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REMOTENESS AND CHRONIC POVERTY IN A FOREST REGION IN SOUTHERN ORISSA:
A TALE OF ENTITLEMENT FAILURE AND STATE'S APATHY

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1. Introduction

1.1. Policy Perspectives on Poverty in Orissa: Some Reflections

The recent round of poverty estimates, placing Orissa as the poorest state in India, has pressed an alarm bell among planners, practitioner and also international donors. This, in turn, has triggered a sense of urgency for salvaging the situation of chronic poverty, where the central thrust is on expediting growth. Agricultural growth occupies a special significance in this approach 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[1]. While the need to foster growth, particularly, agricultural growth can hardly be over emphasized, what appears to be missing in the emerging perspective on linkages between growth and poverty reduction is integration with one of the most critical segments, i.e. the forest based economy, in the state. The segment has special significance not only in terms of its contribution to the states, revenue but also in terms of supporting poors' livelihood besides rendering environmental services that are often realized beyond the state boundaries.

Forests of Orissa accounting for 30 per cent of the land support though, not adequately, about 40 per cent of the population contributing approximately half of the poor in the state[2]. Notwithstanding this significant link between forest and poverty, the growth as well as the developmental discourse in the state continues to address the issues pertaining to forest-resource management and people's livelihood in a somewhat dis-jointed manner[3]. The issue therefore is

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1 According to the recent estimates poverty elasticity with respect to income (per capita total expenditure) is –1.68 for rural areas. It is therefore argued that to achieve more than 3 per cent reduction rate of rural poverty, it is essential that agriculture grows at 4 to 5 per cent with a high concentration of poor (Parikh and Radhakrishna, 2005; p.3).
It is in this context, the Poverty Task Force (PTF) in Orissa has recommended that 'growth of agricultural and allied sectors would hold the key to poverty alleviation I the medium run of a decade or two on several grounds' (PTF, 2003; p.11).

2 It has been estimated that the 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; p.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.

not so much of marginalisation of tribal *per se;* rather the more basic issue is that of segregating the forest resources from the mainstream strategies for growth, which eventually is expected to reduce poverty among forest dwellers in the state.

A disjointed view of development thus, results in a loose-loose scenario where neither forests are properly conserved, protected, and being managed (despite its significant contribution to the state's revenue), nor livelihood options in the down stream are adequately explored (due to loss of potential revenue from forests, forming an important source of investment) in rest of the economy[4]. The immediate and the worst sufferers are the forest dwellers, who have neither proper entitlement to manage the forest resources nor, have equitable share in the developmental opportunities, emanating due to 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 into limited realization of the conservation goals.

Missing Link between Forest and Development

High concentration of chronic poverty in these areas, like in other parts of forest-based regions in the country, is outcome of policy failure in terms of balancing the twin objectives of regeneration/conservation of forest on the one and meeting livelihood needs on the other. Instead of working out a proper interface between the two, the forest policies, right from the colonial period till the recent times, sought to alienate people from the forest resources thus, setting up a downward spiral of: overuse of resources (by many players rather than by the tribals alone) – deprivation (poverty) – further extraction of resources- increased control by the state (for conservation) – further degradation through clearing of forest for crop cultivation.

Such policies of alienation at best, could have worked as a short term solution to reduce over use of forest resources provided, adequate investment for regeneration of community forest and other marginal land, for cultivation were in place. Unfortunately, the state till now, has allocated only a meager amount, accounting for only 1.3 per cent of the total revenue expenditure in the state **[Sarap, 2004, p. 15].** In fact the development perspective is yet to incorporate ecological /environmental perspective while setting up priorities for resource allocation across different sectors of the state economy. Incorporating appropriate value to the forest resources both for direct use as well as for conservation may then pave way for a more sustainable management of forests, the prime resource of the state. Ideally investment for forest regeneration/conservation should be treated as compensation for the lost opportunities or disability fund which the state

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The persistence of high poverty in Southern Orissa has also led to a realization 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.

[4] 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 84.2 in 2000-01 (Mallik, 2002; p. 186).

should mobilize from the economy outside the forest areas- within and beyond the state boundaries[5].

One of the most striking features of the Long Term Action Plan (LTAP) prepared for the development of Koraput-Bolangir-Kalahandi (KBK) region for the period 1995-96 to 2001-02, is that conservation natural resources especially forests, forms only a part of a long list of sectoral development programmes rather than being at the center stage of the developmental plan for the region.

1.2 Growth Induced Poverty Reduction: Implications for the Transitory Phase

The contemporary discourse on policies for poverty reduction lays special emphasis on expediting economic growth and sectoral diversification of the state economy. It is envisaged that once the trajectory of high economic growth is achieved, it may pull out a substantial proportion of the poor located in the forest-based regions of the state. This assumption however, needs systematic assessment in the light of the growing population and large number of underemployed workers already existing in other parts of the region. It is thus, likely that the high growth trajectory may bypass a part of the poor in forest based economies even in the long run. In any case in the intermittent period people in these regions need to be supported through (a) various schemes for income and employment generation based mainly on forest resources; and (b) income transfer through public distribution of food.

The above prescription for a growth-linked poverty reduction strategy is quite valid provided, it could be realized within a reasonable time frame. Till then the main plank of poverty reduction may rest on development of forest resources (including land and water), and extraction thereof so as to generate employment-income for the poor. Assuming that the state is able to mobilize adequate funds e.g. through various centrally sponsored schemes, the strategy still suffers from two inherent limitations. First is the extractive nature of forest development, and second is inadequacy of funds and/or administrative/institutional capacity for implementing various employment generation schemes as well as food distribution programmes especially in the remote areas within these regions as suggested by recent experience with respect to a number of employment and income generation schemes in some of the `backward' and remote areas in the state. Notwithstanding these limitations the issue of sustainable extraction/use of forest resources stands unattended.

In fact the sustainability issue, at least till recently, has been seldom addressed while designing plans for collection/marketing of non-timber forest produce (NTFP) – an important source of livelihood for the poor, especially severely poor, in these regions. This is reflected in the fact that there is hardly any systematic effort for assessing the needs for income-employment support for the present as well as future population in the forest based regions, at least till the time when the state economy attains a high growth path.

The developmental plans prepared by the forest department of the state do incorporate certain elements of employment generation and food distribution. But, these provisions are incidental to the plans where the primary focus is regeneration and conservation of forests. This phenomenon has been reflected by the fact that the area under reserve forest has increased significantly from

[5] The concept of compensation for the lost opportunity has been invoked recently by seeking 'Disability Fund' from the Planning Commission. The issue needs to be brought into the larger discourse on sustainable development in the context of the existing system of federal finance.

about 40 per cent in 1959 to 74 per cent in 1993 [Sarap, 2004]. It may be noted that the increase in this category of forest took place at a time when the total area under forest had declined from about 65000 sq. kms. to 57000 sq.kms. ; much of the decline could be due to settlement of land for agriculture and also for the various developmental projects.

During the same period, human population in the forest-based economies may have at lease doubled. The obvious outcome is- substantial decline in the forest dwellers' access (per capita) to the forest resources. In absence of alternative sources of income/employment, this phenomenon of reduced access to forest resources, would almost automatically translate in terms of deepening of poverty for a majority of people in these regions.

It is imperative that promoting alternative sources of income-employment in the forest-based economies may ideally, go against the very existence, and thereby conservation value of forest resources. Faced with an inherent dilemma such as this, the state has been under constant pressure to divert a large amount of forest area for alternative uses under various developmental projects including irrigation. The available estimates suggest that between 1947 and 1984 about 2000 sq.kms. of forest area was converted for promoting alternative activities, which in turn may help diversifying the state economy. Subsequently, additional 177 sq. kms. of forest land was converted for such activities till 1993. By now, about 4-5 per cent of the total forest area seems to have been converted for non-forest uses, besides the area already under `illegal' cultivation. While in terms of magnitude, this may not appear very large, land alienation due to developmental projects however, has cause serious adverse impact on those who have been displaced from their traditional resource base without an appropriate compensation as well as rehabilitation policies **[Mahapatra, 1995]**.

The immediate solution therefore, lies in mobilizing funds for investment so as to foster economic growth and diversification of the state economy. One of the possible ways is to seek additional funds through the system of federal finance by way of compensation for regeneration/conservation of forest and other natural resources that provide benefits/ecological services not only at the local and regional level, but also at the national and international arena. Pleading a case for compensation however, would require that management of forest resources and the people, especially the chronically poor, located in the regions are brought to the centre stage of development and resource allocation within the state. While states like himanchal Pradesh, Arunachal Pradesh, and Madhya Pradesh have already made a case for `disability funds' to obtain additional resources from the center, the task of evolving a comprehensive perspective on environment and development still remains an unfinished agenda.

Till then, the main thrust of the state's poverty reduction programme rests on agricultural growth, which in turn, is to be promoted through increased irrigation. The state development report provides a detailed analysis of how increased irrigation facility could help enhancing productivity and income on the one hand, and employment and wages on the other.

The major regions to gain from this irrigation induced agricultural growth are mainly in the coastal and plain regions that constitute downstream of the watersheds. The forest regions, especially in the south-west Orissa, are thus likely to continue to suffer from low and undependable irrigation facilities[6]. The phenomenon of depleting ground water table due to loss

[6] Uneven and erratic rainfall has resulted into the situation of chronic drought in the KBK-region. Nearly 9 lakh hectares of cultivable land of Western-Southern Orissa faces severe droughts in most of the years.

of vegetation in the upland has been increasingly recognized by various studies [Chengappa, 1995]. What is however, less recognized is the link between development of forest and irrigation induced agricultural growth. The inventory of new initiatives [ptf, p.96] in irrigation system in the state, by and large, reflects the missing link between forest ecosystem and growth in the region. Highlighting the critical importance of topographical features in the state, it has been noted that highland (constituting nearly 42 per cent of the cultivated area in Eastern Ghats incorporating a large part of Souther Orissa), with its poor intrinsic fertility may be suitable only for low water intensive crops [HDR, 2005] or for plantation.

It is perhaps be envisaged that the agricultural growth may create a significant pull effect for people from the forest regions, constituting a large proportion of the state's poor population. This kind of population movement is a fairly common phenomenon especially in Orissa where density varies significantly from 375.4 in the developed coastal region, to 169.1 in Northern and 109.9 in Southern region of the state.

A reverse pattern is observed with respect to incidence of poverty varying from 31.8% in coastal region; 49.8% in northern region and 87.1% in southern region [Panda, 2004]. To an extent the congruence between population density and incidence of poverty might be a reflection of mobility from low to high growth region. This however, may not be true in the case of tribals from forest regions whose mobility is constrained due to physical remoteness and lack of financial as well as social capital essential for supporting such migration[7]. This might be particularly true in the case of regions with relatively better forest resources as we will discuss at a later stage.

Two issues may need attention in the context of growth-induced-migration approach for development and poverty reduction. First, refers to the relative ability of the poor tribal people in the forest regions vis-à-vis the potential migrants from different places gravitating towards the newly emerging centers of agricultural growth. And the second issue pertains to the accentuation of the already existing regional disparity, which may further dampen the opportunities for those who are left behind unless a significant resource transfer takes place through remittances at the households level and through allocation of resources by the state. But this is not likely to happen as agriculture sector is already over-crowded, creating[8] a dampening impact on wages. The new opportunities may, at best, improve the wage rates for some not for all.

Upland areas in these regions therefore should adopt low-water intensive crops (Swain, 2002; p. 120). Plantation and pasture development may for a part of the farming system in the region

[7] Despite high incidence of poverty, interstate migration in Orissa is relatively low as compared to other states like Bihar, Uttar Pradesh, and Rajasthan. A part of this could be due to physical remoteness and access to forest resources. Within the Southern Orissa region, the individed Kalahandi and Phulbani districts have better connectivity as compared to Koraput, which is isolated due to hills on both the sides. Out-migration therefore is found to be higher in Kalahandi and Phulbani as compared to Koraput. There is however, no systematic estimates on out-migration from districts in Orissa.

[8] While there is substantial scope for enhancing irrigation facility in the medium and low land areas in the state, this ideally, should improve livelihood conditions among those who have already shifted out of the forest regions due to economic distress, rather than pull more workers from the high poverty areas. What is essential therefore, is to undertake a systematic study of resources – potential and carrying capacity in a dynamic context. The recent State Development Report does mention about this though, a detailed analysis of carrying capacity is yet to be undertaken (Dash, et.al; 2002). Essentially this would call for adapting the framework from environmental economics.

The fact that physical remoteness is an integral part of a conservation strategy (so as to check commercial and illegal exploitation of forest resources), the forest dwellers are constantly saddled between high-cost migration and over-depletion of forest resources (within or beyond the legal system) so as to avoid out-migration. It is in this context remoteness in a forest-based economy may exert a compounding impact on resource alienation and chronic deprivation as noted earlier.

1.3 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 region, and at the same time enhance their access to the opportunities in the down stream of the forest regions. The central thrust therefore is to recognise their 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 the JFM and other programmes for participatory management hinges mainly on enhancing people's access and thereby use of 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 dis-jointed approach may not work since, the productivity of NTFP may essentially depend on how rest of system is managed; apparently people do not have any say on large part of the resource management.

Moreover, there is a limit to livelihood support that could be derived without adversely affecting the long-term sustainability of forest. This is particularly important in the light of the fact that during 1991-97, forest cover has declined more steeply in the districts with better forest resources (crown density being >40%)[9]. The notion of carrying capacity in the wake of increasing population therefore becomes relevant for defining the limit. The population exceeding a reasonably defined carrying capacity obviously needs to be supported through a smooth transition to a migratory path and/or resource transfer as discussed earlier.

Unfortunately the predicament of the state in Orissa is that it does not find 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 an 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 farther from being benevolent, the fate of both –the resource as well as people is likely to be jeopardized. What is worse is the state does not have effective institutional mechanisms to ensure implementation of the legal system governing its natural resources.

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[9] Forest in Orissa has declined more sharply during 1991-97; the decline is particularly acute in dense forest (Mallik, 2002; p.27). The Eastern Ghat Region, which coincides with Southern Orissa, has the highest proportion of open degraded forest. Koraput has forest cover only in scanty patches in southern, south-western and northern parts (CPSW, 1994).

This is what seems to have triggered in the case of 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 this would therefore require a substantial shift in the mind-set of policy makers who often tend to isolate the very resource that renders foundation of the state's economy especially for the poor. It is both for the state and the poor to capitalize on this resource as a strategic negotiating point rather than keeping that aside, in a safe custody, away from the developmental discourse at national, regional and local levels.

Evolving a coherence of approach and commitment at different level 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 criticality of bringing forest and the poor living in these regions at the center 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.

Given this backdrop, the present study seeks to examine the extent, nature and structural factors (social, physical and legal) leading to poverty in southern region of Orissa, which 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 under poverty line, poverty is most likely to be chronic among a large proportion of poor in the region. Apart from being forest based, the region is also characterized by predominance of socially marginalized group i.e. scheduled castes and tribes accounting for 54% of the population and, also physical remoteness from the mainstream economy.

This is what has been reflected in the fact that whereas incidence of poverty has increased in most of the forest-based districts in the state, poverty is found to be significantly higher in southern region as compared to that in the north. The worst scenario obtains in Koraput (undivided) district, having as high as 92 per cent of people below poverty line (Panda, 2003; p.14). This obviously, causes deep concerns among academicians, civil society organizations, and policy makers.

Fortunately a number of studies have been carried, in the recent past, focusing on estimates of poverty in a more dis-aggregate manner (NCDS, Panda, Haan and Dubey, Pandey and Jena, SDR). While these studies provide policy recommendations for enhancing social as well as physical infrastructure for promoting productivity growth in the lagging regions within Orissa, the analyses do not adequately address the issue of why such abysmal situation of stark poverty continues to exist in southern region, whereas some of the other parts of the state manage to escape the poverty trap. The present analysis tries to move onto this direction by conducting a micro-study in Koraput district in the southern region of Orissa.

The analysis seeks to develop detailed understanding of the status of poverty and policy implementation so as to be able to evolve alternative perspective that seeks to integrate the objectives of environment and economic growth for poverty reduction, especially in the forest-based economies in the state. The analysis is mainly exploratory in nature.

1.4 Objectives and Research Questions

The present study focuses on the following objectives:

(i) To examine relative status of poverty in the southern region in Orissa and reflect on the larger processes obtaining in the state.

(ii) To prepare a profile of poverty in terms of severity as well as multi-dimensionality, and trace changes in economic well-being (i.e. consumption pattern) over time.

(iii) To examine the impact of socio-economic attributes of households and physical remoteness of the area in a micro-setting.

The specific questions addressed by study are:

1. Why incidence of poverty is particularly high in southern region especially Koraput district vis-à-vis other forest dominated districts in the state?

2. Whether social identity (i.e. Tribalness) is more important factor as compared to spatial characteristics such as availability of forest-produce and physical remoteness in explaining high incidence of poverty in the region?

3. Whether variation in physical remoteness operates as an important factor influencing poverty within a micro-setting of a district/block.

4. What is the interface between income (expenditure) poverty and social capability?

5. What is the extent of access to forest produce, land, and water resources? Does it have significant influence on severity of poverty as part of the coping strategy under the conditions of shocks? What is the incidence of migration and what are the major constraints for out-migration?

6. Has there been any improvement in the quality/quantity of consumption and amenities over the past 10 years? Who have experienced these improvements?

7. What kind of policy support has reached the people in this remote region? Who have benefited more than the other? Whether physical remoteness influences differential performance of delivery mechanism for providing the state's support?

The analysis is divided into seven sections including this introduction. The next section presents a brief overview of poverty in terms of different indicators across districts/regions in the state. This is followed by a discussion on the various processes influencing/constraining development in southern region especially in Koraput. Section 4 presents a profile of the villages and households selected for the micro study. The next section 5 presents typology of poverty and its correlates among sample households. Section 6 presents the status of access and effectiveness of the developmental programmes supported by the state and the problems thereof. The last section discusses adequacy as well as appropriateness of policy support especially in the context of the carrying capacity of the region's resources and identifies need for further analysis so as to be able to explore policy options.

This paper discusses preliminary results from the micro study conducted in four villages in Koraput district, besides presenting an overview of poverty estimates based on the existing literature. The analysis presented in the paper thus, is exploratory in nature.

1.5 Coverage and Methodology:

The study is located in four villages of Lamptaput block in the undivided Koraput district. Lamptaput, situated at distance of 35 kms. from Jeypore, a major trading center in the district, represents relatively larger proportion of area under open (degraded) forest and physical remoteness in terms of connectivity through and transportation. In fact Lamptaput is on the southern border, with mountains as natural boundaries between Orissa and Andhra Pradesh. Four villages have been selected for the study- two each located near the road- side and about 5 kms. thus, representing less and more remote villages respectively. The sample villages are Hanumal and Kamel in I-category, and Balel and Sindhiguda in category-II in terms of remoteness. The villages are located at a distance of 15-35 kms. from Lamptaput. The more remote villages are almost the last points of habitation in the foothill of the mountains on the state-border. Table1.1 presents some of the basic information about the sample villages.

Table 1.1: Profile of Sample Villages

Indicator	Balel	Sindhiguda	Hanumal	Kamel
Total HHs	141	52	126	57
Total population	527	NA	457	226
Total area	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 Km.	Approach by walk to Lamtaput 10-12 Km.	Approach by walk to Onkadeli 4-5 Km.	Lamtaput 6 Km.
School facility	Yes (Primary)	No	Yes (Primary)	Yes (Primary
Health facility	Lamtaput ICDS services of village level Irregular ANM visit	Lamtaput/ Khairput No ANM service	Lamtaput ICDS service at village health extension by NGO (Ashakiran)	Lamtaput ICCDS services at village Regular visit to ANM
Drinking water	Handpump/ Tubewell/River/ Nala	Deep tubewell	River/Nala/ Shallow/Open water/Tubewell	Deep tubewell
Electricity	No	No	No	No

Transport	No transpor-tation facility. Private four wheeler come to village occasion-ally. Travel 3-4 Km to catch bus	No transpor-tation facility. They come to Khairput to catch bus or to Lamtaput	No transpor-tation facility. They come to Onkadeu to catch bus	Yes 0.5 Km.
Distance from road (SH/ ODR)	5 Km.	14-15 Km.	10 Km.	0.5 Km.
Distance from Lamtaput	15-17 Km.	65 Km.	41 Km.	5 Km.
Panchayat	Yes	Yes	Yes	Yes
Wage rate (Rs./Day) Male Female	40 30-35	30-40 25-35	40 30	35-40 30-35

The study is mainly based the primary data collected from households in the sample villages. 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 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 the communities within the study villages is fairly homogeneous in terms of economic well being, and also that, the villages are relatively small in terms of number of households, a sub-set of households were selected for detailed enquiry. A quota sampling method was used for selecting households for collecting primary information. Forty households were selected on a random basis from each village. The total sample size is 159 households since one household dropped out from responding to the survey [See Table1.2]. Besides this, focus group discussions were conducted in order to get better understandings on the issues pertaining to institutions and governance.

The sample survey of households focused on various aspects listed as follows:

[1] Household general information
[2] Details on family members
[3] Employment details
[4] Migration s
[5] Assets and Amenities
[6] Drought and its impact
[7] Expenditure on basic consumption
[8] Price increment
[9] Expenditure in non-food items
[10] Mortality and Morbidity
[11] Family planning services
[12] Development and Governance
[13] Water and irrigation
[14] Electricity
[15] Forest and people's dependency
[16] Income / expenditure details

Table 1.2: Distribution of Sample Households by Villages

Village/Category	Households	
	No	% to all HHs in the Village
Balel	40	28.3 (141)
Sindhiguda	40	76.9 (52)
Sub-total (I)	**80**	**41.4 (193)**
Hanumal	39	30.9 (126)
Kamel	40	70.1 (57)
Sub-total (II)	**79**	**43.2 (183)**
All HHs	**159**	**42.3 (376)**

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

2.1 Poverty Across Regions in Orissa

The important features characterizing 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 (20030 indicate that whereas poverty had reduced significantly in coastal region and also in northern region, the incidence of poverty in southern Orissa had registered an increase from 79% in 1983 to 81% in 1999-00 (See Table 2.1). The increased incidence of poverty in southern region is entirely due to a sharp increase in rural areas as against urban areas, which had registered a decline during this period.

Table 2.1: Poverty Among Regions in Orissa

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) Based on official poverty line
(ii) Compiled from Haan and Dubey (2003); p. 6
(iii) NSS-Regions consist of undivided districts as follows:
Coastal: Baleshwar, Cuttack, Puri, Ganjam
Southern: Phulbani, Koraput, Kalahandi
Northern: Sundargadh, Balangir, Sambalpur, Keudujar, Dhenkemal, Mayurbhan

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 southern region.

ii. Poverty in southern region had increased even during the early part of the eighties. 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 viz; 1983-1987/88 and 1993-1999/2000 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 – 1999/2000 in both southern and northern regions could be due to the problems in converting food-grains into monetary value 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 10% lower poverty line for southern region, the incidence of poverty still remains around 77% (Panda 2004).

Notwithstanding these problems in gauging the actual increase in poverty, the problem remains that a significantly large majority (i.e. about 70-80 per cent) of people in Southern Orissa have experienced poverty over a long period of time. Hence the questions that need to be addressed in the context of the trajectory of poverty reduction described above are two fold: First, what were the major factors responsible for reducing the incidence of poverty during 1987/88 and 1993/99? And second, what kind of processes were at work, triggering the (likely) reversal in poverty reduction during the later parts of the nineties?

There are a few possible explanations for the phenomenon described above:

i. The reduction in poverty during 1983-87/88 could be due to development of mining and industrial sector and the spread of modern agricultural technology especially, irrigation, within and outside the southern region. This may have triggered a spate of out-migration from the region especially, from Kalahandi and Phulbani, which have better connectivity and/or stronger compulsion to move out due to relatively more depleted forest in these districts. This trend may have reached a saturation once large number of migrants had moved out towards the existing clusters of mining-industrial-agricultural growth.

ii. Besides this, a steep rise in rural poverty during the subsequent period could be attributed to slowing down of public expenditure especially for irrigation and Public Distribution System (PDS) network owning to the economic reforms and fiscal discipline followed by the state as well as central governments.

iii. A third, and a more probable reason for increase in rural poverty during the mid-nineties, could be, lagged effects of displacement and land alienation that may have started since the mid eighties but, got consolidated during the nineties in the wake of economic liberalization. This phenomenon is likely to hold good since a number of infrastructural and mining projects were initiated, during this period; the actual benefits in terms of employment and connectivity are yet to be realized.

While we do not have adequate information to substantiate these conjunctures at this stage, the estimates of sectoral growth in Table 2.2 substantiate a part of the explanation put forward. It is observed that whereas agricultural growth was positive (i.e. 1.36% during the eighties, it declined to –0.43% during the nineties. Similarly, growth in industrial sector suffered a major setback falling from 7.4% to 2.5% during the two decades. The significant decline in agriculture

and industrial sector thus, has been seen as the main cause of increasing poverty, which in turn, reinstates the strong link between growth and poverty reduction in the state [Glinskaya, 2003; PTF, 2003]. The linkage between the two may have particularly affected the backward regions such as southern Orissa, where the mainstay of people's livelihood is agriculture and forests though, dependence on the later may have declined. Similarly there are estimates suggesting that the allocation of forest area for non-forest use had increased significantly since 1990s. Of the total allocation of 25343 hectares of land since 1982, nearly 72 per cent was allocated during 1990-2000/01 (Samal, 1998, p.112). It is likely that the projects for which land had been diverted for non-forest use may have a long gestation period hence, employment/income benefits, if at all expected, may not have started flowing to the poor in the forest region.

Table 2.2: Sectoral Growth Rates in Orissa and India

Year	Sectors		
	Agriculture	Industry	Service
Orissa			
1980-81/ 1990-91	1.36	7.38	5.93
1993-94/ 2000-2001	-0.43	2.49	7.02
All India			
1980-81/ 1990-91	3.12	6.60	6.48
1993-94/ 2000-2001	2.73	6.25	8.13

Note: Compiled from Report of the Poverty Task Force (2003), Table 2.4; p.17

The trends in sectoral growth pattern noted above raise further questions that need to be addressed. These are:

(i) What has led to a significant fall in agricultural growth, on which the poor especially, in forest regions, depend? And (ii) even if agricultural growth resumes the earlier momentum and gets further expedited, can it help resolving the livelihood problems of say, 69% of the rural population, which lived under poverty conditions even at the time when the growth performance was somewhat better? There is, of course, no readymade answer to this. One possible explanation for the negative growth in agriculture during the mid-nights could be uncertain rainfall especially, in the terminal year, as noted earlier. Hence even if one grants that agricultural production reverts back to the level of early nineties, the next question still remains unattended.

The tentative answer, based on some of the broad indicators, suggest that agricultural growth *per se* may help substantial reduction in poverty especially in forest based regions such as Southern Orissa. This is particularly so because agricultural base, given the agro-ecological conditions in the region, is quite limited [HDR, 2005]. The phenomenon of poverty reducing impact of agricultural growth could be seen in the light of a recent exercise[10] of co-relates of agricultural growth across different districts in the state (See Table 2.3). While the results, by and large, substantiate the expected positive association between agricultural growth and rural poverty, they also reinforce the widely known reality that agricultural growth is inversely linked with proportion of forest area and proportion of tribal population in the district. The analysis further confirms that agricultural growth is positively linked with development of irrigation and other

[10] For details see Shah, A. (2003).

infrastructure- both are often found to be weak in forest-based economies such as Southern Orissa. The growth-poverty reduction mechanism therefore, is likely to be mediated by migration especially, of male members as suggested by positive link with population density on the one hand negative link with sex ratio on the other. Given the fact that poor, especially in the remote areas in forest-based regions face additional constraint with respect to long distance migration, it is likely that poverty may continue for a large proportion of rural communities in the region, notwithstanding the irrigation induced agricultural growth taking place in other parts of the state.

Table 2.3: Correlation Between Agricultural Growth and Socio-Economic Variables

Variables	Orissa
Population growth	.446
Sex ratio	-.489***
Population density	.907*
Infant mortality	.340
Rural literacy	.712*
Female literacy	.851*
Scheduled tribe	-.654**
Urban population	.209
Forest area	-.570**
Rural poverty	-.746*
Female workforce	-.890*
Area irrigated	.705*
Development index	.527***
Agricultural productivity	-.095
Land productivity	.643**
Non-farm workers	.681**
Area under non-food crops	NA

* Correlation is significant at the 0.01 level; ** Correlation is significant at the 0.05 level and *** Correlation is significant at the 0.10 level.

Sources: (i) Profiles of Districts, CMIE, October 2000
(ii) Census of India 1991, 2001
(iii) India Development Report 2000

2.2 Poverty Among Social Groups

Like in most parts of India, scheduled tribes (STs) and scheduled castes (SCs) in Orissa suffer double disadvantages – i.e. being socially as well as economically marginalized. The available estimates suggest that by 1999-2000 people belonging to STs and SCs contribute 64% of the poor in Orissa. A significantly large proportion of these poor are likely to be located in forest-based districts especially, in southern Orissa. Table 2.4 provides estimates of poverty by social groups during 1993-94 and 1999-2000. It is important to note that whereas poverty among non-SC/ST groups has declined significantly that among STs and SCs has increased during the nineties; the increase is faster among STs as compared to SCs. The pattern is somewhat in tune with the macro level evidence for 1993/94 –1999-00, suggesting that `poverty situation of ST

households worsened relative to both SC households and the average population in rural and urban areas in the country' (Sundaram and Tendulkar, 2003; p. 5267).

Table 2.4: Distribution of Rural Poor by Regions and Social Groups

Social Groups	Head Count Ratio	NSS-Regions			Total
		Coastal	Northern	Southern	
1999-2000					
S.T	73.10	4.10	18.29	18.62	41.01 (22.2)
S.T	52.30	11.15	5.15	6.43	22.74 (16.2)
O.B.C	39.70	16.19	9.97	10.10	36.25 (61.6)
Other	24.01	31.44	33.40	35.15	100
Total	48.14	(47.61)	(35.09)	(17.30)	
1993-94					
S.T	71.31	4.23	15.23	16.52	35.98
S.C	49.79	9.87	4.29	4.41	18.51
Other	40.23	28.99	5.74	10.77	45.51
Total	49.81	43.03	25.26	31.71	100

Notes: * Figures in parentheses indicate share in total population among regions and social groups
Based on Tables 2 and 6 in Panda (2003)

An important question that often arises in the context of high incidence of poverty among tribals is that: Is poverty among tribal communities high mainly because of their social identity and marginalisation or it is so more because of their forest-dependence and physical isolation? Given the fact that since both the processes are simultaneously at work, it may be useful to empirically examine this issue in the light of the poverty estimates generated by Haan and Dubey for the year 1999-2000. Table 2.5 presents estimates of poverty by regions and by social groups. It is observed that whereas 73 per cent of all tribals are poor, the proportion 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%) and coastal (66.6%) regions. Against this, the non-ST/SC population in southern region has higher (77.7%) incidence 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 member of other community within the southern region.

Table 2.5: Head Count Ratio by Regions and Social Groups (Rural): 1999-2000

Regions	Social Groups			
	S.T	S.C	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), Table p.12

The above observation thus lend support to the assertion made earlier about the overriding impact of forest-region on the high and more recently 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 this marginalized community, which constitute 41% of poor in the state. The relatively stronger impact of the spatial characteristic needs to be seen in the light of the fact that tribals have relatively larger size of cultivable land as compared all other social groups across regions in Orissa [Haan and Dubey, 2003]. Only `other communities' in the northern region has similar land holding size as the tribals in 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 we have already noted earlier, land owned by these tribals are likely to be on a sloppy terrain, located upstream in the catchment of a watershed area, and have poor connectivity with markets. Besides these, there is uncertainty about settlement of the land, which they operate. While these are serious issues, the fact remains that even if the tribal own the 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 titled towards forest-management and rather than having an increased access to forest resources. It is in this context recent experiences with respect to NTFP-based livelihood support may hold special relevance.

2.3 Forest-Resources and Livelihood Security: The Issue of Access Vs. Regeneration

Forest, being the most important resource for the state economy providing livelihood base to the poor, should (ideally) assume the focal point of the development programmes in the region. To a large extent, tribal development programmes reflect this, with a main thrust on improving poor's access to forest resources especially NTFPs. A plethora of studies have gone into examining the scope and constraints in providing livelihood support to people in the forest based regions in the state. According to an estimate, there are about 10 million workers directly or indirectly engaged in forest related activities in the state [Sarap, 2004]. Similarly, a study by Mallik (2003; p.1) suggests that NTFPs constitute nearly 20-50 per cent of households income in the forest based regions in the state though, the intensity of forest –dependence has been found to be declining in the wake of increasing population and simultaneous depletion of forest resources[11]. To a large extent increased degradation could be attributed to inadequately defined property rights, absence of developmental opportunities, and lack of transparency in the state controlled management of forest resources. While there has been a growing recognition of the fact that unless people are involved in the management of forest, there cannot be any effective solution for checking the depletion of forest, not only by the people, but more importantly at the instance of the connivance between the state-functionaries and private operators unless the management practices are made more broad based and transparent. In that sense, people's involvement through Joint Forest Management (JFM) and other participatory institutions are being seen more as devices to make the communities operate more as a protector rather than as beneficiaries of the resource regeneration.

[11] The issue of changing intensity of forest-dependence however, is somewhat complex. Whereas, the study by Samal et.al (2005) suggest reduced share of forest resources in household income, there are other evidences suggesting increased value of forest collection per household even at constant prices (Mallik, R; 2005). The two observations are not necessarily incompatible.

The experience from a large number of cases however, suggest that such a truncated view of forest protection and regeneration may seldom work because it gives only limited rights and responsibilities to the people by participation in the management of a sub-set of forest resources which not only constitutes a small part of the integrated forest system, but is also highly degraded. Not surprisingly therefore, empirical evidence clearly suggest that even if management of these depleted forests improves, it is still unlikely that such initiatives would be able to lift a large proportion of the people out of poverty. The reason is that – even in the early eighties when population pressure was lower than the present level, and also that forest resources were relatively in better status, NTFPs did not succeed in lifting as large as 87 per cent of the tribal population, engaged, at least partly, in collection/processing of NTFPs, out of poverty. The fact that 80 per cent of all the people living in southern region during 1983 could not exit poverty, is a pointer to the fact that access to NTFPs and people's involvement in managing the non-reserved, non-protected forest by itself, may not help poverty reduction.

One of the major issues however, remains to be that of prices and market access for NTFPs, despite the efforts made in the past decades to improve marketing and processing of NTFPs in the state. The recent reforms for marketing of NTFPs since 2000 have made significant departure in terms of enhancing income among the forest dwellers. While these are commendable efforts, it is difficult to gauge the extent of income support that NTFPs could provide to the people in absence of systematic assessment of the resource availability over a sustained period of time.

The official statistics on the status of forest resources in Orissa suggest that forest area had declined substantially during the eighties, and that, the decline was particularly confined to close forest, which was reduced from 37320 sq. kms. in 1972-75 to 28,812 kms. in 1980-92. More recent estimates suggest that forest area as a percentage to total geographical area has declined from 37% to 30.2% in 1999 and that the proportion of dense forest to total geographical area has reduced from 24 5 to 17% by the turn of the last century. Besides deforestation, degraded forest land constitute a significantly large proportion of the total forest area, ranging from 72% in Gajapati to 62% in Koraput and 52% in Phulbani – the last two districts constituting part of the southern region in the state. It is thus noted that the severe depletion of forest resources might have contributed towards further deepening of poverty among a large proportion of people, who were already poor even by the beginning of 1980s. Over time, the impoverishment may have worsened if, other things remained unchanged. While we do not have comparative picture of severity of poverty over time, the estimate of poverty-gap in the region suggests (Jha and Sharma, 2004). A recent study suggest that majority of the households in the region are facing scarcity of food and bio-mass for sustaining their livelihood (Mallik, 2003 p.35).

It is thus, imperative to argue that the policy approach needs to be shifted from its central thrust on participatory management and improved access through better sharing of resources, to conservation and regeneration of forest eco-system in order to derive livelihood support on a sustainable basis.

This, essentially, would necessitate a twofold approach: (i) increased investment in forest conservation and development; and (ii) resource transfer for sustaining livelihood of forest dwellers so as to allow proper protection and restoration of the forest-ecosystem. The recent upsurge in policy support for food distribution and employment generation programmes in some of the most backward districts in the state is a move in the direction resource transfer noted

earlier. However the issue of increased investment for sustainable development and management of forests is yet to be addressed, given the financial crunch faced by the state[12].

The issues of lost opportunities and compensation thus, need to be sorted out in the light of the existing inequality across regions, sectors, and social groups. The two overarching perspectives, which may help addressing this most complex and politically non-tenable issue could be: (a) the perspective on resource sharing between stakeholders located at upstream and downstream of a forest ecosystem within the state; and (b) evoking the present federal finance system as well as fiscal reforms framework to incorporate cost of conservation and regeneration of forest, which have far reaching and wide ranging benefits going beyond the state boundaries. The mute point is to recognize the fact that the value of this critical resources lies in its conservation and sustainable use; those who posses and preserve them cannot be penalized for retaining the value of the resource. Nevertheless it may be also kept in mind that, if not properly compensated, the poor will be compelled to over-exploit rather than protect the resources.

[12] For further details see Poverty Task Force (2003); Table 14.

3. 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 one out of 10 persons had crossed the poverty line by the turn of the last millennium. And the second part presents a statistical profile and mapping of important features of Koraput district as they stand now.

3.1 Koraput – A Historical Profile

Location and Remoteness

The undivided Koraput district is characterized certain special features –historical, natural and geographical. The district lies on a section of the Eastern Ghats 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 tablelands. The district falls naturally in to two parts each characterized by a distinct suite of rocks, the 2000 Ft. plateau of Jeypore with its much lower extension in to the Malkangiri sub-division [present Malkangiri district] and the high hilly regions of the Eastern Ghat lying between the Jeypore plateau and the Visakhapatnam costal plains. The peculiar geographical setting has to a large extent made this region isolated from the plain costal districts of Orissa. For this it has up till now preserved many of its much 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 civilization.

Communication

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

Forest resource

At the time of independence, about 70 % of the area in Koraput district was covered under forest of different tree types. The whole forest range was one time 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 years 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 replaced through repeated burning and typical species of drier zones. The forests in these

ranges are of great climatic importance as it helps in controlling temperature and acts as an important factor influencing substantial rain in the district.

Forest has made great contribution to the economic life of the inhabitants. The district is rich in minor forest produces like tamarind, Myrobalan, Adda lives, Sabai grass, kendu leaves, Rauwolfia serpentina etc. Others like sal, resin, rella bark, lac, soapnuts, reeds, canes, honey, arrow-root, Mahua flower and seeds, pongom seeds, cleaning nuts, wax, horns, skins, nux-vomica, shoekey, marking nuts, ghooseberry, kusum seeds, brooms, silk and other medicinal herbs.

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 abolition of Zamindari system [1952] soon after the independence, the Government of Orissa took over the management of forests. Separate rules were framed for the forest in 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 viz; 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 being scientific. By and large the sketchy work plans drawn out during the Zmindari system were continued even in the post-independence era.

Prevention and control of shifting cultivation (known as 'Podu' or zoom cultivation) occupied center stage of forest management for many years. Abolishing the age-old practice, however, is almost impossible without arousing a very strong resistance among the people. The practice is particularly rampant among the most primitive tribes, inhabited in the remotest part of the district. Remoteness thus, emerges as one of the important factors explaining very high proportion of degraded forest in Koraput as we will see subsequently.

At present government has restricted the practice of shifting cultivation and 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 hilltop and settled in the colonies in the plane. Land is given free and along with facilities for irrigation and drinking water. Roads and schools are also provided in the colonies. Bullocks along with agricultural implements were also provided so as to settle in regular cultivation. It was expected that after successful implementation of the scheme, the rate of PODU cultivation could be minimized. A special project called `Dandakaranya' has also been implemented for facilitating settled agriculture among the forest dwellers.

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

Land Revenue systems

The land revenue administration was the survival of the ancient feudal system. No survey or settlement was ever carried out in any part of the district. After the abolition of Jeypore ZAMINDARI, the JIRAYATI lands in the estate were administered partly on RYOTWARI system and partly on a village rent system called MUSTAJARI. The relation between landlords and tenants was governed by the provisions of the Madras Estate Land Act of 1908, administered by the district collector and the Revenue Divisional Officers. Under the act, the tenants had the occupancy right on their holdings. Previously they did not possess this right. Moreover the landlord could evict a tenant only by the authority of law[13]. Prior to this, the tenant had no occupancy right over the land. The uncertainty of their tenure worked as a serious impediment for the tenants to undertake any measures for land development. Excessive rent assessment often led tenants to shift out and cultivate elsewhere. The landlord, in turn, would therefore tied as many ryots for his lands as possible so as to put pressure on the tenants.

This system continued till Orissa became a separate province in the year 1936. After its emergence of a separate state and more particularly after independence, Zamindari system was abolished in 1952. Subsequently, under Orissa Bhoodan Act of 1953, the Bhoodan samiti received around 76,566 acres of land by the end of 1964 and distributed among the tribal as most of the lands in the district was owned by non-tribals. At present, majority of tribals in the district have clear land rights, protected under Orissa Estate Abolition Act. Nevertheless, land alienation continues to be widespread due to lack of land records, perpetual indebtedness, and asymmetric power structure between the forest dwellers and the outsiders[14].

Agriculture and Irrigation

In his book of 1941, R.C.S.Bell mentioned about the agriculture of Koraput in the following manner which some how holds true even now.

---

13 The Ryotbari system placed the ryots in a better position than those in Mustajari villages. The system was prevalent in 587 villages in the year 1945. Agreements such as COWLS and KODPAS were executed between the landlords and tenants by which the latter secure the holdings against regular revenue establishments. The holdings were described by their local names and a rough description of their boundaries was given, the area being estimated either on their seeds or plough capacity.

INAMS in the district were of three kinds namely gift or DANA MOKHASA and Service but the last two terms were used as interchangeable. The payment made by the grantee to the MAHARAJA was known alternatively as TONKI or KATTUBADI. DANA grants were usually made to BRAHMANS for religious purposes. MOKHASAS were granted in favour of the RAJA's relations or other persons of the rank and subject to lapse on failure of direct heirs.

In all above systems, rent was paid either in cash or in kind. Where cash rents were in force, the assessment was usually a certain sum on each plough & hoe used. Normally a single RYOT was assessed on the assumption that he possesses one plough and a hoe and was permitted to cultivate as much land as he could. Where grain rents were in force, the rent was generally fixed upon the seed capacity of the land, the usual rule being that the Ryot paid as rent a quantity of grain equal to that required to sow the land. In addition to cash or grain rent, one or two minor miscellaneous dues were still levied.

14 The issues of land alienation and preparation of land records are being treated as high priority at least in the contemporary discourse on poverty reduction in the state. While there are scattered evidences on the total forest area converted for various developmental projects, there is no systematic prioritization of such projects and little transpirancy with respect to the process of land alienation, let alone consultation with the local stakeholders.

"In Koraput, the soil is tilled at elevations ranging from 200 to 4000 ft. above sea level and Condition and method of cultivation vary widely at different altitudes. But in general, agricultural practice is primitive and far more backward than in the plains of the adjacent districts. There is very little artificial irrigation, manure is little used implements are crude type and the livestock is extremely poor. On the other hand the rainfall is generally plentiful.

Culturable waste being scarce at the district, a hundred thousand acres of forest had to be cleared for Dandakaranya project for the settlement of settlement of tribal and refugee. Large areas have also been given to scheduled castes and tribes for reclamation and cultivation in place of traditional shifting cultivation practices. Land levels change so fast that there is little scope for extensive use of tractors except some places.

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 as noted earlier.

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; originating from the district. The estimated irrigation potential of the medium and large project is 40,000 acres though, very little is available to the forest dwellers in remote parts of Koraput district.

Low Mobility and Bonded Labour

Adverse agrarian relations, coupled with low agronomic potential and limited physical connectivity seem to have led to a situation of perpetual indebtedness and bonded labour. With implementation of Orissa Debt Bandage Abolition Act, 1948 the practice of bonded labour has been modified though, not completely abandoned. One of the important changes taken place over time is emergence of forest-contractors as employers of large number of indebted labourers. While it is difficult to make a comparative assessment of the two systems of appropriation viz; bonded labour and those employed by the contractors, the workers continue to get exploited (especially, in terms of low wages) mainly because of their indebtedness and absence of any other opportunities for employment in the region. Notwithstanding these exploitative aspects, employment in the fields of the landlords (i.e. Nayakas), and forest contractors appear to be the most important source of livelihood among a large number of poor households whose land is too small and/or degraded.

Given this backdrop it would be useful to examine relative status of Koraput vis-à-vis other districts in the state. This will help capturing the multiple adversities, which in turn, have impinged on the area and livelihood of the people living therein.

3.2 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
- % share in total rural poor in Orissa
- % share in total geographical area
- % of degraded forest to total area
- Rural illiteracy
- Frequency of droughts
- % of tribal population*
- Composite development index (Lowest)

Table 3.1 presents important features of the undivided Koraput district in comparison with the state of Orissa. It is observed that Koraput has significantly low density, inhabiting 9.6 per cent of the state population of which 54 per cent are tribal. One third of the geographical area in the district is officially under forest, much of which is degraded. The district is facing severe constraint in terms of productivity of land under agriculture, which is significantly lower than the state average.

The relatively unfavourable natural resources have been accompanied by physical remoteness as reflected by low road density as well as infrastructural index. The later along with socially marginalized communities seem to have constrained migration outside the district; the lower sex ratio may partly be an indicator of lower incidence of male out migration from the district as compared to other districts in the state.

Table 3.1: Koraput District: A Comparative Picture

	Details	KORAPUT	ORISSA
Human Development Indices			
1	Human Development Index (2001)	0.236	0.404
2	Per Capita DDP/Income in 1998-99 (at 1993-94 prices)	4688	5264
Infrastructural Development Index (2000-01)			
1	Transport	89.58	100
2	Energy	82.29	100
3	Irrigation	85.24	100
4	Banking	73.22	100
5	Communication	77.50	100
6	Education	105.47	100
7	Health	84.86	100
Population			
1	Population Total (2001) (in Million)	3.5	36.8
	Male	1.8	18.7
	Female	1.8	18.1
	Rural	3.1	31.3
	Urban	0.4	5.5

2	Share of state's Population (2001)	9.62	100
3	Density of Population (persons per square km) (2001)	131	236
4	Decadal growth of population 1991-2001	17.57	16.25
5	Urban population (in per cent) (2001)	11.51	15.0
Health			
1	IMR (1999)		97
Employment			
1	Share of primary sector in total workers (2001)	77.82	64.77
2	Share of Household Ind. in total workers (2001)	2.13	4.91
3	Share of Other Workers in total workers (2001)	20.05	30.32
4	WPR (All) (2001)	48.70	38.79
District Information			
1	Area (in square km) (2001)	26962	155707
2	No. of CD Blocks (1991)	42	171
3	Total Geo. Area in sq. km. (1999)	26961	155707
4	Total Forest Area in sq.km. (1999)	7551	47033
5	Forest area as % of geographical area (1999)	28.01	30.21
Education			
1	Literacy Rate (All) (2001)	34.80	63.08
2	Literacy Rate (Male) (2001)	46.56	75.35
3	Literacy Rate (Female) (2001)	23.10	50.51
Gender			
1	Sex Ratio (All) (2001)	1003	972
Agriculture			
1	Area of Foodgrains ('000ha.) (1978-1998)	768.03	6858.10
2	Yield of Foodgrains (kg./ha.) (1978-1998)	943.56	948.57
3	Cropping intensity in Foodgrains (%) (1998-99)	131.5	139.0
4	Ferti. Cons. Per hectare of GCA (kg./ha.) (98-99)	20.5	36.0
5	% GCA Irrigated (1998-99)	30.9	41.6
6	Per capita output of food grain (in kg per annum) (2001)	189.08	205.86
7	Cultivator as percentage of total main workers (2001)	58.62	44.30
8	Agricultural labour as percentage of total main workers (2001)	72.67	52.13
9	Land Productivity (Rs/Ha.) (1995)	1477	6317
Poverty			
1	Poverty Ratio (1999-2000) (Rural)	92.2	48.1

Source: Human Development Report 2004
Census of Orissa 2001
Panda (2004)

Together these features indicate a logjam of adverse conditions, leading to significantly high proportion of poor population in the district. In 1999-2000 as large as 92 per cent of people in the 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 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 detail information pertaining to selected districts in the state[15].

Comparing Koraput with Other Forest Based Districts

We tried to examine the relative position of Koraput (and southern region) with other forest-based districts (in northern region) in the state. This would help, at least partly, answering the question why Koraput has remained in stark poverty over an extended period of time?

Table 3.2 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 terms of Relative Development Index (RDI) in 1991 and that the status has worsened over 1971. Evidently Koraput is followed by other two districts from the same region. The forest-based districts in the northern regions viz; Keonjhar, Mayurbhanj, Bolangir and Dhenkenal follow the worst three districts in the southern regions.

Table 3.2: Change in the Relative Development Index in Some of the Forest-Based Districts of Southern Region in Orissa

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

Based on Table 10.3 in SDR, 2003

Recent documents n State Development Report and Human Development Report for Orissa provide useful information on some of the major indicators of poverty, human development and infrastructure across districts in the state. We have used the estimates to prepare a comparative picture of districts in Southern and Northern Regions where forest area form substantial part of the resource base. These estimates however, are available for new districts; we have compiled the data for 20 new districts that constituted nine districts in the earlier scheme (See Table 3.3). It is observed that, the four new districts in the undivided Koraput district, by and large, 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. What is however, noteworthy is that the low developmental as well as poverty outcomes in these

[15] 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).

districts can not be attributed to relatively weak infrastructural indices as indicated by estimates in Table 3.4. For instance, transport index is found to be higher than the state average in two out of the four constituent districts of undivided Koraput. The same holds true for irrigation and education infrastructure.

On the other hand these districts have fairly lower ranks in terms of energy, communication, and banking as compared to other districts in the two regions. Strangely the data in Tables 3.3 and 3.4 indicate that the districts in Koraput, despite having comparable education-infrastructure indices, have relatively very poor outcome in terms of literacy. One of the possible explanations is physical remoteness as reflected in terms of lower population density in three districts except Nabarangpur, though literacy in Nabarangpur is more or less same as the rest of the three districts. Low incidence of out migration, as reflected by higher sex ratio in these four districts, could be yet another factor depriving the poor ion the region to enhance more income and thereby access the existing infrastructural facilities in the region. One of the possible reasons for low migration from this area, once again, is its low connectivity with the main channels of transport and trade even in comparison to other parts of the Southern Region, having traditional links with markets in Raipur and mining activities in the northern part of the state.

What is however, more likely is that physical remoteness may have further worsen the conditions of effectiveness of the infrastructure such as road, transport, schools, health centers etc. It is quite possible that the administrative machinery may find it relatively more difficult to communicate, travel and reach out to the people in the interior villages. In that case the issue of physical remoteness becomes particularly important. The phenomenon of adverse impact of physical remoteness in Koraput may have been aggravated by the fact that the region is physically divided by the mountain on the southern border, hence, is relatively more disconnected from any major center of trade and/or mining/industrial/agricultural development. A major part of the northern region seems to have a better connectivity with the trading centers on the western as well as northern part of the region. This issue has been addressed at a later stage in section 6.

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. Table 3.5 indicates that in 1998-99, southern region constituted only 13 per cent of the state domestic product as against 39% coming from the northern region. What is still worse is that the share has declined from 16.2% in 1993-94. This kind of scenario indicating low and declining share in the state's economy is likely to reflect both cause as well as effect of the long drawn processes of marginalisation of the region and the district. The subsequent analysis provides a brief account of the processes of multiple marginalisation/discrimination faced by the southern region in general and Koraput in district in particular.

Table 3.3: Remoteness among Regions: A Comparative Profile

Sr. No.	Districts	Population Density (2001)	% of Tribal Populat-ion (2001)	Sex Ratio (2001)	Literacy (2001)	IMR (1999)	Human Dev. Index	Forest area as % of Geo. area 99-2000	Open Forest area as % of total Forest area 99-2000	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**
III.	**Orissa Total**	**236**	**22.1**	**972**	**63.61**	**97**	**0.723**	**31.4**	**42.7**	**78.7**

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

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

Table: 3.4 Infrastructural Development Index of Districts in Orissa, 2000-01

Districts	Transport	Energy	Irrigation	Banking	Communication	Education	Health
I Sourthern Orissa							
1. Koraput	**119.64**	**68.82**	**106.65**	**84.30**	**100.99**	**107.48**	**93.95**
Malkangiri	53.22	55.27	117.23	65.45	51.55	110.14	125.80
NavarangPur	60.95	101.22	42.17	47.11	51.99	97.08	48.34
Raygada	106.58	51.68	75.05	94.38	89.93	117.02	91.60
2. Kalahandi	**75.89**	**77.29**	**70.62**	**96.69**	**79.86**	**95.46**	**87.16**
Nuapada	61.99	82.23	58.01	87.27	72.68	95.15	123.31
3. Phulbani	**N.A.**	**N.A.**	**N.A.**	**N.A.**	**N.A.**	**N.A.**	**N.A.**
Boudh	86.42	75.85	92.24	97.52	94.00	100.28	64.66
Kandhamal	53.84	63.08	42.89	99.67	125.54	137.28	120.44
II Northern Orissa							
4. Balangir	**115.03**	**115.09**	**71.87**	**90.41**	**84.20**	**117.41**	**90.08**
Sonepur	78.69	104.70	219.19	85.79	58.11	121.59	88.49
5. Sambalpur	**142.21**	**88.61**	**105.72**	**139.01**	**143.98**	**75.16**	**163.38**
Bargarh	83.30	133.62	175.30	87.27	68.84	91.54	85.58
Deogarh	106.85	46.10	98.32	120.66	53.06	93.38	79.81
Jharsuguda	131.16	133.65	61.76	107.11	112.84	106.57	84.23
6. Dhenkanal	**102.77**	**119.71**	**66.58**	**97.85**	**88.85**	**91.90**	**92.15**
Angul	99.46	105.31	54.97	100.17	121.64	82.71	71.28
7. Sundargadh	**118.50**	**116.13**	**69.37**	**107.60**	**136.54**	**88.62**	**86.64**
8. Keonjhar	**56.72**	**111.37**	**68.13**	**92.07**	**80.65**	**90.66**	**94.25**
9. Mayurbhanj	**81.16**	**87.40**	**70.23**	**98.18**	**95.81**	**109.86**	**101.00**
III. Orissa Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Source: Orissa Development Report, 2002

Table 3.5: District Domestic Products by Regions in Orissa

Regions	**1993-94**	**1998-99**
Coastal	702769 (44.3)	857376 (46.0)
Northern	625649 (39.4)	730036 (39.1)
Southern	257712 (16.2)	242903 (13.0)
Orissa State	1586130 (100)*	1862971 (100)

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. Prima facie, this suggests a substantial gap in governance, owning mainly to the resources as well as people of the region.

4. People in the Study Villages: A Profile of Sample Households

Lamptaput block, consisting of the four villages selected for the micro study is located on the southern border of the state, with mountains as a natural boundary between Orissa and Andhra Pradesh. The villages have been selected on the basis of distance from the road side- two each located near and about 5-6 kms. from the road (or the nearest market place). The villages thus represent relatively less and more remote villages respectively. The four villages are Hanumal and Kamel representing the category of less remote; and Balel and Sindhiguda (and Khadaput) representing more remote villages. The sample villages are located at a distance of 15-35 kms. from Lamptaput. The more remote villages are almost the last points of habitation in the foothill of the mountains on the state-border.

Box 2 presents some of the basic information about the villages covered by the study. It may be noted at the out set that compiling village level information especially, for land use, has been a major hurdle because of the inadequacy and/or non-transparency of land records in the study area. As a result we have not been able to report the land use pattern and access to land among households.

Box 2: Profile of Sample Villages

Indicator	Balel	Khadaput	Sindhiguda	Hanumal	Kamel
Households					
Total Landed Landless	141	17	33	130	57
Population	700	80	200	700	250
Sources of drinking water	Handpump, river, nala	Handpump, river, nala	River, nala	Handpump, river, nala	Handpump, well
Primary school	Yes	No	No	Yes	Yes
Electricity	No	No	No	No	Yes
PDS shop	Lamdhaput – 15 Kms.	Ankadili – 15 Kms.	Ankadili – 25 Kms	Ankadili – 5 Kms.	Lamdhaput – 6 Kms.
Anganwadi	Yes	No	No	Yes	Yes
Road Infrastructure	Kachcha	Kachcha	No road	Kachcha	Kachcha
Transportation	No transpor-tation facility. Private four wheeler come to village occasionally. Have to walk 8 kms. to get a bus	No transport-ation facility. Occasionally have to walk 15 kms. to get a bus	No transportation facility. Occasionally have to walk 25 kms. to get a bus	No transport-ation facility. Occasionally have to walk 5 kms. to get a bus	Yes, 0.5 kms.
Nearest market and distance	Lamdhaput – 15 Kms.	Ankadili – 15 Kms.	Ankadili – 25 Kms.	Ankadili – 5 Kms.	Lamdhaput – 6 Kms.
Nearest health center and distance	Ashakiran 8 kms Lamdhaput – 15 Kms.	Ashakiran 5 kms Ankadili – 15 Kms.	Ashakiran 15 kms Ankadili – 25 Kms.	Ashakiran 0 Kms. Ankadili – 5 Kms.	Ashakiran 0.5 kms Lamdhaput 6 Kms.

Land (acre)					
Cultivated	300	25	120	350	240
Irrigated	0	0	0	0	0
Shifting-Cultivation	150	30	60	140	80
Forest (kaju)	80	15	60	75	60
Yield(Kg./acre)					
Paddy	560	450	450	580	550
Ragi	320	300	300	350	325
Alsi	150	100	125	150	150
Kaju (Rs.)	1300	1200	1500	1500	1500
No. of HHs migrated for work	25	4	5	20	35
NGO Activities	Jagruti Trust and Asha Kiran Trust – SHG Group, holticulture, health	No	No	Asha Kiran Trust – SHG group, holti-culture, health, cow shed, motivation camp	Jagruti Trust and Asha Kiran – SHG group, holti-culture helath, adult education, seeds
Wage Rate Agriculture*	Male 40 Female 35 Other 50	Male 35 Female 30 Other 50	Male 35 Female 30 Other 50	Male 40 Female 35 Other 50	Male 40 Female 35 Other 50

Note: (1) The information is based on PRAs conducted in the study villages; it may not reflect data on the official records, which was difficult to obtain especially for land use.
(2) Khadaput is a small hamlet adjacent to Sindhiguda. The two villages have been treated as single entity as Sindhiguda for the purpose of the study.
* Include wages in cash and kind; the nominal wage rate is around Rs. 25-30 per day.

This section presents a detailed profile of the sample households selected for primary survey carried out during October, 2004 in the study villages. The presentation is divided into three parts dealing with: (i) socio-demographic features; (ii) economic status; and (iii) coping mechanisms under internal and external shock. The main focus of the analysis in this section is to examine whether the households characteristics vary across villages with relatively low and high levels of remoteness, measured in terms of physical proximity to the road and the market place.

While it is hypothesized 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 realized in a predominantly tribal setting such as that in the study villages where the economy is still at a bare subsistence level and marketisation is fairly low. A typical household in the village is either landless or operates a very small holding; collects various minor forest produce during most parts of the year; seeks wage labour in and around the village; visits weekly markets for small purchases; intends to obtain grains available from public distribution system; indulges into drinking country liquor (and of late the branded ones) in case he happens to be an adult male; and seeks credit for

incurring a 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 the public land; this consists of both-landed as well as landless households. With an average land holding size of 3.0 acres of owned land, the problem among these forest dwellers is not much of access per se, rather, the question is more of the quality of land and certainty of land titles, since a large proportion of land is un-surveyed. Given this backdrop, the following analysis presents a derailed profile of the sample households focusing on three sets of indicators viz; socio-demographic, income-employment, and coping mechanism.

4.1 Socio-Demographic Profile

Population and Social Groups

The sample households comprise of 58.5 per cent scheduled tribes (STs); 28.9 per cent scheduled castes (SCs); and 12.6 per cent belonging to other communities. The proportion of STs is significantly higher in Sindhiguda with 92 per cent of the households belonging to this category.

Table 4.1 (a): Distribution of Households by Social Groups

Sr. No.	Villages	Total HHs	SC	ST	Other	Total	% tot Total HHs
1	Balel	141	18 (45.0)	21 (52.5)	1 (2.5)	40 (100.0)	28.4
2	Sindhiguda	52	3 (7.5)	37 (92.5)	-	40 (100.0)	76.9
3	Hanumal	126	16 (41.0)	22 (56.4)	1 (2.6)	39 (100.0)	30.9
4	Kamel	57	9 (22.5)	13 (32.5)	18 (45.0)	40 (100.0)	70.2
	All	376	46 (28.9)	93 (58.5)	20 (12.6)	159 (100.0)	42.3

Source – Primary information

Table 4.1(b): Distribution of Population by Village and Caste Among Sample Households

Village	Caste			
	S.C	S.T	Others	All
Balel	95 (18)	99 (21)	6 (1)	200 (40)
Sindhiguda	19 (3)	189 (37)	- (-)	208 (40)
Hanumal	78 (16)	89 (22)	6 (1)	173 (39)
Kamel	35 (9)	61 (13)	84 (18)	180 (40)
All	227 (46)	438 (93)	96 (20)	761 (159)
Average size of HHs	4.93	4.70	4.80	4.80

Age of the household becomes an important indicator for comparing economic well being status. Table 4.2 depicts age distribution of households, which varied from less 5 years to 70 years. Whereas 56.6 % of the sample households came in to existence during the past 20 years, 10 and 8.8 per cent of the households have existed since 30 and 40 years respectively. Obviously, the average size of the household varies significantly across age of the households as shown in Table 4.2 (b). It is observed that whereas the average household-size for the entire sample is 4.8, it varies from 5 and 3.9 in the age groups of <20 years and 30-40 years respectively.

Table 4.2 (a): Distribution of Household by the Age

Village	Age Group				
	<20 years	>20 <30	>30 <40	40+	Total
BALEL	28	08	02	02	40
SINDHIGUDA	29	08	02	01	40
HANUMAL	15	13	06	05	39
KAMEL	18	10	06	06	40
Total	90 [56.60]	39 [24.53]	16 [10.06]	14 [8.81]	159 [100.00]

Source – Primary information

Table 4.2 (b): Average Size of the Households

Villages	Age Group				All
	< 20	20 – 30	31 - 40	40 +	
BALEL	5.1	5.4	3.5	4.0	5.0
SINDHIGUDA	5.0	6.1	4.5	4.0	5.2
HANUMAL	5.1	4.1	3.5	4.4	4.4
KAMEL	4.8	4.6	4.2	3.8	4.5
All	5.00	4.9	3.9	4.1	4.8

In all, the sample households have 761 persons; 391 male and 370 female. The sex ratio (female: male) for the population in sample households works out to be 94.6. This varies from 1.01 in Hanumal and 97 in Kamel to about 90 and 91 in other two villages. This suggests higher sex ratio among less remote villages compared to the other category. Higher sex ratio may be indicative of better connectivity hence, higher incidence of male migration in the less remote villages (See Table 4.3).

Table 4.3: Sex Ratio Among Sample Households

Sr. No.	Villages	Sex Ratio*
1	BALEL	90.5
2	SINDHIGUDA	90.8
3	HANUMAL	101.2
4	KAMEL	97.8
	All	94.6

* Female:Male Population

Literacy and Health Services

Nearly 47 per cent of the households have reported at least one literate member (see Table 4.4). What is however, striking is that the proportion varies significantly from 75 per cent in Kamel to 10 percent in Sindhiguda. The proportion of households having at least one literate person in Hanumal is nearly 60 per cent. Prima facie, the data suggest that physical remoteness does matter significantly in terms of attainment of literacy. Conversely, the very low incidence of literacy in Sindhiguda is explained by the fact the village does not even have a primary school hence, the children have to go to Hanumal for attending the school. Incidentally Hanumal has a boarding school and it functions reasonably well.

We have worked out proportion of literate persons to total population among sample households. It is surprising that only 18 per cent of the population among the sample households has attained literacy. A part of the reason for significantly low literacy rate is that the estimates are not adjusted for children below the age of 6 years. We tried to work this out at for all the villages together by deducting 10 % of the population, which was under the age group of 5 years. Not surprisingly, the literacy rate got marginally increased to about 20 per cent. The percentage of literate population in the less-remote villages is also in the range of 32-35 per cent. This is abysmally low rate of literacy notwithstanding the fairly high incidence of literacy at household level. This may be because the schools may have started operating only in the past 10-15 years.

But having school in the village is no guarantee for its actual functioning as teachers are seldom there to teach. The fact that a significantly large majority of households seek to access whatever facility is available, the problem appears to be mainly on the supply side; remoteness does become an important constraint for the state to set up a school in such locations. Since Sindhiguda (and Khadaput combined) have only 52 households, the state machinery would not be able to reach out such smaller settlements. The stark difference in literacy attainment between the remote hence, small villages thus, raises the issue of the complimentary role that the civil society organisations could play in such remote villages. Our discussion with such organisations in the study area indicated that whereas the civil society organisations do envisage a complimentary role, their first priority is to fill the complete gap in the field of health services; education and mobilization of tribal community come next in the order of their priority.. We will get back to this issue at a later stage.

It was however, heartening to note that realizing the importance of literacy, villagers have come forward to contribute Rs. 10 per households per month in case they could get someone from the local area to come and teach in the school. This reinstates our earlier observation regarding supply-side deficiency in meeting the goal of universal primary education in the area.

We also tried to examine incidence of literacy among households across different social groups. As expected, scheduled tribes have the lowest incidence of literacy at household level (41.9%); followed by scheduled castes (43.5 %) and then by other communities where the incidence is significantly high i.e. 75 per cent. What is important therefore, is the fact that literacy among tribal is low not only because of their social marginalisation but, also because they happen to live in the more remote villages such as Sindhiguda. This phenomenon is substantiated by the village wise estimates suggesting that in Kamel, having the highest incidence of literacy, also have more or less the same level of literate households among tribals (76.9%) as that among other communities (77.8%); the proportion is significantly higher as compared to scheduled castes (62.5%).

It was observed that about 30 per cent of the households reported expenditure on education of the children. The amount of expenditure on education however, ranged significantly from less than Rs. 100 to about Rs. 1100 per year. While these are aggregate estimates for household rather than per school going child in a household, the data indicate that, unlike the stated objective by the state, education especially, primary education, is not entirely free in this region. It is likely that this may This may work as a demand side constraint among very poor households.

Table 4.4 : Incidence of Literacy* by Caste

Villages	Literate Households				Literate as % to Total
	SC	ST	Others	All	
BALEL	4 (22.2)	13 (61.9)	-	17 (42.5)	14.0
SINDHIGUDA	-	4 (10.8)	-	4 (10.0)	2.4
HANUMAL	10 (62.5)	12 (54.5)	1 (100.0)	23 (59.0)	32.1
KAMEL	6 (66.7)	10 (76.9)	14 (77.8)	30 (75.0)	35.0
TOTAL	20 (43.5)	39 (41.9)	15 (75.0)	74 (46.5)	18.1

Note: Figures in parenthesis indicates percentage to households in each category.
* Refers to households having at least one literate person.

Health and Family Planning

One of the most concerning features reflecting chronic poverty is significantly high infant and child mortality in the region. The high incidence of child mortality reflects not only poor nutrition status in the households especially, the mother, but it also indicates poor health services and people's access to that along with health education and awareness. Failure in terms of any of these services may lead to severe deprivation, driving the children into conditions of chronic poverty. a hazardous condition in the sphere of health as it can be seen in the sample villages.

Table 4.5 presents information on the number of children born and not-survived beyond the age of five. It is observed that about 40 per cent of the households reported child death of this kind. A total of 570 children were born, out of which 122 did not survive beyond the age of five. This works out to be 21.4 % of the total number of children born in the sample households. Surprisingly, the incidence of child death is higher among less-remote villages and socially better off households as shown in Tables 4.5 and 4.6.

Table 4.5: Number of Births and Deaths Among Children

Sr. No	Village	Total Children Born	Total Children Died	%
01	BALEL	139 [3.5]	20 [0.5]	14.4
02	SINDHIGUDA	152 [3.9]	31 [0.8]	20.4
03	HANUMAL	135 [3.5]	34 [0.9]	25.2
04	KAMEL	144 [3.6]	37 [0.9]	25.7
	Total	570 [3.7]	122 [0.8]	21.4

Note: Figures in brackets indicate average number of children per sample households.

Table 4.6: Number of Births and Deaths Among Children by Social Groups

SRNO	Caste	Total Children Born	Total Children Died	% of Death to No. of Children Born
01	SC	185	36	19.5
02	ST	320	71	22.2
03	OBC	26	5	19.2
04	GEN	39	10	25.6
	Total	570	122	21.4

One of the possible explanations for this apparently strange pattern is that a voluntary organisation is working in the remote areas especially, in Sindhuguda, for providing health support. This may have helped reducing the death rate significantly in the village.

We have tried to enquire about adoption of family planning practices and attitude towards that among the sample households. About 50 per cent of the households in the three villages reported that they had availed of family planning services (see Table 4.7). This is quite significant. We tried to work out the proportion for those households that have been formed during the last 30 years.

Prima facie, it may be noted that literacy at the household level may have exerted significant impact on adoption of family planning, Table 4.8 indicates that of the total 64 households having adopted family planning practices, nearly two thirds i.e. 62.5 per cent belonged to the category of literate households. The proportion is higher among the less remote villages as compared to more remote villages. It may be noted that in Hanumal 80 percent of the households practicing family planning measures belong to literate; only 20 per cent of the adopters are non-literate. Nevertheless this observation needs to be seen in conjunction of the fact literacy itself is influenced by physical remoteness as already seen in Table 4.4. Thus to the extent, physical remoteness determine the level of literacy, which in turn influences the adoption pattern, remoteness plays a crucial role with respect to the outcome in terms family planning practices

and the size of births per households. The evidence from the sample villages suggest that literacy has greater impact than physical remoteness in determining the outcome since the difference in literacy level across remoteness category is larger as compared to the difference in adoption of family planning practices by the literacy status of the household.

Table 4.7: Households Reporting Adoption of Family Planning Measures by Caste and Village

Villages	Caste	Availed Family Planning	% to All HHs
1. BALEL	SC	8	44.4
	ST	12	57.1
	Others	-	-
	All	20	50.0
2. SINDHIGUDA	SC	-	-
	ST	5	13.5
	Others	-	-
	All	5	12.5
3. HANUMAL	SC	8	50.0
	ST	11	50.0
	Others	-	-
	All	19	48.7
4. KAMEL	SC	5	55.5
	ST	5	38.5
	Others	10	55.5
	All	20	50.0
ALL	SC	21	45.6
	ST	33	35.5
	Others	10	50.0
	All	64	40.2

Table 4.8: Link Between Family Planning Practices and Literacy

Village	HHs Adopted Family Planning (No.)	% of Households with Literacy*
BALEL	20	50.0
SINDHIGUDA	5	20.0
HANUMAL	19	68.4
KAMEL	20	80.0
Total	64	62.5

* The percentages refer to the number of households having adopted family planning measures.

It was noted that preference for a male child was the most important factor responsible for non-adoption of family planning practices. This was followed by the apprehension about adverse impact on health and physical strength in the event of adopting such measures [See Table 4.10].

We looked at the annual expenditure on health services among sample households. It is observed that almost one fourth of the households (i.e. 26.4%) did not report any expenditure towards heath services during the last year. Of those, who reported expenditure on health, majority i.e. 61.5 % of the households had incurred less than Rs. 300 per year (See Table 4.9). The number of households not having reported any expenditure on health was highest in Balel, followed by Hanumal, and Kamel. Conversely larger proportion of households having reported expenditure on health services, suggests effective access to health services provided by the local organisation in Sindhiguda as noted earlier.

Table 4.9: Major Constraints in Accessing Family Planning Services

SN	Constraints in Family Planning	Balel	Sindhiguda	Hanumal	Kamel	Total*
01	Loosing physical strength	2	6	4	5	17
02	More children for more income	3	1	0	2	6
03	Preference for having at least one male child	8	11	8	4	31
04	Require another male child since the first died	0	0	1	1	2
TOTAL		13	18	13	14	58

* Based on multiple responses

Table: 4.10: Expenditure on Health among Households by Social Groups

Village	Caste	Expenditure (Rs./Year)					
		00	<100	100-300	300-500	500+	All
BALEL	S.C	9	3	2	-	4	18
	S.T	5	-	6	7	3	21
	Other	-	-	-	-	1	1
	All	14	3	8	7	8	40
SINDHIGUDA	S.C	1	-	-	-	2	3
	S.T	7	12	14	1	3	37
	Other	-	-	-	-	-	-
	All	8	12	14	1	5	40
HANUMAL	S.C	3	3	5	2	3	16
	S.T	8	4	6	3	1	22
	Other	-	-	1	-	-	1
	All	11	7	12	5	4	39
KAMEL	S.C	3	1	2	1	2	9
	S.T	2	1	3	1	6	13
	Other	4	2	7	4	1	18
	All	9	4	12	6	9	40
All	S.C	16	7	9	3	11	46
	S.T	22	17	29	12	13	93
	Other	4	2	8	4	2	20
	All	42	26	46	19	26	159

Of the 761 persons 20 were reported as physically and/or mentally challenged. They belong to 20 households, which constitute about 12 per cent of the sample households in the study villages.

4.2 Assets, Employment and Migration

Physical Assets

As noted earlier, 105 out of 159 i.e., 66% of the sample households had reported ownership of land. A substantially large number of households (i.e. 67%) reported undertaking shifting (or podu or zoom) cultivation, whereas 27 households reported encroachment. Only 10 households reported not having any land under any of the categories noted in Table 4.12.

Table 4.12: Ownership of Land by Caste and Village

Village	Ownership of Land	Caste			
		S.C	S.T	Other	All
BALEL	Landed	6 (33.3)	17 (81.0)	1 (100.0)	24 (60.0)
SINDHIGUDA	Landed	2 (66.7)	19 (51.4)	- (-)	21 (52.5)
HANUMAL	Landed	6 (37.5)	20 (90.9)	- (-)	26 (66.7)
KAMEL	Landed	5 (55.6)	13 (100.0)	16(88.9)	34 (85.0)
ALL	Landed	19 (41.3)	69 (74.2)	17 (85.0)	105 (66.0)

While the average size of (owned) land holding is 3.0 acres, it ranges from 1.64 acres in Sindhiguda to 4.8 acres in Kamel. This indicates significant variation. Prima facie, the smaller size of land holding in Sindhiguda may reflect relatively better status of forest, which is still kept under the forest use rather than converted into crop-land.

Land transactions through leasing, sharing and mortgaging has been report by a small sub-set of households though, such transactions are seldom reported accurately owing to the complex and often uncertain land titles. Similar situation prevails with respect to encroachment of land under public ownership and also under zoom cultivation. In fact the issue of reporting ownership of land or operational land holdings is so tricky that it is difficult to gauge the actual size as well as control over land in this area.

Table 4.13: Pattern of Land Holding among Sample Households

Village	Caste	Own Land		Lease in		Lease Out		Mort.in		Zoon		Encroach	
		No	Area	No	Area	No	Area	No	Area	No	Area	No	Area
Balel	S.C	6	14.6	1	1.0	-	-	1	2.0	1	0.4	-	-
	S.T	17	48.7	2	2.5	-	-	3	3.0	2	1.5	5	9.9
	Other	1	3.5	-	-	-	-	-	-	1	0.8	-	-
	All	24	66.8	3	3.5	-	-	4	5.0	4	2.7	5	9.9
Sindhiguda	S.C	2	2.0	-	-	-	-	-	-	2	3.0	-	-
	S.T	19	32.6	1	1.0	-	-	-	-	27	37.1	8	13.0
	Other	-	-	-	-	-	-	-	-	-	-	-	-
	All	21	34.6	1	1.0	-	-	-	-	29	40.1	8	13.0
Hanumal	S.C	6	9.0	-	-	-	-	2	3.0	11	12.5	2	2.0
	S.T	20	44.6	-	-	-	-	1	1.0	15	19.5	6	9.5
	Other	-	-	-	-	-	-	-	-	1	0.5	-	-
	All	26	53.6	-	-	-	-	3	4.0	27	32.5	8	11.5
Kamel	S.C	5	21.4	-	-	-	-	-	-	-	-	3	17.3
	S.T	13	60.4	-	-	-	-	1	3.0	3	5.0	2	2.7
	Other	16	82.5	-	-	2	1.5	-	-	4	7.0	1	1.0
	All	34	164.2	-	-	2	1.5	1	3.0	7	12.0	6	21.0
All	S.C	19	47.0	1	1.0	-	-	3	5.0	14	15.9	5	19.3
	S.T	69	186.2	3	3.5	-	-	5	7.0	47	63.1	21	35.1
	Other	17	85.9	-	-	2	1.5	-	-	6	8.3	1	1.0
	All	105	319.1	4	4.5	2	1.5	8	12.0	67	87.3	27	55.3

Table: 4.14 Average Size of Owned Land by Caste by Village

Village	S.C	S.T	Other	All
Balel	2.4	2.9	3.5	2.8
	(6)	(17)	(1)	(24)
Sindhiguda	1.0	1.7	-	1.7
	(2)	(19)	-	(21)
Hanumal	1.5	2.2	-	2.1
	(6)	(20)	-	(26)
Kamel	4.3	4.6	5.2	4.8
	(5)	(13)	(16)	(34)
All	2.5	2.7	5.1	3.0
	(19)	(69)	(17)	(105)

Note: Figures in parentheses indicate number of households.

The average land holding size is found to be the highest among 'other' communities, which are mainly concentrated in Kamel. Against the average holding of 5.05 acres among these communities, landholding size among tribal is 2.7 acres and 2.5 acres among Scsnon-tribals. Prima facie, this suggests a reverse picture than what obtains at the macro level, where tribals have the same size of land holdings as that among others and much higher size than that among SCs and OBCs [Haan and Dubey, 2003]. The contrast between the macro and micro pattern thus

reflects the ground reality of conversion and land alienation, which is fairly large scale in these forest based remote regions.

Livestock

Livestock is an important part of the traditional livelihood system in the region. This is reflected by the fact over 88 per cent of the households owned livestock. This varies from 82.5 % per cent in Balel to 95 per cent in Sindhiguda (See Table 4.15 (a)). Of the total 922 livestock, 262 are cows, 161 are bullocks, 42 buffalos and rest are small animals including sheep and goat. This suggests that on an average each livestock owning household has more than one cow/buffalo and almost all households with operational land have one bullock.

Overtime, however, the asset seems to be losing its strength as means of survival/coping mechanism due to depletion of forest resources in the region. This is reflected by the fact that a larger proportion of the households i.e. about 54 % have reported decline in livestock population during the past 10 years. A number of factors are responsible for declining number of livestock population such as: mortality due to frequent droughts; lack of support services; selling out to fulfill family requirements; use for social functions; and inability to replenish the stock due to financial crunch.

Table 4.15 (a): Ownership of Livestock Among Sample Households

Village	Total Live-stock					HH having Live-Stock					Avg. No. of Live-stock Per HH				
	Cow	Buf.	Bul.	Other	All	Cow	Buf.	Bul.	Other	All	Cow	Buf.	Bul.	Other	All
Balel	43	10	22	62	137	25	7	13	16	33	1.7	1.4	1.7	3.9	4.1
Sindhiguda	61	1	50	207	321	31	1	25	37	38	2.0	1.0	2.0	5.6	8.4
Hanumal	55	11	42	93	201	26	5	19	24	34	2.1	2.2	2.2	3.9	5.9
Kamel	103	20	47	93	263	31	9	20	18	35	3.3	2.2	2.3	5.2	7.5
All	262	42	161	455	922	113	22	77	95	140	2.32	1.9	2.1	4.8	6.6

Ownership and Type of House

Table 4.16 provides information about the type of house owned by the sample households. While it is observed that a majority of households (i.e. 76 %) live in Kachha house, about 63% of the households have reported that the housing conditions have improved over the past 10 years. This may comprise of those who live in Pucca or mixed type of house, or those who might have undertaken extension or major repairs. This could be considered as an important indicator of improvement in households' economic well -being.

Besides land, livestock and house, the sample households have very little asset base in terms of consumer durables. For instance, only 20 households (12.58%) were found having cycle. Similarly, 18 households had reported having gold; this asset, of course, is difficult to capture since most of the households tend to under-report possession of gold, silver and other valuables to outsiders such as researchers like us.

Table: 4.16: Type of Houses and Change Over Time

Village	Caste	House Type			HH with (+) Change
		Kachcha	Mixed	Pucca	
Balel	S.C	77.8	16.7	5.5	77.8
	S.T	80.9	14.3	4.8	66.7
	Other	100.0	-	-	100.0
	All	80.0	15.0	5.0	72.5
Sindhiguda	S.C	66.7	-	33.3	33.3
	S.T	86.5	8.1	5.4	48.6
	Other	-	-	-	-
	All	85.0	7.5	7.5	47.5
Hanumal	S.C	81.3	6.2	12.5	37.5
	S.T	72.7	27.3	-	72.7
	Other	100.0	-	-	-
	All	76.9	18.0	5.1	56.4
Kamel	S.C	66.7	22.2	11.1	77.8
	S.T	69.2	7.7	23.1	61.5
	Other	55.5	27.8	16.7	83.3
	All	62.5	20.0	17.5	75.0
All	S.C	76.1	13.0	10.9	60.9
	S.T	79.6	14.0	6.4	60.2
	Other	60.0	25.0	15.0	80.0
	All	76.1	15.1	8.8	62.9

Workforce and Employment

About 49 % of the population are reported to be engaged in economic activities such as agriculture, livestock, collection of forest produce, and casual labour; only a few persons are employed as salary earners. The total number of workers, undertaking economic activities is 375, which works out to be 2.35 workers per households (Table 4.17). The proportion of workers is only 40 per cent in Sindhiguda. Of the total workers tribal constitute about 57 per cent, almost same as their share in the total population among the sample villages.

Table 4.17: Workforce among Sample Households

Village	No. of Workers				% to total Population
	S.C	S.T	Other	All	
Balel	50 (43.5)	61 (53.0)	4 (3.5)	115 (100.0)	57.5
Sindhiguda	7 (8.4)	76 (91.6)	-	83 (100.0)	39.9
Hanumal	31 (39.7)	44 (56.4)	3 (3.8)	78 (100.0)	45.1
Kamel	17 (17.2)	32 (32.3)	50 (50.5)	99 (100.0)	55.0
All	105 (28.0)	213 (56.8)	57 (15.2)	375 (100.0)	49.3

We also tried to look at the distribution of households across different activities - principal and subsidiary (Table 4.18). It may be noted that some households had reported more than one workers undertaking different principal activities. The demarcation of principal and subsidiary activities have made in terms of income derived from different activities. Such households would have been counted more than once depending on the number of principal activities undertaken by the workers within the households. Thus we get a count of 180 households having workers engaged in different principal activities. The same applies to the distribution of households in the case of subsidiary activity.

Table 4.18: Activity Profile Among Workers

Activity	Balel		Sindhiguda		Hanumal		Kamel		All	
	Pri.	Sub.	Pri.	Sub.	Pri.	Sub.	Pri.	Sub.	Pri.	Sub.
Cultivation	22 (19.1)	1 (0.9)	38 (45.8)	-	32 (41.0)	11 (14.1)	33 (33.3)	3 (3.0)	125 (33.3)	15 (4.0)
Wage Labour	19 (16.5)	21 (18.3)	2 (2.4)	33 (39.8)	8 (10.3)	31 (39.7)	11 (11.1)	28 (28.3)	40 (10.7)	113 (30.1)
Service	1 (0.9)	-	-	-	1 (1.3)	-	2 (2.0)	-	4 (1.1)	-
Business	2 (1.7)	1 (0.9)	-	3 (3.6)	2 (2.6)	2 (2.6)	1 (1.0)	-	5 (1.3)	6 (1.6)
Other	2 (1.7)	8 (7.0)	2 (2.4)	5 (6.0)	-	2 (2.6)	2 (2.0)	-	6 (1.6)	15 (4.0)
Total	46 (40.0)	31 (27.0)	42 (50.6)	41 (49.4)	43 (55.1)	46 (59.0)	49 (49.5)	31 (31.3)	180 (48.0)	149 (39.7)

It is observed that as large as 79 per cent of the households have reported at least one person engaged in cultivation as principal activity. This is fairly higher than the proportion of households (i.e. 66%) owning land. This implies that a large number of the households not owning land are also engaged in agricultural activities. What is more important is that 113 households have reported at least one person engaged in wage labour as subsidiary activity in terms of income; a large proportion of these are likely to be engaged in agriculture.

Table 4.19 provides information about employment in the two major activities viz; cultivation and wage labour. It is observed that 297 workers (principal) belonging to 125 households are engaged in cultivation. This works out to be 2.4 workers per household. Together these workers were engaged for 171 days per household. The average number of days thus works out to be about 72 per worker. It may be noted that these work-days are not adjusted for the norm of 8 hours a day. Obviously, this suggests substantial amount of under-employment among the workers engaged in agriculture.

It is likely that some of the workers engaged in agriculture also seek wage employment especially in agriculture. There were 92 workers (principal) from 40 households having been engaged in wage labour in different activities including agriculture. This works out be 165 days per household and 72 days per worker.

Conceding that the two activities together create a total of 27,938 days of work for the 375 workers in the village, the average workdays per worker works out be 72 per annum, irrespective

of the quantum of work per day. Given the inherent constraints for out-migration frm this remote region, collection of forest produce and livestock becomes the major recourse for seeking employment. Prima facie, both these may have adverse impact on sustainable use of forest resources.

Table 4.19: Person Days of Employment by Different Activities

Village	HHs	Worker	Days	Days per HH	Days per worker engaged in particular activity
Cultivation					
Balel	23 (57.5)*	62 (2.7)**	3470	150.87	55.97
Sindhiguda	38 (95.0)	79 (2.1)	6290	165.53	79.62
Hanumal	32 (82.0)	70 (2.2)	5578	174.31	79.68
Kamel	32 (80.0)	86 (2.7)	5990	187.19	69.65
All	125 (78.6)	297 (2.4)	21328	170.62	71.81
Wage Employment					
Balel	19 (47.5)	55 (2.9)	4490	236.31	81.64
Sindhiguda	2 (5.0)	3 (1.5)	220	110.00	73.33
Hanumal	8 (20.5)	11 (1.4)	840	105.00	76.36
Kamel	11 (27.5)	23 (2.1)	1060	96.36	46.09
All	40 (25.1)	92 (2.3)	6610	165.25	71.85

* Percentage of Total HHs; ** No. of worker per households

Income from Major Activities

Table 4.20 presents estimates of average income obtained from different sources across category of households and villages. It may however, be noted that the estimates of income excludes that from 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 % of the estimated income of the households. This is followed by wage income contributing 25.2 % and then by forest resources 15.1% and other 17.2 %. It may be noted that the per capita highest income from all sources is obtained 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 less remote village. It is also interesting to note that Sindhiguda has the highest average income from forest, which confirms our 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. 9147 to Rs.13854, which is significantly lower than the official poverty line for the region.

Table 4.20 (a) Average Annual Income Per Household by Social Groups

Village	Caste	Culti-vation	Wage Labour	Forest	Other	Average Annual Income (All Sources)	
						Per HH	Per capita
Balel	S.C	4750.00	4476.56	1803.83	7229.33	13918.56	2662.43
	S.T	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	S.C	4410.00	4600.00	2576.67	2016.67	10600.00	1684.13
	S.T	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	S.C	3178.21	3697.86	1717.94	4217.14	9579.50	1925.51
	S.T	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	S.C	5209.00	3806.25	1867.67	3066.67	9167.11	2380.27
	S.T	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	S.C	4046.90	4076.12	1836.85	5471.78	11263.26	2287.10
	S.T	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 4.20(b).

Table 4.20 (b) Income from Collection of Forest Produce among Households

Village	Income (Rs./Year)			
	0	<1000	1000+	All
Balel	2 (5.0)	14 (35.0)	24 (60.0)	40 (100.0)
Sindhigudal	1 (2.5)	8 (20.0)	31 (77.5)	40 (100.0)
Hanumal	- -	8 (20.5)	31 (79.5)	39 (1000)
Kamel	- -	17 (42.5)	23 (57.5)	40 (100.0)
All	3 (1.9)	47 (29.6)	109 (68.5)	159 (100.0)

Migration

As noted in the initial part of the analysis, people in forest-based economies are less likely to migrate at least till a point when the basic minimum livelihood is supported by the forest-ecosystem. However, as forest starts depleting due to pressure from external and/or internal forces (including increase in the local population), the forest dwellers are compelled to go out in search of employment-income mainly as a survival strategy. Physical remoteness reinforces this basic characteristic owing to the two inter-related processes. First, remoteness generally ensures low level of depletion in forest. At the same time remoteness also involves higher cost of migration given the limited financial resources, information, and social contacts. Conceding that the study region represents one of the most remote areas among the forest-based economies, and at the same time has larger area under forest as compared to other forest dominated districts in the state, we expect low incidence of migration as compared to that in some of the other areas in southern Orissa.

The results of our field survey confirm the above assertion about low incidence of migration in the study villages. It is observed that only 20 households in the sample have at least one person migrating outside the district. Of these, 17 households belong to only one village i.e. Balel. Alternatively we tried to capture migration of workers seeking work outside the village, which also include commuters. It is observed that 85 out of the 159 (i.e. 53 %) of the households reported migration of this type, which is mostly for a period of about 15-20 days per year. In all, there are 143 migrants having obtained work outside the village; this works out to be 1.6 workers per households. Only five households reported their family members having settled outside the village on a long term basis.

Table 4.21: Households with Intra-District Migration

Village	Caste	No. of	
		HHS with Migration	Migrating Workers
BALEL	SC	15	24
	ST	13	19
	Other	1	1
	Total	29	44
SINDHIGUDA	SC	2	4
	ST	24	50
	Total	26	54
HANUMAL	SC	12	19
	ST	12	19
	Other	-	-
	Total	24	38
KAMEL	ST	2	2
	Other	4	5
	Total	6	7
ALL	SC	29	47
	ST	51	90
	Other	5	6
	Total	85	143

We tried to understand the reasons for not migrating outside the district. The results are quite revealing. A significantly large proportion of the (multiple) responses indicated that non-migration is mainly due to socio-economic factors such as absence of any other member to look after the family or agricultural operations; having old persons or very small children; and lack of information/contacts outside the village. Remoteness seems to have played some role in this context as 17 out of the 29 households indicating this reason belong more remote villages.

While some of these responses may implicitly indicate that they can still manage their livelihood without migration, 28 responses explicitly mentioned that migration is not an absolute requirement for sustaining their livelihood. These households are likely to be economically better off than others. Together these responses suggest that migration is not a preferred option at least till a point where the household has exhausted all other options for meeting the basic needs.

4.3 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 know how households cope up during shocks and whether migration appears as an important component in 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 did not actually experience any internal shock; for these households the responses are based on perceptions.

Table 4.22 Factors Explaining Non-Migration (Outside the District)

Factors For Non-Migration	Balel	Sindhiguda	Hanumal	Kamel	Total
Absence of other adult male member to look after the farming	10	15	24	11	41
Lack of information/contacts	6	11	9	3	29
Work available in the near by area	2	3	6	2	13
Old age	4	1	2	14	21
Ill health of family members	1	2	3	4	10
Small children/Old Persons Need Ccare	4	5	4	11	24
No need to go out	7	11	8	2	28
All responses	34	48	56	47	185

Table 4.23 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 in the household. It is likely that most of these households belong to the category of severely poor.

Table 4.23: 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

Multiple responses. Source – Primary data Note - Borrowings referred here as taking money with interest

Another equally concerning feature of households' coping mechanism is- increasing the use of forest resources. This may imply increased extraction for both-self consumption and selling in the market. Of course, the later part is generally under reported, the ground reality is that, NTFP is an important part of the households' livelihood system under normal situations, and that it becomes an increasingly important component of coping mechanism during shocks.

About 21 per cent of the householdsreported 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 keeper/traders. It is likely that many of those who borrow under the stress-

situations such as this, 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 the region is prone to frequent external shocks especially, droughts. Exiting from poverty thus, may become almost impossible for most of the households once trapped into a down ward spiral such as death or ill health of the main earner of the household [Krishna, 2003]. In this context it may be useful to examine the coping strategy adopted by households during external shocks (See Table 4.24).

Table 4.24: Coping Strategies During External Shocks

% of HHS

Coping Strategies	Balel	Sindhiguda	Hanumal	Kamel	Total
Selling of assets	0.0	0.6	1.3	0.0	1.9
Mortgaging of assets	1.3	0.0	2.5	0.6	4.4
Work diversification	6.9	0.0	0.0	1.3	8.2
Reduction in consumption of food	9.4	23.9	15.1	13.8	62.3
Use more ragi than rice	2.5	3.8	6.3	10.7	23.3
More dependency on forest	6.9	11.9	14.5	6.3	39.6
Borrowings from other sources	11.3	14.5	8.8	40.9*	75.5
Credit from shops	5.0	5.7	10.1	7.5	28.3
Higher degree of dependency on govt. schemes	0.0	0.6	0.6	5.0	6.3
Migration	5.0	0.0	0.6	0.6	6.3
Increased zoom cultivation	1.9	4.4	5.0	1.3	12.6

Multiple Responses.

It is important to note that whereas there is some kind of continuity in the pattern of responses obtained on the coping mechanisms to be adopted during internal and external shocks, few observations need special attention in this context. These are:

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 during 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 from 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 zoom cultivation. There is however, likely to be an overlap between the households reporting increased use of forest produce and increased zoom 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 of inadequate/in-appropriate 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 constitute the hard core of 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%) in more remote as compared the less remote villages. What is more striking is that about 95% of the households in Sindhiguda reported this as part of the coping mechanism during external shocks.

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

5. The largest number of responses pertain to borrowing; the highest number of households reporting borrowing as a coping strategy is in Kamel- a less remote village. This may imply the impact of better access to markets hence, borrowing, which works as a substitute for forest extraction as the village has the lowest number of households reporting that option. It could of course, be argued that those in 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 is improved before improving their access to credit support.

Finally, we tried to understand how the sample households had coped up with increased price of rice, which has almost doubled in the past 10 years. This is important because most of the households are not a net seller of food grains hence, may not gain much from the increased price of agricultural produce. Similarly, wage employment is available only to 40 households, where at least one person undertook that as principal activity. For 112 households it is only a subsidiary activity. Given this context, a large proportion of the households may not benefit much from increase in the wage rate if at all the increase took place. The following responses provide very useful information about households' response to increase in prices of foodgrains (See Table 4.25).

Table 4.25: Coping Strategy Under Price-Rise

Price Hike and Coping	Balel	Sindhiguda	Hanumal	Kamel	Total
Increase in Wage Rate	18.9	23.9	12.6	11.3	66.7
More use of Ragi in place of Rice	6.9	21.4	18.2	14.5	61.0
Seek More Work in the Nearby Places	20.1	15.7	15.7	11.9	63.5
Managed from Home Produce	0.6	0.0	0.6	0.6	1.9
Borrow from Money Lender	5.7	6.3	10.7	10.1	32.7
Dis-saving	0.0	0.0	0.6	1.3	1.9
Reduced Consumption of Food	2.5	0.0	1.3	3.1	6.9

Multiple Responses.

Changes in Livelihood Pattern in the Past 10 Years

The foregoing analysis in this section 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 4.26).

Table 4.26 - Change in Livelihood Base Over the Past 10 years

Changing Life Pattern	Balel	Sindhiguda	Hanumal	Kamel	Total
Positive/Negative Change					
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 fertilizer	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

Multiple responses.

It is observed that a substantially large proportion of households reported improvement in quality of food, quality of house, and quality of clothing they use. Besides these, improvement has been seen in terms of connectivity, information/exposure, and agricultural practices. Against this, there have been some negative changes with respect to conversion of forest for agricultural use, reduced wild life, and increase in temperature etc. This suggests some kind of trade off between the improved livelihood base and quality of environment. Obviously, sustaining the improvement may be increasingly difficult. That is perhaps what is being reflected in the sustained high level of poverty, especially in the wake of increasing population in the region. The recent evidence of increase in poverty in the region might be a part of these larger processes of degradation of forest resources in the wake of increased population in the region.

5. Typology and Correlates of Poverty

This section presents mapping of sample households by typology of poverty. While the exercise is based mainly on quantitative data pertaining to expenditure and consumption of food grains at household level, attempt has been made to identify households' well being in terms of community wealth ranking. This was ascertained by using PRA-method covering all households in the study villages. The idea was to extend the exercise and trace the change (if any) in households' position with respect to community ranking over a period of 10 years. Unfortunately, the exercise did not yield significant variations as most of the households were found to have clustered round the category of chronic poor- both in terms severity as well as duration. The ranking exercise therefore, referred to the five-fold categorization of viz; extreme poor to non-poor. Besides this, we also tired to link up community ranking, with the official status of `Below Poverty Line' (BPL) in order to get a sense of how the two indicators compare. We begin by presenting the mapping of all households, based on community ranking, which provides a backdrop for examining the expenditure-based incidence of poverty and the correlates thereof.

5.1 Community-Ranking among Households

Essentially community ranking reflects shared assessment of relative level of households' well being. Generally, the ranking is based on a number of criteria pertaining not only to economic status, but also social standing and, overall well being including human capital. This was brought out during discussions at the time of conducting PRAs. In practice however, community- ranking is found to be reflecting the households' asset/income base. The reason could be that a significantly large proportion of households are living under severe deprivation in terms of the basic requirements. Thus economic well-being becomes the most overpowering reality notwithstanding the other forms of vulnerability faced by the income-poor households.

Table 5.1 presents distribution of households across community ranking, following an ascending order. As large as 98 per cent of the households have been considered as poor i.e. those covered by categories 1 thru 4. This proportion is higher than the BPL-estimate, which is about 88 per cent. Of the total households, about 50 per cent were categorized as extreme and highly poor, and another 28 per cent as average poor. This leaves about one fifth of the households, which were in the category of low poverty perhaps, due to external shocks like very severe droughts. Incidentally, the eight non-poor households belonged to only one village i.e. Kamel.

How does this depiction of poverty, based mainly on community-perception, compare with the consumption expenditure based estimates of poverty? This has been examined in the light of the quantitative data collected from the sample households. According to the estimates, 77 per cent of the households in the study villages were treated as BPL; this is fairly low as compared to only 2 per cent of the households ranked as non-poor by the wealth ranking exercise.

Table 5.1: Distribution of Households by Community Ranking BPL-Status

Village/Rank	Typology of Poverty (No. of HHs)					All HHS BPL
	Extreme Poor BPL	Highly Poor BPL	Average Poor BPL	Low Poor BPL	Non-Poor BPL	
Balel	33 (24)	24 (16)	56 (42)	28 (19)	-	141 (101)
Sindhiguda	16 (12)	15 (5)	12 (8)	9 (8)	-	52 (-)
Sub-Total (I)	**49 (36) [25.4]**	**39 (21) [20.2]**	**68 (50) [35.2]**	**37 (27) [19.1]**	**- [0.0]**	**193 (101) [100]**
Hanumal	42 (34)	34 (30)	25 (25)	25 (24)	-	126 (33)
Kamel	14 (13)	9 (8)	12 (11)	14 (10)	8 (1)	57 (113)
Sub-total (II)	**56 (47) [30.6]**	**33 (38) [18.0]**	**37 (36) [20.2]**	**39 (34) [21.3]**	**8 (1) [4.4]**	**183 (146) [100]**
**All % **	**105 (83) [27.9][a] [79.0][b]**	**82 (59) [21.8] [71.9]**	**105 (86) [27.9] [81.9]**	**76 (61) [20.2] [80.2]**	**8 (1) [2.1] [12.5]**	**376 (290) [100] [77.0]**

Figures in parentheses indicate BPL-households

a. Percentage to all households

b. BPL as percentage to hhs in each category of community ranking

5.2 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 a higher side since the actual price of staple food grain 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 be applied to the consumption expenditure data of 2004, we have used the same cut-off i.e. MPCE- Rs.300 for identifying poor with different levels of severity.

Initially, we tried to make four categories based on MPCE viz; >25% and <25% below the poverty line; and < 25% and >25% above the poverty line. This kind of categorization would have helped comparability with other studies carried out under CPRC-I [Mehta, 2004; Shah and Sah, 2004]. But, the above scheme of categorization did not work since as large as three fourth of the households were getting clustered in the first group i.e. > 25% below poverty line. Alternatively, we created three categories by splitting the first into two. On the other hand there were only few a households above the poverty line hence, we have merged the two groups of non-poor households. Thus, the four way categorization of poor refers to those having MPCE >50 %, 25-50%, and <25% 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. In what follows we present the estimates of poverty using this scheme of categorization.

Table 5.2 presents estimates of poverty among sample households. It is observed that about 31 per cent of households are in the category of severe poverty whereas about 43 per cent belong the category of medium poor. Together they constitute hardcore poor in the study region, whose consumption expenditure level is > 25% below the poverty line. This leaves about 26 per cent of the households, of which 15 % are moderate poor, and only 11 per cent are non-poor.

Evidentally, this confirms the district level estimate for Koraput [Panda, 2004], suggesting 92.2 per cent of people in Koraput living below poverty in 1999-00.

An important observation emerging from Table 5.2 is that, the proportion of severe poor is significantly higher among more remote villages (36.3 %) as compared to less remote villages (25.3 %). Conversely, the proportion of non-poor is higher among less as compared to 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).

Table 5.2(a): Incidence of Poverty Among Sample Households

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

Figures in parentheses indicate number of households.

Table 5.2(b): Average Total Expenditure by MPCE Groups

Village	MPCE Group (Rs.)				All
	Severe Poor	Medium Poor	Moderate Poor	Non-Poor	
Balel	123.66	181.00	252.96	331.85	190.21
Sindhiguda	112.26	176.95	264.37	423.11	176.18
Sub-total	115.79	179.65	258.67	377.48	183.19
%	(36.2)	(41.3)	(15.0)	(7.5)	(100.0)
Hanumal	122.92	174.36	254.55	402.64	173.19
Kamel	131.00	180.75	264.49	394.89	240.70
Sub-total	124.54	177.73	261.18	396.30	207.37
%	(25.3)	(45.6)	(15.2)	(13.9)	(100.0)
All	119.36	178.65	259.92	389.66	195.21
%	(30.8)	(43.4)	(15.1)	(10.7)	(100.0)

To a large extent, the relatively smaller difference in average level of consumption expenditure across the two sets of villages is due to the pattern of expenditure on food per household. It is observed that the average expenditure on food is higher among households in more remote villages in the case of the middle two categories of MPCE. For the very poor and non-poor, the pattern is reverse i.e. households in less remote villages have higher expenditure on food as compared to those in the more remote villages (Table 5.3). One of the possible reasons for this apparently distorted picture might be that the households in the middle MPCE-categories in less remote villages may have better access to land hence, better availability of food from self cultivation. We will get back to this issue at a later stage.

Table 5.3: Average Total Food Expenditure by MPCE Groups

Village	MPCE Group (Rs.)				All
	Severe Poor	Medium Poor	Moderate Poor	Non-Poor	
Balel	86.07	120.43	155.62	219.83	125.43
Sindhiguda	82.66	128.30	190.64	133.37	115.21
Sub-total	83.72	123.05	173.13	176.60	120.32
%	(36.2)	(41.3)	(15.0)	(7.5)	(100.0)
Hanumal	87.96	112.44	133.92	277.85	113.08
Kamel	100.24	128.11	178.72	204.36	152.60
Sub-total	90.42	120.71	163.79	217.72	133.09
%	(25.3)	(45.6)	(15.2)	(13.9)	(100.0)
All	86.45	121.83	168.46	203.21	126.67
%	(30.8)	(43.4)	(15.1)	(10.7)	(100.0)

Notwithstanding the difference in food expenditure across two sets of villages, it is pertinent to note that the average cereal consumption (per capita per day) is abysmally low among households across all MPCE-categories. The estimates in Table 5.4 indicate that per capita cereal consumption is only 302 grams per per day; this ranges from about 227 among severe poor to 403 gms. among the non-poor. The estimates are more or less in line with the national norm of 400 gms. of cereal consumption to be able to lead a normal life. It may be noted here that only

17 out of the total 159 households (i.e. 10.7%) belonging to the category of non-poor have attained the norm set by ICMR. For the rest the gap in cereal consumption is significant; of course, the gap gets reduced along with higher MPCE-group. This phenomenon takes us back to the earlier observation about `reducing food consumption' as coping strategy among a large majority of the households.

Table 5.4: Average Cereal Consumption Per Capita by MPCE Groups

Village	MPCE Group (Gms.)				All
	Severe Poor	Medium Poor	Moderate Poor	Non-Poor	
Balel	211.41	315.44	374.05	472.22	312.58
Sindhiguda	201.73	308.85	388.61	303.78	266.87
Sub-total	204.73	313.24	381.33	388.00	289.73
%	(36.2)	(41.3)	(15.0)	(7.5)	(100.0)
Hanumal	247.73	297.88	312.92	500.17	289.22
Kamel	305.08	318.56	359.29	392.00	341.88
Sub-total	259.20	308.80	343.83	411.67	315.89
%	(25.3)	(45.6)	(15.2)	(13.9)	(100.0)
All	226.97	310.92	362.58	403.31	302.72
%	(30.8)	(43.4)	(15.1)	(10.7)	(100.0)

Another important aspect pertains to poverty among different social groups. The estimates in Table 5.5 indicate that the SCs have the highest incidence of poverty (93.4%), followed by STs (90.3%) and then by other communities (75 %). A similar pattern is observed in the case of severe- poverty. As large as 45.7 % of the SC-households belong to this category as compared to 26.9% in the case of STs and 15% in the case of others. Of course, medium poor constitute a significantly high proportion of households among STs (47.3%) and others (50.0 %). 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 even the non-SC/ST communities have three fourth of the households living under poverty conditions.

Before getting into the discussion on the factors responsible for chronic poverty among sample households, it would be useful to compare the typology of poverty obtained through estimates of consumption expenditure and the perception based categorization of household's well-being presented in Table 5.1

Table 5.6 provides 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 categorization of households. However, if we look at the cross-classification one finds that a substantially large proportion of those considered as `extreme poor' have been categorized as moderate or non-poor by expenditure based classification. The same is true for usually poor. About 60 per cent of the sample households, categorized 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 study region. What makes them more vulnerable among the already deprived? This has been examined in the light of some of the important features of the poor in different categories.

Table 5.5(a): MPCE Group by Caste by Village

Village	Caste	MPCE Group				All
		>150	151-225	226-300	300+	
Balel	SC	6	9	1	2	18
	ST	3	12	5	1	21
	Other	-	1	-	-	1
	All	9	22	6	3	40
Sindhiguda	SC	3	-	-	-	3
	ST	17	11	6	3	37
	Other	-	-	-	-	-
	All	20	11	6	3	40
Hanumal	SC	10	5	1	-	16
	ST	5	12	3	2	22
	Other	1	-	-	-	1
	All	16	17	4	2	39
Kamel	SC	2	1	5	1	9
	ST	-	9	1	3	13
	Other	2	9	2	5	18
	All	4	19	8	9	40
All	SC	21 (45.7)	15 (32.6)	7 (15.2)	3 (6.5)	46 (100.0)
	ST	25 (26.9)	44 (47.3)	15 (16.1)	9 (9.7)	93 (100.0)
	Other	3 (15.0)	10 (50.0)	2 (10.0)	5 (25.0)	20 (100.0)
	All	49 (30.8)	69 (43.4)	24 (15.1)	17 (10.7)	159 (100.0)

Table 5.6(b): Distribution of Sample Households by MPCE by Community Ranking

Community Ranking	MPCE (Rs.)				All
	<150	150-225	225-300	>300	
Extreme Poor	34.7	27.5	25.0	11.7	27.6 (27.9)*
High Poor	26.5	26.1	8.3	23.5	23.3 (21.8)
Average Poor	30.6	23.2	29.1	35.2	27.6 (27.9)
Low Poor	8.2	18.8	33.3	23.5	18.2 (20.2)
Non-Poor	-	4.3	4.2	5.8	3.1 (2.1)
All %	100 36.2	100 41.3	100 15.0	100 7.5	100 100.0

* Percentages by Community Ranking among all the households in sample villages

5.3 Correlates of Poverty: Some Evidence

Land:

Generally, access to cultivable land is considered as the most important factor influencing poverty in a predominantly agrarian economy such as India. How far does it impinge on the poverty outcome in the forest-based economy? This can be seen in the light of the information presented in Table 5.7. It is observed that whereas 87 per cent of the households had access to operational land (as against 66 per cent of the households having ownership of land as seen in Table 4.12). Of the 21 households not having any operational land, 15 belonged to the more remote villages (13 in Balel and 2 in Sindhiguda). Of the households not having any operational land, the largest proportion i.e. 52 percent are concentrated in the lowest MPCE group as compared to 30 per cent in the case of all the households in this MPCE-category. This is followed by those having very small operational land (i.e. up to 1.4 acres), of which 43 per cent of the households were categorized as severely poor. On the other hand relatively larger proportion of households having better operational holdings are found to be in the category of moderate and non-poor. The pattern however, is not very clear, perhaps due to the income obtained from forest resources. The results thus, indicate the need to understand the interface between poverty and forest-dependence in a dynamic context.

Table 5.7: Households Operating Land by MPCE Groups

Village	Land Holding (Acre)	MPCE Group				All
		<150	151-225	226-300	300+	
All Villages	No Op. Land	52.4	28.6	4.8	17.6	100.0 (21)
	0.01-1.40	43.5	30.4	13.0	13.0	100.0 (23)
	1.41-2.50	28.3	49.1	17.0	5.7	100.0 (53)
	2.50+	21.0	48.4	17.7	12.9	100.0 (62)
	All	30.8	43.4	15.1	10.7	100.0 (159)

Figures in parentheses indicate number of households.

Forest Dependence:

It is generally hypothesized that the poor have greater dependence on forest resources. What is however, missing in this generally held perception about poor and forest dependence is that, the causation often runs other way round. That is –while initially higher level of poverty may induce greater dependence on forest resources, the outcome may often be reduced level of poverty at least in the short run. It is therefore difficult to gauge the multi –patterned interface between poverty and forest dependence or degradation [Nadkarni, 2000; Shah, 2004], in the light of a data set, pertaining to only one point of time.

The picture that emerged from the household survey in the study villages thus, suggests a mixed pattern as noted above (See Table 5.8). It is observed that forest-dependence, in terms of proportion of households' income obtained from collection of forest produce, tends to decline along with increased MPCE. Similarly, the average level of dependence is marginally higher

among more remote as compared to less remote villages. On an average 15 per cent of the households' income is constituted by forest produce; this ranges from nearly 18 % among severe poor to 12 % among non-poor. There are however, significant exceptions to this pattern. For instance, non-poor among more remote villages have relatively higher dependence as compared all the three categories of poor. This might represent a case of reverse causation where higher level of forest extraction may have led to overall enhancement of households' income.

Table 5.8: Share of Forest to Total Income among Households Across MPCE-Categories

% of HHS

Villages	MPCE (Rs.)				All
	<150	151-225	226-300	300+	
Balel + Sindhiguda	17.69	16.72	9.40	18.74	15.95
Hanumal + Kamel	17.80	12.25	21.38	9.89	14.27
All	17.73	14.26	15.30	11.78	15.12

Literacy:

We tried to look at the interface between incidence of literacy and poverty at household level. Table 5.9(a) depicts the link between the two variables. It may be noted, at the outset, that we do not postulate poverty reducing impact of literacy especially, at the lower range of educational attainment, observed among the sample households. At best literacy could be a result of better economic status of the households. The interesting issue, at this stage, is to examine how income (expenditure) and human capability aspects are related. Table 5.8 (a) suggests that there is no systematic link between households' literacy level and level of poverty. The proportion of households having at least one literate person varies marginally from 42.8% among severe poor to 52.2 % among medium poor, and then falls to 41 .2 % among non-poor. The picture presented in Table 5.9(a) thus, reflects more of supply side dynamics rather than the forces operating on the demand side. This is further confirmed by the fact that Sindhguda has very low literacy level because of the non-existence of school in the village. To that extent, remoteness plays a role in determining literacy outcome among these villages.

Table 5.9(a): Proportion of Households with Literate Member/s by MPCE Groups by Village

Villages	MPCE (Rs.)				All
	<150	150-225	225-300	>300	
Balel	44.4	36.4	66.7	33.0	42.5
Sindhiguda	5.0	18.2	16.7	0.0	10.0
Sub-total	17.2	30.3	41.7	16.7	26.2
Hanumal	75.0	58.8	25.0	0.0	59.0
Kamel	100.0	84.2	50.0	66.7	75.0
Sub-total	80.0	72.2	41.7	54.5	67.1
All	42.9	52.2	41.7	41.2	46.5

We tried to examine whether households in the relatively higher MPCE-categories have larger number of literate persons as compared to the severe and medium poor households. The distribution of households in Table 5.9(b) does not confirm this except that the non-poor the largest proportion of households having more than one literate persons as compared to the other three categories. The fact still remains that proportion of households without any literate person is higher among the higher MPCE-categories as already noted.

Table 5.9(b): Percentage Distribution of Households by Number of Literate Persons Across MPCE Categories

% of HHs by No. of Literate Persons	MPCE Groups				All
	<150	150-225	225-300	>300	
Nil	57.1	47.8	58.3	58.8	53.5
1	16.3	23.2	16.7	5.9	18.2
>1	26.5	28.9	25.0	35.3	28.3
All	100	100	100	100	100

Family Planning:

We tried to examine which are the households that have adopted or wish to adopt family planning measures? Are these households mainly concentrated in relatively higher MPCE categories? Table 5.10 presents information on this aspect. It is observed that households in the every poor category have lower incidence of family planning practices as compared to medium poor and moderate poor. Strangely, the proportion of households adopting these measures is lowest among the Non-poor. In fact, this observation is on the line with that in the case of incidence of literacy as seen in Table 5.9. While it is difficult to explain low incidence of literacy as well as adoption of family planning measures among the non-poor, the overall pattern, however, suggests a positive association between poverty and adoption of the family planning measure.

Table 5.10: Adoption of Family Planning Measures by MPCE Groups

Villages	MPCE Groups				All
	<150	151-225	226-300	300+	
Balel	5	11	5	1	22
Sindhiguda	5	1	2	-	8
Sub-Total	10	12	7	1	30
Hanumal	7	10	2	1	20
Kamel	2	11	4	3	20
Sub-Total	9	21	6	4	40
All	19 (38.8)	33 (47.8)	13 (54.2)	5 (29.4)	70 (44.0)

Figures in parentheses indicate percentage to the total number of households in each MPCE category

Households' Coping Mechanism:

Finally, we tried to examine whether reducing food grain consumption during external shocks like droughts has any systematic association with poverty or not. This is important because reduced food consumption from a level, which is already low, may lead to further deepening of poverty as that might adversely impact capability of the households' workforce in the long run. Table 5.11 suggests that there is generally a negative association between the proportion of households reporting reduced food consumption as a coping mechanism and MPCE-category. The proportion is also found to be higher among more as compared to less remote villages. The pattern however, is not so much consistent if we look at the specific cells in village-MPCE categories. Nevertheless, the overall pattern does indicate situations of hunger especially among the severe poor where as large as 71 per cent of the households reported reduction in food consumption from the level, which is almost half (i.e. 227 gms. per capita per day) of the national norm, as noted earlier.

Table 5.11: Households Reducing Food Grain Consumption to Cope-up With External Shocks

Village	MPCE Group (% HHs)				
	> 150	151 - 225	226 - 300	300 +	All
Balel + Sindhiguda	72.4	69.7	58.3	66.7	68.7
Hanumal + Kamel	70.0	52.7	66.7	54.5	58.2
All	71.4	60.9	62.5	58.8	63.5

The above information needs to be juxtaposed against the fact that a number of households have reported improvement in quality of food, clothing and housing-the three basic requirements of livelihood. While improvement is a positive indicator of how things have moved in the past 10 years, the situation is still so grave, if we look at the conditions of abject poverty and severe food insecurity faced by more than three fourth of households in the study area. Given the constraint of increasing the area of cultivated land and also enhancing crop productivity due to limited irrigation potential in a forest-based region such as this, the need is to evolve an effective mechanism of resource transfer through effective food distribution schemes.

This of course, is not a new revelation. In fact, the Government of Orissa and several of the international donor agencies have already initiated a number of programmes for ensuring food security to the people of this region. What is however, missing in this approach is that, the resource transfer is being viewed as welfare programme or as charity to the poor rather than as rightful compensation that the rest of the society (within and outside the state) owes to the forest dwellers in the region.

Evolving a perspective like this may help linking up the forest resource and the people dependent on that, with developmental planning in the state. Essentially, the cost of conservation and development of forest resources (and thereby the livelihood of people in the region) needs to be internalized in every single developmental scheme that takes place in the state. This, in turn, would imply changing the developmental discourse from charity orientation to rights- based approach. The real issue therefore, is- who can bring the change? – the polity, the bureaucracy, the tribal leadership, civil society organizations, donor agencies? The next section discusses the present policy approaches in the light of the various initiatives undertaken for poverty reduction in the state.

6. State Response, People's Participation and Major Challenges

Faced with the major challenge of ameliorating poverty, the state Government in 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, Government of India, has prepared the first ever Long Term Action Plan (LTAP) for Kalahandi-Bolangir-Koraput (KBK) region, which account for nearly 31.9 % of the rural poor in Orissa a against its hare of 19.7 % of the total population 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, get influenced by the macro perspectives, often loosing sight of the specific agro-ecological and social environment facing the forest based regions and the forest dwellers, who form a major chunk of poor in the state. While the LTAP is an attempt to depart from the general trend of policy formulation in the state in as much as it focuses 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 the document, as it stands now, 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 most tricky issue of linking environment and development or 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 as well people within that. Nevertheless, such views get lost in the midst of 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 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 amount of priority for evolving a region specific developmental perspective and feed that into the state/national level plans.

The scenario juxtaposed against the long history of exploitation, dis-continuity and apathy on parts of various rulers in the past, may tend to reinforce the adverse impact of non-connectivity or remoteness has faced by the people over centauries together. It is unfortunate that the present discourse on development and policy reduction in the state has not made major strides towards establishing an organic link between forest economies and the rest of the economy in the state. Unless this is put in place, 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 usefulness or positive impact of the various schemes that Government in the state has initiated in the most remote district/ area covered by the state. Quite contrary, a holistic perspective that ought to internalize some of the initiatives that the state has taken over a long period of time; in absence of this, the poverty scenario in the region might still 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, there is an larger proportion of the poor in the regions with very high incidence of poverty, are concentrated immediately below the poverty line [Deaton, and Dreze (2002), Panda (2004)]. 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 assume

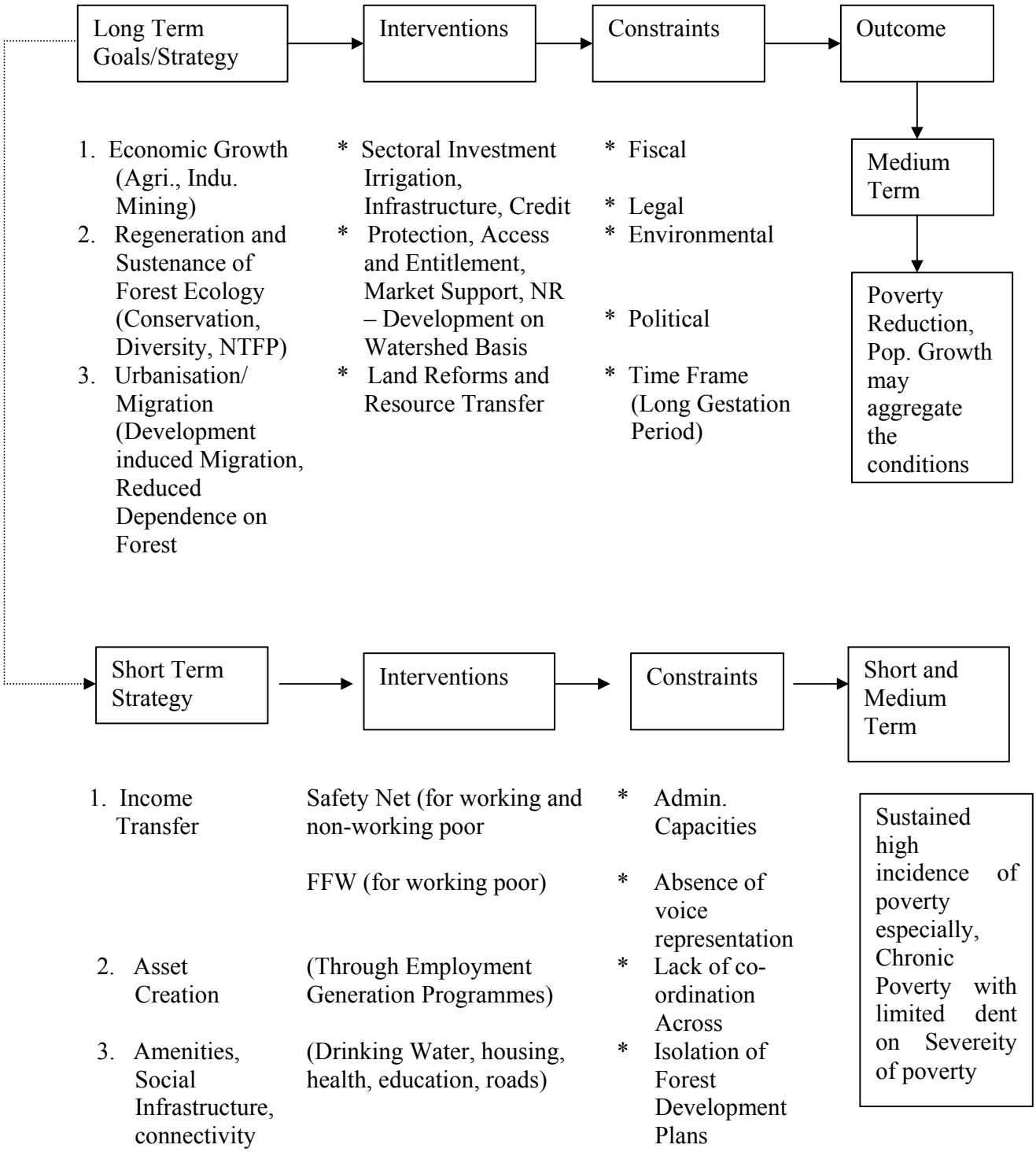
special relevance, as reflected by recent spur in the policy for promoting food for work programme, noted earlier.

6.1 Policies and Programmes for Poverty reduction: A Schematic View

As noted above a plethora of schemes and programmes are being implemented for supporting a wide spectrum of activities/aspects influencing poors' well-being. While most of these schemes are relief oriented and partial, if not short term, in nature, they also constitute a substantial part of the state's approach for poverty reduction in the region, where poverty is extensive, severe and long duration as described in the earlier sections. This can be seen in the light of the schematic presentation in Chart I.

The important observation that arise from the presentation Chart I is the lack of integration between the short-term with the long-term strategy. In that case it is likely that the transitional phase may get over stretched, resulting into accumulation (and perhaps) worsening of poverty conditions with little or no improvement in the forest ecology. Some of the important dimensions depicted in Chart I have been recapitulated in the light of the actual implementation of the PDS and the newly introduced National Food for Work Programme (NFFW), forming important segments of the short term strategy for poverty reduction in the state.

Chart I: Policies for Poverty Reduction in Orissa



Public Distribution of Food: A Brief Review

While PDS in Orissa has a better record in terms of coverage of population per outlet, the effectiveness in terms of physical access to the shop, availability of supply, and ability to purchase foodgrains by the chronic poor is far from satisfactory. According to a study by Radhakrishna et.al (1997), the extent of income transfer in rural Orissa was third lowest after Bihar and Uttar Pradesh.

More recently, the state has made special efforts for improving the efficacy of PDS. According to the NSSO estimates, about 51 per cent of the rural households in had accessed PDS for purchase of rice during 1999-2000; the proportion for all India was only 32 per cent (Dev, 2003). The reality especially, in remote areas like that in Southern Orissa however, is quite different, as suggested by a number of micro level studies in the region. For instance, a study by NCAER in the early nineties indicated that only 5 per cent of the households were using PDS (in Haan and Dubey, 2003; p.16). This is more or less same as what we observed in the study villages (see Table 6.1).

The important point however, is that, even if the household accesses PDS, there are other limitations with respect to adequacy, quality, and periodicity. A recent study by CENDERET in villages of Southern Orissa observed that:

1 16 kg BPL rice is supplied through PDS to a four members family, which only lasts upto 12 days in marginal and small farmers but in case of landless and daily wage earner it only goes upto 8 days for the same number of family members.

2. The price of BPL rice available in the PDS @ Rs. 6.30/- per kg. is 20.63% more than a better quality of rice available in the market.

3. The Mobile Van visits only three times in a month in every village. So only those who have the require money at that time only purchase ration. The remaining people don't get their ration for that particular month.

Of course, it should be recognised that PDS alone may not fill-up the entire gap in food consumption among the poor. And that, PDS should be seen in conjunction with a number of other schemes listed below:

Other Schemes for Food/Nutrition Support

A	Supplementary Feeding Programmes	
1	Integrated Child Development Programme (ICDS)	For children
2	Mid-Day Meal Programme	For school children
B	Consumer Food Price Subsidy	
3	Targetted PDS	For BPL households
4	Antyodaya Anna Yojna	For ultra poor
5	Annapurna Scheme	For aged (Pension of Rs. 100 per month
C	Food For Work	
6	Sampoorna Gram Rojgar Yojna (SGRY)	Employment guarantee
7	National Food for Work Programme (NFFP)	100 days work @ Rs. 52.5/day

D	Emergency Feeding for Aged Take Home Ration (THR)	> 65 years

Not withstanding this wide net of Food-Safety Programmes, the question still remains whether increasing targeting helps improving the effective coverage or not? Is the price-subsidy adequate for the non-working poor like the aged, widow, disabled? Instead of partnership with private traders, should here be a specific role carved out for the NGOs and other CBOs in the region? We would get back to these issues at a later stage.

National Food for Work Programm (NFFP)

NFFW covers 18 out of 30 districts of Orissa, which include most parts of Southern Orissa. The important features of the programme are:

(i) The poor families are assured of 100 days of gainful employment with the provision of food grains and cash equivalent to the minimum wage rate prevailing in each state.

(ii) The payment of wage will take the form of foodgrains and cash. Each wage earner will be given 5 kilos of foodgrains at BPL rate of Rs. 4.65 per day and the balance in the shape of cash. In case more foodgrains are available, the distributing agency will give more of foodgrains and less of cash to equate with minimum wage rate and vice versa. In Orissa the minimum wage fixed by the government is Rs. 52.50.

(iii) The new programme intends to create durable community based assets through wage employment involving ***unskilled manual workers*** in the rural areas. The community based assets to be generated are of such types that would contribute towards sustainable living of the rural poor.

(iv) The focus of the programme is on Gram Panchayats covering the villages surrounding it.

(v) The programme will cover four principal activities such as:

(a) Water Conservation
(b) Drought proofing (including afforestation/free plantation) and land development
(c) Flood control and protection (including drainage in waterlogged areas)
(d) Rural connectivity in terms of all weather roads

(vi) The programme envisages that the projects meant for the rural poor are done by the people themselves without invoking labour displacing machines. The purpose is to persuade the people to undertake the projects by themselves without the support of mechanics and machines.

(vii) Pallisabha is the nodal agency at the village level where projects are selected by the villagers. The selected projects after being finalized in the presence of ward members and Panchayat executive officers (VLWs)/ welfare extension officers are sent for suitable modifications and alternations to higher levels of Panchayat Raj institutions viz; Gram Panchayat Samiti and Zilla Parishad.

(viii) The Collector is the Nodal Officer at the district level. He shoulders overall responsibility of Planning, Implementation, Co-ordination, Monitoring and supervision of the programme under his jurisdiction.

(ix) It is further intended under the new NFFWP that works which can be undertaken within the resources available under any other ongoing central schemes will be taken up under the respective schemes without putting undue pressure on the funds available for NFFWP.

The programme targeted mainly for the working poor, unable to get sufficient work throughout the year at reasonable wage rates. It also seeks to create productive assets through the focus areas viz; irrigation, soil-water conservation, drought proofing and rural roads – most of which are already covered by some of the comprehensive programmes such as Integrated Watershed Development, supported by the Ministry of Rural Development, Govt. of India.

While the programme envisages sorting out overlap of activities among other schemes, the focus remains mainly on non-forest based activities even in the predominantly forest region such as Southern Orissa. Similarly the programme fails to attain systematic links with other schemes e.g. irrigation as part of the mainstream strategy for sectoral growth. The most important lacunae, at least at this stage, is administrative mechanisms and institutional capabilities to prepare action plans and put them into actual implementation. The initial response from the agencies facilitating the process suggest that, the poor even in the remote areas, do not have preference for undertaking manual work especially in the vicinity of the villages. The phenomenon is fairly common as observed during relief work programmes in Gujarat, Rajasthan, and Maharashtra, where poverty conditions are likely to be less severe. Nevertheless, low preference for manual work among severely poor in Orissa, besides cultural inhabitations may also reflect physical incapacity to stand through eight hours of hard work, as reported by the document on Long Term Action Plan for the KBK region in the state.
Finally, the issue of adequacy of funding needs attention. According to the official information, the total funds (combined for SGRY and NFFW) allocated for a district (i.e. Nabarangpur) in Southern Orissa is Rs. 575 crores over the next five years. Assuming that 50 per cent of the total 2.14 lakh rural households are very (chronically) poor, this would work out to 1.7 lakh households eligible for work under the programme. Given the project cost of Rs. 5,250 for generating employment for 100 day per household per year, the funds required for five years would be Rs. 26,250. At this rate the programme could cover about 2.2 lakh rural households. This obviously is fairly encouraging.

The pertinent question, raised by a senior official at the helm of implementing the scheme in Orissa is: where is wherewithal's for preparing such plans and implementing them in due time? His remarks were: (a) if money was the problem, there won't have been so much of poverty in the state; and (b) these are short term and adhoc measures at the cost of long term investment for promoting growth in the state. If these are the concerned raised by the very people in the government who always had to deal with scarcity of funds to finance productive investment in the state, the programme though well intended, certainly needs rethinking in the light of the disjointedness between the long term and short term strategies for poverty reduction and sustained development in the state.

It is high time that these issues are discussed among various stakeholders, looking at the macro as well as micro level realities of both poverty conditions and policy implementation in the state.

6.2 People's Access to the State's Support and Interface with Local Governance

Given the backdrop of the larger schematic of policy interventions, it would now be useful to assess people's access to the various developmental schemes that the Government has already initiated, especially for BPL-households, in the region. Table 6.1 provides information about the various schemes and households obtaining benefiting from that.

Table 6.1: Households Availing Benefits from Developmental Schemes

Scheme	Village				Total
	Balel	Sindhiguda	Hanumal	Kamel	
1	-	-	-	-	-
2	-	-	-	-	-
3	-	-	-	1	1(0.6)
4	21	-	13	23	57(35.8)
5	4	-	5	5	14(8.8)
6	10	9	8	9	36(22.6)
7	-	-	-	-	-
8	-	-	-	-	-
9	15	2	10	7	34(21.4)
10	4	9	13	7	33(20.7)
11	-	-	-	-	-
12	7	1	3	5	16(10.1)
13	2	4	8	5	19(11.9)
14	1	-	-	-	1(0.6)
15	1	-	1	-	2(1.2)
16	-	-	-	-	-
17	-	-	-	-	-
18	-	-	-	-	-
19	-	-	-	-	-
20	-	-	-	-	-
21	2	1	5	-	8(5.0)
22	1	-	-	-	1(0.6)
23	-	-	-	-	-
24	-	-	-	-	-
25	32	22	35	27	116(72.9)
All	139	88	139	129	338

In to bracket % of total HHs (159)

Note – [s1] Irrigation facility; [s2] Crop insurance; [s3] Livestock improvement; [s4] SHG; [s5] Loan from bank / co-op; [s6] PDS; [s7] Drought relief work; [s8] Pensions; [s9] Health and family planning; [s10] Idira Awas Yojana[s11]; Prime Minister's Rojgar Yojana; [s12] NOAP [s13] SOAP [s14] ODPs15] Widowhood Pension [s16] NFBS [s17] NMBS [s18] Agriculture loan [s19] SGSY [s20] Emergency Feeding [s21] Food for Work [s22] Land Reform [s23] BSY [s24] ITDA [s25] Other

It is interesting to note that the list of the schemes that are being (or expected to be) implemented in the region are enormously large. It consists of almost everything that one could think of in

terms of addressing severity and multidimensionality of poverty with special focus on vulnerable groups such as old, disabled, landless etc. Nevertheless, if one looks at the extent to which these schemes have reached the people is abysmal[16].

Therefore the questions that arise in the context of the state's response to dealing with poverty reduction in the region are as follows:

- Do we really need so many schemes at a time? Is there any significant overlap between the schemes and the beneficiaries?
- Are there sufficient resources to meet the needs of the people entitled for the benefits even within a time frame of 5 years?
- Since most of the schemes are, by and large, short term in nature, how do they make connections with the mainstream processes of growth and development?
- Are the targets clearly defined and benefits identified for different points of time during the plan period? Is the information about the targets and beneficiaries made available to the local institutions including the civil society organisations working in the area?
- What are the indicators of achievements and success? And how transparent the claims of success are?
- What are the major constraints in achieving the expected results, especially in remote areas such as that in Southern Orissa?
- What are the major initiatives undertaken by the NGOs/ civil society organisations working in the area? Is there any systematic link among them and with the State machinery?

While these questions need additional information that need to be collected in the next stage of the study, it might be useful to know the present status with respect to the link between people and the institutions of local governance i.e. village Panchayat and the state machinery at the block/district level. The broader schematic of policies and programmes presented above may provide a useful backdrop for reflecting on the issues of policy implementation and governance.

We tried to ascertain this by examining people's participation in Panchayat election and contacting the officials at taluka/district levels for problems faced by them. The information has been presented in Table 6.2.

Table 6.2: Participation in Local Governance and Approaching for Solution

Village	Casted Vote in PRI Election	Approaching Authority
Balel	39(97.5)	28(70.0)
Sindhiguda	13(32.5)	4(10.0)
Hanumal	26(66.7)	17(43.6)
Kamel	38(95.0)	36(90.0)
All	155(97.5)	114(71.7)

[16] Of course, it is likely that the coverage is under reported in the sense that many more households might have been in principal reached out by schemes like PDS, but the households may not have reported that because of the gap between physical infrastructure and the actual benefits, or that between the expected and actual benefits received. In other words what might have been reported here is not enrolment in a scheme, but realisation of the expected benefits, which appears to be fairly small.

It is encouraging to note that as large as 97.5% households had at least one person having exercised their right of vote in the last local election for PRI. Similarly, a large proportion of households (72%) reported that they have approached officials of the state machinery at block/district levels. Subsequently, the respondents were asked about their expectations from different agencies (Table 6.3). Surely, housing, electricity, education, drinking water and health facilities emerged as relatively more important demands as compared to agriculture related support, employment or PDS.

We also tried to examine this by obtaining people's perceptions about what would be the improvement in their livelihood base if, they were to move to less remote locations in the same region. The responses have been presented in Table 6.4. It is interesting to note that a large number of respondents perceived better transportation, electricity, medical facility, and market access as the major benefits by moving to a less remote location than where they are presently located, only a few of them reported additional employment/business opportunities. Similarly, improved facility for education emerged as an important perceived benefit. These observations substantiate the critical importance of physical connectivity in terms of road and transportation facility as perceived by the people[17].

[17] This poses an important policy dilemma where some of the NGOs plead against improving the road connectivity since that bring increased commercialization and exploitation of resources as well as people, mainstream development policies may like to support development of road infrastructure in the region. The forest department may have a mixed view on this. The issue therefore needs further probing.

Table 6.3: Expectation from the State

	Village				All
	Balel	Sindhiguda	Hanumal	Kamel	
Expectation from PRI					
Indira Awas Yojana	18	26	15	29	88(55.3)
Portable drinking water	8	25	3	4	40(25.1)
Co-op. loan provision	14	1	7	10	32(20.1)
Pension	1	-	-	1	2(1.2)
Irrigation facility	-	6	-	2	8(5.0)
All	41	58	25	46	170
Expectation from Government					
Electricity facility	17	8	9	20	54(33.9)
Telephone facility	-	-	-	1	1(0.6)
Seed and water facility for agriculture	-	7	1	7	15(9.4)
In-time medical facility	15	7	8	10	40(25.1)
Crop loan	11	4	2	11	28(17.6)
All	43	26	20	49	138
Expectation from Other Agencies					
Education	12	22	-	11	45(28.3)
Credit Support	4	-	-	1	5(3.1)
Timely Supply of Medicine	6	5	-	1	12(7.5)
All	22	27	-	13	62

Table 6.4: Perceptions about Implications of Moving to Less Remote Areas within the Region

Sr.No.	Prospect Aspects	Balel	Sindhiguda	Hanumal	Kamel	Total
Village Situated at Road Side						
01	Good communication Facilities	36	40	37	39	152(95.6)
02	Business opportunities	8	2	3	2	15(9.4)
03	Electricity facility	24	2	6	18	50(31.4)
04	Education facilities	3	1	10	16	30(18.9)
05	Medical facilities	15	15	7	15	52(32.7)
06	Easy access to market	14	7	12	10	43(27.0)
	All	100	67	75	100	342
Small Town Near By						
01	Educational facilities	24	17	12	18	71(44.6)
02	Electricity facilities	26	4	16	7	53(33.3)
03	Availability of work Opportunity	18	17	19	12	66(41.5)
04	Medical facilities	9	1	13	15	38(23.9)
05	Consumer goods available any time	-	2	-	-	2(1.2)
	All	77	41	60	52	230

Multiple Responses

While there may be constraints in enhancing connectivity to the region due to conservation objectives, nevertheless it is crucial to fill-in the `Governance-Gap', which is fairly large. The recent experience of implementing employment generation and food distribution schemes in the region has highlighted the problem of capacity of the state machinery to 'absorb' large funding, a part of which could be due to physical remoteness. At the same time, of the NGOs do not seem to have grass-root base in this remote region. The need therefore, is to co-ordinate and consolidate the efforts made by the state as well as various civil society organizations. The long term solution however, may lie in strengthening community-based organizations, which may focus more on institution building, and promote rights based approach, rather than operating merely as service delivery mechanisms. It is in this context examining the profile as well as approaches of the various agencies, and the initiatives thereof assume special importance[18].

[18] An analysis focusing on this issue undertaken by S. Padhi and N. Panigrah at Nabakrushna Choudhary Centre for Development Studies, Bhubaneshwar.

7. Summary and Way Forward

The foregoing analysis of chronic poverty in a forest-based region in Southern Orissa, by and large, reconfirms some of the already known realities about the interface between forest resources and people's livelihood in the region. For instance, it reinstates the fact that chronic poverty in terms of- both 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 just about half of the prescribed norm of cereal in-take. The analysis also indicated high incidence of child mortality as well as illiteracy among the sample households. Size of land holding is yet another feature that shows the expected negative association with severity of poverty. It may however, be noted that whereas the major correlates of poverty, by and large, confirm the expected relationships, the pattern is not very clear.

Against these observations, the analysis also brings out certain new insights. These are:

1. Unlike the commonly held perception, people in the forest area have reasonably good access to the forest resources- land and NTFPs. The contemporary policy discourse also emphasizes 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 internalizing forest development with people's livelihood, where the latter is treated as matter of right rather than as concessions granted to support poor's livelihood *per se*.

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

3. Whereas 66 per cent of households own land, irrigation is almost non-existent. This may be mainly due to limited potential, since the region constitutes part of the upper catchment of river basins in the region. This is a major ecological constraint, which need to be kept in mind, while planning for development, and at the same time, compensatory resources transfer, in the region.

4. Migration, as a livelihood option, is almost missing. This may increase dependence on forest under shocks.

5. Physical remoteness at regional/district level emerges as the most important factor explaining such a high incidence of poverty in Koraput, which is significantly higher even in comparison to other forest-based districts in northern region in the state. The impact however gets somewhat diluted when we compared relatively more remote villages with less remote villages within the same district. Nevertheless, we did notice negative impact of remoteness on literacy, accessing health (family planning) services, and expenditure-poverty. The pattern of difference between the two sets of villages however, is found to be somewhat mixed.

6. Households having higher dependence on forest (as proportion to their total income), are found to be located in the two extreme ends of MPCE-groups i.e. severe poor and non-poor.

7. Scheduled castes, rather than schedule tribes, have higher incidence of poverty. The incidence is as high as 75 % even among the non-SC/ST households. This may suggest that more than the social identity; regional characteristics have more empowering impact on poverty.

8. Reducing cereal consumption is the most important coping strategy under shocks. This sets a downward spiral of low-nutrition leading to mobility and physical capability, further leading to low food intake. Physical remoteness and frequent droughts make this a perpetual reality, exiting this is almost impossible for large majority of poor in the study region.

9. The state has initiated a number of developmental schemes in the region; the actual coverage of beneficiary households is very limited.

10. A large proportion of households reported having exercised the voting right during Panchayat elections. More importantly, many of them reported having approached the state authorities at the block or district levels.

11. The existing NGOs in the region seem to be engaged more in delivering the much needed support for health services, education, food security schemes, market support for NTFPs etc; rather than taking up the issues of entitlement for work and/or compensation.

12. The major constraint therefore, is that of filling-up the governance-gap rather than flow of funds, which of late, has shown an increasing trend.

These are of course, some of the initial findings. The analysis needs to throw better light on critical issues like:

- What is the present status of the households having reported improvement in food, clothing, and housing? This will help ascertaining the earlier status of the households.

- What is the status of forest degradation? What is the potential for increasing irrigation and improving agricultural productivity? This would help ascertain the carrying capacity of the forest-based region?

- What is the extent of migration among relatively less remote areas within the same region i.e. Southern Orissa? This would help examining the impact of remoteness on mobility, which may have special relevance to livelihood strategy and forest dependence among households.

- What is the nature of the polity, and civil society's response to the conditions of chronic poverty in the region? This would help understanding the scope for a consolidation of institutional support for better planning as well as governance.

- What are the major hurdles in achieving significant impact of the various schemes for food security, being implemented by the Government and non-Government organizations? This would help identifying the locus as well as nature of mal-functioning at various levels of administrative hierarchies.

These issues will be addressed in the next round of study in the study region.

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