

Resource Conservation through Religious Sanctions and Social Conventions in a Primitive Tribal Group of Orissa, India

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ABSTRACT Struggling along and against the elements of nature, the tribal in their "little world" largely depends upon its bounty for subsistence. The incidence of dependence is much greater on forest and its product during the lean period. The traditional way of their life is in perfect harmony with nature. It stands in contradiction with ever-growing spirals of higher consumption and higher production ideals of modern man. It is interesting to note that even in a situation of plentiful they foresee the irretrievable depletion of natural resources through over-exploitation. Hence they have developed some indigenous practices for the conservation of their resources. However, this "constructive dependence" of the tribals on forest is fast withering away due to the faulty practices of the government and the infringement of both public and private sectors on the domain of the tribal. Against the backdrop, the paper tries to examine the traditional knowledge system of resource management of the Pungs, a primitive tribal group of Orissa, India.

Man has been growing, thriving and progressing in the cradle of "Mother Nature" ever since his ape ancestry. In the early days man was awed and amazed with the various phenomena that surrounded him in his day-to-day life, revealing them as supernatural. He tried to cause or stop such phenomena through various magico-religious practices - holding them in high esteem as gods and goddesses.

However, such practices are considered as "primitive" or "savage" by the modernist. But the "primitive" or "savage" culture was designed to maintain harmony with nature. Each element of nature was respected and regarded as a living entity. The primitive man thought that the plants and animals have souls like his own and therefore treated those accordingly. The nature was his only source of sustenance and any amount of disruptive intervention would entail serious consequences. Therefore, his interaction with nature was carefully struck between utilization and revitalization of nature's bounty.

However, with the advent of modern science and technology the symbiotic relationship of man with nature gave way to unabated extractions of nature's bounty, with little concern for its consequential impact on the environment and the people. Today the entire world sees to development through economic growth, emphasizing more on the modern particularistic sectors. There have been reckless extractions of natural resources by industrial and commercial concerns in collusion with the techno-bureaucratic apparatus of the state (Behera, 1993: 256). This has led man to face with problems like acid rain, oil slicks, radiation leaks, soil salinizations, land desertifications, air pollution, green house effects and what not. But still the growth mania of the developing and developed nations has led them to underscore these deleterious impacts on the human targets and the environment. In contrast to the situation in the West, the people of the Third World, struggling to survive in the face of relentless population pressure, are collectively more tempted or impelled almost to ignore the clear signals of what looks like impending economic disaster. They continue to mine soil, level the forest, pollute rivers and lakes and undermine the ecological support system in other ways (Mishan, 1993: 97).

Until very recently we were not certain that the present mode of man-nature interaction would spell doom on the entire planet. The limits of growth got revealed to us at a situation when we have almost disrupted the ecological support system. But it is a point to ponder that the so-called "primitive" or "savage" people could foresee the cataclysmic impact of over-exploitation of nature and that too in a situation of plentiful.

The foresight and wisdom gained by them through experience have passed from generation to generation. Even today there are numerous

indigenous communities who live far away from the centres of development, eking out a simple living amidst nature. Their economy and other cognitive practices are designed to protect nature resources and minimize its abuse. Frazer (1993: 220-21) narrates that the Unalit hunter who has had a hand in the killing of white whale, or even has helped to take one from the net is not allowed to do any work for the next four days and at the same time no one in the village may use any sharp object for fear of wounding the whale's shade, which is believed to be hovering in the neighbourhood. The use of iron instruments is forbidden during those four days. The observance of these abstinence may appear absurd, superfluous or inexplicable and breakdown entirely all rationalistic theories. However, a careful look reveals that such practices in fact cater to the conservation of resources from over-exploitation by the concerned community. The four days of abstinence from games and avoidance from the use of sharp or iron instruments by the villagers suggest that it prevented the villagers from further killing of whale or any other animals or plants thereby gave scope to all other species to multiply and grow. It is reasonable to hold that such practices augment the natural resource and at the same allow a restrained access to the users of the resources.

Rita Armstrong concludes in one of her narratives that, "the primitives should no longer be used as rhetorical device to illuminate Western metahistories about the tragedy of capitalism or the optimism of modernity," (Armstrong, 1998: 528) but it is important to understand how the primitives utilized and managed their resources. And why it works for some communities and fails in other communities or why it works in one place but fails in other place even for the same community. Today conservation of world bio-diversity is very important and the traditional method of bio-diversity conservation and management has been gaining grounds. In India there has been various traditional methods of conserving bio-diversity and natural resources since time immemorial. It is not wise to belittle the importance of traditional knowledge system considering it useless or irrelevant in our contemporary societies. The real wisdom lies in learning from the primitives

and thereby saving our resources from fast depleting. It is the call of the hour to study and document various indigenous knowledge based preservation methods and find out means for conservation of bio-diversity and natural resources.

Against this backdrop, the present paper attempts to explain some of the cognitive practices of resource utilization and resource management among a primitive tribal group. The study was carried out among the Peng tribe in the undivided Kalahandi district of Orissa, India. The Pengs are hardworking people subsisting on simple technology. Their economy has multiple loci, mostly revolving round cultivation by slash-and-burn, collection of forest produces, hunting wild games and wage earning. Two villages, namely Podaauding and Dudungchuan, were selected for the study. Podaauding is an isolated village having minimum influence of the market or for that matter minimum interaction with the people from the urban centres. It does not have a motorable road and takes almost two-and-half hours walk from the nearest road to reach the village. Dudungchuan is a displaced village by the Indravati multi-purposes dam project. The inhabitants have been resettled here not far away from their original ancestral land. Though Dudungchuan has a good road communication, yet local transport for this village is available once a week, i.e. only during the *haat* (weekly market day). Neither of the villages is totally isolated from nor exposed to the market or the urban world. However, Poaauding village is less exposed to the components of modern urban way of life than Dudungchuan village. While Dudungchuan has a degraded forest Podaauding has a luxuriant forest cover.

Ethnography of the Pengs

The Pengs are one of the primitive tribal groups (PTG) in the state of Orissa. They consider themselves as *Parja* - the ruled or the commoner or *desia* - the indigenous. They cannot conceive of territory other than their social boundary. The Pengs can be broadly classified into two categories, namely, the hill dwellers (*dongarla Peng*) and the Plain dwellers. The *dongarla Pengs* are more primitive than their

brothers in the plains. They call the mountain-pass as *dharam-dooar* (the gate of truth) where they have been living since time immemorial. This mountain-pass forms a part of the Eastern Ghat. Scattered in the *dongerla* region numerous small hamlets of the Peng tribe are found near perennial water sources. These mountains have sustained them both materially and spiritually and the Pengs worship the mountains, the growths and the under-growths as gods and goddesses and hold them in high esteem. They believe that the village deity and other demi-gods protect them from all possible hazards; hence they feel more confident and secured in their ancestral land. The Pengs' world can only be envisioned through their eyes. They live in a tangible as well as an intangible world. Tangible world is that one which an outsider can perceive. And the intangible world, which is most important from the Pengs' point of view, can only be perceived by them. The Pengs are an endogamous tribe with exogamous clan and *toden* (a group of clans among whom marital exchange is tabooed). It is interesting to note that a village acquires its name according to the clan name of the people living in it, for example, the village inhabited by the *odring* clan is called as *Odri* and similarly the place occupied by the *chipizoding* clan is called as *Chipizod*. Hence members of each clan are proud of their place of residence and consider their ancestral land sacred. It also owes its allegiance and identity to the ancestral land. They believe that their ancestors reside in this land and protect them from all foreseen as well as unforeseen calamities.

The Pengs are aware that the natural resources have the survival value and depletion of these resources by improper utilization can prove fatal to the community. Their natural resources include forest, lands, water, etc. Management of resources needs collective actions by its users and there is no ambiguity whatsoever among the Pengs regarding resource management through proper resource utilization.

Mode of Production, Resource Collection and Utilization

The Pengs produce for subsistence and surplus and hoarding do not bear any meaning to them. The calendar year of the Pengs starts with

Poos (tentatively December 15 to January 15) and passes through *Magh*, *Phagun*, *Chait*, *Baishak*, *Landi*, *Ashad*, *Saraban*, *Bhodo*, *Dussera*, *Diali* and ends with *Pond* (tentatively November 15 to December 15). The economic activities of the Pengs are seasonal and they pursue different kind of economy in accordance with the availability of natural resources (see Figure 1).

Most of the Pengs are landless and those having land are marginal landholders - landholding averaging less than two acres only. However, they practice shifting cultivation on the slopes of the hills and the amount of land used for crop production barely exceeds two acres. The Pengs are not nomadic by nature. However, those living in the *dongerla* region and practicing shifting cultivation change the site of settlement along with the site of cultivation. This kind of shifting is restricted to pre-selected sites following a cyclic order. Their mode of cultivation is primarily of multiple cropping patterns. They grow in the same field and at the same time a variety of crops. Their crops range from different minor millets to coarse cereals and pulses; rice is also grown in the *dongar* as well as in the plain. On an average the land requirement for the Pengs practicing shifting cultivation is much less than their non-tribal brothers practicing settled cultivation. For this mode of production the environmentalists and all those who are concerned about environmental issues have condemned the tribal communities. Particularly the shifting cultivators have become the eyesores of these people. It is a strange paradox that while the non-tribal intruders misappropriate the forest wealth by their greed and graft the tribals are blamed for their creed and craft. Walter Fernandes writes:

The way the causes of depletion, such as fuel, fodder, etc., have been mentioned creates the impression that the policy makers continue to consider the forest dwellers and other rural poor as the main destroyers of forest. In fact, industry and raw material have not been mentioned directly among the causes of deforestation. Hence one is left with the impression that even while being aware of it, the policy makers do not analyze adequately the role of the industrial

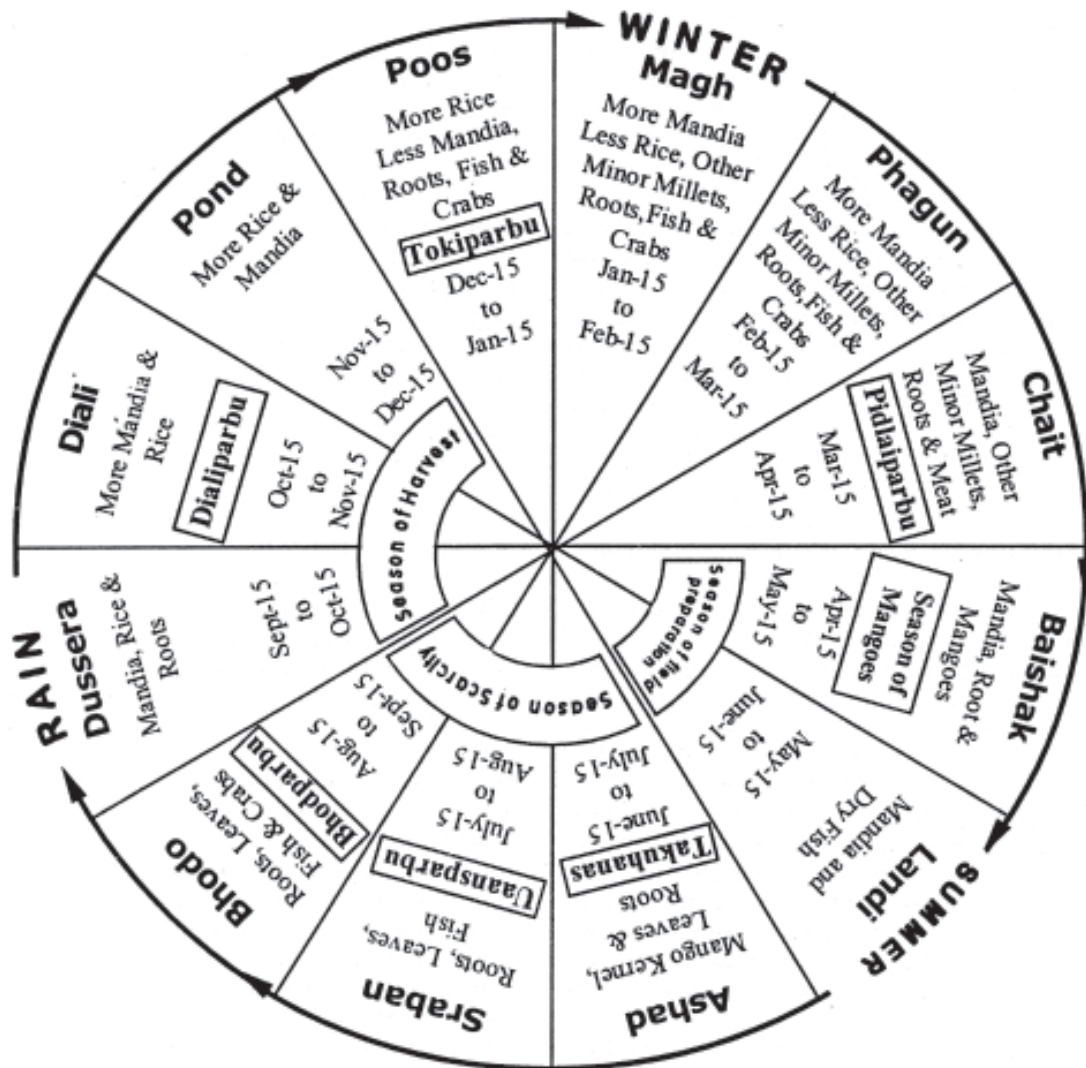


Fig. 1: The calendar year of the Pengu showing different seasons, months and food habits (adopted from Elizabeth F. Andrews, 1996)

commercial complex that started this vicious circle of clear felling of vast tracts of forest (1989: 38).

The main point of argument here is that while the crime of large-scale forest depletion and environmental degradation is mostly done by the modern development sectors and the non-tribal intruders into the forestland, the voiceless tribals are branded as the destroyers

of the forest and natural resources. Cultivation activities start from the month of *Landi* (May 15 to June 15). The Pengu select a patch of land and the growths and undergrowths are slashed and left exposed to the sun for drying. Once the felled trees and shrubs are ready to be set into fire, the Pengu go out with their drums to the site and shout at the peak of their voice. By doing so they try to drive away all the living

creatures from the patch of land by beating the drums. This they do it for three consecutive days before the dry trees and shrubs are finally set into fire. This speaks about the concern of the Pengs for all the living beings, may those be the smallest creatures like insects and worms. During the month of *Ashad* (June 15 to July 15) both male and female members of the community make furrows on the land with the help of an iron instrument known as *kodki*. Then different varieties of selected seeds from the harvest of the previous year are blended and broadcasted on the fields. During the month of *Saraban* (July 15 to August 15) they perform a ritual known as *Uaansparbu*. A day before the *Uaansparbu*, the *jaani* (priest) and *disari* (astrologer) would bring a *dera* (bottle brush millet) sapling and a *kuling* (paddy) sapling and offer those to *Sitakania* (goddess of crops and wealth). They leave those in the *gudighar* (abode of the deity in the central place of the village) overnight, and pray for the growth of those plants. Similarly all the Pengs bring from their respective fields a *dera* and a *kuling* sapling and place them before *Sitakania* and request her to protect the crops from external dangers. These *dera* and *kuling* saplings are considered to be sacred. The next day they celebrate *Uaansparbu* ritual and the sacred saplings are transplanted in the field. The month of *Saraban* is the month of surveillance of the crops for the Pengs. They are cautious about the growth and development of the crops in the field and the entire community seeks the refuge of *Sitakania* for the protection and proper growth of their crops. During the month of *Bhodo* (August 15 to September 15) the crops are ready for harvest and *Bhodparbu* ritual is performed during the harvest season. *Bhodparbu* ritual is performed in order to seek permission from *Sitakania* before the crops are brought from the field to the home. Until the *Bhodparbu* ritual is witnessed, no one can use the new crops at home. It is believed that without performing the *Bhodparbu* if someone eats the new rice, then tigers from the forest would attack the village and destroy the cattle wealth as well as human being. For the same reason the early cob of maize from the field cannot be plucked without the performance of the

Jahnamara ritual. It is interesting to note that each activity pertaining to cultivation starts with a ritual and ends up with another. Lee has very correctly pointed out that, "there exist a core culture in the primitive society that is intimately linked to mode of production. It is much longer lived, has a much deeper time depth...." (1988: 255).

Generally the Pengs do not divide their land among the claimants. Most often they jointly cultivate the field and equally share the produce. The produce from the field is rarely sold in the market. Production is primarily meant for self-consumption and not for the market. Most often products are bartered when need arises. The Pengs do not hire labour, rather it is mutually exchanged between two families. Whenever labour is hired from within the village, all persons giving labour are equally compensated irrespective of age or sex. Products like *kuling* (paddy), *dera* (bottle brush millets), *kohoda* (a kind of minor millets), *arku* (minor millets), *kating* (a kind of pulses), etc. are mainly produced for home consumption. Their dependence on the market is minimal and most of their requirements are met by their own production. They depend on the market for items such as salts, kerosene, clothes, etc.

In a calendar year the months of *Dussera*, *Diali* and *Pond* are time of rejoicing. During this period the home of the Pengs is full with *pachi* (harvest). They are not worried, as food is plentiful during this period. This is the time when the Pengs celebrate and involve themselves with merry-making, fun and frolic. Old debts are repaid and new investments are made in buying clothes, fowls or cattle. Apart from the dependency on cultivation the Pengs also harvest other natural resources like forest, river, ponds, etc.

The Pengs also undergo a phase of lean period during the months of *Ashad*, *Saraban* and *Bhodo*. These three months are very crucial for them and they heavily rely on the natural resources like forest, rivers, ponds etc., for mere survival during this period. Partly their requirement is met from the collection from forest, rivers and ponds and partly by wage earning both within and outside the village.

The Pengs resource utilization is characterized by aggregation during part of the year and

distribution and utilization in other times. The entire process of resource collection to resource utilization is guided by cultural sanctions and monitored by various cultural infrastructures (informal institutions). During the month of *Chait* (March 15 to April 15) the Pangs perform two rituals, namely, *Chaitparbu* and *Pilaiparbu*. *Chaitparbu* ritual heralds the beginning of hunting in the community and *Pilaiparbu* ritual gives allowance to the community members to collect mangoes from the forest or orchards. During *Chaitparbu* all the able-bodied males go out to the forest for hunting. When the kill is made, all the members in the community equally share it. This practice of going to the forest for game is locally known as *bentaboola*. For eight days the male members go out for *bentaboola*. Only on the eight-day other economic activities are resumed. Thereafter the *bentaboola* ceases to be a regular activity and eventually it is stalled during the month of *Landi*. It is forbidden to pluck mangoes from the trees before the *Pilaiparbu* ritual. It is believed to bring ill luck for the whole village if someone plucks those without performing the ritual. It is interesting to note that the Pangs are required to perform different rituals for different parts of the same product before those can be used. For example the Pangs can only eat the pulp of the mango by performing the *Pilaiparbu* ritual; they need to perform another ritual known as *Takuhanas* ritual if the mango kernel is to be eaten. Mango Kernel is dried up and stored for use during the lean period. A kind of gruel is made out of the mango kernel for its consumption during the lean period. Both *Pilaiparbu* and *Takuhanas* ritual are performed in fixed time of the year and there cannot be any deviation whatsoever. The *Takuhanas* ritual is performed in the month of *Ashad* (June 15 to August 15), i.e. at the commencement of the lean periods. A careful analysis of various ritual practices and their occurrence in different seasons reveal that these cultural practices have been consciously devised to space the utilization of resources in accordance with the need of the people, minimizing risk and uncertainty. Several other rituals are performed during the collection of other forest products like roots, tuber leaves, honey, resin, etc. The mode of collection of these natural re-

sources shows their efforts towards management of natural resources. Viegas and Menon have very correctly pointed out that, "the tribals built cultural and religious myths, rituals and social control mechanisms which were geared to maintaining a balance between human and ecological needs" (1989: 59).

Selection of animal during hunting is done very carefully. The pregnant animals are seldom hunted and the very young ones are released when trapped. The Pangs have different totem symbols like *Langlabehing* (tiger), *Zabeing* (snake), *Kotchim* (turtle), etc. The Pangs not only protect their respective totemic objects but also take interest for their regeneration and growth. This kind of arrangement is an endeavor to space the available resources and restrain the users from abusing the same thereby making those available at a time when it is highly needed. Thus it checks over-exploitation and depletion of natural resources. Hence it can be argued that the economy of the Pangs is embedded within the cultural matrix and each component of the economy is culturally ordained and patterned. The economy of the Pangs is so designed that it not only provides livelihood to the present generation but also assures of basic needs of the future generations. Polanyi does not mean matters when he says, "that man's economy, as rule is enmeshed in his social relationships" (1957: 46). However, such arrangements get eroded and disembedded from the cultural matrix by the intrusion of market and state; the age old traditional system of resource management dwindle like a pack of cards in front of such forces.

State of the Resources in Podaading and Dudunghuan

Kalahandi is considered to be one of the most backward regions in the state of Orissa. In the past the district was hardly exposed to the world outside. There were instances where inefficient government officials were sent to this district to work in harsh conditions as a measure of punishment. In the absence of adequate communication facilities the government officials were reluctant to work in the forested regions of the district. Majority of the inhabitants of the region was tribal with very little understanding on urban culture. Lieutenant C. Elliot

in his report on Kalahandi writes "no money passes in the country not even cowries and during my tour it has been necessary to pay the coolies in grains" (1865: 468).

As mention earlier, the Pengs in Dudungchuan are the victims of the Indravati Multipurpose Dam Project. They have been evicted from their original ancestral land and eventually resettled in village Dudungchuan. Their original ancestral village Benakhamar has already been submerged in the reservoir of the dam along with all valuable repositories of natural resources. The construction for the dam was cleared in 1979 and the actual construction started in the year 1985. It could attract intruders like contractors, semiskilled labourers, petty businessmen and all those who wanted to make a profit much before the construction actually started. Once the construction began, the flux of intrusion from outside gained momentum and within no time there were people from various communities and various walks of life. Now one could see a number of intruders actively engaged in misappropriating the valuable life-sustaining repository of natural resources. Reddy rightly points out that:

"Many small towns have emerged in the tribal areas (forest) of the country, causing further deforestation. A look at the settlement pattern of these towns reveals both stratification and the real culprits who are destroying the forests. Tops of hills are invariably dotted with government offices and guesthouses of government officials. Beneath these houses, at successively lower levels, are the neighbourhoods of lower officials, non-tribal immigrants and at the bottom, the settlement of the original inhabitants, the tribal communities" (1996: 359).

The forests on which the Pengs of Dudungchuan were once very much dependent have now almost vanished due to the construction of the multipurpose project. The forest contractors and other non-tribal intruders have also played their due roles in the process of resource depletion of the region. It is disgusting to learn that most often the indigenous Pengs of Dudungchuan are hired for the rampant extraction of the resources of their immediate surrounding by

the unconcerned agents of the state and market. Now as the construction of the dam is over and the natural resources of the region is almost depleted. This has impacted their forest-based economy so much so that these innocent Pengs migrate to the nearby urban centre to hire out labour.

The scenario of Podaauding speaks of an altogether different story. Podaauding is an isolated village with almost no interference from the outer world. This however does not mean that it is totally cut off from rest of the world. The village is covered from all its sides by high mountains with rich flora and fauna. The distance between Podaauding and Dudungchuan is approximately twenty-five kms. There is no transport facility to the village. There is even no motorable road. As a result there is no intruders in the village. The Pengs of Podaauding have been successful in conservation of their natural resources through their traditional resource management system. The non-intervention of the agents of the state helps the Pengs to adhere to their traditional norms and value system. There is co-operation and co-ordination among the members of the community in the village and resource utilization and conservation finds its way through collective action. They hold the natural repositories as commons. It was interesting to find that no one in this village has entered or harvested any products from one of the nearby forests since last seven years. It is believed by the villagers that the *Kalpatt* (deity of the mountain), the guardian of the mountain, is not happy with them. Therefore he has banned their entry to the said forest. The proscription from entering the forest would stay valid till further order from *Kalpatt* to *Jaani* through dreams.

The foregoing analysis leads us to the conclusion that natural resource extraction in an indigenous community operates under the strict guidelines of social values and norms. However, when this traditional cultural mechanism is confronted with so-called modernizing forces, resource extraction becomes chaotic so much so that it threatens the ecological support system of the locality. Under such circumstances the collective action of the resource users gives way to misappropriation of the resources, giving rise to the situations like the "tragedy of the commons".

REFERENCES

- Andrew, E.F. 1996. "Territory and Land Use Among the Akumuit in Western Alaska," in E.S. Burch Jr. and J. Linda Ellana (eds.), *Key Issues in Hunter-Gatherer Research*. Bergh: Oxford.
- Armstrong, R. 1998. "Insufficiency and Lack Between Production and Consumption Longhouse Economy 1909-1996," *Journal of the Royal Anthropological Institute*, 4 (3) September.
- Behera, D.K. 1993. "Impact of Deforestation on the Plain Bhuiyans of Northern Orissa," *Journal of Human Ecology*, 4 (4).
- Elliot, C. 1856. Reports on Kalahandi. No. 73 in Senapati's Gazetteer on Kalahandi.
- Fernandes, W. 1989. "The Forest Policy and the Forest Conservation (Amendment) Act, 1988," *Lokayan*, (January-February).
- Frazer, J. 1993. *The Golden Bough*. Hertfordshire: Wordsworth Edition Limited.
- Lee, R.B. 1988. "Reflection on Primitive Communism," in T. Ingold et al. (eds.), *Hunters and Gatherers: History, Evolution and Social Change*. Vol. I, Oxford: Bergh.
- Mishan, E.J. 1993. *The Cost of Economic Growth*. London: Orion Publishing Group.
- Polanyi, K. 1957. *The Great Transformation*. Boston: Beacon Press.
- Reddy, G.P. 1996. "Hunter-Gatherer and the Politics of Environment and Development in India," in E.S. Burch Jr. and J. Linda Ellana (eds.), *Key Issues in Hunter-Gatherer Research*. Bergh: Oxford.
- Viegas, P. and G. Menon. 1989. *The Impact of Environmental Degradation on People*. New Delhi: Indian Social Institute.