76.6	2.9	2170	208	14.3
DPAP Districts	66.5	2.6	19.6	38.3	80.5	3.8	2164.7	192.8	
Maharahstra	164	2.3	38.7	64.9	61.1	2.6	2202	115	26.8
DPAP Districts	83	2.4	24.8	58.6	72.8	2.8	2112.2	140.7	
Rajasthan	69	2.5	22.9	38.6	70.6	4.3	1559	163	10.8
DPAP Districts	54.4	2.5	20.9	35.5	72.7	6.3	1281.3	124.8	
Tamil Nadu	135	1.4	34.2	62.7	61.5	1	6622	124	21.7
DPAP Districts	105.7	1.3	29.4	63.3	63.6	1	5324.7	101.7	
Uttar Pradesh	72	2.3	19.8	41.6	72.9	0.9	4502	220	14.7
DPAP Districts	58	2	14.5	43.8	76.9	1.2	3048.5	214.2	

Source: Centre for Monitoring the Indian Economy, District Profiles (1993), Mumbai.

The following observations are important in this context:

?? Despite relatively lower land productivity, per capita production of food grains in DPAP districts is higher or more or less same as the state average, which might be largely due to lower rate of growth in population among these districts.

?? Most of the DPAP districts have lower level of overall development index vis-a-vis the state average. The same is true for literacy rate (except for Bihar, U.P. and Tamil Nadu), and also for rate of urbanisation. These indicators, along with lower rate of population growth (in 7 out of the 10 districts), and perhaps lower sex-ratio as seen in the case of Gujarat, indicate net-out-migration of workers from these regions.

?? Migration can be an effective strategy only when it is combined with alternative economic avenues in the growing industrial and tertiary sectors. The result would be a diverse outcome across two sets of regions: (a) industrially developed states like Gujarat, Maharashtra, Tamil Nadu and Karnataka and (b) high poverty states with lower level of industrialisation.

?? It is likely that migration, in the former case, may result in upward mobility in economic conditions of the people in the DPAP regions due to relatively better market support and investment opportunities, which eventually lead to higher reservation price (in terms of wages) among these intra-state migrants. Compared to this, migration among the latter category (b) might amount to long distance migration often to the industrially/agriculturally developed regions like Gujarat, Maharashtra, Punjab and Haryana. This kind of migration is likely to have significantly higher social cost. This may manifest in terms of disintegration of family life, disruption of children's education, loss of social identity, inhuman living conditions and increased health hazards.

What is however, fairly well recognised is that unless efforts are made to develop the home economy, out migration from drought prone regions may only shift poverty from rural to urban or from dry land to agro-climatically better endowed regions. However, a higher level of industrial growth combined with market development may help improve the outcome of such migration. The existing literature on internal migration in India does not throw much light on the long term impact on migrants' (or non-migrants') livelihood base and quality of life among the poor migrating households and this will be the subject of future research. Some of these issues could be examined also through a comparative analysis of relatively high and low poverty districts within drought prone regions. Absence of district level estimates of poverty constraints this type of analysis. Nevertheless, this aspect could be explored further by considering alternative indicators of poverty at a more disaggregate level.

Forest Based Regions: Some Agronomic Features

Table 22 provides information about some of the agronomic features across regions within the major states categorised as forest-based. The regions with `*' indicate a relatively stronger forest base in these regions vis-a-vis the other regions within a state. It is clearly observed that most of these `*' regions have a relatively higher incidence of poverty e.g. southern Bihar, Chhatisgarh, southern Orissa, Himalayan and eastern West Bengal. Nevertheless, if one looks at the agricultural indicators like the extent of irrigation, and land and labour productivity one does not find any systematic pattern of difference across the `*' and the non-* regions within these states. Even agricultural wage rates are not significantly different among the two sets of regions.

Table 22: Agronomic Features Among Forest Based Regions

States and Regions	Head Count Poverty Ratio	% GIA to GVA	Land Produc-tivity (Rs.)	Labour Produc-tivity (Rs.)	Per Capita Foodgrain Production (Kg.)	Real Wage Rate (Rs.)
ASSAM (45.01)						
Hills*	41.29	NA	NA	NA	NA	NA
Plains Eastern	37.38	6.37	13259	6479	169	31.16
Plains Western	41.28	17.63	10836	5965	143	28.04
BIHAR (58.21)						
Southern*	62.44	9.84	8501	2748	106	31.16
Northern	58.68	32.26	11427	4600	236	26.49
Central	54.03	66.29	12188	5187	204	32.2
MADHYA PRADESH (40.64)						
Central*	50.13	15.36	7038	9524	248	21.79
South Western*	68.2	26.23	7559	4822	297	22.47
Vindhya	36.71	14.76	5998	5122	246	24.02
Malwa	27.39	24.59	7605	5492	237	26.2
South	46.36	15.45	7393	5159	274	18.54
Northern	17.42	29.24	9968	11250	357	32.21
CHATTISGARH*	43.97	16.34	7091	4842	451	23.75
ORISSA (49.72)						
Southern	69.02	16	6581	5355	286	24.67
Coastal	45.36	10.76	11377	6023	293	25.75
Northern	45.64	33.33	7794	6867	275	22.33
WEST BENGAL (40.80)						
Himalayan*	58.73	NA	NA	NA	NA	NA
Eastern*	47.14	26.21	28527	14380	495	31.26
Central Plains	31.04	37.81	19135	11277	162	44.59
Western Plains	40.26	46.58	14984	9176	330	40.14
MAHARASHTRA (37.93)						
Coastal	14.84	2.91	13491	4018	175	25.79
Inland Western	25.13	15.91	9024	7632	176	20.16
Inland Northern	47.18	11.38	8034	4957	205	20.92
Inland Central	50.02	9.98	6774	4974	472	20.86
Inland Eastern	49.08	3.38	9041	5056	207	29.01
Eastern	48.56	27.27	8367	5333	219	18.5

Note: Figures within the parenthesis indicate Headcount Poverty Ratio in the state.
Source: NIRD (2000)

Prima facie, the data in Table 22 implies that it is not the agronomic conditions per se, which influence rural poverty in the forest-based regions. Rather, it is the access to

productive resources like agricultural land, farm inputs, and minor forest produce which might be playing an important role in determining people's entitlement and income. Given the fact that a large number of households in the forest-based regions do not have proper entitlement to these resources, they may end-up with lower income/expenditure levels. This has been borne out by the existing body of literature indicating that the 'tribals' (scheduled tribes), who are the aboriginal inhabitants of India, were driven over centuries to the `refuge zones' - hills, forests and semi-arid tracts. This has led to a situation where about 84 per cent of tribals in India live in forests of different types, acquiring an enclave status characterised by increasing resource emasculation (for details see, Shah, et.al, 1998, p.151).

If the tribals manage to enter the agricultural labour market, they do not face any special wage discrimination relative to other workers in the state. The evidences based on the rural labour household data for the year 1993-94 suggest that those who work as agricultural labourers get more or less same amount of wage paid employment irrespective of their social status (Indian Labour Bureau, 1993-94). It does not follow that the tribals do not face any discrimination with respect to the terms on which they are employed.

The issue is lack of adequate access to such opportunities due to (a) limited agricultural base as well as low entitlement to forest-resources; and (b) limited networking with institutions, like labour contractors, having a strong hold in the already segmented rural labour markets. It is likely that the problem of entitlement gets further aggravated due to relatively lower human capabilities arising out of social as well as physical isolation among households in the forest-based regions.

Issues such as the interface between the households' economic base and the social as well as human capabilities and their influence on livelihood opportunities among the poor will be the subject of in-depth enquiry based on qualitative research.

IV.3 Human Capabilities and Social Structure

As noted in earlier sections, the `BIMARU' states consisting of M.P., Bihar, Orissa, U.P. and Rajasthan have had the lowest performance in terms of the various indicators of human capabilities. The comparative picture across the broad categories of states, does not show a clear pattern. For instance, three of the five states in the category of forest-based states have higher than the average rates of overall female literacy at the all India level. On the other hand two out of the five drought prone state have lower literacy rates than the national average (Table 23). Health related indicators such as infant mortality rate as well as index of rural health infrastructure indicate relatively better performance among the drought prone states (except Rajasthan) as compared to the forest based states (except West Bengal). Together these factors seem to have resulted in relatively higher demographic pressure among the `BIMARU' states.

To an extent the higher demographic pressure among these states is associated with social alienation as reflected by higher than the average proportion of Scheduled Caste and

Scheduled Tribe population except in Bihar. These households, as noted by Chaudhari (2000), generally have larger family size and lower educational attainment. This is because tribals, especially in the remote rural areas have higher IMR, which in turn leads to higher fertility and also higher population growth. However, this may not be adequately reflected in family size because of the predominance of nuclear families among these communities. This apart the feudal structure in these states may also have contributed to the overall lower social attainments in these states.

Table 23: Social Sector Indicators in the Forest Based Regions

States/Regions	Total Literacy	Female Literacy	Child Mortality	House Hold Size
ASSAM (45.01)				
Hills*	43.4	32.2	NA	5.83
Plains Eastern	55.22	44.91	NA	5.67
Plains Western	46.81	35.78	NA	6.1
BIHAR (58.21)				
Southern*	32.66	16.31	85.32	5.8
Northern	30.39	15.71	88.66	6.04
Central	39.77	22.53	82.82	6.67
CHATTISGARH*	35.22	20.98	116	5.31
MADHYA PRADESH (40.64)				
Central*	38.65	21.33	159.7	5.73
South Western*	35.77	21.96	147.4	6.02
Vindhya	32.03	15.8	166.4	5.7
Malwa	31.49	14.45	123.6	5.97
South	42.24	27.37	139.1	5.37
Northern	36.4	14.7	139.3	6.6
ORISSA (49.72)				
Southern*	23.56	11.01	136.7	4.53
Coastal	55.92	41.29	137.3	5.87
Northern	42.26	26.5	117	5.09
WEST BENGAL (40.80)				
Himalayan*	42.56	29.84	95.49	5.19
Eastern*	38.48	28.33	100	5.41
Central Plains	56.26	43.87	75.66	5.63
Western Plains	59.75	44.71	73.44	5.75

Note: Figures within the parenthesis indicate Headcount Poverty Ratio in the state.
Source: NIRD (2000)

What is however, striking is that literacy rates are found to be particularly low among the `*' regions as compared to other regions within the broad category of the forest based states. This is evident in the case of Assam-hills, southern Orissa, Himalayan and eastern West Bengal (see Table 23). Of course, educational attainments in the rest of the regions

(i.e. non-'*' regions) within the states are also fairly low. Apparently, physical alienation might have played some role in this context. This has been examined subsequently.

IV.4 Physical and Social Infrastructure: An Interface

A detailed mapping at the level of NSS-regions prepared by NIRD (2000) indicates a close association between social and physical infrastructure, which in turn have a negative relationship with the incidence of poverty. It is further noted that infrastructural development is more closely related to poverty reduction than social development. A higher level of social and/or infrastructural development is not a sufficient condition for poverty reduction since a fourth of the NSS-regions are in a 'medium' poverty group despite many of them having higher values of social and infrastructural development index. It could be argued that the conditions of poverty are rooted in agro-climatic conditions, agrarian relations and market development. How far these factors explain the condition of the chronically poor within RRAs needs to be explored further.

Overall therefore, the incidence of poverty among the two sets of remote rural areas reflect a multi-patterned and complex phenomenon, influenced by a cobweb of various factors structural, agronomic, social and physical. The dynamics of poverty varies significantly across the two sets of region viz. drought prone and forest-based. Ironically, the former does not exhibit high incidence of poverty despite relatively weak agronomic base whereas there is high incidence of poverty in the midst of relatively better endowment of natural resources in the forest-based states/regions. In fact rapid development of ground water table in the post eighties had provided a fresh lease of life to the farmers in dryland regions. Such options were not adequately explored in the central eastern regions with moderate rainfall and higher agronomic potential. Hence, lower level of ground water development in the poverty stricken eastern regions has been considered as one of the important reasons for low yield of paddy compared to the rest of India particularly, Andhra Pradesh and Tamil Nadu (Government of India, 1985). According to a recent analysis, the major explanation for this comes from political economy in states like Uttar Pradesh, Bihar, Orissa where the public policy initiatives seem to have impeded rather than expedited development of ground water resources (Shah, T., 2000).

While a large part of the poverty reduction in drought prone areas is due to factors like favourable land relations, larger landholding size, commercialisation of agriculture, migration to industrially developed regions, and state's support in terms of drought relief and public works programme, the growing non-sustainability of agricultural growth in these regions is a cause for concern. On the other hand, high incidence of poverty is linked with weak social and infrastructural development leading to demographic pressure in the forest-based regions. But, the critical constraint in these regions appears to be that of entitlement failure, which may be worsened due to their physical and/or social isolation. The weak socio-economic base makes long distance migration more difficult because of the higher financial cost, lack of kinship based linkages, lower educational attainment and lack of communication skills.

To sum up the above analysis of the spatial profile of poverty has brought home two important aspects:

?? The states, which were under the Zamindari regime and have experienced relatively ineffective green revolution as well as low level of industrialisation and market/infrastructural development, have remained in poverty. Perhaps the better agro-climatic conditions prevented them from desperately looking for alternative avenues for livelihood. Overall therefore, "drier states (in the west) harbour lower poverty proportions than the wetter ones (in east). Within these contours, all suffer, if the monsoon fails, and vice versa" (NIRD, 2000: p.9.).

?? While migration is an important coping strategy for drought prone regions, its outcome depends upon the overall economic development and scope for occupational diversification in the region/state. To the extent industrial growth helps in developing markets/infrastructure, it can improve the economic conditions of migrants from drought prone regions within the state. What is the recent experience of industrial growth and its impact on rural poverty? What are the constraints in developing agriculture in the drought prone and/or high poverty regions? And, what are the various coping strategies, especially migration and their implications for poverty reduction? These are some of the crucial issues in this context. The next section discusses them in the light of the available literature.

IV.5 Dynamics of Poverty and Coping Strategies: Evidence from Selected States

The above analysis depicts a more or less similar story for explaining poverty at the state as well as the regional level. This kind of aggregate analysis however, does not adequately explain some of the outliers like the southern regions in Bihar, MP, and Orissa having very high incidence of poverty. It seems none of the known determinants - agricultural productivity, literacy rate or infrastructural support - can sufficiently explain some of these pockets of persistently high poverty. In order to understand the context specific factors and intra-state dynamics that make some of the regions within certain states (or pockets within the regions) more prone to poverty, an initial sketch of the dynamics of poverty is given below for the following states: Bihar and Orissa, in the high-poverty group, and Gujarat and Andhra Pradesh in the category of dry land and low-poverty states. This provides a broad context in which detailed studies in the two sets of RRAs can be designed.

Poverty in Bihar : Legacy of the Feudal Policy:

Among the major states with predominantly feudal socio-political structures, Bihar has by far the worst performance in terms of implementation of land reforms (Mooij, J. 2000). The result is the continued and rather perpetuating feudal character of its regional policy, which has exerted a significant damaging impact on the economic growth especially in the agricultural sector. Unfortunately, the rich natural resources of rivers, minerals and forests have also worked against to the state's economic interests. This is because of the state's inability to control the flooding rivers, set up local linkages with the large scale mineral based industries having forward linkages outside the regional

economies, and lack of access to the resources by the people within forests regions. Thus, people both in north and south Bihar, have turned out to be the losers in whatever industrial development taking place in the state (Ray, A. 2000).

But the situation of stagnation and marginalisation continued to persist mainly because the feudal masters of the state in Bihar were able to reap benefits of both – the large land holdings and bonded labour on the one hand, and rent seeking from the public sector dominated industrialization on the other. Within these broad contours of feudal policy, most of the Government sponsored anti poverty programmes became milching cows for the political leadership. The funds allocated for social sectors like health and education, Public Distribution System (PDS), and the special anti poverty programmes hardly reached the targeted beneficiaries (Sharma, A. 1995).

To a large extent, the unrest in most parts of Bihar, especially in the southern parts of the state, is a reflection of the alienation that the poor have faced in the midst of large scale public sector investments and welfare programmes undertaken by the state. But, the poor, in the last two decades, have become restive and have mobilized. This, in fact, adds a regional dimension to the profile of poverty in the state. The Jharkhand movement, to a large extent, is a manifestation of sustained neglect of poor by the 'feudal' polity in the state.

Poverty Among Tribals in Orissa : Failure of Entitlement and Capabilities

With 25 per cent of population being tribal, Orissa represents a typical case of lopsided development in different parts of the state. While the tribal population exists in most part of the state, there are districts like Sundargadh, Mayurbhanj and Koraput where tribal population is as high as 60 per cent. In the middle range, there are districts like Keonjhar (47.4%), Phulbani (39.1%), Kalahandi (32.6%), and Sambalpur (30.4%). In most of these districts, except Sambalpur, incidence of poverty is as high as over 80 per cent, and close to 90 per cent in Mayurbhanj, Koraput and Kalahandi. The tribals, mostly in the forest regions, face the brunt of geographical isolation and at the same time entitlement - failure since all what they have is traditional usufruct rights over the forest resources rather than complete entitlement to development and manage these resources. This phenomenon is particularly important in this tribal dominated state where the history of forest administration has been closely related to its political history (Patnaik and Brahmachari, 1966).

Degradation of forest has an immediate 'push' effect for the tribals who end up being agricultural labourers in an economy where both the cost as well as the demand for labour has been very low (Padhi, 1998, p.50)[69]. As a result, the total annual earning of agricultural labourers in Orissa have been the lowest among the 11 major states including Bihar, MP and UP. Evidently, the labour market is characterized by a very high incidence of underemployment with 84 per cent of rural labour force not seeking/available for work in the current reference week. To an extent, this may be due to poor people's inability to migrate because of the lack of basic capabilities as well as resources. The situation seems to have been further aggravated by the fact that there is an

increasing pressure on forest resources, which at best can provide for the bare minimum requirements merely to sustain human existence. Together lack of entitlement to forest resources coupled with stagnant agriculture and social alienation has made the tribals in Orissa live in perpetual poverty.

Andhra Pradesh : Poverty Reduction through Public Intervention

Andhra Pradesh, with the three distinctly different regions viz. drought prone Rayalseema, Telangana and Coastal Andhra represents a unique case in terms of rapid reduction in poverty across all the regions during the seventies and eighties. What is however puzzling about the poverty reduction during 1960s in the state is that the period was marked by low level agricultural growth. Similarly in the post 1980s, growth in agriculture as well as the industrial sector has slackened. Regional imbalance in food grain production has also sharpened. Yet, there has been a significant decline in the incidence of rural poverty during the 1980s and 1990s (Parthasarthy, G. 1995).

Three factors seem to have contributed to the decline in poverty in Andhra Pradesh. These are (i) relatively better land reforms supplemented by the Naxalite movements (ii) high growth in agriculture through expansion of irrigation in the early phase of Green Revolution, and (iii) direct intervention through Public Distribution System, particularly the "Two Rupees a Kilo Scheme'. Prima facie, this appears to be a fairly good combination of structural reforms, combined with growth in production and the state support for a direct attack on poverty.

But, the recent trends in the state suggest stagnation in agricultural sector with slowing down of expansion of irrigation facilities. What is also of concern is that the state lags behind all the other southern states in terms of human resource development. Together – these forces, in the absence of rapid industrialization unlike the case of Gujarat, may lead to overall stagnation in the economy. If so, the financial resources for funding the huge cost of PDS might also be jeopardised. Fortunately, the state has a relatively dynamic political leadership, which is trying to mobilize resources, both for funding the welfare programmes as well as for industrial investments. The sustainability of the state's unique experience in terms of poverty reduction therefore, hinges largely on the state's capacity to continuously mobilize more resources for economic as well as social sector development. While industrial investment is important for diversification of the economy facing frequent droughts, that alone can not suffice for a sustained diversification of workforce on a large scale. Unless, measures are taken to stabilize agriculture in dryland regions in the state, disastrous situations like suicides by the cotton growing farmers in the state may continue for long.

Gujarat : Selective Development and Inter-Regional Migration

Given the developed industrial sector as well as relatively higher level of urbanisation, Gujarat offers a somewhat dynamic environment within which migration is a major coping strategy for poor people. This is reflected by the fact that in 1991 Gujarat was second only to Maharashtra, in terms of interstate in-migration, especially from the high

poverty states like Bihar, Orissa and UP. To a large extent, these migrants sought employment in non-farm sector in the highly industrialised region known as the golden corridor between Ahmedabad and Valsad (Shah, 2001).

A similar pattern is also observed in terms of inter-regional migration from dryland districts in Saurashtra – Kachchh (Gujarat) to the irrigation canal served districts in the central and southern regions. This has resulted in a lower rate of population growth and a favourable sex ratio in the Saurashtra-Kachchh region. Human migration is also accompanied by shift in livestock population. As a result of these migratory movements, the incidence of poverty in the dryland Saurashtra-Kuchchh region is found to be as low as 11.8 per cent.

But, the issues concerning the long term sustainability of this migration based coping strategy are twofold:

?? industrial growth, like agriculture in the dry land region, is also susceptible to wild fluctuations. If the recent trends in industrial employment as depicted by Bhalla's (2000a) analyses continue, there are serious risks that the out-migrants from the Saurashtra-Kachchh region (and from other states) will not find industrial employment in the 'golden corridor'; and

?? the shift of workforce from dryland to wet regions may create over crowding and also lead to environmental degeneration in the place of destination. Moreover, if remittances are ploughed back in agricultural sector in the home economy, it might lead to further depletion of ground water resources in the dryland regions.

Both these phenomena are already operating in Gujarat. What is therefore implied is the non-sustainability of migration as a coping strategy, unless it is backed by basic investment in dryland agriculture.

The above analysis thus, indicated two important aspects of poverty reduction in different states/regions: First, the critical need for promoting agricultural growth along with improved access to physical and social infrastructure, and entitlements to basic factors of production especially, in the forest based tribal societies. And, second, the need to address the non-sustainability of poverty reduction strategies in some of dryland/drought prone regions, where poverty continues despite significant reduction.

V. THE POVERTY ALLEVIATION STRATEGY MIX

Over the last fifty years, India's strategy for poverty alleviation has consisted of a mix of poverty alleviation programmes that directly attack poverty, land reform, activation of the Panchayati Raj institutions, economic growth and its trickle down effects and providing access to basic minimum services. The distinction between the chronically poor and temporarily poor is seldom made in designing anti poverty strategy.

Poverty Alleviation Programmes: A Brief Overview (Economic Survey, 2001)

The anti-poverty programmes of the Government of India are designed to generate self-employment and wage employment and provide safety nets through, for example, food subsidy programmes. All three have been subject to redesign and change in recent years. India's anti-poverty programmes (APPs) amount to some 6-7 per cent of total Government of India budgetary expenditure, or 1 per cent of GDP (IBRD, 2000). The Economic Survey lists the major poverty alleviation programmes which are in operation in rural and urban as including:

- ?? Jawahar Gram Samridhi Yojana (JGSY): works that result in the creation of durable productive community assets are taken up.
- ?? Swarna Jayanti Gram Swarozgar Yojana (SJGSY): a self employment programme aimed at promoting micro enterprises and helping the rural poor form self help groups.
- ?? National Social Assistance Programme (NSAP): provides social assistance benefit to poor households affected by old age, death of the primary breadwinner or need for maternity care, through National Old Age Pension Scheme, National Family Benefit Scheme and National Maternity Benefit Scheme.
- ?? Employment Assurance Scheme (EAS): a wage employment programme which generates additional wage employment opportunities during the period of acute shortage of wage employment through manual work for the rural poor living below the poverty line.
- ?? Pradhan Mantri Gramodaya Yojana (PMGY): aims at improving the quality of life of people in rural areas by focusing on village level development in the critical area of health, primary education, drinking water, housing and rural roads.
- ?? Swarna Jayanti Shahari Rozgar Yojana (SJSRY): an urban poverty alleviation programme. The Urban Self-employment Programme and the Urban Wage Employment Programme are the two special schemes of SJSRY.
- ?? For women, Indira Mahila Yojana (IMY): which aims at empowerment of women through awareness generation and training.
- ?? Rural Women's Development and Empowerment Project renamed as Swa-Shakti aims at empowering women through awareness, participation and income generation.
- ?? A Women's Component Plan (WCP) introduced as a major strategy for the first time in the Ninth Five Year Plan also works towards the development of poor women.
- ?? Rashtriya Mahila Kosh (RMK): is a programme to meet the micro credit needs of poor and asset-less women in the informal sector.
- ?? For Children, the Integrated Child Development Service Programme (ICDS) has health, nutrition and pre-school education as the basic parameters of this programme.
- ?? Balika Samridhi Yojana (BSY) is another national-level programme which aims at improving the status of the Girl Child belonging to the Below Poverty Line (BPL) Groups.

?? Availability of 2 square meals a day and food security are a very important part of poverty alleviation policy or sense of wellbeing in India. The Public Distribution System (PDS) is the key element of the Government's food security system in India. It is an instrument for ensuring availability of certain essential commodities at easily affordable prices especially for the poor. The Government via the Food Corporation of India (FCI) procures and stocks foodgrains which are released every month for distribution through the PDS network across the country. The PDS till recently has been a general entitlement scheme to all consumers without any targeting. Under the Targetted Public Distribution System (TPDS) w.e.f. 1st June, 1997 foodgrains are being issued at highly subsidised rates to the States on the basis of the number of BPL families.

Several of these schemes have undergone reforms, rationalization and better targeting with a greater role to local government for implementation and for beneficiary selection and monitoring. The reforms also lay stress on transparency, making information about the programmes public at the village level, and on the importance of physical, financial, and social audits. While these reforms are very welcome, there is still a long way to go on the ground.(IBRD,2000:19) "To reduce leakages and abuse, and to promote the new guidelines on transparency, access to information, and accountability, the central government could make participation by state and local governments in the APPs conditional on good performance"(IBRD, 2000:19).

In the context of leakages and diversion of funds meant for poverty reduction, it needs to be recognized that "the root of all corruption in the villages is the freedom with which village officials can falsify bills, vouchers, daily wage register and attendance books. Because the system is so corrupt, because there is no accountability and no fear of being caught and suspended, every year crores[4] of rupees of funds earmarked for building schools, dispensaries, houses, drinking water schemes, planting saplings in forest land and construction of dams, anicuts and community centres go into the pockets of gram sevaks (extension workers), patwaris and village level officials in league with touts and politicians." Bunker Roy (1996)

In 1990 a mass based organisation called the Mazdoor Kisan Shakti Sanghathan (MKSS) working in one of the most backward areas of Rajasthan – Bhim Tehsil - on the borders of the three districts of Pali, Ajmer and Rajsamand took up the issue of transparency and accountability. After procuring copies of bills and vouchers and muster rolls from the government they held a Jan Sunwayi (Public Hearing) to which everyone was invited – bureaucrat, politicians, contractor, farmer and landless labourer. If anyone objected or wanted to explain his point of view the MKSS would provide the platform. The Hearing was a phenomenal success. The corrupt officials and politicians fled from the scene. Names of dead people drawing wages, non-existent bags of cement being claimed, bills for furniture, stone, lime that never reached the village all came out in the open.

The Community Action based work of the MKSS is now legendary. A more recent report on this is given in the box below. As the report shows, state failure or governance failure

[4] I crore = 10 million

can be corrected if empowered communities are willing to put in the time and effort needed to demand transparency and accountability.

Lasani is a small village which is part of Rawatmaal panchayat (village council) in Rajasthan's Ajmer district. According to the panchayat records, Rs.56,000 was recently spent to construct water channels linking the village talab (pond) with the fields. The water channels, however, exist only on paper. This is one of many shocking revelations that emerged at a recent public hearing (jan sunwai) led by the Mazdoor Kisan Shakti Sangathan (MKSS), a people's organisation working in the region since 1988. The public hearing is one of the means used by the MKSS in its struggle to ensure the people's right to information. One aim of the campaign is to root out corruption at the local level and demand accountability from the development establishment. Hundreds of women and men participated in the hearing. Some of them had participated in development works as labourers or masons, and had seen corruption from close quarters or even been cheated themselves.

Activists took out file after file and invited participants to present their testimonies. Soon a wide range of frauds were identified. To mason Dood Singh's surprise, his name was found on the muster rolls of two different works for the same period, while he had not even received his due wages for one. Bhanvri Singh, a labourer, stated that she had received only Rs.300 as wages, as against Rs.570 shown in the muster rolls against her name. The name of Devi Singh, a man who had died 30 years ago, was found on the muster rolls.

The 23 development works examined over the day accounted for a total expenditure of Rs.33 lakhs (1 lakh = 100,000 Rs./1Pound = 64Rs.). Of this, it was estimated that at least Rs. 5 lakhs had been siphoned off by various people in complicity with the sarpanch (head of the village council). Of this amount, one third was accounted for by fake bills for the purported purchase of cement.

At the end of the day, the sarpanches agreed to cooperate with the follow-up process of recovering misappropriated funds. Some of them even promised to return money themselves in cases where their personal responsibility had been established. For instance, the sarpanch of Rawatmaal volunteered to return Rs.56,000 appropriated in the name of non-existent water channels. These may seem like small victories but their symbolic significance is far-reaching. All over rural India, scores of small development works have been undertaken in the name of the poor. The main beneficiaries of these schemes, however, are not the poor but a network of contractors, bureaucrats and village leaders who are looting public funds for private gain.

Source: Bela Bhatia & Jean Dreze "For Development and Democracy", Abridged TI Working Paper : Transparency Internatio nal Campaign in India 19 September, 1998.

Summary of Key Findings and Agenda for Future Research

The incidence of income poverty in India has declined steadily between 1973-74 and 1999-2000 but the pace of reduction in poverty has varied considerably. There was a large decline in the percentage of the population in poverty throughout the 1980s, a slowdown in the rate of poverty reduction in the early 1990s, and a reported but contested 10% decline in poverty in the second half of the 1990s. The share of urban poverty increased from 18.7% in1973-74 to 24.5% in 1987-88 and fluctuated around this since then.

71.65% of India's poor and half the population are located in six states - Uttar Pradesh, Bihar, Madhya Pradesh, Maharashtra, West Bengal and Orissa. Several of these states have suffered long duration chronic poverty as more than 40% of their population has been in poverty for over 20 years. Assam gets added to this list since 41% of its population is in poverty. No major reduction in poverty in India is possible unless interventions for poverty alleviation are intensified in these states. The track record of different states in reducing poverty is very varied. While some states were able to accomplish a substantial reduction in the incidence of poverty, other states made less progress in poverty reduction during the last three decades.

If severe poverty is estimated in terms of those earning incomes that are less than or equal to three fourths of the poverty line, around 130 million people can be identified as chronically below the poverty line in the severity sense. Rural poverty was severest or the proportion of those who were very poor was largest in South Western Madhya Pradesh, Southern Uttar Pradesh, Southern Orissa, Inland Central Maharashtra, Southern Bihar, Northern Bihar and Central Uttar Pradesh. Urban poverty is specially severe in Inland Central, Eastern and Northern Maharashtra, Southern Uttar Pradesh, Inland Northern Karnataka, South Western and Central Madhya Pradesh and Southern Orissa.

Hunger is a more serious problem in rural India and is especially severe in rural Orissa, West Bengal, Kerala, Assam and Bihar. Non-availability of two square meals a day peaks in the summer months from June to September with longer duration suffering in West Bengal and Orissa. Several of these states are among those with the highest income poverty. However, hunger exists even in the supposedly better parts of India and policy action is needed to address this.

Recently there have been several reports in the media of starvation led suicide by powerloom weavers of Sircilla, suffering from an economic shock. Chronic conditions of ill health such as tuberculosis and HIV/AIDs can drive people into poverty. Shocks can have long duration ramifications in terms of pushing households below the poverty line and can result from a variety of factors such as the withdrawal of state support, technological change and global competition changing market demand and rendering traditional skills redundant, development related displacement, ecological factors, etc.

Casual agricultural labourers were the largest group and cultivators were the second largest among the chronically poor. The bulk of the chronically poor (over 79 per cent)

depended on wages. This implies that much of the change in the household income of the chronically poor depended critically on how the wage component changed over the period in question. Wages paid to agricultural labour leave very little surplus over the cereal consumption for meeting food and non-food needs. Fixation of minimum wages, their periodic revisions and most importantly use of bargaining power to demand their effective implementation become extremely important specially during the slack season when wages fall.

Several of the high income poverty states such as Uttar Pradesh, Madhya Pradesh, Bihar, Orissa, and Assam also have the worst record on multidimensionality indicators such as HDI, GDI, GEM and HPI. Data pertaining to Infant Mortality Rates reinforces this further with extremely high state averages of infant mortality for Orissa and Madhya Pradesh as also for a large number of districts in Uttar Pradesh and Rajasthan. However, some states have managed to achieve more in reducing infant mortality than in reducing the incidence of poverty. High literacy is important in decreasing IMRs in most states.

Chronic poverty in the duration sense is a characteristic that persists as a "hard core" in almost all the states of the country. However, the proportion of the poor who suffer long duration and inter generationally transmitted poverty is likely to be significantly higher in those parts of the country that suffer greater incidence of severe poverty and multi dimensional deprivation.

Chronic poverty seems to be disproportionately high among historically marginalised groups such as scheduled castes, scheduled tribes, the elderly, women and the disabled. The multiple deprivations suffered by these groups make it harder for them to escape poverty as different forms of disadvantages tend to be mutually reinforcing.

Two regions that can be defined as remote rural areas likely to experience chronic poverty on the basis of agro-ecological and socio-economic conditions are:

- the large tracts of dryland regions characterised by frequent failure of crops and employment opportunities and thereby leading to high level of unprotected risks of livelihood security among the poor; and
- the `forest based' economies, especially in hilly regions with predominance of tribal population with limited access to natural resources on the one hand, and information as well as markets on the other.

Apart from land productivity, the major factors causing high incidence of poverty in states like Orissa, M.P. and Bihar is relatively lower labour productivity in agriculture resulting in lower earnings as well as lower wage rates from agriculture for rural wage labourers. This is an outcome of high demographic pressure accompanied by lower economic growth and limited workforce diversification in the states like Bihar, M.P. and Orissa in the `forest based' category.

Migration can be an effective strategy only when it is combined with alternative economic avenues in the growing industrial and tertiary sectors. Unless efforts are made to develop the home economy, out migration from drought prone regions may only shift

poverty from rural to urban or from dry land to agro-climatically better endowed regions. However, a higher level of industrial growth combined with market development may help improve the outcome of such migration.

Mainstream development theories, policies and strategies supposedly analyse poverty through a neutral lens. However, most approaches are in fact not neutral because they assume the average male actor as the standard and consider the male actor as representative of the human actor. Consequently, policies that are supposedly neutral across all groups actually discriminate against vulnerable groups, whether identified in terms of caste or tribe or disability or age or gender.

The anti-poverty programmes of the Government of India are designed for generation of self-employment, wage employment and provision of safety nets through, for example, food subsidy programmes. Several of these schemes have undergone reforms, rationalization and better targeting with a greater role to local government for implementation and for beneficiary selection and monitoring. The reforms also lay stress on transparency, making information about the programmes public at the village level, and on the importance of physical, financial, and social audits. In the context of leakages and diversion of funds meant for poverty reduction, it needs to be recognised that state failure or governance failure can be corrected if empowered communities are willing to put in the time and effort needed to demand transparency and accountability.

Agenda for Action

A large number of issues and research questions arise from the overview of chronic poverty in India. These include questions such as: who are the chronically poor; where are they located spatially; what socio-economic groups are more vulnerable to chronic poverty; are they concentrated in remote rural areas; what is the impact of shocks in generating chronic poverty; how do chronic social tensions and long term socio-political conflict affect chronic poverty; what are the factors that lead to inability to access even two square meals a day; what explains the varying performance of different regions in reducing chronic poverty; what are the socio-politico-economic processes that increase/decrease vulnerability to chronic poverty; what policies and community actions contribute to reducing chronic poverty; what are the minimum necessary social security options required to address the specific problems of especially vulnerable groups and what are the livelihood and coping strategies adopted by people who have succeeded in moving out of chronic poverty.

The approach will be to use a multidisciplinary team and a mix of quantitative and qualitative methods for researching chronic poverty in India. Both primary and secondary data and information sources will be used. At the macro level, the research will use data available at the national level from the National Sample Survey, panel data sets and data pertaining to a large range of multidimensional indicators. There is no recent data and analysis on chronic (duration) poverty in India so future work in this area will fill an important gap. Analysis of data pertaining to changes in prices and wage rates as factors restricting income of the chronically poor and landlessness will also be undertaken.

In areas identified for in-depth study, longitudinal data will be collected based on household surveys. This will be supplemented by qualitative data using life history studies focusing on socio-economic factors, focus group discussions, social mapping, policy analysis studies and livelihood approaches.

The research will:

- Spatially map chronic poverty in the multidimensional sense using indicators at the district level.
- Longitudinally track chronic poverty using existing panel data sets at the macro level on the one hand and create panel data at the micro level for 30 to 50 households (including a representative mix of poor and non poor households) in 8 areas chosen for in-depth analysis.
- Use multi-disciplinary teams to enable adoption of a mix of methods to deepen the understanding of many of the research issues identified through in depth case studies in 8 areas to be identified on the basis of the spatial mapping of chronic poverty. These 8 areas will include 2 remote rural areas, 2 non poor or decreasingly poor rural areas (to provide a comparative picture), 2 areas that have suffered shock and 2 areas that have been affected by social conflict (one by caste/class conflict and the other by ethnic conflict). The indepth analysis segment of the research will begin with a pilot study so that learning from it can inform the other case studies.

For all 8 study areas networks will be developed to enable documentation of existing research relevant to chronic poverty in these areas. Local policy networks will also be established into which research plans and results will be fed. An objective would be to give local (state, district, NGO) decision-makers a stake in the research.

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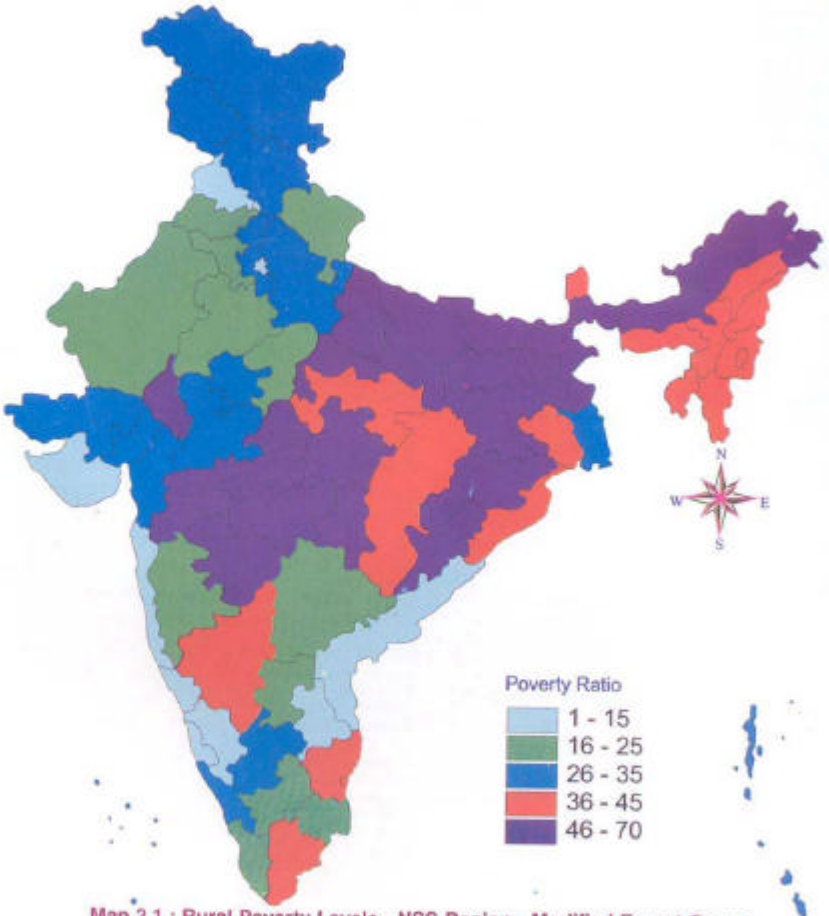
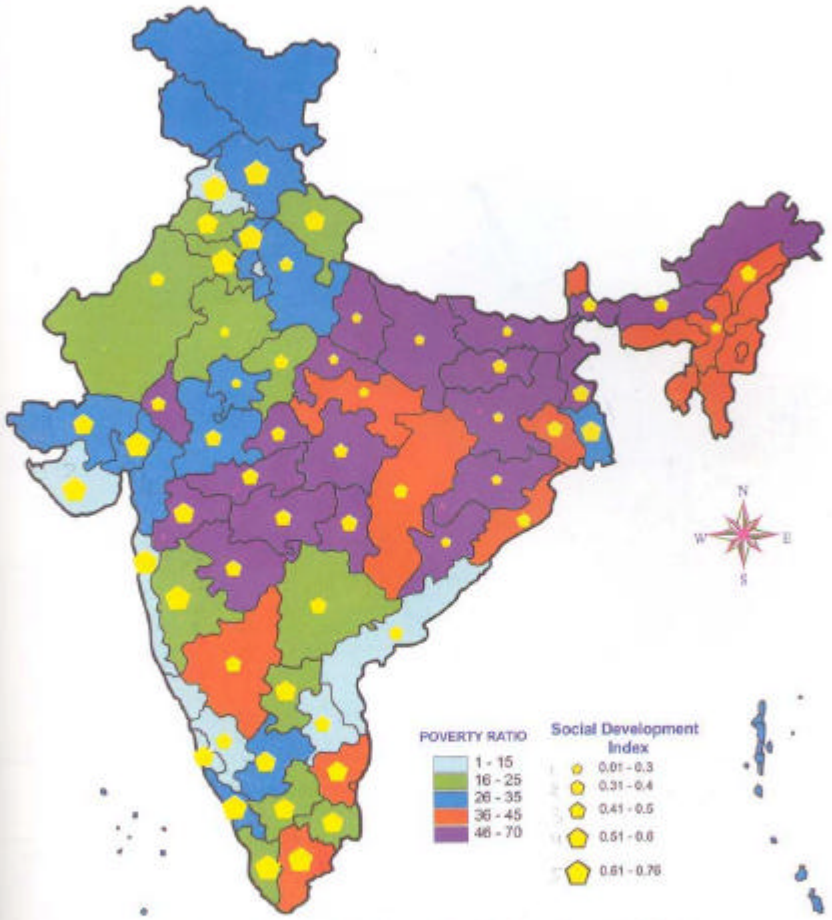


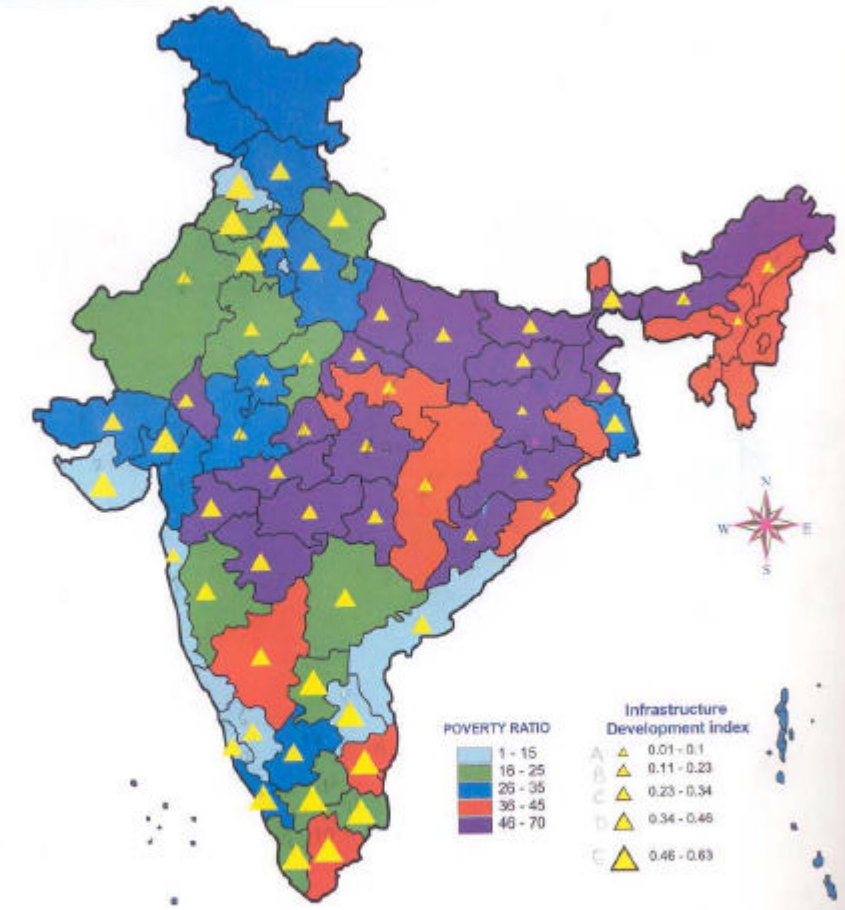
Map 2.1 : Rural Poverty Levels - NSS Region - Modified Expert Group Recommendations - 1993-94

Source : NSS 50th Round Data and Census of India 1991



Map 5.10 : Poverty Levels and Social Development Index

Source : NSS 50th Round Data and Census of India 1991



Map 5.11 : Poverty Levels and Infrastructure Development Index

Source : NSS 50th Round Data and Census of India 1991