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Ecology and Economy of the Kondhs of Orissa

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ABSTRACT Ecology and economy are most intimately related. Steward in cultural ecology maintained that there are some areas of a culture which are more related with its eco-system than are others. Of them economy was described by him as forming the culture core; and it is conditioned by changes among the ecological cycle. Following this method, the present article analyzes the relation between ecology and economy as it exists in the Kondhs of Orissa. Briefly describing the physical area they inhabit, their economic life is detailed out in relation with the eco-system. It is stated that most of the developmental efforts for the people ignore ecological issues. Unless they are fully integrated with the development plan, it is argued here, the condition of the people will not change.

The relation between environment and culture has been studied in terms of environmentalism and possibilism (Burnham and Ellen, 1979; Ellen, 1981). In the former, it was held that every culture is a product of the given environment and its constraints. The trouble with this perspective was of reductionism as every element of culture was believed to have a cause in the environment. Contrasted to this, possibilism considered environment as one of the factors that shapes the social relations as well as the culture of a people, and such a shaping is more pronounced in the case of small scale societies who are entirely dependent on the nature and on its products (Forde, 1934).

As the environmental systems have degraded because of the consumeristic market economy, the small societies are faced with the problems of survival (Srivastava, 1990). One of the major issues in development is to restore and rehabilitate the environment of the people. For this is required studies of local systems in relation with their ecological endowments.

The present paper is an examination of the relationship between environment and culture with respect to the Kondh life. The theoretical stance taken here is of possibilism and those areas of the Kondh life which have an intimate relation with their environment are, detailed out. At the methodological level, Steward's cultural ecology (1955) is found to be quite useful.

THE PEOPLE

The Kondhs, famous in anthropological world for their *meriah* (human sacrifice) cult, are a scheduled tribe inhabiting southwest Orissa in the districts of Phulbani, Koraput and Ganjam. They also live in Srikakulam and Visakhapatnam districts of Andhra Pradesh. Numbering close to one million, they are the seventh largest tribe in India and the largest of sixty-two tribes of Orissa. Almost sixty per cent of the people in Phulbani district belong to this tribe; because of their predominance in this area, it is also called Khondmal district, and some have called it Kandhaland (Pathy, 1988). The Kondhs consider themselves as the original inhabitants of the soil; according to them "this is our soil, the earth is our mother and we always appease her by regularly worshipping her because she provides us food". Boal (1982) however, thinks that they are not the autochthones and came to the present land from the plains during the Aryan advance many centuries ago.

Besides being known as Kondh, they have some other names also like Khond, Kandha, Kond, Kandh. They speak Kui, a dialect of

Dravidian origin. It is distinct from Oriya, an Indo-Aryan language, which is spoken by their neighbours, the people of Orissa. As a result of their interaction with the Oriyas, they have also learnt their language.

The Kondhs are divided into three main sections because of inhabiting different habitats and eco-niches: Dongria Kondhs living in the Niyamgiri hills of Koraput, Kuttia Kondhs living in the Belghar and G. Udayagiri region of Phulbani and Desia Kondhs referred to as a plain people living mainly in Phulbani (Fig. 1). And because of living in different habitats, differences in the economic organization and customs have naturally set in. Although each section is endogamous, inter-marriages between them are not rare. Response to change also varies and in interior villages, which are still inaccessible, the primitive customs and practices survive (For details see Chaudhury, 1989).

TOPOGRAPHY

Phulbani district is divided into two distinct physical divisions; the plain region in the north and the highlands in the south. The fertile plains of Boudh lie between the high mountain ranges of the Khondmal in the south and the river Mahanadi in the north forming the northern boundary of the district to the south of Boudh subdivision. The Khondmal subdivision forms a broken plateau about 518 metres above sea level girdled almost continuously by high ranges which cuts it off from the surrounding areas. The whole district otherwise exhibits an endless series of valleys and vast forests.

The Khondmal subdivision—where the Phulbani block (created on 2 October 1955) is located—is a wild hilly tract intersected in all directions by streams and torrents, which run dry after the rains. It is characterised by comparatively less cultivated land. The uplands and slopes leading down from the foot of the hills are periodically cleared for raising dry crops and the low paddy lands have been permanently cleared and cultivated every year. The rest of the area is covered with thick forest. Kalinga Ghat is the main gateway to Baligurha and Khondmal subdivision from the Ganjam district. After climbing continuously for about eleven kilometres one arrives at Kalinga, a height of 701 metres, from where a road leads to Phulbani and a second road branches off to Baligurha through G. Udayagiri.

The district is located on the Eastern Ghats. The district has many peaks, the top most being the Champaghorona peak with a height of 1,257 metres. The principal rivers which flow through the district are the Bagh, the Salki, the Rushikulya and the Loharakhandi. These are mostly hill streams which form the affluents of larger rivers like the Mahanadi and the Tel. The river Mahanadi and the Tel do not flow through the district, but only form its northern and north-western boundaries respectively.

The lithostratigraphic units of the district are khondalite, charnockite, leptynite, biotite granite gneiss, pegmatite, vein quartz, cataclasite, sandstone, shale, laterite, alluvium and soil. The mineral deposit in the district consists of mica, manganese, rock crystals, graphite, beryl etc.

FLORA AND FAUNA

The vegetation of the district comes under two major divisions: (a) Northern tropical semi evergreen forest—this is mostly found in the Baligurha Forest Division area and the species found are *Mangifera indica* (mango), *Diospyros ambryopteris (makar kendu)*, *Michelia champaca (champa)*, *Dillenia pentagyna (rai)*, *Macaranga peltate (manda)*, *Mesua ferrea (nageswar)*, *Saraca indica (asoka) and Calamus* (canes). Teak plantation has been raised with success and is being commercially exploited. (b) Northern tropical moist deciduous forest—this type of vegetation is found in the Phulbani Forest Division alongwith the semi-evergreen type. The important species found here are *Shores robusta* (sal), *Terminalia tomentosa* (asan), *Pterocarpus marsupium* (bija), *Adina cardifolia* (kurum), *Xylia xylocarpa* (kangada), *Anegeisus latifolia* (dhaura), *Balbergia latifolia* (sisoo), and *Gmelina arborea* (gambhar).

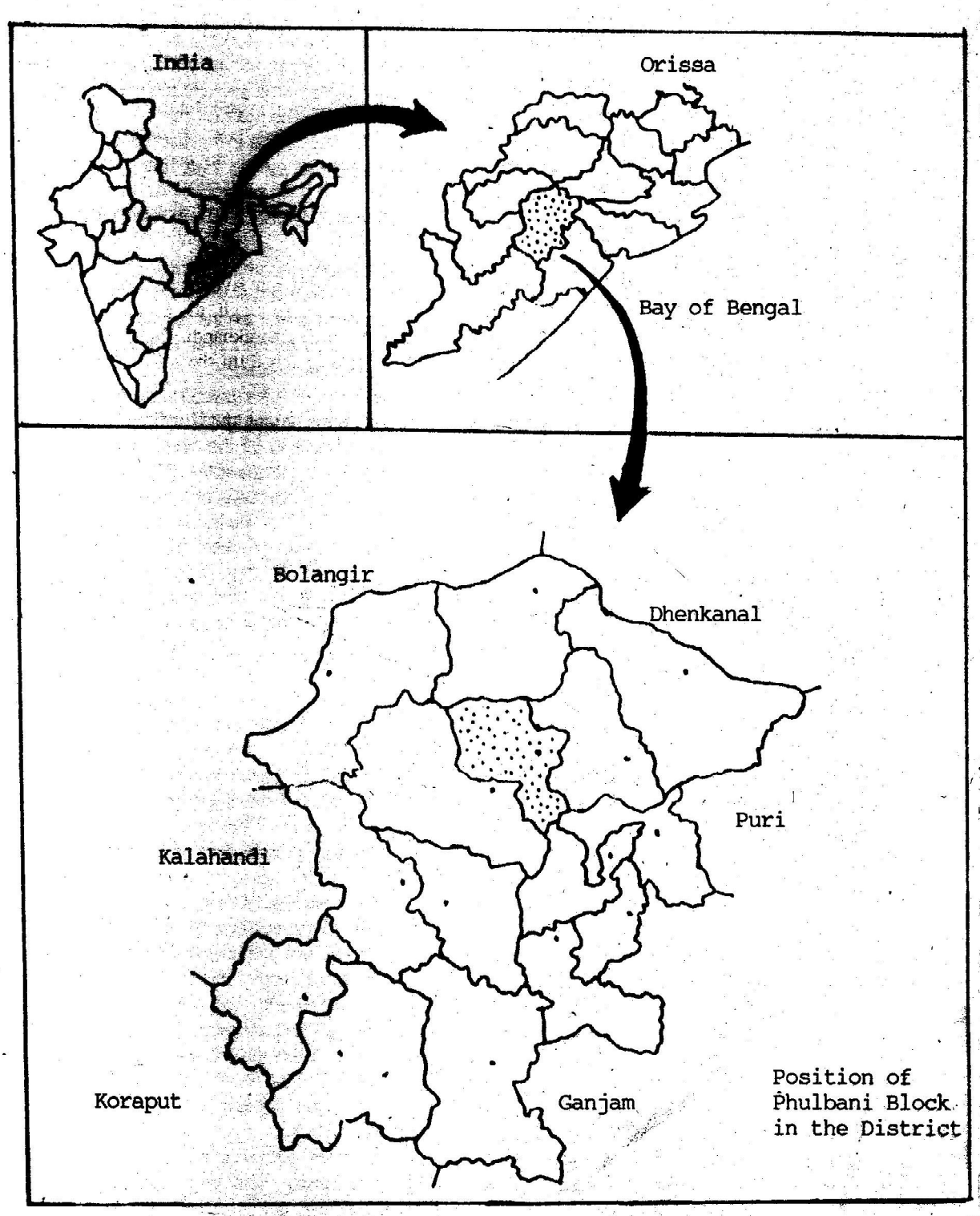

Fig. 1. Boudh-Khondmal (Phulbani) District

Among other plants of economic importance in the district are four species of bamboos (*Bambusa arundinacea, Dendrocalamus strictus, Bambusa tulds* and *Bambusa nutens*), *Terminalia chebula* (myrobalam; used in tanneries), *Diospyros melanoxylon* (tendu leaf, used for making bidi), Rauwolfia serpentina (pasul ganeda, used for medicinal purposes), *Tamarindus indica* (tamarind), *Caryota urens* (sago palm, locally known as *solopo*, a kind of liquor which is consumed heavily), and *Bassia latifolia* (mahua tree from whose fleshy corollae a powerful liquor is distilled).

The forests of the district have many wild animals.They include tigers, leopards, deer, wild pigs, bear, hyaena, wolf, wild dog, fox, jackal, weasel and other. Besides these, other animals are spotted deer, bison, sambar, barking deer, mouse deer and elephants. The number of tigers according to the 1972 census was eighteen in the district.The leopards are harmful to the people as they kill the domestic animals. Some of them are also maneaters. The bear frequently enter the village and destroy the crops.

CLIMATE

The district lies within the Deccan plateau to the west of Eastern Ghats, hence the climate is akin to the Deccan region. The year may be divided into four seasons: summer from March to May, rainy season from June to September, post-monsoon season from October and November and winter from December to February. The maximum temperature in summer, particularly in the month of May is around 39°C, while the mean minimum temperature in the cold season, particularly in December is 8.7°C. The maximum temperature recorded in the district was 44.6°C on 10th May, 1973 and the lowest was 1.5°C on 2nd January, 1971. Humidity is generally high in the area especially in the Southwest monsoon and post-monsoon months. April is the driest month. During the Southwest monsoon season, the sky is generally clouded to overcast. Winds are generally light to moderate with some increase in force in the South-west period. The average annual rainfall in the district is 1591.5 mm. On an average there are 77 rainy days in a year. The heaviest rainfall in 24 hours recorded at any station in the district was 295 mm at Balandaparha on the 15th June, 1936.

RESOURCES AND ECONOMY

The Kondh economy rests mainly on cultivation of plain, hill and shifting types. In addition, they use their forest extensively. Their villages are surrounded by agricultural fields, wide hill tracts and dense forests.

Earlier reports have described the existence of primitive trade among the Kondhs. Macpherson writes that in 1836-37 the Kondh villages were self-contained communities. The people were engaged in the cultivation of hill plots and in certain eastern regions, paddy fields. Hunting and gathering of wild produce, supplemented their produce. By 1840s, there was an increase in the trade. Macpherson estimated that about 10,000 bullock loads of turmeric and about 4,000 loads of other products like tamarind, mustard seeds, arrowroot, ginger, wadding from the silk cotton trees, beeswax, wild honey, red and yellow dye, red pepper, sweet potatoes and pulses etc. were sent down through the middle man. In return the Kondhs received the following commodities from the low lands: salt, tiny salt fish, iron, cattle, brass vessels and ornaments, coarse red and white clothes, cheap print clothes, beads etc. (*cf.* Boal, 1982).

With the passage of time, the monopoly of the Kondhs on the trade has weakened. The trade still goes on, but with the intervention of the middle men, petty contractors, the benefits do not actually go to the Kondhs. Cooperative societies have also changed the character of this trade. Contact situation with the non-tribal outsiders has led to the exploitation of the Kondhs. Land alienation and bonded labour have yielded a state of abject poverty.

The Kondhs grow crops in order to meet with their subsistence requirements. The surplus is

brought to the market. The agricultural land is both upland and low land, but occasionally it is medium land also. Their villages are mostly rain-fed. The *kharif* crop mostly predominates which is mainly rice. Mustard and vegetables are also grown during the *rabi* season. The methods of cultivation are old and crude. the wooden plough, *langala*, is currently used. Fertilisers are also not frequently used. Generally people use the farm-yard manure, although some have started using the fertilisers as a consequence of the government sponsored development programme. High yielding variety seeds, ploughs and other implements are also used by some of them.

Shifting cultivation, locally known as *podu*, was widely practiced by the Kondhs; in some areas it is still practised, with a fallow cycle ranging from ten to fifteen years. The landless immigrants in the villages exclusively depend on *podu*. Even big farmers and non-Kondhs resort to it for supplementing thier income. the *podu* plots are usually located near the villages. The main crop of shifting cultivation is ragi (also known as *Mandia*), which is a staple food of the Kondhs. *Kandulo (Cajanus cajan), kuiri (Panicum miliare), kangu (Setaria italica), jhudunga (Vigna species)* are also *podu* crops.

Shifting cultivation involves cleaning of a plot of one to three acres on steep slopes by a family. The area of the plot cleared usually depends upon the family size—the larger the family the bigger the plot. During winter, the area to be cultivated is marked. Firstly the shrubs and creepers are cleared, followed by big trees. Fruit bearing and timber trees are usally left untouched. The poles of trees are brought home as fire wood or any other domestic use. The slash is allowed to dry during February and March and then it is burnt in May. Seeds are sown after the first rain. Methods used in shifting cultivation are usally old. For example, *kandulo* (arhar pulse) is sown with a stick. Each family generally cultivates two *podu* plots every year, one for *kandulo* and the other for *mandia*. After harvesting, the land is left fallow and the cultivator moves to another plot.

Although agriculture is the mainstay of the Kondhs, their life is intricately linked with forest. They live amidst dense forest. Their hills, which are a part of the Eastern Ghat, are situated about 600 metres above the sea level. Long trees, creepers and bamboos wildly grow in the hills. The hills are also used as paths to reach nearby towns and villages for marketing as well as shopping.

A wide range of products are collected from the forest. Firewood is collected for domestic consumption as well as for the market. Some households largely depend upon selling the firewood. For constructing and repairing the houses, timber is collected from the forest. Stones are also brought from the forest for constructing houses and in the fields. The Kondhs have a good knowledge of the medicinal plants like *Satabari, Hareda, Baheda, Amla* etc. They are all collected from the forest. Fruits, timber and mushrooms are also collected from forest. Seasonal fruits such as mango, jack fruit are used for domestic consumption as well as selling. A particular species of date palm, peculiar to Kondh hills provides a regular supply of toddy drink (*solopo*), which has high nutritional value. All these tubers and fruits are for the household consumption as well as the market.

For making ropes, grass (*suma*) is available in plenty in the forest.This rope is used for weaving cots. These ropes are also sold in the weekly market (*haat*). From another type of grass, the Kondhs make broom (*Fula jhadu*) and this is sold in the market.

Leaves of sal (*Shorea robusta*) and *Siali (Bahunia)* trees are usually collected by Kondh women. These leaves are used for making *khalli* (leaf plates) for domestic and commercial purposes. These plates are purchased by hotels and restaurants, and are sent to many towns and cities in Orissa. For hundred leaf plates, the Kondhs get rupees six to rupees seven. In the month of June, sal seeds are collected and are sold to the LAMP Society (Large Scale Multipurpose Co-operative Society).

The local liquor called *mahuli* is prepared from the flowers of *mahua (Madhuca latifolia)*. These flowers are collected in the months of March to

May. *Mahua* fruit (*gara*) is also collected for extracting cooking oil. For constructing houses, thatching, fencing, making baskets and winnowing fans; bamboo is collected from the forest. The Kondhs also sell bamboo in the market.

The Kondhs frequent the forest for hunting wild animals such as wild pigs, deers etc. There is a plenty of wild life in Kondh hills, but most of these fauna is a liability than an asset to the people (Bailey, 1957). The jackles, hayuna and bears destroy their crops. Some times grave casualities also take place—the cattle are taken away, the Kondhs returning from the jungle are killed or greviously injured by the leopard or bear.

But the fact that the forest has a plenty of wild life does not reduce its importance in the life of the people. In the ideological system, the god is believed to have created the forest; the god gives rain and life. Therefore, the god should be appeased. In case he is angry, drought, sickness, death and misery may be unleashed. Since god is the creator and guardian of the forest, the felling of trees for commercial purposes should be stopped. The forest needs to be protected for the life and survival of the people. It is precisely because of this ideology that the people have vehemently opposed the encroachment upon it by the contractors. They believe that the forest goddess (*Bana Devi*) resides in the forest and the people annually worship her with elaborate rituals.

RELIGIOUS BELIEFS AND PRACTICES

The Kondh's belief in supernatural beings is seen in all their activities. God is referred to by the term *pennu*, which is the core of their existence. For leading a sound life they must constantly appease him. Of the supernatural entities, earth goddess (*Tari Pennu*) is the most important and therefore human sacrifice was practiced to appease her. Since human sacrifice has been legally abolished the people now sacrifice an animal, usually a bufalloe, as a surrogate. Sacrificing fowl and goat is the main ritual in every Kondh festival. Ecological themes enter into all the festivals—for example *Chaita Parab* is for appeasing the village deity and is celebrated in the month of March, *Nua Khia* festival marks the beginning of the consumption of new produce, *Bana Devi* worship is for appeasing the forest goddess, *giri* worship is of the mountains etc. These rituals are carried out by different functionaries. For example the Dehuri would carry out the Lachmi puja (the worship of the Hindu goddess Laxmi), the Jhakara would perform the *Bana Devi* and *Giri puja*, and the Jani would perform the *Mati puja* (worship of the earth goddess).

DEVELOPMENT ISSUES

Unless the ecological parameters are fully attended to, the development of the people will remain unachieved. Our planners have hardly examined the issues of development from ecological perspective and this is one of the reasons of why the benefits have not reached the people. Take, for example, the case of the Kondhs of Phulbani. They find themselves in a state of poverty in spite of the development programmes.

After the introduction of Community Development Programme in this area in 1958, many development measures have been initiated by the Government for their amelioration. The major thrust to these programmes came in the 80's particularly after the introduction of IRDP (Integrated Rural Development Programme), NREP (National Rural Employment Programme) and RLEGP (Rural Landless Employment Generation Programme). However, evaluative studies conducted among them show disparity between the objectives and outcome. For instance, in case of schemes like assistance for cattle, piggery and goatery, they have not yielded the expected results. High yielding variety cows were given for which fodder was supplied for just six months. These cows can not live on the grass and as a result they give less quantity of milk. Moreover there is no marketability of milk or milk products.

In case of another scheme—*khalli* (leaf plates) stitching, the beneficiary have in most cases consumed the amount and moreover the money given was not sufficient to start it. Rupees five hundred is sanctioned for the *khalli* stitching scheme. The VLW (Village Level Workers)—the lowest implementing official—came to the village and selected at random or from known faces the beneficiaries for the scheme, and convinced them that there would not be any burden of loan as the loan amount of 50% *i.e.* Rs. 250/-would be repaid instantaneously to the bank. In the process the beneficiary would get Rs. 250/-, the subsidy amount without any work. The beneficiaries agreed and took the money and spend in household and other expenditures. The Kondhs are not new to such an occupation—*khalli* stitching. It is one of the subsidiary occupations which they do. Persons from all the houses know it and also do it for dual purposes—firstly for domestic use and secondly for selling it in the market. The marketability of *khalli* is very good in the sense that *khalli* is sold throughout Orissa. The use of *khalli* in festive occasions to feed the guests, and for domestic use is abundant in Orissa. Even small bowls made up of leaves are much in demand. The cooperative societies and local traders in Phulbani town purchase *khalli* from the Kondhs and sell them on a high price outside. The price of 100 *khallis* ranges between 10 to 12 rupees (in 1989). Whereas the Kondh sells it to the trader at a price ranging between 6 to 7 rupees. Besides, the hotel owners also buy it from the Kondhs and they also sell *khalli* in the weekly market. Therefore, *khalli* stitching if done in an organised manner would give a constant income. But after various forest laws and also leasing of the forests to contractors, the Kondhs are facing difficulties in getting the leaves. They have to bribe the forest guard or give commission to the contractor to pluck leaves from the *Siali* tree. However, the occupation does not give much income which is expected as Kondhs are not seriously pursuing it. Therefore, our concern on this issue is that the beneficiaries should have been given the whole amount and there should have been proper inspection and vigil by the official on these scheme. This could have definitely become a successful scheme as it takes into cognizance the local needs.

In another scheme—rope making, people could not use it properly and it has also met with the similar results. They have not utilised the money for rope making. The raw material for it comes from the forest. The Kondhs are also familiar with it. Only in one case, I have found it to be utilised successfully. This is from village Bandha Sahi, where a relatively well off person having all entrepreneurial capabilities is pursuing it carefully. But he has accepted it as a subsidiary occupation, the primary occupation being cultivation.

Coming over to the community oriented programmes such as roads, schools, dispensaries, etc. have been successful and also accepted by people warmly. Social forestry schemes have also been initiated in the area. The awareness programme particularly that of tree conservation have had good impact. People have started taking care of their plants. But traditionally the Kondhs are the protectors of the forests. No doubt they use to practise *podu* widely, but that was due to a crucial need and due to their ignorance of modern technology. For domestic consumption they collect wood from the forest. For fuel, they collect only dried branches, creepers etc. *i.e.* to say that they do not cut trees for it.

But to eke out livelihood, some of them who live on selling fire wood and those who take it up as a subsidiary occupation, cut trees to collect it. However during my observation, I have found that those who were relatively manipulative and authoritative, they could collect firewood in bulk, even by employing labourers. In village Bandha Sahi, a Pana had collected at least 50 quintals of firewood by employing local labour, mainly the Kondh labourers. He had kept them hiding so that no official could see them. On repeated enquiry, it was found out that he gives commission to the contractor who has been given on lease a particular area of the forest. He continues to do such type of illegal collection of

firewood in bulk. It may be interesting to mention here that the firewood I saw there must have given him 5000/- rupees. Baring few such cases, on an average the Kondh, particularly those who sell firewood collect it twice a week and go to the nearby market to sell it.

CONCLUDING OBSERVATIONS

It is clear from the analysis that forest occupies a pivotal place in the ideological and materialistic system of the people. The forest is rich in various resources on which are dependent the local people for extracting their livelihood. The people use the forest resources mainly for survival rather than using them for commercial purposes,considering it an abode of their *Bana Devi*, they are strictly against its devastation by materialistic-oriented groups of people.

But they find it hard to stop any modicum of exploitation. the contractors are given legal right to extract forest resources and sell them in the market. The traditional rights of the Kondhs on forests are not valued, and in this process, they are reduced to a simple labour force.

It is therefore, essential that the rights—traditional right of the people—of the Kondhs over forest are recognized and regulated. The system of leasing should be legally stopped and so any kind of middle man. The Kondhs should collect the produce and it should be properly bargained and purchased, so that the tribals do not remain the losers. Similarly, the *khalli* plates, ropes and firewood should be sold and exchanged. It will be possible only when the role of eco-system in the culture of the people is recognized and their traditional rights over the resources they have been managing for generations together is legally recognized and implemented. A lip-service will not be enough!

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