Poverty Among Tribals in Madhya Pradesh: Has Anything Changed Over Time?

Amita Shah and D.C. Sah

Abstract

Perpetual poverty condition in India's tribal regions has been explained through structural factors like breaking down of the forest-based livelihood systems, social as well as political alienation, and physical remoteness. The developmental processes tried to mitigate these disadvantages rather than correcting the basic discrimination faced by the communities. Notwithstanding these structural constraints, tribals have also experienced certain changes in the socio-economic milieu. These pertain to literacy, mortality, crops and markets, transport and mobility, and people's perceptions about their well-being. Ideally, these should have resulted in a substantial reduction in poverty, which however, is defied by the recent evidence. In fact, incidence of poverty is found to be significantly high in some of the backward regions like South-West Madhya Pradesh (MP), with more than 60 per cent of its people in poverty.

Does this imply that developmental processes in these regions have almost no links with poverty reduction? And, that the incidence of poverty continues to be largely explained by the structural factors like access to means of production, growth of population, adoption of crop-technology, and indebtedness? Whether developmental changes have led to further marginalisation and polarisation within the community? These questions have been examined in the context of South-West MP, characterized by predominantly tribal population and perpetually high incidence of poverty. The proposed paper will examine (a) correlates of poverty and changes over time across regions in the state; and (b) interface between development and poverty, especially long duration poverty within a micro-setting in South-West MP. Whereas the former will use secondary data for 1983 and 1993-94, the later will be based on primary data from two villages.

(Draft for Comments)

Poverty Among Tribals in South West Madhya Pradesh: Has Anything Changed Over Time?*

Amita Shah
D.C. Sah

I. Introduction

1.1 The Context:

The structuralist perspective envisages poverty, especially in rural India, as a long duration phenomenon. The famous axiom that 'Indian farmers are born, live and die in indebtedness' is a classic description of the structural roots as well as the form of poverty engulfing a bulk of the rural poor in the country. Over time, most of the structural features of poverty have remained more or less intact, with little difference in degree rather than in kind. As a result, a large proportion of the poor in India are also chronically poor in terms of duration as well as severity (Mehta and Shah, 2002). Nevertheless, economic growth achieved through processes of planned development since the early fifties, have made a significant dent in the incidence (i.e. extent) of poverty measured in terms of average expenditure of the households. Thus, incidence of poverty in India declined from 52 per cent in 1977-78 to 39 in 1987-88 and further to 36 percent in 1993-94 and 27 percent in 1999-2000 (Hirway and Dev, 2001). Notwithstanding the limitations of the official estimates, this suggests a substantial impact in terms of poverty reduction at an aggregate level. Unfortunately, the impact has been fairly differential across regions and households within that. Three different trajectories could be visualized for those who were poor in the initial period. These are: (i) crossing over the poverty barrier on sustained basis; (ii) moving in and out of the poverty line; and (iii) always remaining below the poverty line. The households experiencing different trajectories represent non-poor, transient poor, and chronically poor (in duration sense). There is of course, a fourth category of households who had never been poor.

The official statistics on poverty in India do not make any distinction between the two sets of poor i.e. transient and chronic poor, as information on the time line of poverty is not collected. Given the wide variations in the extent of poverty reduction across regions and households, differentiating the households across various kinds of poverty conditions might be useful. Severity, i.e. the distance from the poverty line, is another important dimension of (income) poverty. Combining these two criteria might therefore provide a fairly comprehensive profile of poverty and well being across households. In turn, it would help understanding the dynamics of poverty especially, chronic poverty, in the states and regions where developmental processes have not made any major dent on poverty. Similarly, profiling the (income) poverty conditions in conjunction with the non-economic aspects like human, social, and political capital would help understanding multi-dimensionality of poverty and inter-relationship among them. The present paper aims at preparing a detailed profile of poverty among rural households and tries to unravel various factors as well as processes that shape up different categories of poverty conditions among rural households so as to understand the changes overtime. The study is based in South-West Madhya Pradesh (SWMP), which represents one of the seven regions (classified

by the National Sample Survey Organisation-NSSO) having highest incidence of rural poverty in India. The analysis is placed in a larger context of the processes of development in the state of Madhya Pradesh.

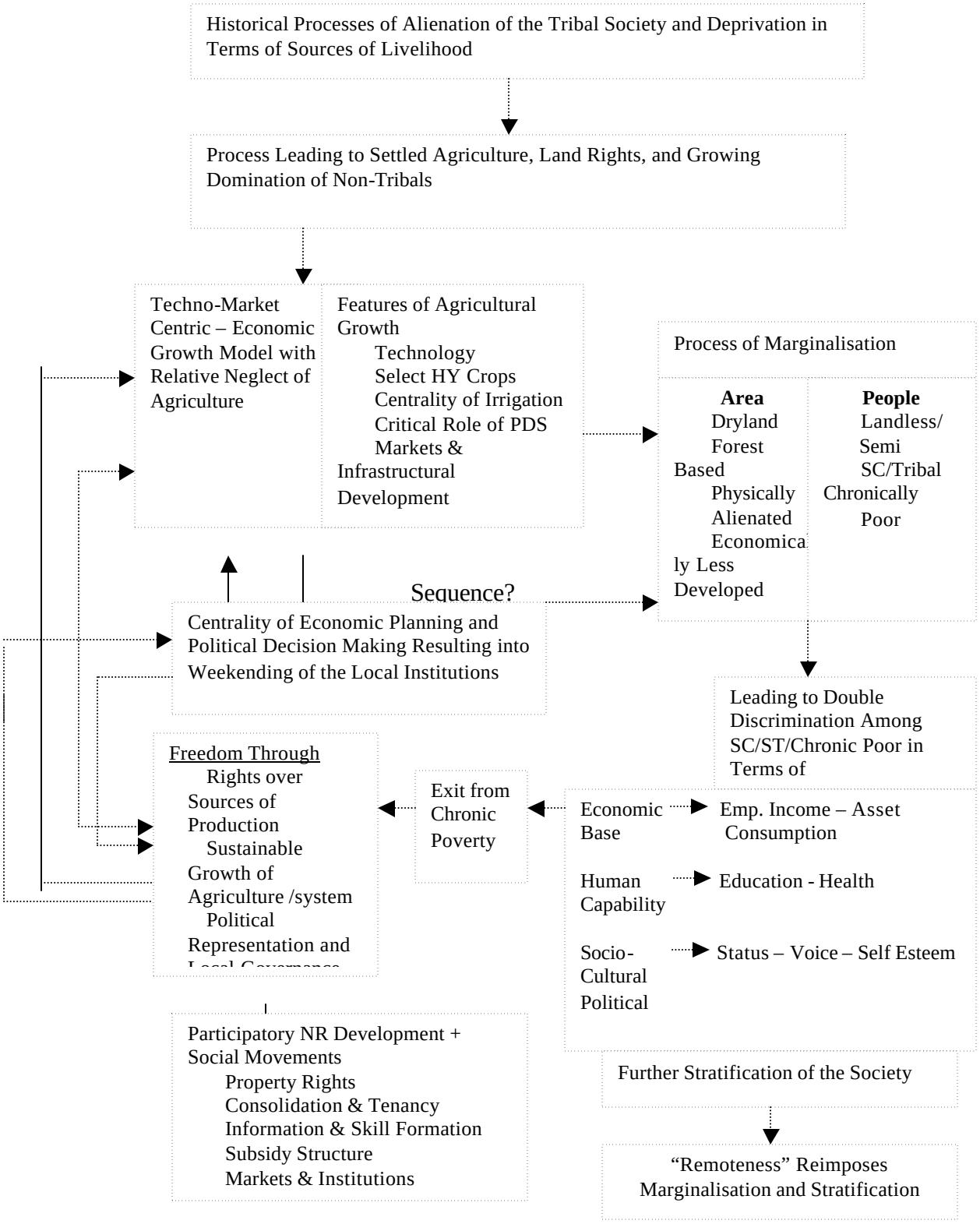
1.2 Macro Processes and Framework:

The recent discourse in India has highlighted the central role of agricultural growth in poverty reduction (Fan and Hazell, 2000; Ravallion, 2000; Desai and Namboodiri, 1998). The evidence from a number of study suggest that while the percolation mechanism has worked in reducing the incidence of poverty, its impact has been limited in terms of pace and coverage. To a large extent, this is linked to the strategy of agricultural growth, characterized by Green Revolution, and the prioritization associated with that. This, impinged upon the unfavourable agrarian relations and their extension to the nature of political leadership, paved the way for consolidation of some the driving forces that discriminated against certain agro-climatic conditions (like dry land); resources (like forest); socio-economic identities (like landless, schedule castes -SCs and tribes-STs); political representation (like special ethnic minorities); and regions (like geographically alienated areas in hills and interior pockets in the marginalized areas). Unfortunately, there is a logjam of several of these discriminatory forces such as in the central-eastern parts of the country with low level of irrigation hence agricultural growth, forest resources, hilly regions, tribal communities, feudal agrarian relations and low political representation. The result is high concentration i.e. about 63 per cent of poverty in these states viz; Bihar, Uttar Pradesh Assam, West Bengal, Orissa, and Madhya Pradesh.

Prima facie, this suggests inter-linkages between the natural endowment, social stratification, historical processes of power structure and agrarian relations, political economy, influencing the choice of developmental strategy and the choice of strategy for economic development. Conceding that most of these forces were historically determined, the choice of developmental strategy also got determined in turn, by the same set of forces that already existed at the dawn of India's independence. It is therefore, imperative that a clearer understanding of the genesis of poverty, especially chronic poverty, necessitates a multi- disciplinary approach. This is particularly important in the case of a region such as the South West MP, which is faced with a situation of multiple discrimination in terms of the resource base, social identity, geographical location, infrastructural development, political representation and developmental interventions. As a result, the region is characterized by very high incidence of poverty with only a marginal decline over time. In 1993-94 over 60 per cent of the rural households in the region were poor, of which about 42 per cent were severely poor (NIRD, 2001). To a large extent, severe and perpetual poverty in the region could be attributed to a log-jam of various factors- economic, agro-climatic, social, political, and geographical (Kate, et. al; 2001). The interface of the various factors could be described in a tentative framework presented in Chart I.

Chart I

Understanding Severe, Long Term and Multi-dimensional Poverty: A Tentative Framework



It is envisaged that the macro processes especially, those pertaining to the social and political marginalisation and alienation of people from resources of production like that in the forest based economies, have resulted into a kind of developmental strategy, which reinforces the historically existing discrimination in the disadvantaged regions. Three sets of forces may have played an important role in setting up a strategy, which alienated local communities from the mainstream economic development. These are: (i) commercialization of forest by bringing the resources under state monopoly since the colonial period; (ii) encouraging non-tribal to undertake settled agriculture and thereby marginalizing the local tribals; and (iii) centrally planned economy with higher priorities accorded rapid industrialization and technology based agricultural growth in regions with better agricultural infrastructure. In the process the developmental strategy bypassed a large part of rural economies in (a) dry land and (b) forest based regions. To a large extent South-West MP represents a region that has been alienated from the mainstream agricultural growth having a crucial bearing on poverty reduction. Unfortunately the region experiences constraints due to both- degradation of forest and dryness leading frequent crop failure. The tribals in South-West MP region thus, face marginalisation owing to their low bargaining capacity emanating from the low information base and technology adoption, limited access to institutional support system including formal credit system; persisting indebtedness; low social capital; and socio-cultural discrimination due to language and other attributes of tribal identity. Exit from this logjam of forces resulting into perpetual poverty among a large proportion of the rural community and increasing stratification therein, might require a multi-pronged approach, which could at least partly undo the historical processes of marginalisation of people through monopolization of the forest resources and subsequently through promotion of the market oriented agricultural growth.

Marginalisation from the mainstream economy in turn, might lead to deepening of their low capital base-economic, human, and socio-cultural. Geographical and political remoteness may aggravate the situation by widening the gulf between the poor in these remote rural areas and the centers of economic growth. *Prima facie*, weakening the capital base may take place due to further stratification among the local tribal community. Ironically, the stratification might take place through some of the developmental processes or interventions like formal education, job-reservation, subsidies for ground resources development and other farm inputs, legalisation of encroachment of common property resources, development of roads and modern means of transportation, migration, urbanization, and parallel institutions of local governance etc. While most of these interventions are essential for development of the marginalized areas and communities, the problem is that these initiatives are tuned to `mainstreaming' the marginalised, which implies superiority of the centrally planned `mainstream' growth processes. What is worse is, the mainstream growth processes are inherently iniquitous. Does this imply that developmental processes have almost no links with poverty reduction in the region? And, that the incidence of poverty especially, chronic poverty continues to be explained by structural factors like access to means of production, growth of population, adoption of crop technology, and indebtedness? Whether developmental processes and the governance thereof have led to further marginalisation and polarization within the community? The present analysis examines these questions in the light of South West Madhya Pradesh, which continues to have a substantially large proportion of its rural population living under poverty conditions.

The main objectives of the paper are twofold: (i) to examine the changes that have taken place in SWMP-region vis-à-vis the state of MP, and identify the major factors affecting per capita income (expenditure) during 1983 and 1993-94; and (ii) to prepare detailed profile of poverty among rural households and understand its dynamics within a micro setting of two villages in the

region. The analysis is divided into five sections including this introduction. The next section 2 looks into comparative picture of poverty across different expenditure groups and overtime. This is followed by a mapping of chronic poverty in a micro setting of two villages in SWMP. Section 4 examines dynamics of poverty as well as possible exit routes in the light of a micro-study in two villages. The last section 5 summarizes the main findings and discusses implications for future research and policies.

2. Poverty in South-West Madhya Pradaesh: Changes Over Time

This section examines incidence of poverty and determinants of per capita income among rural households in SWMP region and the state as a whole. This followed by tracing the changes that have taken place in the region and the districts within that during eighties. There are, of course, difficulties in using regional data for poverty estimates because of the inadequate sample size (Murgai, et.al; 2003). Nevertheless, we have used the region level data to obtain relative magnitudes rather than as exact estimates. This has been done by using raw data pertaining to the samples households covered by the two rounds of the National Sample Survey conducted during 1983 (38^{th} round) and 1993-94 (50^{th} round). The analysis takes into consideration some of the basic factors at household level, representing size of the household, land ownership, access to irrigation, level of literacy, sex ratio (as a proxy of out-migration), and occupational diversification for explaining the level of economic well being represented by monthly per capita expenditure (MPCE). The analysis has been undertaken separately for households with relatively lower income (expenditure) levels and for all households together.

2.1 Changing Socio-Economic Scenario

Table 1 depicts changes in some of the important socio-economic features during reference period. While the basic purpose is to examine the changes that have taken place over time within SWMP region, it would be useful to compare these changes with the average scenario at the state level. In this context it may be noted that SWMP region consists of four districts of which two i.e. Hoshangabad and East Nimar are relatively developed whereas the other two viz; Betul and West Nimar represent fairly low levels of development vis-à-vis other districts in the state. This is also reflected in the crude estimates of poverty in terms of head count ratio (HCR) in the four districts; the HCR ranged from 34. 5 in Hoshangabad to 78.6 in West Nimar (Govt. of Madhya Pradesh, 1998; p. 192). It is therefore important to keep in mind the intra regional differences while looking at the changes over time. It is observed that the region has experienced significant changes in terms of socio-economic as well as infrastructural development. And at times, the improvement in some of the indicators has been better or almost same as compared to the state average. For instance, infant mortality (IMR) in SWMP has declined from 149 to 110, which is more or less same as that obtained at the state level. What is more important is the attainment of overall literacy rate of 47 per cent, which is higher than 44 per cent observed at the state level. It may be noted that the literacy level has increased (from 23 to 36 %) even in the least developed district i. e. West Nimar. What is perhaps most significant is the increase in land productivity which has increased by 34 per cent in SWMP-region and by 37 per cent in West Nimar district.

Notwithstanding these developments, poverty continues to sustain at a significantly high level in SWMP-region in general and in district like West Nimar in particular. These aspects have been reflected in terms of high concentration of tribal population and low level of physical infrastructure including the public distribution of system (PDS) in the case of West Nimar

(Tables 1 and Appendix 1.1). Thus, prima facie, it appears that the developmental processes are rather slow and also inadequate to take care of needs of the growing population. Physical remoteness and tribal identity might aggravate the situation further. To what extent poverty has declined and how it has changed the distribution of households across different income/expenditure levels? This has been examined by using household level data for 1983 and 1993-94.

2.2 Incidence of Poverty:

It may be noted at the outset that distribution of rural households across four categories has been based on official poverty lines for 1983 and 1993 for Madhya Pradesh. The four categories consist of the households that are 25 % above and below the respective poverty line for the year, and the remaining households outside this band of 25 per cent on both sides. Thus, the four way classification of households includes very poor, poor, potential poor, and non-poor (see Table 2). The potentially poor are those whose per capita monthly expenditure is higher by only up to 25 per cent, implying that shocks like frequent droughts may bring down many of these households below the poverty line. It is observed that whereas incidence of poverty has declined both in MP-state as well as in SWMP-region, as large as 36 and 65 per cent rural households still remained below the poverty line in the state and the region respectively. The decline in poverty however, is much higher in the state (i.e. from 65.4.6 to 36.4 %) as compared to SWMP region (i.e. from 74.5 to 64.6 %). These estimates are at variance with the estimates of head count ratios prepared by other studies. For instance, the estimates by Sundaram and Tendulkar (2003) suggest a decline in rural head count ratio in the state from 54 per cent in 1983 to 36.6. per cent in 1993-94. Nevertheless, the higher estimate of HCR in 1983 is in conformity with that oobtained by using the official poverty line (Dubey and Gangopadhyaya, 1999). Even if one uses the lower estimate of 54 per cent of HCR in 1983 as worked out Sundaram and Tendulkar, the decline in poverty is fairly substantial i.e. around 17 per cent. Compared to this, the reduction in the case of SWMP region is only 10 per cent. Obviously, the situation would be worse in less developed remote district like West Nimar, as will be observed subsequently in Table 2.

We tried to ascertain the changes in HCR across expenditure categories. It is observed that the incidence of poverty has declined significantly in the category of very poor both in SWMP region as well as in the state. In fact, the decline in poverty is almost entirely concentrated in the first category. The proportion of household in the next category has therefore remained more or less same. Among the rest, the shift is substantially higher among the last category i.e. the non-poor rather than in the potentially poor. It is however, difficult to ascertain the trajectory of the exit from two categories of poor in absence of any information capturing duration. It is likely that the movement is gradual i.e. from very poor to poor and from poor to non-poor. In that case what is concerning is the slower pace of this transition. Prima facie, limited economic development along with high rate of population growth could be responsible for the low pace of poverty reduction in the region.

2.3 Determinants of MPCE:

What are the major factors influencing income (expenditure) level among rural households in the region? How does the pattern compare with the state as whole? And, whether there has been any significant change in the pattern of determinants of poverty (expenditure level) over the decade since 1983? These questions have been examined by estimating multiple regression models for

explaining variations in monthly per capita expenditure (MPCE) among rural households in the South-West region and the state. The exercise has been carried out separately for two categories of rural households classified in terms of MPCE-groups. The analysis however, has been constrained by the number of explanatory variables, for which household level data could be computed. The main observation emerging from the analysis have been presented in Tables 3 (a and b). These are:

i. Households size is found have a negative impact on MPCE under almost all the situations under analysis. This suggests a strong influence of growth in population, especially under a relatively stagnant economic scenario within the state and the region. This phenomenon has been further substantiated by observations from the micro-study discussed in the subsequent sections 3 and 4.

ii. Against this literacy, as generally expected, is found to have positive impact on MPCE in almost all situations except among households with relatively low MPCE categories in SWMP.

(iii) The other important factors influencing MPCE are those related to economic assets viz; land holdings and irrigation. Leasing-out also have a significant negative impact on MCEP. To an extent, this might suggest reverse tenancy where households with lower income and asset base lease out their lnad to relatively better-off households.

Together these observations imply that as time moves and population increases, natural resources particularly, land become scarcer. Hence, those who are fortunate to have relatively larger land holdings with access to irrigation and also education could improve their economic status. The rest continued to remain where they were earlier or suffered deterioration in their economic status.

(iv) The pattern at the state level is more or less same. What is however, important is to note that occupational diversification, especially among households in low expenditure groups, exerts a significant impact on MPCE, which is not the case in SWMP region. This suggests limited economic options and stagnancy in the region as noted earlier.

(v) Finally sex ratio (female:male population), which has been taken as a proxy for out-migration among male members of the households, is not found to be significant. To a large extent, this might suggest that migration is mainly of distress type, where the poor have to migrate out merely for meeting their basic requirement, without having any substantial improvement, through remittances, on income (expenditure) status of the households back at home. This issue has been addressed subsequently.

Finally, it may be noted that the major determinants of rural poverty does not seem to have changed over time. The factors influencing poverty thus, continue to be rooted in structural factors as the case in most parts of rural India. The pertinent question therefore is: to what makes the region and their poor remain in perpetual poverty? Is chronic poverty in this region emanate mainly because of the physical remoteness and/or social exclusion associated with tribal identity? The micro study in two villages of Badwani district (a part of the erstwhile West Nimar) might throw some light on these issues.

3. Chronic Poverty in a Micro Region: Evidence from Two Villages in South-West Madhya Pradesh

3.1 The Focus:

This section presents a profile of poverty in two sample villages form Sendhawa and Pati blocks in Badwani district. The two blocks represent different levels of economic development in terms of sectoral composition, access to market and other physical infrastructure. Accordingly the two villages viz; Karchali and Pospur represent relatively less and more remote situations within the district (for further details see, Sah, Shah, and Bird, 2003). The analysis is based on primary data collected through a number of participatory exercises along with a small survey of 84 households during July-August 2002. The basic objectives for collecting the primary data were (a) to prepare a typology of poverty and identify the interface between income (i.e. expenditure) and capability aspects of poverty; and (b) to understand the dynamics of chronic poverty and exit route thereof focusing specifically on the role played by different aspects of remoteness. In what follows we have tried to address the first objective, which provides a back ground for the next.

The study villages are located at distance of 5-7 kms. from the main road as well as the nearest market place though, the former is relatively better linked to market and other support services than the former. Similarly, quality of land and access to irrigation are also somewhat better in Karchali as compared to that in Pospur. Notwithstanding these differences the two villages are characterized by tribal population, with more than 90 per cent of the households belonging to a socially marginalized tribe i.e. Barela. Hence, it is hypothesized that the difference in livelihood pattern and the poverty outcomes, would mainly be due to two sets of factors viz; (i) quality of land and irrigation; and (b) excess to physical as well as economic infrastructure like road, transport, markets, information services, credit facilities etc. It is further hypothesized that given the limited access to the basic sources of production (i.e. land and water) vis-à-vis household's population (i.e. per capita), out- migration is a critical part of the livelihood strategy among both landless and landed households. In turn migration, along with per capita land and irrigation, would explain a large part of the variations in income (or expenditure) across households and over time. And finally, relative remoteness, especially in terms of physical infrastructure, information (or technology) and markets (including credit support) will play a significant role in determining the patterns of labour- force diversification on the one hand and chronicity (in terms of severity as ell as duration) of income poverty on the other. The capability poverty however, is determined more by the political representation and quality of local governance, notwithstanding the `physical remoteness'.

3.2 Poverty Mapping in Sample Villages

3.2.1 Wealth Ranking

The basic purpose of the wealth ranking exercise was twofold: First, to identify households in different categories of well-being and, second to examine the reasons for changes in the status of the households across typology of poverty overtime. The categorization therefore, was done to capture the status at present and also 10 years before.

It may be noted, at the outset, that a number of criteria were suggested for defining well -being of a household. However, almost all these criteria relate to economic status. Apparently, a `well-off' household was characterized as those having:

Five acres of land
Well with a pump for irrigation
Two pairs of bullocks
Land with black soil
Not forced to migrate
1-2 kgs. Of silver
Good rapport with the money lender

This, of course, is an ideal list. In reality very few households have all these assets at a time. Notwithstanding these limitations the wealth ranking exercise came up with clear categorization of households in four categories. Given this context, have tried to create a broad mapping of poverty in Table 4. It is observed that as large as 60 per cent of the households in Karchali were categorized as poor whereas the proportion is lower i.e. 44 per cent in Pospur, which represents a relatively less developed situation. This is somewhat surprising. One of the possible explanations could be in terms of migration, which works as a two-way process influencing poverty. For it is plausible that, migration at an initial period, might have been caused due to higher incidence of poverty but, once a household starts sending out its member for migration, it might gradually rise above the poverty condition. Another possibility however, is that the difference in poverty between the two villages is more in terms of severity rather than in terms of incidence of poverty *per se*. This is perhaps, what is reflected in Table 4. It is observed that whereas about 22 per cent of the households in Karchali are categorized as `well-off' this proportion is only 12 per cent in Pospur. On the other end of the spectrum, Pospur has about 30 per cent of the households categorized as severely poor. Evidentially, this category did not emerge in the case of Karchali.

Examining the change in well-being status, it was found that Pospur depicting a rather static situation has only four households having shifted the well-being category whereas the proportion in Karchali is 20 per cent. To a large extent, the decline in well-being status is due to population pressure leading to subdivision of land holdings, especially when information flow and market support are under developed, and more importantly, discriminating. We will look into these dynamics at a later stage.

Given this broad profile, we may now present a somewhat more detailed typology of poverty by using the primary data collected through a survey of 84 households in the two villages..

3.2.2 Typology of Poverty among Sample Households:

This sub-section tries to identify households in four categories of income (expenditure) poverty and ascertains changes that took place during the reference year i.e. 2201-02, which was the third consecutive drought in the region. By doing this, it also captures chronicity in some sense of a time dimension. Ideally, one should have comparable data for all the major components of income or expenditure for a time series of say, five to ten years. This however, is difficult to build in a one-time survey like this. Instead what we have done is to capture fluctuations in cereal consumption for five years including the reference and the normal years. While this information may help understanding year –to-year fluctuations in the basic requirement, it does not help building up a comparable income (expenditure) line over time. For (a) cereal consumption is only a part of the three major components of household consumption besides non-cereal food items; and (b) even among the poor, cereal consumption is likely to get affected at the last hence, may not reflect the decline in the consumption of other food items like

vegetables, milk, oil on the one hand and other expenses like clothing, medical care, social functions etc. on the other.

Given these limitations, we have estimated total expenditure of sample households by adding up reported consumption of the three sets of commodities during the reference and a normal year (see Table 5(a)). Two observations are important in this context: (i) the average annual expenditure during the reference year is Rs. 20,560 ranging from Rs. 19,709 in Pospur to Rs. 21,653 in Karchuli. This is much above the annual expenditure of Rs. 14,700 derived by using the official poverty line. for a household with five members; and (ii) cereal consumption constitutes about 27 per cent of the total expenditure in Pospur and 32 per cent in the case of Karchali (Table 5 (b)). This substantiates the earlier proposition that fluctuation in cereal consumption may not be an adequate representation of the changes in the total consumption expenditure among the households. To what extent, the different sets of consumption get affected due to a normal condition thus remains to be examined by collecting additional information.

The estimates of total expenditure have been used for identifying poor in different categories. This has been done by using the prevailing poverty line of Rs. 245 per capita, per moth for rural MP. This works out to be Rs. 2,950 per capita per annum. Using this cut-off, the sample households have been grouped in five expenditure classes, which in turn, have been classified in to three broad categories viz; severely poor, moderately poor, and non-poor. Table 6 provides distribution of households across different expenditure classes during the reference year. It is observed that 76 per cent households in Karchali and 62 per cent households in Pospur were poor at different levels of severity. Overall the incidence of poverty worked out to be 68 per cent taking the two villages together, which is fairly close to the estimated HCR for the region during 1993-94.

Of the total poor, about 28 per cent of the households in Pospur were in the category of severe poverty. This is defined as having a per capita income of less than Rs.2000 per annum, which is lower than two thirds of the poverty level income. In Karachali, this proportion is only 16 per cent. These results, are broadly in conformity with the pattern that emerged from the wealth ranking exercise, which indicated a significant proportion (i.e. 32 per cent) of severely poor households in Pospure but none in Karchali. It may however, be noted that the incidence of poverty turns out to be much higher in case of income (expenditure) poverty based on the sample survey vis-à-vis that obtained from the wealth ranking exercise carried out for the sample villages.

We tried to look at the time dimension by comparing the pattern with that in a normal year. It is observed that as many as 14 (out of 47) households in Pospur reported a shift from lower to higher lower expenditure class during a normal vis-à-vis a drought year (i.e. the reference year). This kind of a shift was found to be limited to only two households in the case of Karchali (Table 6). Of these 16 households experiencing a decline in expenditure during a drought year, 8 households had shifted from a category of non-poor to poor- 7 in Pospur and 1 in Karchali. This implies a transitory nature of poverty among these 8 households. These households constitute about 12 per cent of the total 57 households identified as poor during the reference year. The remaining 49 households (86 per cent of the poor) could be treated as chronically poor.

Finally we have tried to create a four –way classification of poor by combining the level and time dimension (or chronicity) of poverty. This includes severe as wee as chronically poor

(SCP), moderate and chronically poor (MCP), severe but transient poor (STP), and moderate but transient poor (MTP). Apart from this, there is a fifth category of households i.e. of non-poor (NP). Table 6 provides a summary of the typology of poverty in terms of the above categories. The typology in Table 7 suggests (i) a large part of the poor are chronic poverty condition in a duration sense; (ii) severe poverty constitutes only a small proportion i.e. about 16 per cent of the poor households; and (iii) relatively lower level of remoteness in Karchali is associated with larger proportion moderate-chronic poor.

The main observations emerging from the foregoing can be highlighted as follows:

About 58 per cent of the sample households were in chronic poverty. This constitutes 86 per cent of the poor households in the sample.

To a large extent chronic poverty is associated with severe poverty. All the severely poor are in the category of chronic poverty, whereas all transient poor are in the category of moderate poverty. Severely poor account for 63 per cent of the poor.

Thus, chronic poverty constitutes 100 per cent of severely poor, and 61 per cent of moderately poor.

These observations substantiate the trends at macro level, which suggests that a large proportion of chronically poor in India are also severely poor (Mehta and Shah, 2001). In turn, this may suggest perpetuation of the structurally determined chronicity of poverty among the rural poor in India.

3.3 Correlates of Income and Capability Poverty:

Since a large proportion of poor among the sample households is chronically poor, following analysis of correlates of poverty could also be treated as capturing a large part of the reality among chronically poor. Table 7 provides information about some of the major characteristics of the poor and non-poor among sample households. The important observations emerging from Table 8 are:

While about 17 per cent of the households are in the category of landless or semi-landless (i.e. with less than 1 acre of land), the proportion is higher among the poor (19%) vis-à-vis the non-poor (11%). Conversely, those having relatively larger land holding i.e. more than 5 acres constitute only 17 per cent among the poor as compared to 33 per cent among the non-poor.

However, in terms of access to irrigation, the difference is not so significant. Whereas 48 per cent of the non-poor households have access to irrigation, the proportion is 43 per cent among the poor.

Strangely, incidence of migration (i.e. at least one person from the household having migrated during the reference year) does not seem to suggest any direct association with household income (expenditure). In fact, the pattern is found to be different across the two villages. In Pospur, almost all (i.e. 91 %) households reported migration during the reference year whereas in Karchali only 46 per cent households reported at least one migrating person during the reference year. This takes us back to the observation made earlier about migration as a two-way process influencing poverty especially, in a relatively less developed village like Pospur. In Karchali the

situation may not be as pressing as to push a majority of poor households out for migration. This has been substantiated by the fact that Karchali has relatively lower incidence (i.e. 13%) of severely poor households as compared to Pospur (i.e.28%). Also, better connectivity with other larger village (i.e. Ramkula) as well as the market place (i.e.Chacharia) might also reduce the incidence of distress migration, which is likely to be the case in Pospur.

Moreover, the two-way process of poverty being an initial cause of migration resulting into non-poor status especially in Pospur, is further supported by the observation that intensity of migration (i.e. the proportion of migrating workers to total workers in the households) is found to be higher among the non-poor households. In that case, the observed reality with respect to income poverty should be treated as reflecting the impact rather than the capturing the initial condition where poverty is likely to be the cause of out-migration. It may however, be noted that the likely positive impact of migration on households' income may not be a uniform phenomenon across all households with migration. For there does not exist any one-to –one relationship between migration income (expenditure). Alternatively, these results could be interpreted as indicating the constraints within which the poor are forced to stay put. These conjecture however, does not appear to be valid in the light of the wealth ranking exercise where incidence and length of out migration was reported as one of the most important attributes of poverty. This phenomenon has been supported by the information obtained through the well-being exercise. For instance, only 3 out of the total 46 households in the better-off category had reported migration. Conversely, 45 out of the 84 poor households were reported to have migration. A similar pattern was also found in Pospur. The actual interface between income and migration however, is likely to vary across households with different levels of initial income. This needs further probing.

The interface between literacy and poverty is also not found to be very significant. This has been examined by identifying the households where none of the adult members is literate. The remaining households have at least one adult literate member. It is observed that whereas proportion of households with literacy is significantly higher among the non-poor households in Karchali, the difference though, marginal is in the reverse direction in the case of Pospur. That is, literacy is higher among poor as compared to non-poor in Pospur. This is somewhat strange. A proper measure of the incidence of literacy might throw a better light on this aspect.

Together, the above observations suggest that land holding (i.e. the primary economic asset base) by and large, has a positive association with income (or expenditure) of the households. But, this alone may not explain the incidence as well as extent (i.e. level) of poverty. The dynamics of poverty consists of a complex mix of processes involving migration, which in turn, is influenced by economic, social and human capital. The preliminary observations emerging from Table 7 do not provide clear understanding on these processes. Nevertheless it helps identifying certain hypotheses that might be taken up for further probing.

4. Understanding the Dynamics of Poverty in a Micro-setting

Given the fact that the study area is characterized by relatively low levels of natural, economic, physical, and social capital, population dynamics seems to have emerged as a critical constraint in enhancing the livelihood base and thereby resulting in prolonged poverty conditions among a large number of households. This phenomenon was clearly evident while conducting the wealth ranking exercise where fragmentation of land holdings came up as the most important factor for households having shifted from a relatively higher to a lower well being category. It would

therefore, be useful to examine the demographic profile in the light of the changing production as well as market environment within which exchange of commodities, labour and credit takes place. This section provides a broad account of the demographic profile as well as and the resource base in the study villages. The idea is to understand livelihood base among different categories of households and, trace some of the major changes experienced by the village communities over the past 5-10 years. This is important because it helps capturing the changing pattern of the people-resources interface through a time scale. The analysis is based mainly on the information collected through various PRA-exercises, supplemented by data obtained through a primary survey of 84 sample households in the two villages.

4.1 Population, and Literacy

We tried to examine the growth in population over the past 10 years using the sample estimates. This was done by working out the age profile among households covered by the sample survey. It was observed that as high as 38 per cent of population was in the age group below 10 years. This implies an addition of about 62 per cent to the population that existed 10 years before! This is significantly high. Similarly, we also worked out dependency ratio by considering the proportion of household-members in the age group of <15 and > 60. This worked out to be 47 per cent of the total population of 633 persons in the sample households. Of these only 13 persons belonged to the age group of >60 years; the rest 286 are children. This suggests a very high proportion of children. Overall, therefore, the proportion of children below 15 years is higher i.e. 45 per cent compared to the all India average of 37 per cent during 1991. On the other hand, the proportion of old age persons is only 2 per cent vis-à-vis 8 per cent at the all India level. The difference is likely to be sharper if one compares the sample estimates with the all India estimates of 2001. This suggests a somewhat imbalanced demographic structure, characterized by high birth rate and low life expectancy among households in the study villages. Higher growth in population, would imply fragmentation of land holdings at a faster rate than otherwise.

Unfortunately a significantly large proportion of children between 5 to 15 years are illiterate. The incidence of literacy in this age group is found to be only 35 per cent. The proportion of children with literacy however, varied significantly across the two villages with Pospur having a higher rate of 43 per cent as compared to 28 per cent in Karchali. If we examine the incidence of literacy among girl children, the rate is only marginally lower i.e. 32 per cent than that for all children together. It may however, be noted that the estimates of literacy is based on the reported rather than the actual attendance. In that case it is likely to reflect enrolment in the school and not attainment of literacy. The issue has been discussed further while examining the efficacy of various institutions in the study villages. It may however, be noted that the schools in Pospur were found to be in much better shape and the actual functioning was also reported to be better than that in Karchali. Accordingly the actual attainment is also likely to be better in Pospur.

4. 2 Land Irrigation and Livestock

As noted above the average size of land holding is about 1.75 and 1.24 acres in Pospur and Karchali respectively. This is much below what is considered as an economically viable size of say, 5 acres, especially under dry land conditions in the study villages. While the number of

landless households in the sample is only 2, another 15 households have very small size of land holding. Together these 17 households represent a category of landless or semi-landless, and constitute about 20 per cent of the sample households.

Livestock population is also fairly limited. One third of the households do not own any milch animals. The proportion is higher i.e. 44 per cent among those who do not have irrigation. This proportion is 29 per cent among those having irrigation. The average number of milch animals is 1.7 and sheep/goat is 2.34 among the sample households. This may provide some kind of supplementary income to the poor households. The average income (in terms of cash or kind) is estimated to be about Rs. 1440 per goat per year. Apart from these most of the poor households also engage themselves in poultry farm on a small scale. Together these activities may potentially provide a fairly substantial base for livelihood support provided the poor have a fairly good livestock base. Unfortunately, this does not seem to be true in the case of most of the land-poor as noted above. Besides this, need to maintain a pair of bullock (in absence of a well developed sharing arrangement) may also work as a constraint for keeping a larger size of livestock, given the meager resources. We observed that as large as 75 per cent of the households keep at least one bullock, and the average number of bullock is 1.87 for all the households. Changing this scenario however, would involve development of markets for products from livestock on the one hand, and changing the land use pattern on the other. The village economies, as of now, do not seem to be poised for any major changes on any of the two fronts.

What makes the situation worse is limited access to irrigation. While we do not have information about irrigation at the village level, the sample estimates suggest that about 45 per cent of the landed households had access to irrigation. The net irrigated area worked to be 29 per cent of the total land owned by the sample farmers. The proportion is significantly higher in Karchali (41%) as compared to Pospur (19%). This of course, is a somewhat rough but, a handy estimate to proceed with our analysis at this stage. To a large extent those having access to irrigation are likely to be relatively better off or non-poor. According to the PRA- data, as large as 80 per cent of the irrigated land in Karchali is owned by the better-off households, whereas only 40 per cent of the unirrigated land belongs to this category of households. A similar situation also prevails in Pospur. While this is a fairly well recognized phenomenon, what is noteworthy is that in several cases poverty does exist despite access to irrigation. Clearly smaller size of land holdings along with low levels of technology and market development might have resulted in situation like this.

4.3 Land Based Activities and Income

Given the constraints in adoption of yield augmenting technologies for crop production and limited options for occupational diversification within the village economy, poverty is likely to increase both in terms of its extent as well as severity and that, exit from poverty is possible only through migration. We have tried to construct a typical scenario faced by households with an average size of land holding, and not having access to irrigation. It is observed that a typical household like this could earn about Rs.2, 500 in Pospur and Rs. 1,800 in Karchali from unirrigated crop during a single season. In addition to this, the household may earn Rs. 1,440 from at least one goat. Together this income could fetch them about 790 and 650 kgs. of grains respectively in Pospur and Karchali. This is about 61 and 50 per cent of the estimated requirement of cereals based on the average consumption 1300 kgs. for all the households taken together. But, expenditure on cereals is only about 30 per cent of the reported total expenditure among the severely poor households. For the rest, households have to depend on the other sources on employment and income. But, there are severe constraints operating on the demand

side even in the market for migratory work. It is reported that those who migrate out for more than six months a year, the average number of days for which they find paid job is generally @ of 20-22 days per month. Besides this, supply side constraints also operate in terms of relatively lower preference for migration, which is treated as an indicator of ill-being.

For landless and semi-landless, the coping mechanism is fairly diverse and often more uncertain. For them the major part of the income is to be obtained from casual work on farm and non-farm activities within and outside the villages. Migration, as noted earlier, is likely to be the major strategy for meeting the basic requirement for livelihood among these households, which constitute about 70 per cent of the households in the study villages.

4.4 Perpetual Underemployment

Limited land (and irrigation) base among 55 per cent of the sample households (i.e. 20 per cent semi landless, and another 35 per cent not having irrigation) is likely to have resulted in a situation of perpetual underemployment among a large proportion of the labour force within the study villages. We have tried to work out total quantum of labour time likely to be employed on crops and related activities in the three seasons. It is estimated that on-farm employment on an un-irrigated farm is 144 person days per acre whereas, for irrigated farm the estimated employment is for 240 days per acre. During a normal year this would amount to total employment of about 57,000 and 47,000 person days respectively. Against this, the total labour force in the age group of 15-60 years in the two villages is estimated to be 609 and 420 persons by 2001. Assuming that each person in the labour force could undertake work for 270 days in a year, crop cultivation alone can provide full time employment to 212 and 175 persons in Pospur and Karchali.

Conceding that about 50 per cent of the total labour force are female who also take care of the other activities like collection of fuel, fodder, and water; tending of animals; cooking and caring, a large proportion of the male labour force is likely to be surplus even during a normal year. Even if one assumes that the entire work for crop cultivation is being undertaken b male members, there would still be a substantial number of male labour force, which would be totally unemployed. This number works out to be 93 in Pospur and 35 in Karchali. Since women, in reality, contribute a large proportion of work in agriculture, the extent of surplus labour among male population is likely to be fairly large. This itself is a manifestation of major deprivation though, directly it does not get projected as an important dimension of poverty. To the extent surplus labour also reflects food grain deficit at household level, a large part of the surplus labour force is pushed out for migration, which is treated as a direct indicator of poverty as noted earlier.

Ideally, livestock or forest based activities like collection of non-timber products should provide supplementary employment as well as income during these seasons. But, as discussed earlier, these options are also severely constrained because of the depletion of forest and other common property land resources (CPLRs) in the villages. While we do not have information about the quality and as well as the productivity of these resources, discussion on livelihood strategies during the PRAs did not suggest strong dependence on livestock or forest based activities for livelihood base. What is however, quite clear is that the forests have been depleted significantly and that illegal extraction of wood still continues.

It appears that whereas a major part of the depletion has taken place with connivance of the forest bureaucracy, most of the people also had their share in this collective destruction though, the share is likely to be far from being `fair'! For even if most of the households might have indulged into extraction of forest resources in an unsustainable manner, the poor might have gained proportionately less than the rich and the powerful. Ultimately the process of extraction might have reached a stage when the state had to formally intervene and regularize the land rights. In the process, a part of the discrepancy in the level of extraction might have been evened out by allocating (i.e. leasing) of land of equal size to all the households.

We have not been able to unravel this process of clear felling of land by people and eventually settling down of the land rights by the state. What is however concerning is that the outcome is likely to be fairly uneven among households within village and also across villages in hills and plains. The obvious manifestation of this disparity is in terms of the size and quality of land holdings in the study villages in plains unless, it is purely due to differential rate of sub-division of land across the original households who received the land rights. The major difference vis-à-vis the villages in the nearby hills or forests is in terms of physical infrastructure and remoteness. Ideally, public investment in various forms including regeneration of forests should aim at bridging this inequality that seems to have been rooted in the initial process of forest extraction noted above.

4.5 Availability of Food Grains and Droughts

Given the meager resource base, availability of food grains from own land or from wage income within the village is found to be very limited. About 18 per cent of the households in Pospur and 13 per cent in Karchali reported that food grains obtained from the above sources last for less than five months in a year. The proportions of households reporting six months were 32 and 22 per cent respectively. Those who reported that the food grains last for more than 9 months constituted only 23 per cent in Pospur and 33 per cent in Karchali.

Recognising that cost of food grains constitute only about 30 per cent of the total expenditure among all the households taken together, a large part of the households may have to depend on employment/ income from outside especially in the post-monsoon periods. During monsoon borrowing for consumption requirement is a fairly common practice among a large number of the households. Given the high interest rates and the stringent terms of recovery under the private money lending system, migration becomes almost inevitable for most of the poor households. This is why we find that over 70 per cent of the households had least one person migrating outside the village for supplementing the income. To a large extent, the nature of migration represents distress rather than induced type. High incidence of drought invariably worsens the situation where out-migration, combined with perpetual indebtedness, becomes a way of life for most of the households.

We tried to understand coping mechanism adopted by sample households during the current year, which is the fourth consecutive drought in the region. We enquired about the various devices adopted by the households. It is observed that reduced food consumption was a fairly wide spread response along with reduced livestock and increased migration as well as debt. As large as 85 per cent of the households in Pospur and 68 per cent in Karchali reported reducing food consumption as a coping mechanism to face the drought. This however, would imply reduction in food grain and/or other food items like vegetables, oil, milk, sugar, meat etc. We have tried to work out per capita consumption of cereals during the reference (i.e. a drought) and

normal year across different expenditure groups. It is observed that the cereal consumption had declined by about 16 per cent in Pospur whereas in Karchali the decline was almost negligible. The reduction in cereal consumption in Pospur was as high as 36 per cent in the case of households in expenditure category of 1501-2000 per capita per year. This kind of severe reduction in cereal consumption among the poor may lead to long-term impact on health and overall capability of the members of the households.

Droughts could also cast a negative impact on children's education and thereby hamper development of human capability. Together, mal-nutrition, ill health and low education could lead to multidimensional and long duration poverty in this region.

4.6 Credit vs. Migration: Limited Options

The resource-poor, with subsistence livelihood, are faced also with the problem of limited options for employment and diversification of sources of income. While a part of this is likely to be rooted in the low social as well as human capital, a large part of the constraint arises due to the low as well as regionally and sectorally imbalanced economic growth. Given the overall sluggishness in employment generation as well as occupational diversification among workforce in the country, sheer existence of the poor hinges mainly on availability of employment outside the village and ultimately on their credit worthiness. In fact both these are closely inter-related and highly constrained. We tried to understand this phenomenon in the light of the farm- based economy, within which options for consumption loan (i.e.borrowing) as well as migration are shaped up. This has been done by extending the analogy of a `typical' household with average size of household as well as land holding without access to irrigation. This in fact, would set a limit to the household's income from its own resources within the village, and at the same time determine its need to borrow and/or migrate.

One can argue that credit and migration are substituted for each other. But in a rural setting like this, they work as supplementary to each other. For resource poor, out-migration support timely repayment of borrowings. In the case of the resource-poor (i.e. those with limited land as well as irrigation resources), migration is clearly a more effective option because of the limited `credit worthiness' (Walker and Ryan, 1990). In fact in a dynamic context, migration might help enhancing the credit worthiness especially, by improving the repayment schedule among these households. This would imply that given the limited land base and the uncertainty associated with the stream of income flowing from the land based activities, migration becomes inevitable for most of the poor households. A `good' credit support could reduce the burden of migration, whereas a `bad credit' system might increase it. But credit support per se, can hardly be a substitute for migration unless, the household's resource base and the corresponding `credit worthiness' is enhanced. Occurrence of a shock or lumpy borrowing for social events like marriage, death and at times sickness may further turn the equation against the poor borrowers.

While this is a fairly well observed phenomenon pertaining to a large number of poor households in different parts of the country, what is relatively less recognized is that enhancing the poor's access to credit involves substantial investment in basic factors of production (including labour) by the state (Shah, 1993). Unless this is ensured, credit mechanism is difficult to sustain even if right kind of institutions are in place. For, under a market based system, credit worthiness of this typical household cannot significantly go beyond the total expected income from the basic factors of production including other assets like silver etc. Since we do not have information

about the ownership of silver among these households, we assume that the total eligibility of the household would be 1.5 times that of the stream of expected income from land and livestock. This would work out be about Rs.5-6, 000 per year. Conceding that the household borrows this entire amount at different time in the year, it would still fall short of about Rs. 8-10,000 of income to meet the other basic requirements. In most cases, this kind of income-deficit cannot be supported even if a `fair' system for credit exists. Migration thus becomes inevitable for most of these households especially, for enhancing borrowing capacity among poor. This is what seems to be happening in the study villages where the households tend to migrate in order to be able to borrow rather than stop borrowing.

Thus overall the dynamics of borrowing and migration among the resource poor households suggest a log-jam of limited borrowing capacity, frequent shocks of droughts leading to excessive borrowing, lower preference for long duration migration, perpetual under-nourishment, and almost negligible investment in human capital.

4.7 Technology, Markets, and the State Intervention

The other route for exiting the poverty trap is by improving the productivity of production sectors, correcting the market mechanism, including credit operations, and welfare support by the state. Has anything happened on these fronts? We have tried to collect information about the presence of crop technology, access to inputs and output markets, and the state support for basic amenities, relief work, and productive investment in the study villages. Following observations emerged from the PRA-exercises.

Adoption of high valued crop like Soya bean was introduced by the state agricultural extension services. This crop has been adopted widely, covering about 50 per cent of the cropland especially, in Karchali. Adoption of this crop has increased the net returns, which is about Rs. 5,000 per acre (under irrigated condition) vis-a -vis Rs. 1400 for the traditional grain crop i.e. maize. Of late, the crop has started facing severe pest problems partly due to monoculture and partly due to the changing (rather deteriorating) vegetation other in the adjacent forests. The state extension agency, in absence of any indigenous method, is providing remedies through chemical treatments. But, this does not seem to have worked effectively. Despite this, farmers continue to grow the crop because under good rainfall conditions the pests also get washed out; if the rainfall conditions are not good, then only little is obtained from the field anyway!

Those who have irrigation also prefer to grow cotton because of the expected high returns. The farmers not having irrigation chose (rather are compelled to choose) cereal crops like maize or Sorghum. This kind of crop-preferences operates almost universally across households, irrespective of their land holding size or extent of indebtedness.

Almost all the irrigation wells are privately owned perhaps, by putting their own resources or borrowing from friend/relatives and at the last resort from moneylenders. The state supported co-operatives exist in the nearby block towns. We don't have information about what part of the private investment in irrigation wells had been supported by any of the institutional finance system. There is however, a good chance that many of the irrigated farmers got some kind of financial support from the various anti-poverty programmes such as IRDP, Million Well Scheme, and Co-operative Credit Society. The major problem with these schemes is that they are highly subsidized, often leading to high rate of default, which in turn, seals the credit worthiness of the borrower forever.

Connectivity to markets is another important development that has taken place over time. While both the villages are located at a fair amount of distance from the metaled road used by the state transport service, the villages in the recent times, have been connected by Kachchha road, which are usable for eight months except monsoon season. This seems to have improved the connectivity by development private transport service and also by using bicycle. Moreover, both villages have at least one motored vehicle- tractor in the case of Karchali and auto-rickshaw in Pospur. These are often used by the community to meet an emergency situation, especially under severe/sudden illness. These services are often made available free of cost or by charging only the fuel cost, depending on the social networking.

The markets for input and outputs are generally inter-locked through credit operations. This however, should be true more in the case of farmers having irrigation and growing input-intensive, high valued crops like cotton, Soya bean, wheat, groundnut etc. As noted earlier, farmers growing cotton and wheat are likely to be small in number. In any case, the uncertainty related to crops and income thereof is much smaller compared a farmer not having irrigation. This divide is fairly clear since, a large part of those having irrigation, did not have to migrate (or migrated for only a short period of time) even during the current year i.e. 2001-02, which was more or less the fourth drought year in the region.

The households growing subsistence crops mainly due to lack of irrigation have to borrow for consumption, which again has a binding in terms of paying up the debt in the form of output rather than in cash. These transactions are invariably quite exploitative. The borrowers often tend to lose in terms of quantity as well as price of the produce being considered for repayment.

4.8 Amenities and Social Infrastructure

The study villages do have basic services like hand pump for drinking water, which seem to be fairly functional even during the droughts, Anganwadi and primary schools, workers for health and agricultural extension visiting the village, check dams, nursery plantation etc. Moreover, the state Government is also supporting a public distribution system (PDS) for food grains, which specially cater to the poorer of the poor. It may be noted that the PDS seems to have been working moderately well in both the villages. This was also reported by a large number of the sample households who accessed food from the PDS; 89 per cent in Karhali and 85 per cent in Pospur.

The problems however, lie with the other support system, which is more or less defunct in both the villages. The exception is a primary as well as secondary school in Pospur. Both these institutions seem to be working fairly well despite the relative remoteness of Pospur vis-a vis Karchali. This is more surprising also because Pospur, like Karchali, is also under a group Panchayat. It is likely that the personal chemistry and/or the local power dynamics work more in favour of Pospur. It is difficult to ascertain this in absence of a detailed discussion with the village leaders. There is however, a possibility that Pospur represents one of the focus villages in the region, as it serves as a gateway for the 'unapproachable' villages further up in hills.

Notwithstanding this conjecture it is likely that the social fabric of the society is relatively more progressive than that in Karchali. This was reflected by the fact that Pospur has undertaken a fairly good initiative in terms of formation of self- help groups (one of which is functioning well); and also in terms of putting up a collective resistance to our study, which in their

perception was linked with submergence of Narmada- canal. It is likely that a perception of collective threat from the irrigation project might have worked as a binding factor for the people in Pospur. We tend to see some merit in this argument because a similar situation was also experienced in an adjoining village, which we had visited earlier for exploring the possibility of conducting our study.

Erosion of the resource base has thus prompted an effective demand for controlling the number of children among most of the household. This was clearly stated by the people in Karchali during a PRA-exercise. The perception was further substantiated by a remark made by the local medical practitioner, saying that even a small rumor about organizing a family-planning camp, would draw a large number of potential services seekers. Unfortunately, the place does not have enough facilities for conducting such camps more often. Probably, physical remoteness plays a role in this context.

Spending on liquor is another factor leading to erosion of the resource base at household level. We tried to probe this issue through PRAs as well as through the sample survey. It was observed that almost all the households indulge in liquor consumption during some parts of the year. The average annual expenditure on liquor as well as tobacco reported by the sample households is Rs. 1094, which is about 17 per cent of the estimated expenditure on food. The actual expenditure however, is likely to be higher than this.

It is quite likely that the above changes have influenced the households at differential rates. Those with better resource base, close affinity with the social institutions, and a possibility of greater mobility not for work alone, might have benefited more; the rest remained marginalised from all these processes. Overall, therefore, it appears that those with better land (plus irrigation) can manage to escape chronic poverty. Among the rest, those with some base of natural, social and political capital can escape it for some time thus, turning into a transient and/or chronic but less severely poor. And the rest become chronically as well as severely poor. This is perhaps why we observe Karchali having a larger proportion of chronic but, less severely poor as compared those experiencing severe-chronic poverty.

4.9 Decentralisation and Community Participation

The revival of Panchayati Raj Institutions (PRI) is an important development, which potentially, could influence poverty reduction in the area. But, the experience so far, has indicated that devolution of financial and administrative powers with the PRIs have resulted in further consolidation of power among those who are already powerful. In fact, the process of decentralisation of developmental as well as welfare oriented programmes has led to new forms of equations and nexus between the traditional leaders and the neo-rich or the educated elite in the rural communities. To a large extent this has worked through the all pervading system of `contracting out' the actual execution of many of the developmental programmes, which in turn, breed corruption and co-option of a few individuals who get assured share in the funds being spent under the various developmental programmes. This kind of a nexus is more difficult to break because it is wide spread and also rooted in the very community, whose welfare is under stake. Besides these, actual functioning of some of the institutions of decentralised governance is far from desirable.

The community in both the study villages have expressed that Gram Sabha meetings are not organized on regular basis and consequently their participation in Gram Sabha has significantly

reduced in last few years. Unfulfilled expectations and livelihood struggles (migration) also do not create conducive environment for larger participation of the community. The community feels that programmes and developmental works are unequally distributed. General perception is that benefits are accruing to the people and village to which the *Sarpanch* belongs. Local demands and needs do not form a part of the activities of the Panchayat. According to the villagers, Jati Panchayat, the most potent social institution in tribal areas, is redundant in development of village.

If nothing, the political decentralization has at least created a new set of political elites, some of them are corrupt and self-serving. In Kirchali, the *Sarpanch* embezzles welfare payments for pensioners and the disabled. He retains pension and other welfare payments, as well as government disbursements, distributing small sums in an unpredictable and idiosyncratic manner during religious and cultural festivals (e.g. Diwali). The discretionary nature of his disbursements could be seen as reinforcing existing patron-client relationships. He has used the retained funds to build a concrete house and pass benefits to a small group of cronies. Another possible indicator of corruption is the failure of the teacher and assistant teacher to attend the village school. They are rarely present although they are paid a salary, implying that the *Sarpanch* signs the necessary document verifying their attendance.

On the other hand, the bureaucracy has been replaced by political elites and the expectations of community participation in the decision-making have remained a distant dream. The community recounting the support that Panchayat provides proclaims that identification of households below poverty line means including well to do in the list; prioritizing the asset transfer beneficiaries, *Jeevan Dhara* loan, and *Jawahar Gram Samridhi Yojana* means inclusion of coterie of Sarpanch; creation of infrastructure like link road, school building, hand pumps, *Indira Awas Yojana* means benefits for the people living in *Sarpanch's* village. The only benefit the community has received is ration cards from Panchayat for subsidised food. *Sarpanch*, say the villagers, would never say `no' to their requests, but would never fulfill any. But the *Sarpanch* say that his hands are tied for, prioritization is under instructions of the government officials. Moreover, a large part of fund flow is predetermined by state run schemes and united allocation to meet local needs is inadequate to meet the expectations of the community.

5. Summary of the Major Findings

The foregoing analysis of the people, their livelihood, and the changes experienced over time thus, bring out two important observations: (i) increasing population pressure, in absence of a significant improvement in crop technology and avenues for occupational diversification, has pushed a large number of rural households into a spiral of `poor resource base, limited borrowing capacity, and out-migration'. But, options and outcomes of migration are also fairly limited, which in turn, creates conditions of prolonged under-nourishment, and low human capabilities. The droughts only aggravate these already stark conditions, under which the poor have to eke out their meager livelihood. The children borne in these households are most likely to inherit poverty, which may accentuate over time primarily because of the continued erosion of their resource base. Droughts and exploitative credit institutions tend to worsen their conditions. And (ii) the state has made several interventions in terms of provision of physical infrastructure, settlement of land rights, diffusion of crop technology, public distribution system for food, and special programmes for poverty alleviation. Most of these have made some inroads into people's livelihood base. But, these interventions cannot help completely overcome the basic resource constraints faced by the poor. To a large extent, this is because of the fact that most of the

interventions influencing the natural resource based livelihood systems are undertaken on piecemeal basis often focusing on individual households rather than the resource or the community per se. On the other hand, the institutions based interventions like provision of health, education credit services are almost defunct primarily because of the power structure and corruption that cripple the system. Breaking these thick walls would thus, need multiple and prolonged efforts, which could mitigate some of the basic constraints faced by the people. It may however, be recognized that these all are intermittent remedies. The solutions ultimately, would lie in restructuring the macro policies pertaining to property rights and access to resources, sectoral priorities, social mobilization. Unless these issues are addressed, political decentralization per se, may not bring substantial improvements in people's livelihood base besides improving the governance. Overall therefore the analysis bring out three important observations with respect to the questions raised in the initial part of the paper.

First, while developmental processes as well as interventions by the state have exerted positive influence among a large proportion of the rural households, the actual impact is slow vis-à-vis the population growth, and also limited mainly to landed households with irrigation.

Second, to a large extent chronic poverty is rooted in structural factors like access to land, water, and health services resulting in unplanned growth of population.

And third, the state-intervention and also migration as a coping mechanism seem to have created a differentiated impact among poor households depending mainly on their economic and social capital. This might imply polarization within a tribal community though, the empirical evidence is somewhat limited to draw any firm conclusions. Instead what appears to more likely is a shift in the locus of power rather than increasing polarization *per se*.

While the above findings are more or less in conformity with the existing understanding on rural poverty in India, future research should therefore need to focus on examining the impact of physical remoteness and socio-political marginalisation of tribals on poverty in general and chronic poverty in particular. In this context the present study may also offer some important lessons for methodology to be adopted for the future research. These are:

i. incorporating time dimension into the wealth ranking exercise along with the main reasons for changes in the wealth- rank status is an effective method of capturing long duration poverty among households.

ii. The above observation is supported by the fact that there is a close correspondence between the typology of poverty prepared by using participatory as well as survey method based on estimates of consumption expenditure food and other major items including medical expenses as well as for the various kinds of social functions.

iii. While there are problems of recall, especially beyond three to four years, using a notional reference of a `normal year' is quite a handy tool to capture the impact of droughts and thereby reflecting on transient vs. chronic nature of poverty.

iv. Similarly, changes in the asset base and the reasons for that can also help capturing the impact of droughts or any other shocks faced by the households. Details about coping mechanism during the droughts can help verifying some of the information pertaining to chronicity of poverty.

v. The approach of combining wealth ranking and a sample survey offers an ample scope for modification. Whereas there is a significant scope for making the participatory tools directly focused on the chronicity of poverty, the sample survey could also be used for preparing a good base for detailed case studies and life histories. Together a combination of participatory methods, sample survey and case studies might help evolving a fairly good mapping of the typology of poverty, and at the same time help understand the processes that are at work, both at community as well as individual levels, in terms of impacting the poverty conditions.

Table 1: Changing Scenario in South-West Region in Madhya Pradesh and the State: Some Features

Variable	Region 6		M.P. State	
	1981	1991	1981	1991
Population growth rate		2.53		2.68
Sex ratio	0.94	0.94	0.94	0.93
N.S.A. of geographical area	42	49	42	44
Irri. Area % of GCA	6	18	8	13
Food prod./per capita (Kg.)	138	180	183	208
Value agri. Output/per hectare (Rs.)	679	1993	803	2170
Value agri. Output/per capita (Rs.)	274	747	284	755
% of tribal pop.	32	33	23	23
% of S.C. pop.	12	12	14	15
Urbanisation %	20	23	20	23
Literacy %	28	47	28	44
Labour force %	39	44	38	43
Labour force (%) employed agri.	76	77	76	77
Labour force (%) employed other	24	23	24	23
Infra. Dev. Index	65	71	62	73
I.M.R	149	110	142	104
Head count ratio	NA	58	NA	NA
No. of ration shops per village	NA	0.3	NA	0.2

Source: CMIE, District Profiles (1985 and 1993) Centre for Monitoring Indian Economy, Mumbai

* Obtained from Human Development Report for Madhya Pradesh (1998), Government of Madhya Pradesh, Bhopal

Table 2: Change in Distribution of Rural Household's by MPCE Groups: 1983 and 1993-94

MPCE Category	SWMP		M.P. State	
	1983	1993-94	1983	1993-94
9. Very poor	50.7	40.0	41.8	14.3
10. Poor	23.8	24.6	23.7	22.2
11. All poor (1+2)	74.5	64.6	65.5	36.5
12. Potentially poor	11.1	13.8	13.9	20.6
13. Non-poor	14.4	21.6	20.6	42.9
All households	100.0	100.0	100.0	100.0

Table 3(a): Factors Influencing Monthly Per Capita Expenditure in Rural Area: South West M.P

	1983 (38th Round)	1993-94 (50th Round)
Households in the MPCE 1 & 2	(-) Household size	Lease in of land (-) Lease out of land Occupational diversification Literacy (-) Household size
All households	Literacy	Landholding Area under irrigation (-) Household size

Table 3(b): Factors Influencing Monthly Per Capita Expenditure in Rural Area in M.P

	1983 (38th Round)	1993-94 (50th Round)
Households in the MPCE 1 & 2	Area under irrigation Occupational diversification Literacy (-) Household size (-) Sex ratio	Landholding (-) Lease out of land Literacy (-) Household size
All households	Landholding (-) Lease out of land Area under irrigation Literacy (-) Household size (-) Sex ratio	Landholding Area under irrigation Literacy (-) Household size

Note: The MPCE categories consist of three out of 12 groups created by the NSSO. For 38th round, the number of groups was 13. Hence, the MPCE category 1, consists of the lowest 4 instead of 3 groups.

Table 4: Distribution of Households by Well-being Categories

Well-being Cateogires	Karchali		Pospur	
	No	%	No.	%
Better-off	46 (60)*	21.7	5 (4)	12.2
Medium	38 (60)	17.9	18 (17)	44
Poor	128 (60)	60.4	5 (4)	12
Severely poor	-	-	13 (12)	32
All	212 (180)	100	41** (37)	100

* Indicate the status that prevailed 10 years back

** can be extrapolated for 200 households in the village

Note: Based on Welath Ranking Exercise

Table 5 (a) Average Expenditure on Three Major Sets of Consumption (Reference Year)

Exp. Category	Cereal	Other food	Other exp.	Total exp. (Ref. Year)
Pospur				
(i) Severe Poor				
<1000 (2)	2100	2751	1787	6638
1000-1500 (7)	3300	3230	3235	9765
1500-2000 (4)	4050	3412	5905	13367
(ii) Moderate Poor (18)	6303	8228	14115	28647
2000-2950 (16)	6000	4652	6572	17224
(iii) Non-poor>2950				
All (47)	5382	5622	8703	19709
Karchali				
(i) Severe Poor				
< 1000 (-)	-	-	-	-
1000-1500 (-)	6700	3674	4816	15190
1500-2000 (6)	6368	7128	5585	19082
(ii) Moderate Poor				
2000-2950 (22)				
(iii) Non-poor > 2950 (9)	8666	9404	14177	32249
All (37)	6981	7121	7550	21653
Combined	6086	6283	8195	20560

Table 5 (b): Percentage Distribution of Three Sets of Consumption in Total Household Expenditure by Expenditure Class (Reference Year)

	Pospur				Karachuli			
	Cereal	Other food	Other	All	Cereal	Other food	Other	All
< 1000	31.6	41.5	28.9	100	-	-	-	-
1000-1500	33.8	33.1	33.1	100	-	-	-	-
1500-2000	30.3	25.5	44.2	100	44.1	24.2	31.7	100
2000-2950	34.8	27.0	38.2	100	33.3	37.3	29.3	100
> 2950	22.0	28.7	49.3	100	26.9	29.2	44.0	100
All	27.3	28.5	44.2	100	32.2	32.9	34.9	100

Table 6: Distribution of Sample Households by Levels of Poverty During Reference and Normal Years

Levels of Poverty (Rs. Per capita/Year)	Pospur		Karchuli	
	Rreference year	Normal year	Rreference year	Normal year
I Severely poor	(27.6)	(17.0)	(16.2)	(13.5)
< 1000	2	-	-	-
1000-1500	7	3	-	-
1500-2000	4	5	6	5
Sub-total	13	8	6	5
II Moderate Poor	(34.0)	(29.7)	(59.4)	(59.4)
2000-2950	16	14	22	22
All poor	29 (61.7)	22 (46.8)	28 (75.7)	27 (72.9)
III Non-Poor	(38.3)	(53.2)	(24,3)	(27.0)
> 2950	18	25	9	10
All	47 (100)	47 (100)	37	37

* Figures in parentheses indicate percentage to total household

Table 7 Distribution of Households According to the Typology of Poverty

	Pospur	Karchali	Combined
Severe Chronic Poor (SCP)	13 (27.6)	5 (13.5)	18 (21.4)
Moderate-Chronic Poor (MCP)	9 (19.1)	22 (59.4)	31 (36.9)
Severe Transient Poor (STP)	-	-	-
Moderate Transient Poor (MTP)	7 (14.9)	1 (2.7)	8 (9.5)
Always Non-Poor	18 (38.3)	9 (24.1)	27 (32.1)
All	47 (100)	37(100)	84 (100)

Table 8: Correlates of Poverty Among Sample Households (Reference Year)

	Pospur		Karchali		Combined		All
Land-Base							
Landless+Marginal	7 (24)	3 (17)	4 (14)	- (0)	11 (19)	3 (11)	14 (16)
1-5 acres	17 (59)	9 (50)	19 (68)	6 (67)	36 (63)	15 (56)	51 (59)
> 5 acres	5 (17)	6 (33)	5 (18)	3 (33)	10 (17)	9 (33)	19 (22)
Access to irrigation	12 (41)	8 (44)	13 (46)	5 (55)	25 (44)	13 (48)	38 (44)
Per capita Landholding (Acres)							
Up to 0.20	27.6 (8)	27.8 (5)	17.9 (5)	11.1 (1)	22.8 (13)	22.2 (6)	22.6 (19)
0.21-0.70	48.3 (14)	27.8 (5)	57.1 (16)	55.6 (5)	52.6 (30)	37.0 (10)	47.6 (40)
> 0.70	24.1 (7)	44.4 (8)	25.0 (7)	33.3 (3)	24.6 (14)	40.8 (11)	29.8 (25)
At least one adult literate member	19 (65)	11 (61)	9 (32)	6 (67)	28 (49)	17 (63)	45 (53)
At least one migrating member	26 (90)	17 (94)	13 (46)	4 (44)	39 (68)	21 (78)	60 (71)
Up to 50% migrating workers	6 (21)	4 (22)	5 (18)	1 (11)	11 (19)	5 (19)	16 (19)
> 50% migrating workers	20 (69)	13 (72)	8 (29)	3 (33)	28 (49)	16 (59)	44 (52)
	29 (100)	18 (100)	28 (100)	9 (100)	57 (100)	27 (100)	84 (100)

Please insert Table 4 (i.e. Table 3 in the original file).

Appendix Table 1.1: Changing Scenario in Districts of SWMP and MP States

Variable	M.P. State		Betul		Hosangabad		East-Nimar		West-Nimar	
	1981	1991	1981	1991	1981	1991	1981	1991	1981	1991
Population growth rate		2.7		2.8		2.6		2.4		2.4
Sex ratio	0.94	0.93	0.97	0.97	0.91	0.90	0.94	0.94	0.95	0.95
N.S.A. of Geographical area	42	44	39	40	44	46	40	64	46	47
Irri. Area % of GCA	8	13	8	11	4	27	6	22	7	12
Food prod./per capita (Kg.)	183	208	141	151	184	281	124	161	117	146
Value agri. Output/per hectare (Rs.)	803	2170	463	1678	662	2739	850	1546	739	2010
Value agri. Output/per capita (Rs.)	284	755	195	680	289	1202	317	514	279	665
% of tribal pop.	23	23	36	37	16	17	26	27	43	46
% of S.C. pop.	14	15	11	11	16	16	11	11	10	10
Urbanisation %	20	23	15	18	25	27	27	35	15	15
Literacy %	28	44	28	46	35	53	31	59	23	36
Labour force %	38	43	43	47	34	37	40	44	38	46
Labour force (%) employed agri.	76	77	79	82	68	71	74	70	83	85
Labour force (%) employed other	24	23	21	18	32	29	26	30	17	15
Infra. Dev. Index	62	73	39	55	92	93	80	80	50	54
I.M.R	142	104	148	128	164	109	154	100	129	104
Head count ratio	NA	NA	NA	65.6	NA	39.7	NA	50.0	NA	75.6
No. of ration shops per village	NA	0.2	NA	0.3	NA	0.3	NA	0.4	NA	0.1

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