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TRIBAL POPULATION
AND CHRONIC POVERTY
IN ORISSA:
A NOTE ON NORTH-SOUTH
DIVIDE

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Tribal Population and Chronic Poverty in Orissa: A Note on North-South Divide

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1. Introduction

Orissa has a varied physiography on account of a wide range of physical features and agro-ecological conditions. These determine to a large extent the human geography on the basis of 'carrying capacity' of land. The state is usually divided into four agro-climatic zones: Northern Plateau; Central Table Land; Eastern Ghats and the Coastal Plains.

The NSSO has defined three regions for the purpose of selection of samples and their features are given in Table 1.

2. Incidence of Aggregate/Chronic Poverty in Orissa: Differences Across NSS Regions

When a poverty ratio of 48.01 per cent for the year 1999-2000 for rural Orissa was reported, the State earned the dubious distinction of being the poorest state in India ahead of Bihar (43.33 per cent). When the headcount ratio (HCR) for the three NSS regions of Orissa was worked out (Table 2), there were predictably some strong responses to it. The HCR for the coastal region of rural Orissa, at 31.74 per cent, was regarded as an achievement even though this was as expected. But, at the other extreme, the HCR for the Southern NSS region of rural

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Orissa, at a staggering 87.05 per cent, attracted a great deal of attention of academics and led to significant development interventions in terms of funds flow.

Table 1: Some Features of NSS Regions

NSS Region	Districts (undivided)	Share (%) in State's area	Share (%) in State's Population	Population Density (persons per sq. km)
'Northern' (Northern Plateau plus Central Table Land)	Mayurbhanj Keonjhar Sundergarh Sambalpur Dhenkanal Balangir	42.18	34.69	194
'Southern' (Eastern Ghats)	Kalahandi Kandhamal Koraput	32.02	17.47	129
'Coastal' (Coastal Plains)	Cuttack Puri Balasore Ganjam	25.8	47.84	438

Note: The data presented above are for the 13 districts prior to their division in 1992.

Source: Government of Orissa, *Statistical Abstract of Orissa, 2002*, Directorate of Economics and Statistics, Orissa, Bhubaneswar; *Census of India, 2001, Series 2, Final Population Tables, Paper 1 of 2001*, Directorate of Census Operations, Orissa.

Table 2: NSS Region-wise and Social Group-wise HCR, Rural Orissa, 1999-2000

Region	Social Groups			
	ST	SC	Others	All
Coastal	66.63	42.18	24.32	31.74
Northern	61.69	57.22	34.67	49.81
Southern	92.42	88.90	77.65	87.05
Orissa	73.08	52.30	33.29	48.01

Note: (i) The estimates of HCR of ST and SC at the level of NSS regions are based on very small samples.

(ii) It is assured that for the sake of comparison of HCRs across regions, relative price differences are insignificant so that poverty lines are roughly comparable.

Source: Haan and Dubey (2003), *Poverty in Orissa: Divergent Trends? With Some Thoughts on Measurement Issues*, Mimeo, Paper presented at the Workshop on 'Monitoring of Poverty in Orissa', 26-27 February, Nabakerushna Choudhury Center for Development Studies, Bhubaneswar.

What about the HCR for the northern NSS region? Most observers just pointed out that this fell 'neatly' between estimates for the coastal and southern NSS regions. However, it was not difficult to see that the HCR for the northern NSS region was much closer to that for the coastal region rather than the Southern NSS region (Table 2). Therefore, the difference in the HCR between the northern and southern NSS regions was much greater than that between the northern and coastal regions. Indeed, the HCR for the northern region was very close to that of the state as a whole (Table 2). This required an explanation. More strikingly there is a huge difference in the HCR for the tribal population between the northern and southern NSS regions – 61.69 and 92.42 per cent respectively. This striking difference has not been researched, and its significance has not been given attention in discussions of tribal poverty in Orissa. This paper is essentially concerned with exploring this spatial aspect of poverty among the tribal people in Orissa.

The above observations on spatial variations in HCR are with respect to aggregate poverty. What about chronic poverty? For the state as a whole, we have an indirect estimate of the incidence of chronic poverty. Radhakrishna *et. al.* (2004) estimate this at 24.4 per cent for rural Orissa during 1999-2000, (the second highest after Bihar at 25.3 per cent). This meant that a little more than 50 per cent of the poor were chronically poor in rural Orissa.

Since such indirect estimates are not available at the level of NSS regions, we resort to a different indirect method to obtain estimates of the incidence of chronic poverty for the three NSS regions of Orissa. Elsewhere, it has been found using inter-state data for 1999-2000 that the incidence of chronic poverty (rural) and poverty gap (rural), are very strongly correlated ($r = 0.97$) (Padhi and Mishra 2005). In fact, poverty gap explains about 94 per cent of inter-state variation in the incidence of chronic poverty. Hence, we use the data on the distribution of the poor relative to the poverty line, available for 1993-94 at the level of NSS regions. Taking the category of 'very poor' as representing the

chronically poor, the incidence of chronic poverty is taken as a per cent of 'very poor' in the rural population.

Table 3: Indirect Estimates of Incidence and Relative Extent of Chronic Poverty and Poverty Gap, 1993-94

Region	Incidence of Chronic Poverty (‘Very Poor’ as per cent of rural population)	Poverty Gap	Chronically poor as per cent of All poor
Northern	18.99	10.41	41.60
Southern	34.08	18.78	49.38
Coastal	19.03	10.21	41.95

Source: (i) Government of India (1997), Sarvekshana, Vol.XXI, No.2, 73rd Issue, October – December (NSS 50th Round, 1993-94), Ministry of Statistics, Planning and Programme Implementation, Department of Statistics, New Delhi.

Thus, in 1993-94, the incidence of chronic poverty in the north and coastal NSS regions were comparable (about 19 per cent) whereas in the south it was as high as 34.08 per cent. The same regional pattern obtains in respect of poverty gap and the per cent chronically poor among the poor (Table 3). On the whole, there is enough ground to probe into the superior performance of the northern NSS region on the poverty front particularly with respect to the tribal population. This would be useful and appropriate particularly when there is not much difference in the density and concentration of tribal population for the northern and southern NSS regions, to which we will turn (Section 4).

3. Tribal Communities in Orissa: A Digression on their Regional Geography

The scheduled tribe communities of Orissa contribute substantially to the demographic structure and social fabric of the state. There are 62 tribal communities, with a total population of 8.14 million (Census of India 2001), who belong to Austro-Asiatic, Dravidian and Indo-Aryan language families. Out of them, 11 tribal communities have been identified as primitive. Almost 44.21 per cent of the total land area in Orissa has been constitutionally declared as Scheduled Area. Except for the coastal belt, most of the districts of the State are either partially or fully declared as Scheduled Area. The present Scheduled Area of the State includes six districts that are fully and five districts that are partially within it. The districts of Mayurbhanj and Sundargarh are the full

scheduled districts while Keonjhar is the partially scheduled district in the northern zone of the state. Similarly, Koraput (undivided) is a full scheduled district, while Kandhamal and Kalahandi are partial scheduled districts in the southern zone of the state. Out of 314 Community Development Blocks of Orissa, 118 (37.3 per cent) blocks are covered under the Tribal Sub-Plan (TSP). The tribal population of Orissa constitutes 22.08 per cent of the total State population (2001). The major tribes in the northern zone of the state, based on their numerical strength, are, Santhal, Munda, Ho, Juanga, Bhuyan, Bathudi, Kharia, Kolha, Kol Lahara, Kisan, Oraon, Gond, Lodha and Mirdha. The major tribal communities of southern zone include Khond, Koya, Gadaba, Paraja, Omanatya, Pentia, Saora, Bonda, Didayi and Shabar. There are 15 tribal groups distributed in different parts of Orissa each having more than one lakh population. The tribal communities like Santhal, Gond, Munda, Ho, Birhor, Bhumija, Kharia, Lodha, Oraons and Kissan in the northern zone of the state cut across the State boundaries and are also found in the neighbouring States of Jharkhand, Chhatisgarh, and West Bengal. Similarly, Koya, Khond, Saora, Shabara, Paraja and Gadaba tribal communities of the southern zone are also found in Andhra Pradesh and Chhatisgarh.

The tribal economies are still primitive from the point of view of resource utilization, technology adoption and diversification of cropping pattern. A study of the tribal economy requires an understanding of the concept of community, common property, meaning of land and the role of non-tribals, particularly scheduled caste groups, such as Panas and Damos who significantly influence the tribal economy. Land is the pivotal property and tribal people retain strong emotional attachment to it even though they do not enjoy legal right over land. Apart from land based resources, Minor Forest Produce (MFP) and/or Non-Timber Forest Produces (NTFP) play a vital role in their economic life, sustenance and labour processes. The Roy Burman Committee (1982) pointed out the commercial viability of MFPS starting from family level to the national level. The Task Force on Development of Tribal Areas (1983) of the Planning Commission since then has also highlighted the importance of forest resources and the role of tribal communities for its management. More specifically, the tribal communities namely Santhal, Munda, Ho, Bhuiyans and Oraons of northern zone are more or less exposed to the mining and industrial operations in Mayurbhanj, Keonjhar, and Sundargarh districts. Quite a sizeable segment of them have been migrating from their native area to different urban and industrial pockets of Orissa and Jharkhand in search of wage labour. A

look into the level of literacy among these tribal communities also reflects a distinct variation between these two zones. As per the 2001 Census the literacy rate among the Kissan was 50.19 per cent, while it was 50.88, 39.69, 54.20, 40.43 and 46.96 per cent among Bhuyan, Munda, Oraon, Santhals and Gonds of the northern zone respectively. The level of literacy among the major tribal communities of Southern zone is much less, namely, 11.73, 12.62, 14.69, 17.96, 21.21, 31.87 and 41.13 per cent respectively among Koya, Didayi, Bondo, Paraja, Gadaba, Kondh and Saora of the southern zone. The impact of these processes has been quite varied for the different tribal communities and the penetration of exogenous forces has generated aspirations among the tribal communities. In such a situation the influence of traditional institutions in the management of natural and social capital of these communities also varies. There is a need to understand the regional development and diversities and the overall framework of development intervention in these regions.

4. Are North and South Comparable in terms of Tribal Population?

It can be argued that large differences in the density and extent of concentration of tribal population between the northern and southern regions lead to the observed differences in the extent of aggregate/chronic poverty between these regions.

Table 4: Density and Concentration of Tribal Population

Region	ST Population as per cent of Total Population	Per cent share of ST Population in Total ST Population of the State
Northern	35.22	53.66
Southern	34.67	34.90

Source: Census of India 2001, Series-1, Part-II B(iii), Primary Census Abstract: Scheduled Tribe Population.

On the contrary, as can be seen from Table 4, while the density of tribal population is very nearly the same in the north and south NSS regions, there is much greater concentration of tribal population in the north as compared to the southern region. In fact, the northern region has more than a proportionate share of the state's tribal population (53.66 per cent) relative to the share of tribals in the state's total population (34.69 per cent). Thus the higher incidence of aggregate/

chronic poverty in the southern region cannot be explained in terms of a higher density and/or concentration of tribal population. This perhaps means that economic conditions of the tribal people vary from context to context. This needs to be studied to examine the efficacy of existing policies and programmes, and for drawing out implications for policy reforms and interventions. In the present case, it may be quite useful to study the northern region to identify the factors which can explain its relative success in poverty reduction.

5. Differences between North and South in the context of Poverty Estimates: Towards a Schematic Explanation

Thus, in a sense, the ground is cleared for attempting a preliminary schematic explanation for the north-south differential incidence of chronic poverty in general and that of the tribal population in particular. For this, we first look at the rural labour market structure in the two regions as a possible route through which chronic poverty is likely to be influenced. We then move on to a more broad – based explanatory scheme.

5.1 Chronic Poverty and Rural Labour Market Conditions: Do they favour the North?

Do conditions in the rural labour market provide an explanation for the differential performance of northern and southern NSS regions? Research shows that certain labour market characteristics impact significantly on chronic poverty (Padhi and Mishra 2005). Using 2001 census data we analyze selected rural labour market parameters to see whether these could have an adverse/favourable impact on chronic poverty in the south vis-à-vis the north: (i) Agricultural Labourers (AL) as a per cent of Rural Main Workers (RMW) for all Population and Tribal Population (ii) Rural Non-Agricultural Workers (RNAW) as per cent of Rural Main Workers; (iii) Marginal Workers (MLW) as per cent of Total Workers (Main and Marginal) for All Population and Tribal Population (iv) Per cent of Marginal Workers among Total Agricultural Labour (All Population and Tribal Population). The requisite data are presented in Table 5.

From Table 5, there are essentially three relevant factors that need to be noted, since in all other cases, there is nothing much to choose between the north and the south. These are: firstly, there is a much greater concentration of tribal agricultural labour in the agricultural

labour force in the south as compared to the north. Secondly, among the tribal population, the proportion of rural non-agricultural workers to rural male workers is 23.51 per cent in the north as against only 11.81 per cent in the south. This means that for the tribal population in the north, a much greater proportion of rural main workers is engaged in rural non-agricultural employment, which typically offers higher wages as well as longer and steadier employment. Thirdly, the share of secondary sector workers in total (rural + urban) main workers in the north is twice

Table 5: Selected Rural Labour Market Parameters and Chronic Poverty, Northern vs. Southern NSS Regions of Orissa (Census 2001)

NSS Region	AL as % of RMW		AL among MW as % of TAL		Share (%) of Tribal AL in Total AL	RNAW as % of RMW		MW as % of TW		Share (%) of Secondary sector workers in total main workers (1991)
	All Population	Tribal Population	All Population	Tribal Population		All Population	Tribal Population	All Population	Tribal Population	
Northern	25.33	32.49	57.77	61.32	51.88	28.83	23.52	35.05	43.80	9.44
Southern	25.79	29.67	61.61	66.30	66.53	30.01	11.81	38.87	44.84	4.30

Note: (1) AL stands for agriculture labour, (2) RMW stands for rural main workers, (3) MW stands for marginal workers, (4) RNAW stands for rural non-agriculture workers & (5) TW stands for total workers.

Source: Census of India 2001, Series-1, Part-II B (iii), Primary Census Abstract: Scheduled Tribe Population; and Census of India 2001, Series-22, Provisional Population Totals, Paper-3 of 2001: Distribution of Workers and Non-workers, Directorate of Census Operations, Orissa..

that of the south. These three factors suggest that wage rates in the south are very likely to be lower than in the north.

6. Some Distinguishing Factors and Chronic Poverty: Towards an Inclusive Explanation of the North-South divide

A study of factors that contribute to a relatively stronger impact on aggregate/chronic poverty in the northern NSS region could be useful for understanding the presence of different kinds of constraints operating in the southern NSS region. Available evidence relating to some of these factors are discussed below. However, these factors are indicative and call for more detailed research as well as identification of other relevant variables. We present below an account of some of these differentiating factors.

6.1 Level of Wage Rates

The available data suggests that wage rates are relatively higher in the northern as compared to the southern region in all segments of the daily wage market (Table 6).

**Table 6: Differential Daily Wage Rates, 1999 (Base=1993)
(Rs./day)**

Region	Market Segment		
	Real Agricultural Daily Wage	Real non-farm casual daily wage	Real regular daily wage
Northern	15.11	22.11	79.81
Southern	12.21	20.74	74.71

Source: World Bank, 'Orissa Policy Notes 2005: Vulnerability in Orissa: Diagnosis and Approach', pp. 26-27, Mimeo, 2005, prepared for the Planning & Coordination Department, Government of Orissa.

The most striking difference in wage rates is in the case of agricultural labourers, the data for which are available for ST population across NSS Regions (Table 6). It may be seen (Table 7) that average weekly wages of tribal agricultural labourers in the north are about 34 per cent higher than they are in the south (and about equal to that in the coastal NSS region).

Table 7: Average weekly wages (in Rs.) of ST Agricultural Labourers in Regions of Orissa (1999-2000)

Region	ST
Northern	134.32
Southern	104.11

Source: Same as in Table 2

It needs to be mentioned here that the observed difference in the incidence of chronic poverty between the northern and southern regions is not fully explained by labour market conditions, but perhaps more importantly, by the relatively lower ratio of prices received to prices paid by the small producers (who constitute a sizeable proportion of the poor) in the southern region.

6.2 Relatively favourable agro-ecological conditions

6.2.1 Extent of High Land

Table 8: Topographical Feature of Land

Region	Per cent of Cultivated Area under	
	High Land	Low Land
Northern	50.0	20.4
Southern	64.2	13.9

Source: Government of Orissa, Orissa Agricultural Statistics, 1995-96, Directorate of Agriculture and Food Production, Bhubaneswar, 1997.

As can be seen from Table 8, relatively higher proportion of high land, and lower proportion of low land, in the southern as compared to the northern region, perhaps suggests the following: lower agricultural productivity in general in the south (because of lower moisture retention capacity of high land soil) in the short run and in the long run, possibly a higher rate of soil erosion in the southern region, in case there has been a greater extent of degradation of forest.

6.2.2 Extent of Forest Degradation and Effective Forest Cover

The data in Table 9 on closed forest area as per cent of total forest area (which is the reciprocal of the extent of degradation of forests), and closed forest area as per cent of total geographical area (a measure of effective forest cover), for the northern and southern regions, shows

that the extent of degradation of forests is relatively less in the northern region and the effective forest cover is also relatively higher. In addition, there is a much greater concentration of closed forest area in the northern as compared to the southern region. In fact, it is more than proportionate to the share in total population of the state for the northern region (which is much larger than the south: Table 1, *supra*).

Table 9: Extent of Forest Degradation, Effective Forest Cover and Concentration of Closed Forest, 1997

Region	Closed Forest Area as per cent of Total Forest Area (Extent of Degradation)	Closed Forest Area as per cent of Total Geographical Area (Effective Forest Cover)	Share (per cent) of Closed Forest in Total Closed Forest Area of the State
Northern	64.35	21.59	54.21
Southern	48.09	16.45	31.36

Source: *Computed from district level data in Government of India, The State of Forest Report*

6.2.3 Better Forest Management Policies in the North

There is some micro level evidence to the effect that JFM is functioning better in the northern region. A good indicator of this is the extent of institutional and community-based management of forests under JFM. We thus find that the extent of forest area protected by Vana Samrakhyana Samiti (VSS) is much higher in the north compared to the south relative to the total forest area in the two regions (see Table 10).

Table 10: Relative extent of Forest Area under JFM, 2005

NSS Regions	Total Government Forest Area (sq. km)	Total Forest Area under JFM (hect.)
Northern Region	9981	478325
Southern Region	13815	269445
Total	23796	747770

Note: Forest area pertain to the year 2000-01

Source: PCCF, Orissa, Aranya Bhawan, Bhubaneswar, 2005

6.3 Infrastructure Development

The composite index of infrastructural development constructed for the northern and southern regions brings out the relative distance in the same between the two regions (Table 11).

**Table 11: Infrastructural Development Index, 1993
(Orissa = 100)**

NSS Region	Index Value
Northern	87.27
Southern	65.87

Note: The composite index is based on 14 indicators of physical, social and economic infrastructure, similar to the CMIE index.

Source: Padhi (2002), 'Orissa Economy: A Database', Mimeo, Nabakrushna Choudhury Centre for Development Studies, Bhubaneswar.

6.4 Level of Per Capita Foodgrain Output and Entitlement Failure

The average per capita output of food grains (per annum) in the southern region at 157 kg. is higher than the same in the northern region (124 kg.). This seems to be in line with what we know about the 'surplus' of food grains availability over requirements in the backward districts of southern Orissa. This usually means lack of local purchasing power and consequent drain of surplus, given the rather poor grain procurement policy.

In this connection, it would be important to examine whether, and to what extent, the food transfers and food assistance programmes are running more effectively in the northern than in the southern NSS region.

7. Concluding Remarks

Before we conclude, it may be mentioned here that there are a couple of potentially important differentiating factors for which no firm secondary data are available: first, relatively lower co-variate risks and exogenous shocks in the northern region, and second, relatively lower extent of development induced displacement in the northern region. In any case, those are factors that need to be examined in detail.

It is not the purpose of this paper to exaggerate the differences between the northern and southern NSS regions with respect to the incidence of chronic poverty and in the possible contributing factors. It

is suggested that we do not gloss over the differences, primarily because of the comparable incidence of tribal population in the two regions and a much higher concentration of tribal population in the northern region. We hope that whatever relative progress the northern region has made on the poverty front, enables us to identify the conditions which may have made this possible. In the process, it may be possible to draw certain conclusions regarding priority areas of policy interventions. It is not our purpose to underplay the backwardness of the northern NSS region as a whole in absolute terms.

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