

# Hunger and Coping Strategies among Kondh Tribe in Kalahandi District, Odisha (Eastern India)

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## 1 Introduction

In many parts of the world, hunger is pervasive and chronic; persisting even when weather is good and global agricultural production is adequate. Those who are undernourished in normal times are overwhelmingly the poor in the developing market economies of Asia, Africa, Latin America and the Near East. For these people hunger is fundamentally a reflection of poverty embedded in unequal distributions of wealth, income and power within their societies and among nations.<sup>1</sup> Hunger is an important aspect indicating food insecurity. Hunger is not just an expression of poverty, it brings about poverty. The attainment of food security therefore involves eliminating current hunger and reducing the risks of future hunger. Hunger has chronic and seasonal dimensions. Chronic hunger is a consequence of diets persistently inadequate in terms of quantity and/or quality. Poor people suffer from chronic hunger because of their very low income and in turn inability to buy food even for survival. Seasonal hunger is related to cycles of food growing and harvesting. This is prevalent in rural areas because of the seasonal nature of agricultural activities and in urban areas because of the casual labour, e.g., there is less work for casual construction labour during the rainy season. This type of hunger exists when a person is unable to get work for the entire year. According to Amartya Sen and Jean Dreze, “Hunger is intolerable in the modern world” in a way it could not have been in the past, because it is “so unnecessary and unwarranted.” (The Hindu, October 24: 2006). India is a poignant example of how food sufficiency at the aggregate level has not translated into food security at the household level.<sup>2</sup>

Despite rapid economic growth in the past two decades, India is unlikely to meet the first Millennium Development Goal (MDG) of cutting the proportion of hungry people by half. Per capita availability, as well as consumption of food grains, in India has declined since 1996; the percentage of underweight children has remained stagnant between 1998 and 2006; and the calorie consumption of the bottom half of the population has been consistently declining since 1987. Endemic hunger continues to afflict a large proportion of the Indian population (Saxena 2011). Though poverty headcount ratio has declined over a period of time, food insecurity remains unchanged. In fact 79.8 per cent of the rural India is below the prescribed 2400 Kcal in rural areas. Explicit hunger is especially severe in rural Odisha, West Bengal, Kerala, Assam and Bihar. Non-availability of two square meals a day peaks in the summer months from June to September with longer duration suffering in West Bengal and Odisha (Mehta and Shah 2002). A study conducted by UN World Food Programme (WFP) in 2008 in association with the Institute of Human Development (IHD), New Delhi shows that in the state of Odisha there is a contiguous zone of acute food insecurity – all the districts of the Eastern Ghats and the adjoining coastal districts. Further, within this zone there is a group of four districts that require urgent and sustained attention – the districts of Kandhamal, Malkangiri, Gajapati and

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<sup>1</sup>Cf. National Academy of Sciences (Committee on World Food), Population and Food: Critical Issues (Washington D.C.: 1975).

<sup>2</sup>GianPietro Bordinon (2006).

Rayagada. This is the 'geography of hunger' in the state of Odisha. The politics of relief in Odisha ensure that by the time relief is undertaken, a community has become disempowered and at the final stages of hunger (i.e. visible destitution or starvation). Although some rural people jokingly refer to drought relief as *teesra fasl* (the third crop),<sup>3</sup> there is a complex progression of coping mechanisms that are enacted well before drought relief would be available.

## 2 Studies on Hunger and Coping Strategies

There is a growing literature on diversity of rural livelihoods in low income developing countries, particularly in difficult situation (Ellis, 2000). The major determinants of diversification are seasonality, risk, labor markets, credit markets, asset strategies and coping strategies. People residing in drought-prone areas acquire, over time, an ability to deal with food shortages and loss of income, and the complex methods for tackling hardship and 'preserving assets which are needed to sustain a living in the future' usually fall under the broad category of 'coping strategies' (Young and Jaspars 1995: 6–7). The nature of such strategies employed varies depending on types of livelihood, land use patterns, the system of trade, marketing, credit, etc. and local populations 'learn through experience of drought and famine which specific strategies are best in their situation' (ibid.: 7). Literature on coping mechanisms adopted by India's poor households are limited in nature. Few studies highlights the change in the food consumption pattern, diversification of income generation in to non-farm activities, distress sale or mortgage of land and household assets, dependence on common property resources for raising livestock, seasonal migration to other areas are the most favoured mechanisms in semi-arid rural India (Rani and Dodia, 2001, Mishra, 2007, Banik, 2007). Other coping strategies to combat food insecurity involve the consumption of less preferred food, limiting the portion size of food, borrowing food or money, 'maternal buffering' (practice of a mother deliberately eating less to ensure children have enough to eat) and the skipping of meals for whole days. The use of tobacco and the consumption of locally-brewed liquor (from *mahua* flower and date palm juice) also serve as important coping strategies against hunger (Banik 2007.) The most dispossessed communities like the Musahars of Bihar and Eastern Uttar Pradesh search for undigested grain even in the dung of cattle and in the stores of field rats as survival strategies while coping with hunger (Harsh Mander, 2006).

It is in this context, an attempt has been made to provide an understanding of the socio-political roots of chronic poverty and hunger in Kalahandi district in Odisha. The empirical part of the study highlights the current livelihood strategies of the Dongria Kondhs and forest dwellers and the effect that mining has had on their lives and livelihoods in Niyamgiri Hills with special reference to bauxite and other mining operations. The main objective of the paper is to analyse the coping mechanisms developed by the tribal villager's to overcome food insecurity and hunger.

## 3 Area, People and Methods

The present study has been undertaken among the Kondhs (Dangaria and Kutia) primitive tribal groups and other forest dwellers in Niyamgiri hills of Lanjigarh block in Kalahandi district. Niyamgiri is a hill range, about 250 sq. km. in area lying between 19.33 degree N lat. and 83. 25 degree E longitude (Patnaik, N. and Daspatnaik, P.1982, 1984). It forms the northernmost hill in the massif of the cluster of hills called the Niyamgiris or the Dongria Kondh country. There are two tribal groups such as Dongria Kondh and Kutia Kondh notified by Government of India as 'Primitive Tribal Groups' and thus eligible for special protection. While the Kutia Kondh inhabit in the foothills, the Dongria Kondh live in the upper reaches of the Niyamgiri hills. The Dongria Kondh call themselves Jharnia meaning those who live by the Jharana (streams) confined to Niyamgiri hill tracts covering the blocks of Kalyansighpur, Bissamcuttack and Muniguda in Rayagada district. The immediate two neighbours of Dongria Kondh are Kutia and Desia Kondhs. Kutia Kondhs are hill dwellers live of Phulbani and Kalahandi districts while Desia Kondhs are plain dwellers. Dongria Kondh, whose total population is 7952 according to the 2001 census which includes

<sup>3</sup>Sainath (1996: 317)

3458 males and 4529 females are regarded as an endangered tribe. Schedule V of the Indian Constitution which enjoins the government to respect and uphold the land rights of Scheduled Tribes applies to the entire Niyamgiri hills region. There are also two tribal development agencies working for their welfare – for some 35 years now. These are the Kutia Kondh Development Agency (KKDA), Lanjigarh and the Dongria Kondh Development Agency (DKDA). The ethnic groups closest to the Dongria Kondh and in constant touch with their socio-economic life are the Domb. The Domb are a scheduled caste Hindu community. They have been co-settling with the Dongria since long. Along with the Dongria Kondhs, the Dombs may also be considered as forest dwellers. It is held that in the beginning, the Domb were visiting Dongria settlement as traders and in course of time, settled down in the Dongria localities.

This study adopted multiple methods of data collection, which undertook during December- January 2011. Initially census of the village is undertaken. Subsequently, the quantitative data were collected from interviewing the heads of the household with a *structured interview schedule* (n=105). The qualitative data were collected through observation and case studies. Also, data was collected from the key informants which include: head of the household, Sarpanch, village officials, school teachers and others through formal and informal discussions. The data were collected with reference to the details of livelihood and coping strategies during the post harvesting period during the year 2011 and taking a before and after approach of collecting data on food security related questions before one year.

## 4 Results and Discussion

### Socio-Economic Profile of the Respondents

The present study was conducted from the remote and multi-dimensionally deprived villages under Lanjigarh block of Kalahandi in the western tribal region of Odisha. This region is one of the most backward districts in India and is largely inhabited by tribal populations. It is known for chronic hunger, deprivation and food insecurity, and consequently its abysmal human development index (HDI). Very often, it makes the news headlines only for the hunger related deaths that routinely take place here and its neighbour Bolangir district. A peaceful tribal resistance to bauxite mining is going on in the Niyamgiri region of Kalahandi district.

This section deals with the villages under study and the basic facilities available in the village. Seven tribal villages were selected from Lanjigarh block of Kalahandi district with different agro-climatic and socio-economic conditions. Thus, the villages selected were Kenduguda, Rengopali, Bandhuguda, Trilochanpur, Khemundipaddar, Phuldumer and Palberi. Out of the 182 census households (2001 Census) 105 households were surveyed through formal and informal interviews.

Social composition of these seven villages shows that there are 100 per cent tribal households in Palberi, Phuldumer, Khemundipaddar which is situated at the high altitude of the Niyamgiri hills. Whereas, villages under Trilochanpur has mixed kind of households from Dangaria Kond(PTGs), Domb(SCs), Goud or Sundhi from other backward classes(OBCs). However, the Dangaria Kondhs are claimed to be the original inhabitants of these region, where as the people belonging to Dombs, Goud and Sundhi have mostly migrated from the plan areas and settled in this area over a period of time.

Most of the sample households are below poverty line. About 82.9 percent households (both BPL and Antodaya) are below the poverty line. 12.4 per cent households are not having ration card. Hardly 4.8 per cent households are APL households. Ration Cards issued by the Government, provide the means to purchase subsidized food grains from designated shops. The BPL and AAY card holders those who have ration cards use to get rice and kerosene on monthly basis from PDS shops.

Occupational profile of the sample villages shows that the villagers in the foothills like Kenduguda, Rengopali and Bandhuguda mostly depend on agriculture and wage labour and collection of non-timber forest produce. Hardly, two persons from Kenduguda and Bandhuguda reported that they are employed in the Vedanta alumina plant as labourers. Villages in the high altitude of Niyamgiri hill are mostly forest dependent as they practice shifting cultivation (Dangar chas) and collection of NTFPs and firewood and sell them in the nearest local market in Lanjigarh. Out of the surveyed villages, 5 respondents were getting

pensions for disability of Rs. 200 per month.

## Literacy

The tribal villages like Phuldumer, Palberi and Khemundipaddar in Lanjigarh block where 100 per cent of the people are illiterate. Chronic poverty, the absence of local teachers, inadequate number of institutions, poor communication facilities, involvement of children in economic activities, that is, the prevalence of child labour, and lack of awareness about the importance of education are the major reasons for such a situation. The Mid-Day Meal Scheme (MDM Scheme) has not succeeded as an incentive for bringing children into school: the implementation of the scheme is poor, funds are siphoned off, and the food given to the students is of very poor quality. The tribal children lack access to primary education despite the Constitutional adoption of the Right to Elementary Education and the implementation of the *Sarva Shiksha Abhiyan* (SSA) (Tripathy, 2010). Ashram schools and residential schools established for tribal children from a cluster of habitations and three such schools have been established at convenient places of DK settlements (Kurli, Parsali, Khambesi) run by Department of Welfare, Govt. of Odisha, with all sorts of facilities like free food, free reading- writing materials and other basic requirements like sitting mat, uniform, blankets, beds etc.. Despite enrollment, attendance and achievement of students are far from satisfactory. The DK children tend to drop out from schools and assist their parents in domestic and agricultural activities (Kanungo 2004).

## Health Status

None of these villages have electrification, sanitation or access to safe drinking water facilities. Lack of access to health care facilities that resulting in the increased severity and duration of illnesses, social barriers and taboos preventing them utilization of available healthcare services increase further vulnerability to specific endemic and communicable diseases. The PHCs situated in this region are quite inaccessible. In the absence of the medical health care system, the tribal villagers employ traditional knowledge of the causes-cure of ailment, and consult their Disari, the medicine man, at times of need. Tribal villagers from Rengapalli and Bandhuguda village adjoining to the red mud pond of Vedanta plant, facing many health hazards since 2003-2004 soon after the mining activities started in this region. Villagers from this two village reported that about 16 people have died in T.B and many of them are suffering from T.B, skin disease and dust infection. There are two large red mud ponds that contain caustic water that comes out in the process of refining bauxite from the VAL plant. This hard smell affects the adjoining villages and causes many health problems.

## Child Labour

Percentage of child labour is high in the tribal dominated districts because of poor socio-economic conditions. Percentage of child labour is more or less same in Kalahandi and Koraput (12%), which is more than double the state average (5.87%). Bolangir comes next to Kalahandia and Koraput with 5.82% of children employed in labour force.

## Economic Condition

The Dongaria Kondh extensively practice the slash and burn (swidden) type of rotation cultivation. The hill slopes are clearly marked by areas under swidden cultivation. They are also able horticulturists along hill slopes and grow pineapple, banana, sago-pam (salap), citrus fruits, guava, papaya etc. (Table 1). Besides horticulture, they earn their livelihood through forests and animal husbandry (Sahoo, 1992). Rice, maize, ganja and ragi are main crop, besides various types of pulses (red gram and black gram), and oil seeds (kandul, masur, mung, chana, alsi (naizer), castor, mustard). The fruits of jamu, harida, bahada, amla, mahua, kusuma, kendu are of economic importance. Gathering of forest produce like siali creepers, kendu leaf, sal leaf, seeds of karanja (*Pongnamia glatera*) and mahua (*Madhuaka latifolia*) is made for daily domestic requirements (Dash et al., 2008). They raise livestock for their own use on ritual occasions.

Season	Period	Major	Minor
Monsoon (Barsa)	mid June - mid August	Mango, jackfruit, banana	pineapple, maize, Siali leaves, mahua fruit (tula)
Autumn (Sharad)	mid August - mid October	Orange, zinger, banana	Siali leaves, custard apple, mushroom
Winter (Hemanta)	mid October - mid December	Orange, ragi, turmeric, banana, brinjal	Siali leaves, castor, guava
Winter (Sisira)	mid December - mid February	Rice, suan, ragi, turmeric, brinjal, beans, banana	Siali leaves, tamarind, green leaves
Spring (Vasanta)	mid February - mid April	banana, black gram	Tamarind, redgram, castor seeds, broom stoks, siali leaves, honey
Summer (Grishma)	mid April - mid June	Mango, jackfruit, banana	Siali leaves, mahua flowers, tamarind

Table 1: Seasonal collection of minor forest products of Dongaria Kondhs of Niyamgiri in Eastern Ghats of Odisha<sup>5</sup>

## Indebtedness

The DK in Niyamgiri area are at the level of indebtedness due to their poverty, disbeliefs and illiteracy. Villagers depend on credit for 4 to 5 months. This loan is taken in terms of money and food grains. If somebody lends Rs.1000, she/he has to pay Rs.500 as interest at the end of the year. If five mana (mana unit of weighing 1 mana= 3 to 3,5kg) food grains are borrowed, then one is supposed to return 10 mana rice at the end of the year. If the loan is not repaid at the end of the year, one has to pay 2 per cent interest including the amount borrowed. Now-a-days villagers are taking less amount of loan from the money lenders. Earlier villagers need not to keep anything in terms of mortgage for lending, at present they have to keep utensils, silver, gold, land documents in terms of mortgage to get loan from the village money lender.

Table 2 shows the sources of food management of the villagers throughout the year. The agriculture or podu cultivation provides food security only for 150 days in a year; for another 157 days people are dependent upon forest resources. They collect the non-timber forest produce such as Jhudang, Kandul, Kating, Alsi, mustard etc. Public works like construction of road, watershed works etc. provides wage employment for 25 days in a year. To meet food requirements, during the agricultural lean period, villagers take loan from the local money lenders. For seventy days in a year villagers are dependent upon loan to purchase food grains. Villagers take loan during agricultural lean period from the money lender and return it during the harvesting period i.e., in November to December.

## Functioning of the public distribution system

The public distribution system (PDS) is in a woeful condition. The 1997 BPL lost its validity in 2002 and the last BPL survey was undertaken in the state in 2002. But the 2002 BPL list has not been published yet. Although the rules stipulate that the BPL survey has to be conducted every five years, the 2007 survey has not been carried out so far. Another setback to the poverty amelioration programme in the region has been the erroneous identification of the poor, with corruption playing a big role in the faulty distribution of BPL cards. People who are above the poverty line (APL) such as government schoolteachers, owners of big

<sup>5</sup>Source: As cited in Gandham Bulliyya 2010.

<sup>6</sup>Source: Based on focus group discussion by the author with the villagers during field visit to Niyamgiri Hill, Lanjigarh in 2011.

People take loan during May-June and repay during next December- January-February.

Months	Agriculture & Podu Crops	Forest Products for Food	Wages	Loan for Food	Loan Repayment
Magha (Jan-Feb)	30 days	30 days	-	-	
Phagun (Feb-Mar)	30 days	30 days			
Chait (Mar-Apr)	-	5-7 days	8-10 days in shape of grain	15 days	-
Baisakh (Apr-May)	-	20 days	-	10 days	-
Landi (May-Jun)	-	20 days	-	10 days	-
Gundicha (Jun-Jul)	-	20 days	-	10 days	-
Shravan (Jul-Aug)	-	5 days	10 days in shape of grain	15 days	
Bhodo (Aug-Sep)	20 days	-	5 days in grain	5 days	-
Dashara (Sep-Oct)	10 days	15 days	-	5 days	-
Deel, Pando, Pusha (Nov-Dec)	60 days +	10 days		-	Repayments
	150 days	155-157 days	23-25 days	70 days	

Table 2: Sources of Food Management thorough the Year<sup>6</sup>

houses, middle class traders, big farmers, and contractors have achieved BPL cards through manipulation. The Ministry of Agriculture is now talking about piloting the Food Security Act, under which the government intends to make available 25 kg of rice to each BPL family at Rs. 3 kg every month. However, the effectiveness of the act is doubtful due to rampant corruption.

### Benefit from Government Schemes

The Central Government's flagship rural employment scheme under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has major flaws on the ground as indicated by widespread evidence in the area. Either the NREGA work is stopped abruptly by the authorities or the workers are not paid the due amount for their labour or workers do not get an unemployment allowance which is stipulated under the Act. Hardly any progress has been made on the proposed NREGA work so far. Generally, there is very little awareness among *Dalits* and *Adivasis* about the rules that govern the Act. Many villagers have not received the job card yet, and most of the job card-holders do not have any work at all. Due to lack of closer monitoring and better auditing of the scheme fudging of records and corruption have become the norm in the daily life. Villagers are exploited by contractors and junior engineers. The new proposal of the Rural Development Department to set up an ombudsman to oversee NREGA complaints is appreciable in this connection.

### Land-holding System

An exploitative land system is also responsible, to a great extent, for fostering poverty in the region. Land ownership and occupancy rights have a long and complex trajectory in this region. In legal terms, tribal land rights are well defined. However, the land tenure system has several failings. First, there is a lack of awareness amongst *Adivasis* about the land right. Second, over time, tribals have lost control over much of the better land in the lower valleys. Consequently, *Adivasis* are left with only very steep hill slopes for carrying out agriculture. Again, after the arrival of VAL to Lanjigarh and acquiring lands for mining

activities whatever land the villagers had in the plan areas have almost sold to Vedanta company at a throw away price and have become landless since 2003-04.

## Food Security

Food insecurity is directly linked to the defective land holding structure and the Gountia culture in the region. Landlessness, marginal and small land holdings and lack of irrigation facility in the sample villages are the major cause of food insecurity. A major portion of the sample households were in food stress for 3 to 5 months in a year. Dongaria Kondh face acute shortage of food in the post-sowing monsoon period (July-September) and again around March when the *kharif* harvest has been exhausted. In such situations, consumption of mango kernels is the usual practice to compensate the staple food shortage. It is being used after a series of cleaning procedures to get rid of toxicity, which is added to the mandia preparation in place of rice. They were also taking local alternative non-food varieties like wild tubers, leaves, mushrooms, tamarind seed powder that contribute as rainy foods since generations as coping measures of food insecurity. Moreover, the powder from the pith of sago palm is being used commonly. In the past, they were able to cover most of the shortfall with foods gathered from the forests. Due to depletion of forest resources and aggressive mining activities, the livelihood base is shrinking and compels them to depend upon purchased foods to meet the food deficit. Many households have become caught in a debt trap because of the precariousness of food security. The government schemes such as the targeted PDS, special schemes under food safety net and rural development schemes like SGRY, MGNREGS, and OTELP etc have limited impact on poverty and food security in this region. Food security is defined in terms of availability, access and absorption. As subsistence agriculture is the source of livelihood of the tribals and Domba's in the surveyed villages, in most cases it is forest dependent. During the course of primary survey it was observed that the tribal households ensure food security for 4- 12 months depending on the asset base. The existing food security as assessed from household survey shows that about 13 households (12 per cent) have reported that they have secured food for 12 months. However, a major portion of the sample households were in food stress. About 52 households which constitute 50 per cent of the total households have food insecurity for 3 to 5 months in a year. Similarly 33 per cent households have deficit of food grains and the period ranges from less than 3 months to 6 to 11 months in a year. Five households reported that they experience food stress for less than 3 months (Figure 1). Landlessness, marginal and small land holdings and lack of irrigation facility in the sample villages are the major cause of food insecurity.

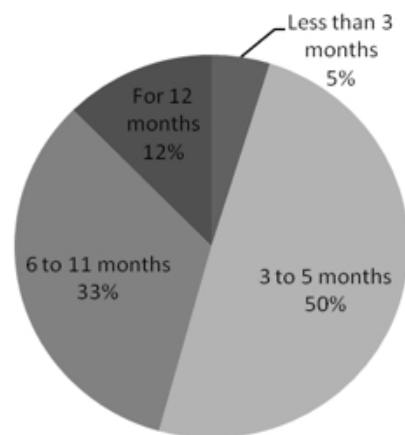


Figure 1: Period of Food Security

## Food consumption-related coping Strategies

The WFP in a participatory poverty profile study in the district of Bolangir<sup>7</sup> has developed the below illustration of these coping mechanisms as practiced in Odisha.

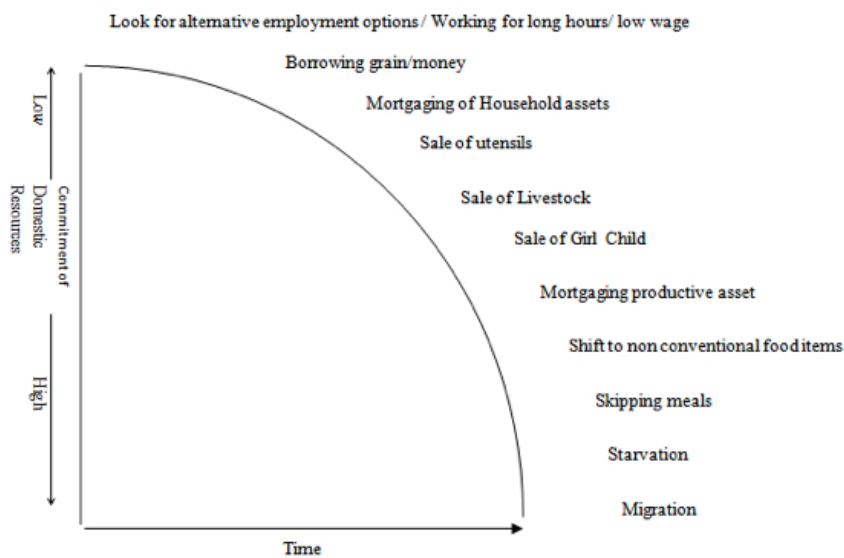


Figure 2: Coping strategies practiced by Odisha's rural poor

Consumption of the people varies significantly between normal year and the crisis period. People of all income groups, especially the most vulnerable, reported long-term trends towards eating foods that are less preferred as a means of adopting to lower income levels. The sources of food in these villages are own production, purchase, nature (forest), help from individuals and organizations. For example, in Phuldumer, Palberi and Khemundipaddar village during crisis period they depend on wild tubers, wild leafy vegetables and poor quality of rice. Similarly, villagers collect mahua flowers and tubers for their own consumption. Maternal buffering is common across all the regions. This is the practice of a mother deliberately limiting her own intake in order to ensure children get sufficient food. This period is common across all the social and economic groups in the study areas.

In most villages of these tribal villages, agriculture and shifting cultivation provides the primary source of food in the period August–January, as harvesting of the first period (Banik, 2007: 52). Starting in the month of November, a large portion of the income generated from the sale of agricultural produce is also used to repay food grain and cash loans taken up earlier in the year. From mid-January and until May–June, the forests provide a secondary source of food. *Sal* seeds and *kendu* and *palas* leaves are also collected from forests since they fetch good prices in the open market. Borrowing money for the food or directly borrowing the food from money lenders and traders generally leads to the permanent indebtedness and is an example how a short-term coping strategy can put a household in a more vulnerable position with regard to long-term livelihood options. Starting in March–April, loans from moneylenders assume importance and food is purchased with the help of loans until August. The money lenders charge exorbitant interest rates often as high as 50 per cent per month. Assistance from immediate family members residing in the vicinity is also an important coping strategy. If such assistance is unavailable, other relatives, friends, neighbours, patrons, large farmers and charitable organizations are approached. These networks function as ‘shock absorbers’ in times of crisis. An alternative strategy – and an important contribution of some NGOs in Kalahandi – is to form local ‘self-help groups’, where villagers contribute a fixed amount of money and/or food grains every month so that local ‘cash banks’ and ‘grain banks’ can be created. In times of acute need, any member of

<sup>7</sup>Participatory Poverty Profile Study, Bolangir District, Odisha, June-Aug, 1998, DFID- Praxis in WFP (2000: Chapter 5).



the group can withdraw a sum of money or grain from the common fund. Self-help groups, claim NGOs, also provide the most effective weapon against the stranglehold of moneylenders. Antodaya, an NGO working in Thuamul Rampur block, appears particularly successful in organizing tribal women to form such self-help groups, and within a span of three years the organisation claimed to have organised over 900 women in both small (5–6) and large (10–15) group (ibid. 53).

Another common coping strategy is distress sale or mortgage of assets – draught animals, cows, goats, poultry, cheap ornaments, kitchen utensils, etc. – during severe drought years. In hopeless situation, the only possible option or the strategies during both drought and non-drought years is migration which is more seasonal in nature. Once the harvesting operations of the *kharif* crop are completed, small and marginal farmers together with landless labourers have no employment opportunities in the lean season. Instead of sitting idle, they prefer working in agriculture, construction and transport sectors in major cities of the country, leaving in November–February and returning towards the end of May or early June with the onset of the monsoon rains (ibid.54).

## 5 Mining induced Displacement

The report of the four member committee on Mining in Niyamgiri hills<sup>8</sup> explored that the PML area is intimately linked, by way of economic, religious and cultural ties, to 28 Kondh villages with a total population of 5148 persons. The affected include about 1453 Dongaria Kondh which constitutes 20 per cent of the total population of this tribe. The present well-being of the Kondh, who continue to have access to the resources of the PML area and adjoining forests is in stark contrast with the status of the Kutia Kondh and Dalit households in Rengopali and Bandhaguda villages, whose lands have been acquired by the Vedanta aluminium refinery. In both villages, Kutia Kondh and Dalit households have sold their agricultural lands to the company, and are left only with their homestead land. Officially, they are classified as Project Affected Persons (PAPs), who lost their agricultural land but not their homes. ActionAid's study (2007)<sup>9</sup> questions the issues pertaining to the impact of the mining activities on the local environmental quality, including air pollution, noise pollution and contamination of local water supplies. Displacement is defined vary narrowly in the VAL project, a large number of people in the mining site have lost their job as they were depending upon the forest resource for their livelihood.

## 6 Conclusion

The Dongaria and Kutia Kondh largely rely on hunting, gathering and shifting cultivation in the Niyamgiri hills for survival. The landless Dalits (Domb) who live in these villages are mainly dependent upon the forest produce for their livelihood. Due to depletion of forest resources and aggressive mining activities, the livelihood base is shrinking and compels them to depend upon purchased foods to meet the food deficit. Large scale mining in this proposed mining lease area has been depriving these two primitive tribal groups and the Dalits of their rights over land. The government schemes have hardly any impact in improving the living conditions of the poor villagers in this region. They face acute shortage of food in the post-sowing monsoon period (July-September) and again around March when the *kharif* harvest has been exhausted. People of all income groups, especially the most vulnerable, reported long-term trends towards eating foods that are less preferred as a means of adopting to lower income levels. The sources of food in these villages are own production, purchase, nature (forest), credit from the ration-shops and local money lenders. When other coping strategies fail, distress migration to neighboring districts of the state and outside is a final option for the villagers as a result of factors recurrent drought, land alienation, debts and high levels of food insecurity. The health status of these tribal villagers is poor due to high level of poverty, poor environmental sanitation and hygiene, and increased morbidity from water-borne and vector-borne infections. Malnutrition is fairly common, especially young children and women debilitating their physical condition and lowering resistance

<sup>8</sup>Saxsena, N.C. et.al (2010: 24-40).

<sup>9</sup>Actionaid (2007:8), Vedanta Cares? Busting the myths about Vedanta's operation in Lanjigarh, India.

to disease. Therefore, a multi-pronged approach for sustainable livelihood coupled with improvement in their literacy levels would certainly lead to economic and social empowerment. There is an urgent need to protect the land rights of those tribal's who are under continuous threats of eviction from their homes and lands.

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