Patterns, processes of reproduction, and Policy Imperatives for Poverty in Remote Rural Areas: A Case Study Southern Orissa in India

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1. Introduction

Given the vast geographical area, ecological-cultural diversity, and deep-rooted social stratification, spatial inequality is one of the important features of poverty scenario in India. Not only that there are significant inter-regional variations, but there exist a large number of spatial poverty traps characterised by the four major categories of regions: remote, low potential or marginal, less favoured, and weakly integrated. In fact, there is often a significant overlap among these categories of spatial poverty traps. The multiple and mutually reinforcing disadvantages or deprivation faced by most of the spatial poverty traps has lead to reproduction of poverty as manifested by the fact that incidence of poverty in these regions continue to remain significantly high in terms of absolute levels as well as comparative ranking.

Since a large proportion of India's poor live in rural areas, poor natural resource endowment or access thereof is among the most important driving forces that sustain and drive initial poverty into long duration and multi-dimensional poverty conditions. Notwithstanding the marginal improvements, poor people in these regions find it particularly more difficult to exit poverty owing unholy alliance between poor agronomic potential and limited scope for diversification within rural economies; weak infrastructure and remoteness; and social or political marginalisation.

Within rural areas, poverty is concentrated in five out of the 17 major (undivided) states, which account for nearly two thirds of poor people in the country. These states are: Bihar, Orissa, Uttar Pradesh, Madhya Pradesh, and Maharashtra. Further the seven regions with significantly high proportion of poor and very poor population belong to the same five states. At a more disaggregated level, 51 out of the 52 most deprived districts, based on human development index, belong to four out the five states; the exception is Maharashtra, which is replaced by Rajasthan.

To a large extent these areas, located mainly in central-eastern regions, are characterised by forest dominated economies with limited entitlements to the relatively rich natural resources; belong to socially marginalised communities such as scheduled tribes and castes; low level of industrial growth and market development; lower attainment in terms of health and education and the higher population growth; and above all, feudal characteristics of the state. This kind of spatial concentration of poverty is also found within states like Maharashtra and Gujarat that are highly industrialised and economically developed. There are of course, exceptions to this larger pattern. There are instances of forest economies especially in the North-Eastern states where poverty is not so widespread or acute, mainly because of the relative absence of social stratification.

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Strangely, incidence of poverty is generally lower among areas with low agronomic potential such as dry land regions located in large parts of the western-southern regions in the country. Historically, these regions are prone to transient poverty with occurrences of droughts. But, the scenario is likely to change fast as some of the most critical coping strategies such as ground water irrigation or out-migration are likely to fail. One of the important manifestations of the changing scenario is the growing urban poverty in the regions where rural poverty is low. Hence, viewing in a dynamic context, many of the dry land regions in India are likely to fall into a deep spiral of chronic poverty.

Another important category consists of those areas that are caught in long drawn social-political conflicts, making it almost impossible to trigger the processes of economic growth and/or formation of human capital. Such pockets are located in several pockets across many states like Assam, Bihar, Manipur, Jammu and Kashmir, parts of Andhra Pradesh and now even Orissa.

Obviously there is no strictly uniform pattern nor, there are uniquely distinct situations. The generalisability of the pattern reduces, as one moves from macro to micro contexts. Hence, both have important bearings on how the policies actually get unfolded at the level of specific spatial contexts.

The state policies in India have a long history of addressing the issue of developing 'backward areas', defined by using multiple categorisations. These policies, at best, have achieved only limited success. Apparently, the reasons for limited success re twofold: First, the central focus of the policies has been on 'mainstreaming' these areas into the larger processes of economic development as against addressing the very root cause of poverty and reproduction thereof. The second reason pertains to the fact that most of the policies have stopped at making special financial allocation for the 'backward areas' without ensuring institutional-organisational-administrative machinery in pace in order to use the funds effectively. An associated aspect to the second reason is that most of the funds for development of backward areas come from the Central Government. While this helps ensuring committed flow of funds irrespective of the financial conditions of the state (which is often very poor), it in fact bypasses the critical processes of contestations and negotiations among chronically poor, transient poor and the relatively better off or the affluent at the level of the states, which in fact is at the helm of implementing the funds received from the central Government.

The recent initiatives by the Planning Commission of India for giving special priorities to the most backward and also conflict afflicted districts in the country, though laudable, seems to be following the same pattern. The need therefore is to re-examine the policies of economic development both at macro as well as micro level. There is certainly a need to do away with planning *only* at macro level. The micro level context of the spatial poverty traps have to be the basis for developing strategies for development, especially for agriculture and human capital formation, at macro as well as micro level.

It is in this context, the paper will address following three objectives:

i. To identify areas with high incidence of poverty over a longer period of time and examine the important features associated across states and regions in India.
ii. To discuss how multiple disadvantages drive chronic poverty (severe, long duration, and multidimensional) especially in forest based economies in the country. This is demonstrated through a case study of Orissa by comparing regions (north and south), and also districts within southern region in the state.

iii. To reflect on the policy approaches and draw implications for a more effective policy framework for ameliorating chronic poverty in the regions of spatial poverty traps.

The analysis is divided into five sections including this introduction. The next section describes spatial concentration of poverty across states and regions and India by identifying regions that have remained in higher intensity of poverty over a period of 12-13 years since 1987. Section 3 looks into the situation in Southern region Orissa, the state with the highest incidence of poverty, in a comparative framework with other regions in the state. This is followed by a case study of four villages in Koraput district in Southern Orissa, experiencing severe poverty over a long period of time. The last section (5) highlights main findings and discusses policy implications. The analyses in the paper draws upon the various studies, including and overview chronic poverty in remote rural areas, carried out under the aegis of Chronic Poverty Research Centre in India (Shah and Guru (2004) and Shah, et. al (2007).

2. Spatial Concentration of Poverty in Rural India

2.1 Poverty among States and Regions in India

According to the recent estimates, poverty (head count ratio-HCR) in India has declined from 36.02 percent in 1993-94 to about 28.27 per cent in 2004-05 (Dev and Ravi, 2007). The rate of decline in poverty works out to be 0.7 percentage point per annum, which fell from 0.85 during the previous decade i.e. during 1983 to1993-94

The spatial concentration of poverty however, has remained more or less same. Whereas the top five states having incidence of poverty during 1983 were: **Orissa, Bihar, Tamil Nadu and West Bengal** (with almost similar poverty ratios), **Madhya Pradesh, and Uttar Pradesh**, more or less the same states continued to top the list of states (See Table 1). By 2004-05 **West Bengal got out of the list of the five poorest states, replaced by Maharashtra**. Together the top seven states during both the years, constituted nearly 74 per cent of all the poor during 1983, which has increased to nearly 78 percent by 2004-05. Overall there has been an increase in concentration poor among the major states in the country. The increase in the state's share poor population has been registered by five out of the seven states except West Bengal and Tamil Nadu.

Table 1: Concentration of Poverty among Major States in India

	1983			2004-05		
States	HCR	Rank	% share	HCR	Rank	% Share
Orissa	65.31	1	5.70	47.07	1	6.03
Bihar	62.71	2	14.64	41.53	2	16.53
Madhya Pradesh	49.23	5	8.61	37.21	3	10.79
Maharashtra	43.13	7	9.04	29.95	5	10.36
Uttar Pradesh	46.94	5	17.42	33.25	4	20.93
Tamil Nadu	53.48	4	8.47	28.31	6	6.10
West Bengal	53.60	4	9.77	25.67	7	7.23
All India	44.93		100	28.27		100

Source: Table 8 in dev and Ravi, 2007.

At regional level (below which the official estimates of poverty are not available), the scenario is somewhat similar (Table 2). It is observed that the top 20 regions with higher incidence of poverty have remained more or less same during 1983 till 1999-00. Region wise estimates for poverty are yet to be worked out. While there are problems of comparability of poverty estimates during 1999-00, it could be assumed that it may not have influenced the relative ranking during the same survey.

Table 2: Top 20 Regions by Levels of Poverty (HCR) Major States in India

No. of NSS-Regions

States	43rd round	50th Round	55th Round	Change
	1987	1993-94	1999-00	94/94 -99/00
1.Orissa	3	3	2	-1
2.Madhya Pradesh	6	6	6	NC
3.Maharashtra	3	3	2	-1
4.Bihar	3	3	3	NC
5.Andhra Pradesh	1	1	2	+1
6.Assam	1	1	2	+1
7.Tamilnadu		1	1	NC
8.West Bengal			1	+1
9.Uttar Pradesh	1	2	2	NC
10.Karnataka	1	1	0	-1

Note: NC=No Change

Source: Based on the estimates prepared by Jha, R. (2003)

Table 2 reveals that the top 20 regions were spread over 8-10 out of the 17 major states in India. The three surveys conducted during 1983 and 1999-00, four regions had exited the list, whereas five regions had entered the list of the poorest regions. The five regions having **exited** the list are: **Inland-Northern Maharashtra; Inland Eastern Maharashtra Coastal Orissa, Inland northern Karnataka**. Against these the regions having **entered** the list are: **Inland Southern Andhra Pradesh; South Western Andhra Pradesh; Plain-western Assam; Assam Hills;** and **Western Plain West Bengal**.

We tried to identify 15 out the 20 poorest regions that had remained common during all the three points of time (See Table 3).

Table 3: List of 15 Regions Appearing in the Three NSSO=Rounds

Sr. No.	Regions in Descending Order	Category of Region
1	Orissa-Southern	Forest-based
2	Madhya Pradesh-South Central	Forest-based
3	Madhya Pradesh-Chhatisgadh	Forest-based
4	Orissa-Northern	Forest-based
5	Madhya Pradesh-South western	Forest-based
6	Maharashtra-Eastern	Forest-based
7	Bihar-Southern	Forest-based
8	Madhya Pradesh-Central	Other
9	Bihar-Central	Dry land
10	Uttar Pradesh-Central	Other
11	Tamilnadu-Coastal Northern	Forest-based
12	Bihar-Northern	Other
13	Madhya Pradesh-Vindhya	Forest-based
14	Madhya Pradesh-Malwa Platau	Other
15	Uttar Pradesh-Eastern	Dry land

Note: Categorisation of Regions is based on Shah and Guru (2004).
Source: as in Table 2.

It is observed that these 15 regions are spread over the six states, which also correspond with the states listed in Table 1. What is however, important is to note that a majority (9 out of the 15) regions belong to the forest based areas, as per the three-way classification of regions worked out by Shah and Guru (2004).

The scenario above clearly suggests a close link between forest-based economies and high incidence of poverty in the country. This phenomenon has been examined by using region level estimates for rural poverty during the early nineties.

2.2 Correlates of Poverty among Different Categories of Regions

Correlates of poverty have been examined by using 16 variables representing natural, human, and physical assets along with economic development. While most of these variables are estimated at district level, we have used them to derive regional estimates by applying appropriate weights. There are of course limitations in using district level estimates for variables like extent of irrigation, waste land, and forest area as these estimates are based on Land use data, which often do not capture the ground reality. Given these limitations, we have tried to capture some broad pattern of correlates of income poverty across three categories of regions, which could be considered as predominantly Forest-based, Dry land, and other. The variables used for the analysis pertain to socio-economic and natural resources, for which district level estimates were readily available.

Table 4 presents the results of the correlation exercise. It is observed that at macro level, i.e. for all the regions taken together, poverty is significantly associated with natural resource endowment in terms of irrigation along with land and labour productivity on the one hand, and electricity, and infrastructural development on the other. Higher land and labour productivity in agriculture in turn, also induces rural (male) wages to rise, which in turn has a poverty reducing impact. To a large extent, this confirms the existing evidence on the critical role of agricultural growth in poverty reduction brought out through more sophisticated analyses at the all India level. Incidentally, rural poverty is found to be closely associated with urban poverty at regional level. Do the same dynamics operate in each of the RRAs, i.e. dry land and forest-based regions?

Table 4: Correlates of Rural Poverty (HCR) Across NSS Regions in India: 1993-94

Variables	All	Dry	Forest	Other
Poverty				
OPL Rural(87-88)				
OPL Rural(93-94)				
OPL Urban(87-88)	0.331*			0.696**
OPL Urban(93-94)	0.462**	0.570*		0.670**
Demographic				
Population Growth				
Household Size				
Human Capabilities				
Female Literacy			-0.693**	
Child Mortality				
Land				
Land Productivity	-0.274*			
Rural Wage (Male)	-0.289*			
Waste Land		-0.590**		
Labour Productivity	-0.394**	-0.510*	-0.455+	-0.467*
Gross Area Irrigated	-0.297*			-0.485*
Economic Diversification				
Rural NFW	-0.246+		-0.544*	
Infrastructure				
Electricity	-0.485**		-0.558*	-0.625**
Safe Drinking Water				
Medical Facilities				
Post & Telegraph	0.386**	0.601**	0.507*	

The results in Table 4 suggest that the dynamics are somewhat different. For instance, within dry land regions, natural endowment (e.g. irrigation) is not influencing poverty; nor is infrastructure as was observed at macro level. What however seem to have been unfolding are the dynamics of out-migration, especially from the areas having a larger proportion of wasteland. Strangely, wasteland is found to be negatively associated with poverty, which *prima facie* may suggest higher incidence of out-migration from these regions. This in turn, is reflected in terms of a positive correlation between rural and urban poverty within a region. Out-migration also results in a reduced workforce in agriculture, and thereby has a negative association with poverty. Together this may indicate lower poverty in areas with high incidence of wasteland and higher level of labour productivity presumably because of out-migration. As a result a part of the rural poverty may get shifted to urban areas and eventually get evened out across the two. This phenomenon is likely to have been reflected by relatively higher rate of urbanisation in the states with predominance of dry land region vis-à-vis forest based regions. While we do not have region wise data to substantiate the migration-mediated impact on poverty, the existing literature does support this phenomenon at macro level (NIRD, 2000) as well as state level (Shah, 2006).

Compared to dry land regions, the pattern in the forest-based regions is different. Here, migration does not seem to be working as an important correlate of poverty. For, rural poverty does not have any significant association with urban poverty. Instead, what seems to be effecting is occupational diversification within rural areas, rather than in urban areas as might be the case in dry land regions. Similarly, access to electricity is also found to be important for reducing poverty in forest-based regions. Labour productivity once again turns out be a significant correlate of rural poverty with an inverse relationship.

The remaining regions in the category of ‘other’ show a somewhat similar pattern to that observed at macro level. Here, irrigation turns out to be an important correlate of poverty with electricity and labour productivity also having significant correlation. Urban poverty is also positively associated with rural poverty. To an extent, this might be due to the fact that many of the high potential rain-fed regions fall into this category, where incidence of both rural as well as urban poverty is high.

It may however be noted that regions with a significantly high proportion of rural poverty (i.e. 50 per cent or more) are found to be concentrated mainly in forest based regions. Nevertheless, pockets of widespread poverty like these exist in all the three categories of regions. To a large extent this could be attributed to the fact that the observed level of rural poverty is already mediated by population movements (say, from rural to urban and from dry to wet areas); and also through the processes of economic diversification, determined by certain exogenous factors. What we observe therefore is a net outcome after accounting for these two (and some other) mediating processes.

3. Remoteness and Chronic Poverty in Forest-based Regions in Orissa

3.1 The Context

As per the latest estimates, Orissa has remained the poorest among the major states in India. In 2004-05 the poverty ratio (HCR) of Orissa was 47.57 per cent; 47.76 in rural and 43.34 per cent in urban areas (Dev and Ravi, 2007). This has pressed alarm bells among planners, practitioners and international donors. This, in turn, has triggered a sense of urgency for salvaging the situation with a thrust on expediting growth. Agricultural growth occupies a special significance since the sector, of late, has demonstrated direct and significant impact on poverty reduction across states, including some of the high-poverty states in the country. While the need to foster growth, particularly agricultural growth, can hardly be over-emphasised, what is missing in the emerging perspective on linkages between growth and poverty reduction is integration with one of the state's most critical segments i.e., the forest based economy. The segment has special significance not only in terms of its contribution to the state's revenue but also in terms of supporting livelihood of the poor besides rendering environmental services that are often realised beyond the state boundaries.

Forests of Orissa (accounting for 30 per cent of the land) support about 40 per cent of the population (constituting half of those in poverty in the state).[2] Notwithstanding this significant link between forest and poverty, the growth and developmental discourse in the state continue to address the issues pertaining to forest-resource management and livelihood in a disjointed manner.[3] The issue, therefore, is not so much of marginalisation of tribals as of segregating forest resources from the mainstream strategies for growth that could reduce poverty among forest dwellers in the state.

Given this backdrop, this section examines pattern of poverty across regions in Orissa, and discusses the reasons poverty scenario varies even across Northern and southern Regions-both being predominantly forest-based.

3.2 Regional Disparity and Social Exclusion: An Overview of Poverty in Orissa

Poverty across Social Groups and Regions in Orissa

The important features characterising the poverty scenario in Orissa are: (a) high incidence with significant regional disparity; and (b) high concentration in forest based economy in the state. The southern region emerges as a clear outlier in the process of poverty reduction experienced by the state since the early eighties. The estimates prepared by Haan and Dubey (2003) indicate that whereas rural poverty, measured in terms of Head Count Ratio (HCR), had reduced significantly in the coastal and southern region, incidence of poverty in

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[2] It has been estimated that 25 per cent of the total population that belongs to scheduled tribes (and located mainly in forest based regions), account for 40 per cent of the total rural poor in Orissa (Glinskaya 2003: 14).

[3] For the 10th Five Year Plan, the Ministry of Environment and Forest has adopted an Integrated Approach for Forest Conservation and Livelihood for the Forest Communities. This is being facilitated by converging various centrally sponsored schemes under the Forest Development Agencies (FDA) constituted in every forest division. The persistence of high poverty in Southern Orissa has also led to a realisation that restoration of ecological balance between water, soil, plants and requirements for human as well as livestock population should form the basic consideration for developmental strategy for the area. The Long Term Action Plan (LTAP) for the KBK-Region is an off-shoot of this approach. What is however still missing in this approach is that plans for forest development and sustainable livelihood support continue to remain as separate entities; employment generation is the link between the two.

the southern region had registered an increase from 81 per cent in 1983 to 87 per cent in 1999-00 (See Table 5). The urban poverty in southern region also increased initially during 1983 to 1987-88, and thereafter declined.

Table 5: Poverty among regions in Orissa (Head Count Ratio–in percent terms)

Year	NSS-Regions			Orissa State
	Coastal	Southern	Northern	
Rural				
1983	57.97	80.76	75.22	68.43
1987-88	48.37	82.98	61.01	58.62
1993-94	45.33	68.84	45.82	49.80
1999-2000	29.30	86.16	50.98	48.13
Urban				
1983	46.15	45.48	54.35	49.66
1987-88	42.11	52.93	39.90	42.58
1993-94	47.24	41.94	32.54	40.68
1999-2000	41.65	43.97	45.81	43.51
Combined				
1983	56.47	72.28	72.28	66.24
1987-88	47.67	58.16	58.16	56.75
1993-94	45.57	43.92	43.92	48.64
1999-2000	31.51	50.10	50.10	47.37

Notes: (i) Compiled from Haan and Dubey (2003: 6)
(ii) NSS-Regions consist of undivided districts as follows:
Coastal: Baleshwar, Cuttack, Puri, Ganjam
Southern: Phulbani, Koraput, Kalahandi
Northern: Sundargadh, Balangir, Sambalpur, Kendujhar, Dhenkanal, Mayurbhanj

A closer look at the estimates in Table 2.1, however suggests two important features:

i. While the rise in rural poverty has been experienced in both southern as well as northern regions, the increase is significantly higher in the case of the southern region.

ii. Poverty in southern region had increased even during the early part of the 1980s. The only period during which poverty in southern Orissa had declined, was between 1987-88 and 1993-94.

It is likely that the marginal increase in poverty – both rural and urban during the two sub-periods (1983 to 1987-88 and 1993 to 1999-2000) could have been marked by severe drought conditions during the respective financial years. Similarly, it is plausible that a part of the increased poverty during 1993-94 and 1999-2000 in both the southern and northern regions could be due to the problems in converting physical units of food grain into consumption expenditure by using the market prices than the price actually paid by the poor (Haan and Dubey 2003). Nevertheless, it is argued that even if one uses a 10 per cent lower poverty line for the southern region, the incidence of poverty still remains around 77 per cent (Panda 2004).

Poverty among Social Groups

Like in most parts of India, SCs and STs in Orissa suffer double disadvantages i.e., being socially as well as economically marginalised. The available estimates suggest that in 1999-2000 these communities constituted 64 per cent of the poor in Orissa. A significantly large proportion of them are likely to be located in forest-based districts, especially in southern Orissa.

An important question that often arises in the context of high incidence of poverty among tribals is whether poverty among tribal communities is high mainly because of their social identity and marginalisation, or it is so more because of their forest-dependence and physical isolation. Since both the processes are simultaneously at work, it may be useful to examine this issue empirically in the light of the poverty estimates generated by Haan and Dubey (2003) for the year 1999-2000. Table 6 presents estimates of poverty by regions and by social groups. It is observed that whereas 73 per cent of the tribals are poor, the proportion for the same is significantly higher in the southern region, which consists of three out of the seven forest-based districts in the state. Conversely, the incidence of poverty among tribals is fairly low in the northern (61.7 per cent) and coastal (66.6 per cent) regions. In comparison, the non-SC/ST population in the southern region has higher incidence (77.7 per cent) of poverty even in comparison to STs in the northern and coastal region. This may imply that one could be better off being a ST person outside the southern region, as compared to being a member of any other community within the southern region.

Table 6: Head Count Ratio by Regions and Social Groups (Rural): 1999-2000

Regions	Social Groups			
	ST	SC	Other	All
Coastal	66.63	42.18	24.32	31.74
Southern	92.42	88.90	77.65	87.05
Northern	61.69	57.22	34.67	49.81
All (Orissa)	73.08	52.30	33.29	48.04

Note: Based on estimates by Haan and Dubey (2003)

The above observation thus lends support to the assertion made earlier about the overriding impact of forest-region on the high and increased incidence of rural poverty in Orissa.

This is very important as it may have significant bearing on agriculture-led strategy for growth and poverty reduction among these marginalised communities, which constitute 41 per cent of poor in the state. The relatively stronger impact of the spatial characteristic needs to be seen in the light of the fact that the tribals have relatively larger size of cultivable land as compared to all other social groups across regions in Orissa (Haan and Dubey 2003). Only 'other communities' in the northern region have similar size land holding as the tribals in the southern region. This suggests that ownership of land *per se* is not a major issue. Rather, the real issue with respect to the prospects of agricultural-growth induced poverty reduction in the region pertains to the agronomic potential of the region, where forest ecology takes priority over crop cultivation. As noted earlier, land owned by these tribals is likely to be on a sloped terrain, located upstream in the catchment of a watershed area, and to have poor connectivity with markets. While these are serious issues, the fact remains that even if the tribals own forest-land, there are severe limitations to ensuring livelihood security. Conceding that increasing connectivity may have adverse impact on the conservation objective in a forest based region, the livelihood options may have to be increasingly tilted towards forest-management, rather than towards increased extraction of forest resources. It is in this context that recent experiences with respect to NTFP-based livelihood support may hold special relevance.

A recent study by Padhi et al; (2005) suggests that factors such as better opportunity for non-farm employment, especially mining activities, combined with better wage rate and less constraining forest polices in the Northern region, seems to have led to relatively better outcome on poverty reduction in this region as compared to southern region Orissa. These factors work upon the two other favourable factors in the northern region i.e. the relatively lower incidence of exogenous shocks and lower extent of development induced displacement as compared to the southern region.

The following section dwells on some of these issues.

4. Poverty in Southern Orissa: A Case Study

Southern Orissa has a dubious distinction of having the highest incidence of poverty among rural regions in India. With as high as 87 per cent of the people living below the poverty line, poverty is most likely to be chronic among a large proportion of the poor in the region. This is what has been reflected in the fact that whereas incidence of poverty has increased in most of the forest-based districts of the state, poverty is found to be significantly higher in the southern region as compared to that in the north. The worst scenario prevails in Koraput (undivided) district, having as high as 92 per cent of people below poverty line (Panda 2003: 14). .

The study is based on four villages in Lamptaput block in the undivided Koraput district. Lamptaput, situated at distance of 35 km from Jeypore, a major trading centre in the district, has a relatively larger proportion of area under open (degraded) forest and is physically remote in terms of connectivity. Lamptaput is on the southern border, with mountains as natural boundaries between Orissa and Andhra Pradesh. Out of the four villages selected for the study, Hanumal and Kamel are located near the road, while Balel and Sindhiguda are about 5 km from the road. The more remote villages are almost the last points of habitation in the foothills of the mountains on the state-border (for details of the sample villages, see Appendix !).

The study is mainly based on the primary data collected from households in the sample villages.[4] Quota sampling method was used for selecting households for collecting primary information. 40 households were selected by random sampling from each village. The total sample size is 159 households since one household did not respond to the survey. Besides this, a number of group discussions were conducted in order to get a better understanding of issues pertaining to institutions and governance.

4.1 Remoteness in Koraput: Manifestations and Processes

This section tries to portray various factors of remoteness in Koraput districts, where 20 per cent of Orissa's rural poor live. The analysis is divided into two parts. The first part gives a brief description of how various socio-economic, political and physical factors have culminated into a situation of isolation and sustained high incidence of poverty, where even less than 1 out of 10 persons had crossed the poverty line by the turn of the last century. The second part presents a statistical profile and mapping of important features of Koraput district as they stand now.

The undivided Koraput district is characterised by certain special features – historical, natural and geographical. The district lies on a section of the Eastern Ghat and consists of five natural divisions having mean elevation of 3,000, 2,500, 2,000, 1,000 and 500 feet above sea level. A number of mountain ranges and isolated hills rise out of this tableland. The district has two parts, each characterised by a distinct type of rocks - the 2000 feet plateau of Jeypore with its much lower extension into the Malkangiri sub-division (present Malkangiri district), and the high hilly regions of the Eastern Ghat, lying between the Jeypore plateau

[4] Initially a complete listing of households was carried out by organising group-meetings and participatory rural appraisal (PRA). This exercise however, faced difficulty with respect to enumerating access/ownership of land, which is the most contentious issue in this forest based economy owing to inadequate land settlements and absence of proper land records on the one hand, and encroachment, as well as illegal shifting cultivation practices on the other. As a result, we tried to rely more on personal interviews based on sample households. Given the fact that communities within the sample villages are fairly homogeneous in terms of economic well being, and also that the villages are relatively small in terms of the number of households, a sub-set of households were selected for detailed enquiry.

and the Visakhapatnam coastal plains. The peculiar geographical setting has to a large extent made this region isolated from the plain coastal districts of Orissa. As a result the region has been able to preserve much of its varied and prolific wild fauna and flora. Moreover, due to this comparative isolation, its present aboriginal inhabitants have not undergone a radical change in their contact with the modern civilisation.

The major part of the present Koraput district was isolated for several centuries from the plains due to non-existence of communication. Outsiders never penetrated into it due to steep hills, fear of malaria and dense forest. The process of road construction started only after 1863 A.D., when the Madras government first took over the administration of Jeypore estate. The road construction work was intensified only after the First World War. During the Second World War period, somehow it slowed down but gained momentum after independence. But still there are certain pockets which are not yet linked to the main road by the approach roads. Lack of lateral communication system thus remains as the major constraint with respect to connectivity in the district

At the time of independence, about 70 per cent of the area in Koraput district was covered by forests. The whole forest range at one point of time was under shifting cultivation, and because of this the forest coverage now comprises plants of various stages of growth. However, in the more densely populated areas, as in the hills to the south of Koraput, repeated shifting cultivation over a long period of time has reduced the forest to an open scrub type or barren soil. The hills of Koraput originally supported a sub-tropical evergreen type of forest, which has been largely depleted due to repeated burning. The forests in these ranges are of great climatic importance as these help to control the temperature, and act as an important factor influencing substantial rain in the district.

Since 1891, management of forest resources in the district was governed under the Madras Forest Act, which came to be known as Jeypore Forest Rule. A number of specific regulations were framed under the Act. With the abolition of Zamindari system in 1952, the Government of Orissa took over the management of forests. Separate rules were framed for the forests such as Koraput District Forest Rule, Waste Land Rule, and Koraput Reserved Land Hunting and Shooting Rule. Under Koraput Forest Rule, the forest area was divided into three categories: reserve land, protected land, and unreserved land. Protected forests were conserved solely for the use of villagers in the nearby areas. Nevertheless, no rights with regard to forest management were given to the villagers, though the management of forest was far from scientific. By and large the sketchy work plans drawn out during the Zamindari system were continued even in the post-independence era.

Prevention and control of shifting cultivation (known as ‘Podu’ or Jhoom cultivation) occupied centre stage of forest management for many years. Abolishing the age-old practice, however, is almost impossible without facing strong resistance from the people. The practice is particularly rampant among the most primitive tribes, inhabiting the remotest part of the district. Remoteness thus emerges as one of the important factors explaining very high proportion of degraded forest in Koraput.

The general land surface, which is a difficult terrain of rugged tracks and varying altitudes, makes flow irrigation impossible in many areas. Tank irrigation was not being practiced in the district in the past. Most of the old tanks called Mundas or Bandha were intended for bathing and drinking purposes. More recently Sagars, formed by construction of large embankments, and tanks are being used for irrigation, which in any case is available on a very small proportion of agricultural land. Cultivable waste land being scarce, about 40,000 hectares of forest was cleared under Dandakaranya project for settlement of tribals and refugees. Similarly forest land was given to STs and SCs for checking further increase in area under Jhoom cultivation.

There are about a hundred minor irrigation sources, mostly tanks and small reservoirs, each irrigating less than 60 acres. These sources together were estimated to irrigate about 5,000 acres. There are two larger irrigation projects on the rivers Kolab and Indravati. The estimated irrigation potential of the medium and large projects is 40,000 acres, though very little is available to the forest dwellers in remote parts of Koraput district.

At present, the government has restricted the practice of shifting cultivation beyond a certain height on the hilltops. To prevent destruction of forest, government has initiated a scheme for settling the tribal people in the district. According to the scheme, the tribal inhabitants are brought from the hilltop and settled in the colonies in the plane. Land is given free along with facilities for irrigation and drinking water.

Apart from forests, the district is also rich in mineral deposits. For instance, deposits of China clay of inferior quality are found in several places of the Koraput plateau. Pottery clays are also found in some parts of the district. Gold in the form of very fine particles is also found scattered in the river sands. Graphite in small quantities is found widely. Among others, limestone, manganese and mica are also found in certain places of undivided Koraput district. Extraction of mineral thus poses another challenge to the forest and forest dwellers who face dislocation without compensatory employment/income support.

Koraput: A Statistical Profile

The undivided district of Koraput has certain dubious distinctions. The district not only represents the conditions of degraded forest, but it ranks highest or among the top three districts in terms of several indicators such as:

- Incidence of poverty
- Percentage share in total rural poor in Orissa
- Percentage share in total geographical area
- Percentage of degraded forest to total area
- Rural illiteracy
- Frequency of droughts
- Percentage of tribal population
- Relative Development Index

All these features indicate a logjam of adverse conditions, leading to a significantly high proportion of the population in the district living below the poverty line. In 1999-2000, as large as 92 per cent of the population in Koraput were poor as compared to 48.1 per cent at the state level. The picture is equally dismal with respect to indicators of human capabilities such as literacy, and the overall human development index. The pertinent question therefore is, whether Koraput faces special disadvantages even in comparison to other forest-based districts in the region/state? This question has been examined in the light of detailed information pertaining to selected districts in the state.[5]

Comparing Koraput with other forest based districts

Table 7 presents changes in the status of Relative Development Index (RDI) of Koraput and other forest-based districts (undivided) in the state. It is observed that Koraput has the worst score in 1991, and that the status has worsened compared to 1971. Evidently, Koraput is followed by other two districts from the same region. The forest-based districts in the northern regions, Keonjhar, Mayurbhanj, Bolangir and Dhenkanal, follow the worst three districts in the southern regions.

[5] A similar question has been raised and analysed in the context of the separate 'Koshala' state, covering a large part of the forest area within the state. For details see Pradhan *et. al.* (2004).

Table 7: Changes in the Relative Development Index (RDI) in Some of the Forest Based Districts of Orissa

Districts	RDI		
	1971	1981	1991
Southern Region			
Kalahandi	9	11	11
Phulbani	13	12	12
Koraput	11	13	13
Northern Region			
Dhenkanal	8	9	7
Keonjhar	12	10	10
Bolangir	6	8	8
Mayurbhanj	10	7	9
Coastal Region			
Ganjam	5	5	5

Source: Based on Table 10.3 in SDR 2003

Recent documents like the State Development Report (SDR) and Human Development Report (HDR) for Orissa provide useful information on some of the major indicators of poverty, human development and infrastructure across districts in the state. The authors have used the estimates to prepare a comparative profile of districts in southern and northern regions where forest area forms substantial part of the resource base. These estimates however are available for the new districts. Data for the 20 new districts that constituted 9 districts in the earlier scheme have been compiled and presented in Table 8. It is observed that, 4 new districts in the undivided Koraput district are adversely placed in terms of several of the infrastructural indicators e.g. literacy, infant mortality rates, human development index, proportion of open (degraded) forest and BPL ratio.

The above observation is further substantiated by the fact that the southern region has a fairly small share in gross domestic product of the state. By 1998-99, the southern region constituted only 13 per cent of the state domestic product as against 39 per cent of the northern region. What is still worse is that the share has declined from 16.2 per cent in 1993-94. This scenario indicating low and declining share in the state's economy is likely to reflect both the cause, as well as the effect of the long drawn processes of marginalisation of the region and the district.

Table 8: Remoteness among Regions: A Comparative Profile

Districts	Population Density (2001)	% of Tribal Population (2001)	Sex Ratio (2001)	Literacy (2001)	IMR (1999)	Human Dev. Index	Forest area as % of Geo. area 1999-2000	Open Forest area as % of total Forest area 1999-2000	BPL (Rural) (1992)
I. Southern Orissa									
1. Koraput	134	49.6	998	36.20	136	0.431	16.9	54.9	86.6
Malkangiri	83	57.4	996	31.26	151	0.370	37.8	50.8	91.9
NavarangPur	192	55.0	992	34.26	117	0.436	21.7	40.3	90.6
Raygada	116	55.8	1029	35.61	131	0.443	38.6	52.1	81.6
2. Kalahandi	168	28.6	1000	46.2	51	0.606	27.0	45.7	86.8
Nuapada	138	34.7	1006	42.29	62	0.581	32.1	52.5	86.3
3. Phulbani	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	93.0
Boudh	120	12.5	985	58.43	104	0.536	41.3	39.8	85.2
Kandhamal	81	52.0	1008	52.95	169	0.389	67.2	43.2	

II. Northern Orissa									
4. Balangir	203	20.6	983	54.93	97	0.546	15.1	49.2	91.9
Sonepur	231	9.8	966	64.07	96	0.566	13.4	44.7	67.4
5. Sambalpur	140	34.5	970	67.01	102	0.589	49.4	30.3	65.6
Bargarh	231	19.4	976	64.13	100	0.565	15.5	53.2	70.0
Deogarh	93	33.6	980	60.78	49	0.669	46.2	42.5	78.5
Jharsuguda	245	31.3	946	71.47	71	0.722	13.3	61.2	53.7
6. Dhenkanal	239	12.8	962	70.11	97	0.591	28.4	47.9	84.2
Angul	179	11.7	941	69.4	95	0.663	41.6	37.4	84.3
7. Sundargadh	188	50.2	957	65.22	62	0.683	42.2	35.9	80.9
8. Keonjhar	188	44.5	977	59.75	117	0.530	40.7	50.6	82.9
9. Mayurbhanj	213	56.6	980	52.43	48	0.639	39.7	30.2	90.8
Orissa (Total)	236	22.1	972	63.61	97	0.723	31.4	42.7	78.7

Sources: Census of India-2001
Human Development Report 2004, Orissa

Note: The Serial numbers refer to 9 out of 13 old districts. The estimates pertain to the divided districts as per the new scheme.

Overall, the region depicts a scenario of sustained deprivation emanating from physical remoteness, adverse land relations, rapid depletion of forest resources, low agronomic potential, and poor employment conditions. It may however, be noted that the situation of a logjam of adversities such as this, persists despite a large number of policy initiatives undertaken in the post-independence era. This suggests a substantial gap in governance, owing mainly to the resources, as well as the people of the region.

4.2 Households and their Coping Mechanism

It is hypothesised that physical remoteness may exert significant impact on some of the basic features such as literacy, access to health services, employment and income, the impact may not be substantial, especially within a micro setting, where the difference in physical remoteness is not so significant. Moreover, the impact may not be realised in a predominantly tribal setting such as that in the villages covered by the study, where the economy is still at a mere subsistence level, and marketisation is fairly low.

A typical household in the village is either landless or operates a very small holding. Members of such households collect various minor forest produce during most parts of the year, seek wage labour in and around the village, visit weekly markets for small purchases such as to obtain grains available from public distribution system, indulge in drinking country liquor (and of late the branded ones) (in the case of adult males), and seek credit for incurring substantial expenditure on social functions, food grain procurement and health services. While one third of the households do not own any land, about 17 per cent of the sample households reported encroachment on public land. This consists of both-landed as well as landless households. With an average land holding size of 3 acres as owned land by these forest dwellers, it is not a problem of access, but of the quality of land titles, since a large proportion of land is un-surveyed.

Income from Major Activities

Table 9 presents estimates of average income from different sources across categories of households and villages. It may however be noted that the estimates of income exclude livestock as it was very difficult to impute value of the products that are mainly used for consumption. Similarly, the estimate for forest produce includes the value of only marketed products. To that extent, the income estimates are under reported.

It is observed that agriculture is the major contributor, accounting for 42.5 per cent of the estimated income of the households. This is followed by wage income, contributing 25.2 per cent and then by forest resources 15.1 per cent and other activities 17.2 per cent. It may be noted that the highest per capita income from all sources is in Kamel. Similarly, Kamel has the highest income per household from agriculture, which also has the highest land holding size. What is however surprising is that, the average income from agriculture in the two more remote villages is higher than that in Hanumal, which is a less remote village. It is also interesting to note that Sindhiguda has the highest average income from forest, which confirms the earlier observation that the village may have relatively better forest resources. This is followed by the two less remote villages, which may have benefited due to better access to market.

It is also important to note that STs have relatively higher than the average per capita income in the case of three villages except Kamel. However, STs have lower than the average income per household, except for Hanumal. Overall, the evidence suggests that the sample households have an average income ranging from Rs. 9,147 to Rs.13,854, which is significantly lower than the official poverty line for the region.

Table 9: Average Annual Income per Household by Social Groups

Village	Caste	Cultivation	Wage Labour	Forest	Other	Average Annual Income (All Sources)	
						Per HH	Per capita
Balel	SC	4750.00	4476.56	1803.83	7229.33	13918.56	2662.43
	ST	8007.94	3791.67	1304.16	4960.67	13747.24	2980.37
	Other	7250.00	2700.00	3800.00	1200.00	14950.00	2491.67
	All	6976.35	4073.57	1606.53	6041.71	13854.40	2825.08
Sindhiguda	SC	4410.00	4600.00	2576.67	2016.67	10600.00	1684.13
	ST	4603.24	2710.00	2165.81	1600.00	9029.61	1944.48
	Other	-	-	-	-	-	-
	All	4593.07	2824.55	2197.41	1778.57	9147.39	1924.96
Hanumal	SC	3178.21	3697.86	1717.94	4217.14	9579.50	1925.51
	ST	5206.36	2663.33	1770.00	6700.00	10432.27	2732.35
	Other	900.00	9350.00	2095.00	2400.00	14745.00	2457.50
	All	4322.57	3251.39	1756.97	4729.09	10193.00	2394.29
Kamel	SC	5209.00	3806.25	1867.67	3066.67	9167.11	2380.27
	ST	6039.62	2197.92	1255.77	8250.00	11862.69	2641.38
	Other	9013.29	3136.88	1504.22	7440.00	14871.78	3437.37
	All	7365.31	2972.64	1505.25	6616.67	12610.28	2940.83
All Villages	SC	4046.90	4076.12	1836.85	5471.78	11263.26	2287.10
	ST	5623.94	2860.55	1755.70	5175.13	10822.72	2462.19
	Other	8493.47	3457.78	1648.55	5828.57	14869.35	3341.09
	All	5688.55	3284.64	1765.89	5397.21	11459.18	2522.09
% to Total HHs		42.5	25.2	15.1	17.2		

The income from collection of forest produce varies across households as shown in Table 9.

Coping Strategy during Shocks

Given the fact that migration is not an important component of livelihood strategy under normal situations, it would be important to study how households cope during shocks, and whether migration appears as an important component of the coping strategies adopted by the sample households under shocks - external, internal and price-related. The internal shocks refer to the household specific events such as death or illness of the main earner of the households, or huge expenditure on social or other occasions, whereas external shocks refer to drought, flood, etc. Of course, it is likely that some of the households have not actually experienced any internal shock; for these households the responses are based on perceptions.

Table 10 presents information on the various strategies that the households adopt while facing an internal shock. It is important to note that reducing cereal consumption in terms of quantity and/or quality is the most important strategy reported by a large number of households. For instance, as large as 38 per cent of the households reported partial shifting from rice to ragi as an important strategy. What is however more concerning is that about 30 per cent of the households resort to reduction in cereal consumption in order to cope with an internal shock. It is likely that most of these households belong to the category of severely poor.

Table 10: Coping Strategy during Internal Shocks (% of HHs)

S.No.	Coping Strategies	Balel	Sindhiguda	Hanumal	Kamel	Total
01	Exploitation of Forest Resource	0.0	15.7	7.5	6.3	29.6
02	Reduced Consumption of Rice	3.1	20.1	9.4	5.7	38.4
03	Reduction in consumption	7.5	9.4	5.0	8.2	30.2
04	Borrowing from money lender	3.1	9.4	2.5	6.3	21.4
05	Credit from shops	3.8	0.0	1.6	8.2	16.3
06	Borrowing from relatives	0.0	0.0	0.0	2.5	2.5

Source: Primary Survey
Note: Borrowings referred here as taking money with interest

Another concern with respect to the households' coping mechanism is increased use of forest resources for self-consumption and selling in the market. Of course, the latter is generally under reported. The ground reality is that, NTFP is an important part of the households' livelihood system under normal situations. It becomes an increasingly important component of coping mechanism during shocks.

About 21 per cent of the households reported borrowing from moneylenders in order to cope with the difficult situation caused by internal shocks. Also, 16 per cent of the households reported borrowing from shop keepers/traders. It is likely that many of those who borrow under the stress may not be able to get out of the indebtedness for a very long time, which in turn, may push the households into a downward spiral of chronic poverty. The situation could be further aggravated by the fact that the region is prone to frequent external shocks, especially droughts. Exiting from poverty may thus become almost impossible for most of the households once trapped into a downward spiral such as death or ill health of the main earner of the household (Krishna 2003).

1. The number of coping options adopted by the households is significantly higher during external as compared to internal shocks. The average number of options to be adopted by a household increased from 1.38 to 2.69. A part of this could however be explained by the fact that, for some households, internal shock may not be an actual experience as noted earlier.

2. Notwithstanding the above limitation, the responses presented in Table 4.24 suggest that whereas 40 per cent of the households reported increased dependence on forest as an important coping mechanism, 12.5 per cent of the households reported that they would increase the area of Jhoom cultivation. There is however, likely to be an overlap between the households reporting increased use of forest produce and increased Jhoom cultivation. It may be noted that the phenomenon of encroachment of land, already reported by 27 households as part of the livelihood base in normal situation, may increase during or following an external shock, though it may not be reported in a survey. This observation reinforces the already existing vicious circle: inappropriate forest management - forest degradation - increased impact of droughts - increased extraction from forest - further degradation - increased poverty in the region.

3. The proportion of households reporting reduced food consumption is as high as 62 per cent. In fact these households suffer hard core poverty since most of them are likely to have relatively lower food consumption even in a normal year, given the frequent occurrence of droughts in the region. Evidently, the proportion of households resorting to reduced food consumption is relatively higher (66 per cent) in more remote as compared the less remote villages. What is more striking is that about 95 per cent of the households in Sindhiguda reported this as part of their coping mechanism during external shocks.

4. Migration continues to remain an insignificant component of the livelihood strategy under external shock; for internal shock it did not appear as an option to be adopted.

5. The highest number of households reporting borrowing as a coping strategy is in Kamel, a less remote village. This signifies impact of better access to markets. It could be argued that those in the less remote villages like Kamel have better ability to borrow (because of their better asset or income base), as compared to that in Sindhiguda. If so, it is all the more important that people's borrowing capacity improves before improvement in their access to credit support.

Changes in Livelihood Pattern in the past 10 years

The above analysis depicted the present status of households with respect to various indicators. It is likely that the households have experienced certain important changes in their well-being over time. This has been captured through perception-based responses from the households (Table 11).

Table 11: Change in Livelihood Base over the past 10 years

Changing Life Pattern	Balel	Sindhiguda	Hanumal	Kamel	Total
Consume better quality food	11.3	19.5	23.9	20.1	74.8
Wear better cloth	9.4	15.1	22.6	19.5	66.7
Access motor vehicle facility	15.1	2.5	6.9	15.7	40.3
Improvement in Housing	10.7	3.8	6.3	16.4	37.1
Decrease in death rate	10.1	0.0	0.6	13.2	23.9
Access to medicine from Govt. hospital	6.9	20.8	13.2	15.1	56.0
Exposure to know outside world	8.8	3.1	2.5	11.9	26.4
Use chemical fertiliser	6.3	1.9	3.1	13.8	25.2
Turning forest to Ag. Land	0.0	21.4	5.7	13.2	40.3
Increased livestock population	3.1	2.5	2.5	8.2	16.4
Decrease in superstitious belief	0.0	0.0	3.1	5.7	8.8
Increase in temperature	1.3	0.0	0.0	9.4	10.7
Decrease in wild life	0.0	0.0	3.1	0.0	3.1
Increase in violence	4.4	1.3	3.1	11.3	20.1
Reduction in liquor consumption	0.0	1.3	0.0	4.4	5.7
Education for children	5.0	0.0	0.0	8.2	13.2

It is observed that a substantially large proportion of households reported improvement in quality of food, house and clothing. Besides these, improvement has been noticed in terms of connectivity, information/exposure and agricultural practices. There have been some negative changes as well, with respect to conversion of forest for agricultural use, reduced wild life, and increase in temperature. This suggests some kind of trade-off between the improved livelihood base and quality of environment. Obviously, sustaining the improvement may be increasingly difficult, and this is being reflected in the sustained high level of poverty, especially in the wake of increasing population in the region.

4.3 Typology and Correlates of Poverty

This section maps the sample households by typology of poverty. While the exercise is based on the quantitative data pertaining to expenditure and consumption of food grains, an attempt has been made to identify households' well-being in terms of community wealth ranking. This was ascertained by using participatory method covering all households in the villages when the study was conducted. According to the community-based ranking, as many as 98 per cent of the households were considered poor. Of the total households, about 50 per cent were categorised as extremely or highly poor, and another 28 per cent as average poor. The remaining one fifth of the households were in the category of low poverty due to external shocks like very severe droughts. Incidentally, the eight non-poor households belonged to Kamel only.

Consumption Expenditure and Poverty Estimates

An attempt has been made to estimate incidence of poverty by using the official poverty line. In 1999-00, the poverty line in terms of per capita monthly consumption expenditure (MPCE) for rural Orissa was Rs. 300 (Deaton 2003). This, according to some scholars, is on the high side since the actual price of staple foodgrain paid by the rural households in Orissa is likely to be lower than the price considered for defining the poverty line (Panda 2003). Hence instead of inflating the poverty line of 1999-00 to apply it to the consumption expenditure data of 2004, MPCE- Rs.300 has been used to identify the poor.[6]

[6] Initially, an attempt was made to classify the households into four categories > 25 per cent and < 25 per cent below the poverty line, and < 25 per cent and >25 per cent above the poverty line – based on MPCE. But, this scheme of categorisation did not work since three fourth of the households were

Table 12 presents estimates of poverty among the sample households. It is observed that about 31 per cent of the households belong to the category of severe poor, whereas about 43 per cent belong to the category of medium poor. Together they constitute hardcore poor in the region, where the study was conducted whose consumption expenditure level is > 25 per cent below the poverty line. This leaves about 26 per cent of the households, out of which 15 per cent are moderate poor, and only 11 per cent are non-poor. Evidently, this confirms the district level estimate for Koraput (Panda 2004), suggesting 92.2 per cent of the people in Koraput living below poverty line in 1999-00.

An important observation emerging from Table 12 is that, the proportion of severe poor is significantly higher among more remote villages (36.3 per cent) as compared to less remote villages (25.3 per cent). Conversely, the proportion of non-poor is higher in the less remote compared to the more remote villages. In this sense it confirms the expected positive association between physical remoteness and incidence as well as severity of poverty. A similar pattern is observed in terms of average expenditure among households in the two categories of villages; the difference however, is less sharp as compared to that in the case of proportion of poor households across the two sets of villages (See Table 5.2(b)).

Table 12: Incidence of Poverty among Sample Households

Villages	MPCE (Rs.)				All
	Severe Poor	Medium Poor	Moderate Poor	Non-Poor	
Balel					
%	22.5	55.0	15.0	7.5	100.0
(n)	(9)	(22)	(6)	(3)	(40)
Sindhiguda					
%	50.0	27.5	15.0	7.5	100.0
(n)	(20)	(11)	(6)	(3)	(40)
Sub-total (I)					
%	36.2	41.3	15.0	7.5	100.0
(n)	(39)	(33)	(12)	(6)	(80)
Hanumal					
%	41.0	43.6	10.3	5.1	100.0
(n)	(16)	(17)	(4)	(2)	(39)
Kamel					
%	10.0	47.5	20.0	22.5	100.0
(n)	(4)	(19)	(8)	(9)	(40)
Sub-total (II)					
%	25.3	45.6	15.2	13.9	100.0
(n)	(20)	(36)	(12)	(11)	(79)
All					
%	30.8	43.4	15.1	10.7	100.0
(n)	(49)	(69)	(24)	(17)	(159)

Note: Figures in parentheses indicate number of households

The estimates in Table 12 indicate that incidence of poverty is highest among the SCs (93.4 per cent), followed by STs (90.3 per cent) and then by other communities (75 per cent). A

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getting clustered in the first group i.e., > 25 per cent below poverty line. Hence the households were classified into three categories by splitting the first groups into two. On the other hand there were only a few households above the poverty line. Hence, the two groups of non-poor households have been merged. Thus, the four way categorisation of poor refers to those having MPCE > 50 per cent, 25-50 per cent, and < 25 per cent below poverty line, and the group above poverty line. We have termed these categories as severe poor; medium poor, moderate poor, and non-poor respectively.

similar pattern is observed in the case of the severe poor. As many as 45.7 per cent of the SC households belong to this category as compared to 26.9 per cent in the case of STs and 15 per cent in the case of others. The medium poor category comprises a significantly high proportion of households (47.3 per cent) and others (50.0 per cent). The estimates thus, reinstate the observation made earlier that it is not merely social marginalisation, rather the dependence on forest resources, which is at the root cause of chronic poverty, as reflected by the fact that three fourth of the households among the non-SC/ST are poor.

We tried to examine a comparative picture of the two typologies of poverty. It may be recalled that the incidence of non-poor by community ranking is 2 per cent as against 11 per cent in the case of expenditure based categorisation of households. However, by looking at the cross-classification one finds that a substantially large proportion of those considered as extreme poor have been categorised as moderate or non-poor by the expenditure based classification. The same is true for the usually poor. About 60 per cent of the sample households categorised as severe to medium poor have been perceived by the community as extreme, high, or average poor. These households constitute hard-core poor in the region where the study was conducted. What makes them more vulnerable than other deprived groups? This is examined in the light of some of the important features of the poor in different categories.

4.4 State Response, People's Participation and Major Challenges

Faced with the major challenge of ameliorating poverty, the State Government of Orissa has launched a multi-pronged approach consisting of food distribution, employment generation, information development, infrastructure development, capacity building, etc. Of late, the state under the auspices of the Planning Commission has prepared the first ever Long Term Action Plan (LTAP) for Kalahandi-Bolangir-Koraput (KBK) region, which accounts for nearly 31.9 per cent of the rural poor in Orissa as against 19.7 per cent of the total poor in the state. Ideally, the Plan should be preceded by a long term policy perspective within a consistency framework of overall developmental policy in the state, and specifically for the forest based economies within that. A number of studies have been undertaken in the recent past to evolve a holistic perspective for development and poverty reduction in the state.

The policy prescriptions, however, at times, are influenced by the macro perspectives, thereby losing sight of the specific agro-ecological and social environment that characterise the forest based regions. While the LTAP does focus on the most poverty-stricken region, the underlying framework still remains the same i.e., echoing the usual approach of sectoral plans devoid of an in-depth situation analysis. Thus, although the document qualifies well in terms of the semantics of an area development plan, it still lacks identifying the right questions to be asked, and solutions to be sought by addressing the more tricky issue of linking environment and development of people's livelihood in this forest-based region.

Alternatively, researchers, civil society organisations and policy makers (often in their individual capacity) tend to come up with more comprehensive approaches for betterment of the area. Nevertheless, such views get lost amidst various activities and action plans, which often take priority over a sustained dialogue and search for long term perspectives. To a large extent, this happens because of the misplaced sense of urgency, which in turn is caused by frequent crisis situations like floods, droughts, and of late, poverty. This, of course, is not to deny the importance of immediate actions; rather the point is to attach equal priority to evolving a region specific developmental perspective, and feed that into the state/national level plans.

The scenario juxtaposed against the long history of exploitation, discontinuity and apathy on the part of various rulers in the past, may tend to reinforce the adverse impact of non-connectivity or remoteness that has been faced by the people over centuries together. It is

unfortunate that the present policy discourse on development and poverty reduction in the state has not made major strides towards establishing an organic link between forest economies and the rest of the economy. As a result, it is difficult to make any significant headway towards finding a long term solution to the enduring poverty in the region. Again, this is not to undermine the positive impact of the various schemes that the State Government has initiated in the most remote district/area. In the absence of these schemes, the poverty scenario in the region might have been worse. This is already reflected by the positive changes, that a large proportion of the households, have reported. It may also be noted that, a large proportion of the poor population are concentrated immediately below the poverty line (Deaton and Dreze 2002; Panda 2004). Therefore a small addition in income/expenditure may lift a substantially large proportion of the presently poor, above the poverty line. Thus, income transfer through schemes like PDS assumes special relevance, as reflected by a recent spur in the policy for promoting food for work programme.

5. Summary and Way Forward

5.1 Main Findings

The foregoing analysis indicated spatial concentration of poverty among seven out of the 17 major states, accounting for nearly 78-80 per cent of rural poor in India. It also indicated that 15 regions had remained in the list of the out of the 20 poorest regions over three points of time during 1983 to 1999-00. During this time, four regions had exited whereas five had entered the list of the poorest 20 regions. !3 out of the 15 regions that remained in this list in all the points of time belonged to only four major states: Orissa (2), M. P. (6), Bihar (3) and U. P. (2).

Another important feature of the spatial concentration of poverty is that nine out of the 15 regions were in the category of forest-based economies vis-à-vis two in the category of dry land areas; the remaining four were in the mixed category.

Predominance of forest based areas with high concentration of poverty over a long period of time, thus calls for detailed probing into the extent, pattern, and policy support for ameliorating poverty in these regions. These issues were addressed in the light of inter-regional variations in Orissa and a case study of Koraput district in the Southern Region in the state, which has a dubious distinction of being the poorest (rural) region in the country.

The analysis of chronic poverty in a forest-based region in southern Orissa reinstates the fact that chronic poverty in terms of severity and long duration is an overarching reality for almost nine out of ten households in the region. Similarly, it highlights severe deprivation in terms of food consumption, with a significantly large proportion of households consuming about half of the prescribed norm of cereal in-take.

The analysis also brings out the following new insights:

1. Unlike the common perception, people in the forest area have reasonably good access to the forest resources such as land and non-timber forest produce. The contemporary policy discourse also emphasises the need to further enhance people's access to forest resources. Nevertheless the real issue is that of matching the needs with the resources on a sustainable basis. This may call for linking up forest development with people's livelihood, where the latter is treated as a matter of right, rather than as concessions granted to support the livelihood of the poor.

2. An overwhelmingly large proportion of the people live in severe poverty. This is despite the fact that there is a sub-set of people who have experienced improvement in the conditions of food, clothing and housing. Thus, the improvements, at best, may have helped reducing the extent of severity, but not the duration of poverty.

3. Physical remoteness at regional/district level emerges as the most important factor explaining the level of poverty in Koraput, which is significantly higher in comparison to other forest-based districts in northern Orissa. It can be seen that the impact gets diluted when a comparison is made between a more remote village and a less remote village within the same district. Nevertheless, negative impact of remoteness on literacy, accessing health (family planning) services, and expenditure-poverty can be noticed. The pattern of difference between the two sets of villages however, is found to be somewhat mixed.

4. There is higher incidence of poverty among the SCs compared to the STs. The incidence is as high as 75 per cent among the non-SC/ST households. This may

suggest that more than the social identity, regional characteristics have greater impact on poverty.

5. Reducing cereal consumption is the most important coping strategy in conditions of shocks. This sets a downward spiral of low-nutrition leading to mobility and physical capability, which further leads to low intake of food. Physical remoteness and frequent droughts make this a perpetual reality; exiting this is almost impossible for a large majority of the poor in the regions where the study has been conducted.

6. The state has initiated a number of developmental schemes in the region. However, the actual coverage of beneficiary households is very limited. The major constraint therefore is that of filling up the governance-gap rather than the flow of funds, which of late has shown an increasing trend.

5.2 Future Policy Direction

A disjointed view of development thus results in a lose-lose scenario, where neither forests are properly conserved, protected, and managed (despite their significant contribution to the state's revenue), nor livelihood options are adequately explored (due to loss of potential revenue from forests, forming an important source of investment) in the rest of the economy.[7] The immediate and the worst sufferers are the forest dwellers, who have neither proper entitlement to manage the forest resources, nor equitable share in the developmental opportunities emanating from forest conservation/management elsewhere. The situation is aggravated because the state, unable to link conservation and economic development in the context of a close interface between highland and low land within the forest ecology, fails to provide for compensation to the forest dwellers against the foregone opportunities. In fact, the opportunities are lost not mainly because of the 'conservation' objectives; rather the loss of opportunities is more due to ineffective measures, resulting in limited realisation of the conservation goals.

There recent flux of policy initiatives for initiating various schemes for employment generation and other developmental programmes in the 150 most backward districts is a testimony of the recognition of sustained concentration of poverty in certain pockets of the country. While resource transfer through wage employment or other subsidies are crucial for making a dent on chronic poverty in these regions, the long term solution however, lies in addressing the structural problems such as failure of entitlement and integration of forest management into the larger framework of development in forest-based economies like southern Orissa.

Exploring an Alternative Approach

The compensation need not necessarily be in terms of promoting agricultural productivity within forest regions. Instead the focus could be on improving the forest resources in the forest regions, and at the same time enhancing the forest dwellers' access to opportunities in the areas that are downstream of the forest regions. The central thrust therefore, is to recognise the forest dwellers' stakes in the conservation measures within the forest-based, as well as in the developmental opportunities outside that.

Essentially, this approach is different from the present policy thrust on the various forms of participatory forest management, especially joint forest management (JFM). The basic difference lies in the fact that JFM and other programmes for participatory management

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[7] Forest resources in Orissa constitute an important component of the non-tax revenue in the state. Of late, the revenue from forest produce has declined. The total revenue (at current prices) declined from Rs. 109 crores in 1990-91 to Rs. 84.2 crores in 2000-01 (Mallik 2002: 186).

hinge mainly on enhancing people's access, and thereby use a part of the forest and its produce, in isolation of a coherent policy for enhancing the status of forest, and the associated agro-ecological system consisting of land-use, irrigation and pastures. As noted earlier, this kind of disjointed approach may not work, since productivity of NTFP essentially depends on how the rest of the system is managed.

Moreover, there is a limit to livelihood support without adversely affecting the long-term sustainability of forest. Population exceeding a reasonably defined carrying capacity obviously needs to be supported through a smooth transition to a migratory path and/or resource transfer.

Unfortunately the predicament of the state in Orissa is that, it does not get sufficient funds for resource transfer such as this, because the richness of the state's major resource (i.e., forest or mineral) lies in the existence itself, rather than in extraction, that too in a non-strategic manner. Of course, sustaining the existence of this resource tends to generate positive externality beyond the administrative/financial unit of the state. Unless the federal financial system facilitates the state for sustaining the resource, the state even if it is benevolent, may not be able to invest in management of forest resources, let alone addressing the issues of livelihood of the people dependent on that. But if the state is not so benevolent, the fate of both - the resource, as well as people - is likely to be jeopardised. What is worse is that the state does not have effective institutional mechanisms to ensure implementation of the legal system governing its natural resources. This is what seems to have triggered poverty among forest dwellers in Orissa. Rooted deeply in the web of socio-economic, financial and legal structures, poverty in the state is most likely to be chronic in nature – severe, long duration and multi-dimensional. Exiting from this would therefore, require a substantial shift in the mind-set of policy makers, who often tend to isolate the very resource that is the foundation of the state's economy, especially for the poor. It is both for the state and the poor, to capitalise on this resource as a strategic negotiating point, rather than keeping it away from the developmental discourse at national, regional and local levels.

Evolving a coherence of approach and commitment at different levels however would require appropriate political representation, especially from the people and region (or resource) whose survival itself is at stake. The present discourse on growth/development and poverty reduction however does not seem to adequately recognise the criticality of bringing forest and the poor living in these regions to the centre stage of development. Generating a better understanding of dynamics of forest and development may thus facilitate a shift in the policy perspective for poverty reduction in the state.

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Appendix 1: Profile of Sample Villages

Indicator	Balel	Sindhiguda	Hanumal	Kamel
Total HHs	141	52	126	57
Total population	527	NA	457	226
Total area (sq. kms.)	643.05	NA	1073.61	323.77
% of SC population	19.0	NA	23.2	11.5
% of ST population	80.4	NA	74.8	40.7
Household size	3.7	NA	3.6	4.0
Sex ratio (Female/Male)	0.99	NA	1.14	1.05
% of worker Male Female	55.5 57.2	NA NA	60.1 27.9	60.9 65.5
Nearest market place/distance	Approach by walk to Lamtaput 10-12 kms.	Approach by walk to Lamtaput 10-12 kms.	Approach by walk to Onkadeli 4-5 kms.	Lamtaput 6 kms.
School facility	Yes (Primary)	No	Yes (Primary)	Yes (Primary)
Health facility	Integrated Child Development Support (ICDS) and village health workers at Lamtaput (both the services are irregular)	ICDS services at Lamtaput/ Khairput	ICDS service at Lamptaput plus village health extension services by NGO (Ashakiran)	ICDS and village health workers at Lamptaput
Drinking water	Handpump/ Tubewell/River/ Nala	Deep tubewell	River/Nala/ Shallow/Open water/Tubewell	Deep tubewell
Electricity	No	No	No	No
Transport	No transportation facility. Private four-wheeler comes to the village occasion ally. Travel 3-4 kms. to catch bus	No transportation facility. They come to Khairput to catch bus or to Lamtaput	No transportation facility. They come to Onkadeu to catch bus	Yes 0.5 kms.
Distance from road (SH/ ODR)	5 kms.	14-15 kms.	10 kms.	0.5 kms.
Distance from Lamtaput	15-17 kms.	65 kms.	41 kms.	5 kms.
Panchayat	Yes	Yes	Yes	Yes
Wage rate (Rs./Day) Male Female	40 30-35	30-40 25-35	40 30	35-40 30-35