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EDITORIAL

Taking birth in the name of Tribal Research Bureau (TRB) way back in 1952 soon after the independence, the Scheduled Castes and Scheduled Tribes Research and Training Institute (SCSTRTI) of Odisha not only has the distinction of being the oldest Tribal Research Institute (TRI) of the Country, but it is also credited with the publication this nationally reputed oldest Anthropological Research Journal of Odisha titled **Adivasi** incorporating the original articles of reputed anthropologists, sociologists, development practitioners, experts and researchers who have worked and gained knowledge and experience in the field of tribal and non-tribal societes and cultures. This veteran research journal of Odisha which is over 50 years old has come up with its 54th volume. Being published uninterruptedly it has endeavored to publish research articles on various aspects of the society, culture and problems of Odishan tribes and castes over these years and marching with the time it has gloriously entered into its 54th year of publication.

Adivasi is to be published bi-annually in June and December every year. Under unavoidable circumstances including the paucity of required standard empirical research papers, it has not been possible to bring out half yearly issues and therefore, this combined Special Issue is being released this year. In the present 54th volume (No.1 & 2, June & December 2014), 11 articles based on the rich experience and sincere efforts of eminent research scholars are being presented.

The first article titled "Folk Knowledge on Utilitarian Aspects of Plants: Findings from Chuktia Bhunjia and Gonds in Sonabera Plateau" is the outcome of team work of B. Mohapatra, R. Parida, M.K. Jena and A.B. Ota. In this paper they have emphasized the fact that Odishan tribes are distinguished by their inexhaustible indigenous knowledge (IK) of plants, plant-animal interactions and the ethno-ecological perceptions on the nature and natural processes. This IK is based on utilitarian and cognitive aspects of their socio- cultural links with the surrounding nature. In more subtle terms such IK systems are their indigenous knowledge domain which is a manifestation of their acute and continuous observation and interpretation of their habitat and surroundings.

On the same domain of rich indigenous knowledge system on Ethno-Medicine of an Odishan tribe comes the second article, "Indigenous Plant Medicine for Fertility Regulation: A Study on the Bhumija Tribe of Odisha" jointly contributed by Bijayalaxmi Dash and N. C. Dash. It focuses on the use of indigenous plant medicine for fertility regulation among the Bhumija tribe. It reveals that eighteen plant species belonging to fifteen plant families are being used as traditional medicines for the cure of different fertility related problems by their village medicine men, elderly persons and the traditional experienced midwives who attend the deliveries. Since, in these days the process of change has threatened this indigenous knowledge and treatment, there is an urgent need to preserve and protect such rich indigenous medical knowledge from complete desertion.

The third one produced by Manas Ranjan Sahoo and Upali Aparajita and captioned "Industrialization and Protest Movements in India: An Anthropological Perspective" speaks about a recent problem of worldwide concern, i.e., situation of displacement and rehabilitation of the Project Affected People (PAPs) and their stiff resistance for mega industrial projects like the Arcelor-Mittal steel project in Kendujhar district in Odisha. Such protest movements have forced the concerned entrepreneurs and governments either to reconsider the problems of displacement or take necessary measures to address these problems or to abandon the project.

The fourth paper written by Dr. Nishakar Panda dwells on the related subject of "Mining in Odisha and Tribal Displacement". It states that the mineral rich State of Odisha have attracted many multi-national companies to establish plants, industries in the State and by this time in the

tribal areas a number of industries have already come up and several others have signed MOUs with the State Government to operate. In this process vast areas of land has been acquired and going to be acquired and the tribals are the most affected which is a matter of concern.

The following paper (5th) titled "Changing Food Habits and Nutritional Status of Savars in Jajpur District of Odisha" is the outcome of empirical research by Dr. Kedarnath Dash. It speaks about the traditional food consumption pattern of Savars, their various ways of obtaining food including the associated habits and beliefs while trying to assess the changing perspectives regarding their food habits and nutritional status.

Dr. K.P. Jena's paper "Employment and Livelihood Patterns of the Adivasis In Odisha and their Economic Development: An Empirical Analysis" appears as the 6th article. It highlights the common malady of the trials of Odisha i.e., the limited occupational diversification, low income, chronic poverty, deforestation, and land alienation.

"Development Projects and Tribal Rights: The dimension of Tribal Human Rights violations in independent India" by Dr. Anil Ota, a young scholar is the 7th paper of this volume stating about the dynamics and nature of Tribal Human Rights violations caused by Industrial and Mining Projects in independent India.

The 8th article, "Status of Didayi Women of Malkangiri District of Odisha" authored by Gopinath Pradhan analyzes the status of Didayi (PTG) women of Malkangiri district and identifes some of the important determinants of women empowerment. He holds the opinion that in the tribal society the women enjoy a better status.

The 9th article on "Santal Durbar and Its Democratic Role" jointly contributed by Suresh Ch. Murmu and Nilamadhaba Kanhar highlights the traditional political organization, especially the institution of Durbar of the Santal society in Rairangpur area in Mayurbhanj district which is still very effective with their democratic way of decision making and in maintenance of social order.

The 10th one titled "Cultural Continuity and Change among the Snake Charmers of Odisha" is prepared by a young research scholar Sushree Sangita Mohanty. Working among the traditional snake charmers called "Sapua Kela" of Padmakesharipur, Bhubaneswar, she has observed how the forces like Urbanization, Sanskritization and the implementation of the Wild Life (Protection) Act had forced them to give uptheir traditional profession and look for alternative livelihood.

The credit for presenting the 11th article titled "Education of Tribal Women in Odisha: An Insight" goes to Dr. Kasturi Panda. In this paper she has highlighted the educational status of tribal women and concluded that tribal women of Odisha are economically, socially and educationally backward when compared to the mainstream society.

I express my sincere gratitude to all the paper contributors for their sincere efforts in contributing the articles for this volume of *Adivasi*. My sincere and heartfelt thanks goes to Shri S.C. Mohanty, OSD (Research) and the Associate Editor of *Adivasi* who, like the previous years, has burnt his midnight oil for bringing out this volume. Without his dedicated efforts this issue would not have seen the light of the day. I also hope that the articles incorporated in this volume will be helpful to the researchers, academicians, development practitioners and all those who are interested on the subject. I earnestly request all our readers to enlighten us with their valuable suggestions for bringing further improvements to this age old research journal.

31st December 2014, BHUBANESWAR.

Prof. A.B. Ota

Folk Knowledge on Utilitarian Aspects of Plants: Findings from Chuktia Bhunjia and Gonds in Sonabera Plateau

B. Mohapatra¹, R. Parida², M.K. Jena³, A.B. Ota⁴

What separates the ethnic communities in Odisha is their inexhaustible knowledge of plants, plant-animal interactions and the ethno-ecological perceptions on the nature and natural processes. This knowledge is based on utilitarian and cognitive aspects of their socio- cultural links with the surrounding natural world. In more subtle terms such knowledge systems are regarded as indigenous knowledge of communities which is a manifestation of their acute and continuous observation and interpretation of their habitat and surrounding.

Folk / Indigenous Knowledge on Plants: Relevance and Perspectives

According to Brodt (2000), indigenous knowledge implies any knowledge produced by and /or distinctive to a particular culture group or any loosely defined group of resource users in a given area. ... As such, the term is synonymous with 'folk knowledge'. These definitions and their implied boundaries are intended rather loosely, in recognition of the fact that it is often difficult to determine in the field where one knowledge system ends and the other begins (Brodt, 1998 in Brodt, 2000).

Indigenous technical knowledge has become important for a sustainable management and conservation of the world's forest that has gained more and more attention. Indigenous means that something is originated locally and performed by a community or society in a specific place. It emerges as peoples' perceptions and experience in an environment at a given time in a continuous process of observation and interpretation in relation to the locally acknowledged everyday rationality and transcendental powers (Seeland, 2000).

Indigenous knowledge is not formally taught, but perceived in a particular context at a certain stage of the perceiver's consciousness that grows in the world of local events. Knowledge is to be called indigenous, if it is bound to local experiences and takes its local world perhaps not as the only one existing, but as the most relevant of all. Local knowledge as we may call it, is an encompassing whole of what has been revealed to human perceptions in a particular place or region. There will always be local knowledge even if modern scientific knowledge invades a sociocultural setting and challenges its local knowledge more or less effectively.

There are two views in context. Firstly, there is the idea that an environment can only be properly managed by its inhabitants and not by ultimately absent experts from outside. The go-on-travelling experts may know 'solutions' to environmental problems because they are not part and parcel of local setting. They do not live where they work for long or even for generations in a tight social cohesion and mutual dependence. Secondly, the technical experts who are trained in a

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western scientific rationality are more and more convinced that indigenous knowledge fits very well into a participating approach that involves people with their knowledge in the process of economic development. After decades of extension activities, now there has evolved awareness that modern global expertise has always to cope with autochthonous knowledge that is deeply woven into the social fabric of a local and particularly rural community within a transitional developing society. There is always so to speak a basic layer of knowledge in every community from times immemorial, which is a representation of a society in its typical natural surroundings. The wisdom and experience of generations reflect the way of life of their ancestors before one's own generation and one took over. Indigenous knowledge is a matter of continuity, although one's surrounding may change at a slower or quicker pace. It is a matter of social and cultural evolution in the background of an ancestral tradition.

Indigenous knowledge cannot be displaced because it is autochthonous empirical experience and only valid as a world in its place of origin. Authenticity means to know things from personal experience in places where they originate and thus experiencing them in their proper context. The modality, how tribal forest dwellers perceive things live with them and use them is a mode of appropriation that they may share with many other tribal all over the world. To collect them and use them for a network presumes that forest dwellers can anticipate what may be useful for them. It contradicts the principle that those who know and what is of local relevance to be known is part of the same environment.

Sooner or later, tribal communities respond to outside or social mainstream developments in conservationist, adaptationist or fundamentalist way. Then the question arises, whether indigenous knowledge is to be equated with ecologically sound knowledge? There is, for e.g., an overall notion of cosmos in any tribal society that encompasses all physical, social and spiritual aspects of life in a form of animism or natural symbolism and ritualism. This does not mean that all interactions between physical aspects are known to rural people as interconnected in the sense of the term in natural science, 'ecological'. If one, however, understands ecology as 'to know about the interconnectedness between all forms of life as such', then indigenous knowledge can be called ecological. Yet, ecological does not necessarily mean that tribal forest dwellers care for a sustainable resource use — that is sustainability as emphasized in the recent western environmental discussions. Ecology should much more be understood as the reproduction of a cultural lifestyle that has been passed on and not as an economical rationale (*ibid*).

Shackeroff & Campbell (2007) citing references from many authors on importance of local peoples' knowledge on ecology presents that conservation researchers are approaching traditional ecological knowledge (TEK) with increased alacrity (Drew, 2005; Drew and Henne, 2006; Fraser, et al, 2006) recognizing its potential contributions to both understanding biological phenomena and the practice of protecting species and ecosystems. For example, fishery biologist and ecologists have recognized the need to engage with local knowledge holders, particularly when they are indigenous and/or have long ties to ecosystems, in order to fill in the gaps in our understanding of marine ecosystems (Pauli, 1995; Pitcher and Pauli, 1998) and to explore alternative approaches to management (Pitcher and Pauli 1998; Mc Goodwin, 2001; Berkes, 2003) engaging with TEK (and also with local ecological knowledge LEK) may indeed be a means for conservation researchers to link their efforts to the local, environmental and cultural contexts (Berkes, et.al.,2003). TEK 'is presumed here to constitute a "body" and a "system" of understanding and know-how that arise through time from a variety of individual and shared experiences and observations, mediated by culture, with regard to environmental factors, behavioural attributes and ecological dynamics' (ibid) It may also provide a much needed tool to help revamp environmental management practices

(Acheson, 2005; Mc Leod and Leslie; *Forthcoming*). Thus, in response to growing interest in accessing traditional ecological knowledge (TEK) for conservation purposes, complexities involved in doing TEK research assumes relevance.

Forest represents a legacy and is a testimony to the evolution or migration of biological species; flora and fauna, in various societies. Forests, trees, and their products are managed by indigenous people who are knowledgeable about local consumption, in largely self-sustained rural communities often located in remote areas. To make use of these resources and manage them, indigenous knowledge of trees and forests encompasses locally available renewable resources and social and spiritual energies... What 'forest' and 'knowledge of forest' mean to members of any culture are reflections of their worldview and traditions, which vary according to their different stages of economic and technological development. This knowledge goes beyond technical (i.e. botanical) knowledge, hunting skills, wood harvesting know-how or non timber forest product usage (Seeland & Jena, 2008).

The acquisition of indigenous knowledge is generally guided by utilitarian considerations. It is neither shared equally among all of the inhabitants of a locality nor is it a standardized and comprehensive account of *what is known*; it varies sometimes tremendously. Often gender specific knowledge separates what is known among people of the same area into different worlds. Indigenous knowledge is applied at the level of human senses – such as seeing, touching and feeling – as well as by remembering natural phenomena. To our knowledge, there is no published record of indigenous people being interested in the traditional or local knowledge of another forest dwelling community. Knowledge for the sake of knowledge mostly does not exist in an indigenous community; curiosity – about flora, fauna or other natural phenomena that do not have any practical value – is rare (*ibid*).

There is always a fundamental basis of inherited knowledge in every community, a representative of the society in its typical geographical and climatic surroundings that is individually interpreted, modified and passed on for generations. The experience and knowledge of peoples' ancestors are generally passed down orally to the younger generations, but increasingly often this transmission is limited by cultural change. The indigenous knowledge of trees and forests consist of a rather solid fund of knowledge, although the pace at which environmental conditions change may vary, becoming slower or quicker in the wake of social and cultural evolution. Devaluation of indigenous knowledge can have many causes: alternative life styles, new modes of production and degradation of important natural resources, as well as forest dwellers being displaced into territories unknown to them or their worlds being affected by laws and modernization from outside (*ibid*).

Traditional forest dependent communities residing in and around Protected Areas have acknowledgeable ethno-ecological knowledge that could play instrumental in achieving the conservation goals in a participatory management model. Mohapatra, et al, (2013) basing on evaluation of their findings on Sunabera and Karlapat sanctuary in Odisha appropriated and built rationale for incorporation of such knowledge systems in shaping up principles for effective comanagement of Protected Areas to meet the twin objectives of conservation and livelihoods. The authors argued that what is needed in the long run is an appropriate Protected Area policy that builds on indigenous culture, knowledge and values reflecting the locally perceived ambivalence between biodiversity conservation and sustainable economy and permits freedom to use and manage natural resources.

Moreover, traditional knowledge systems have been gaining favour in biodiversity conservation related legislations in India. Prof. Madhav Gadgil, an authority in the subject, in a brainstorming discussion on National Biodiversity Strategy Action Plan at Indian Institute of Science, Bangalore, on 12 October 2012, argued aloud that 'While it is true that use of traditional knowledge has been restricted to local communities, the Biodiversity Act states that local knowledge will be considered for conservation planning', justifying the importance of folk knowledge on biodiversity conservation and management.

Setting the Methods for Enquiry: Experiences of Early Workers

People are familiar with hundreds of plants categorized as edible, non-edible, spices, medicines, construction materials, veterinary medicine, and so on. There are certain plants with which the community members are so familiar that they can identify a plant from a small part of it, be it a piece of bark or a flower or a fruit or seed. Even small differences are noticed and plants are distinguished from each other with minor differences, much like the scientific systems of plant classification in taxonomic texts. Most plants, especially the ones with which the community members are fairly familiar, for sure, have a name and the less familiar plants are grouped with a group name. Such an understanding is also common in many cultures in India and the World. Levi Strauss (P.1) in his Savage Mind quoted Krause as 'among plants and animals the Indian designates by name only those which are useful or harmful; all others are included under the classification of bird, weed, etc'.

Levi Strauss in his Savage Mind has quoted experiences of various researchers investigating into the natives' knowledge of the plant and animal kingdom as well as their understanding on the interaction of plants and animals. The descriptions, directly and indirectly, have hinted the working methodology for enquiring the natives' knowledge. A description by E. Smith Brown from her experiences with an African tribe itself provides a methodology for assessing the knowledge of local communities on the plant world.

'These people are farmers: to them plants are as important and familiar as people. I'd never been on a farm and am not even sure which are begonias, dahlias or petunias. Plants like algebra have a habit of looking alike and being different or looking different and being alike; consequently mathematics and botany confused me. For the first time in my life I found myself in a community where ten year old children weren't my mathematical superiors. I also found myself in a place where every plant, wild or cultivated had a name and a use, and where every man, women and child knew literally hundreds of plants... (my instructor) simply could not realize that it was not the words but the plants which baffled me' (Smith Bowen, P.19 cf Levi Strauss, P.6).

Further, quoting Gilges on his experiences with certain peoples of Northern Rhodesia –

'It has always been a surprise to me to find with what eagerness the people in and around Balovale were ready and willing to talk about their medicines. Was it that they found my interest in their methods pleasing? Was it an exchange of information amongst colleagues? or was it to show the off their knowledge? Whatever the reason, information was readily forthcoming. I remember a bit old Luchozi who brought bundles of dried leaves, roots and stems and told me about their uses. How far he was a herbalist and how far a witch doctor I could never fathom, but I regret that I shall never possess his knowledge of African psychology and his art in the treatment of his fellow men, that, coupled with my scientific medical knowledge, might have made a most useful combination' (Gilges, P.20 cf Levi Strausse, P. 6)

From his experiences on certain primitive Indians Dennler wrote -

'The natives are actually aware of the characteristic trees, under scrub and grasses of each distinct 'association area' ... in its ecological sense. They are able to list in detail and without any hesitation, the characteristic trees in each, and also to record the string, resin, grasses, and other products used in material culture, which they obtain from each association, as well as the mammals and birds characteristic of each habitat. Indeed, so detailed and so accurate is their knowledge of these areas that they note the gradual changes in marginal areas ... My informants were able to relate without hesitation the changes in fauna and in food supply in each association in relation to seasonal changes (Dennler cf Levi Strausse, P. 45)

The experiences of various researchers quoted by Levi Strausse presents a comprehensive understanding that local communities are well versed about names of plants that come in their use, or putting it differently, plants with which the locals are very familiar have names. Another understanding is that each local is an informant knowing some or most of the plants that comes in their use. However, the work exposure or occupation of the informants may happen to be the reason for why some people know about more plants and some people know the least. Work exposure wise or occupation wise informants may tell about different groups of plants and trees with which they are familiar, or, putting it differently, an informant is familiar with such plants that are much related to their work, occupation and profession. Accordingly, amongst the local communities there could be specialists knowing about varieties of plants in terms of utilitarian categories and 'association area'.

The authors in this paper have made an effort to assess the folk knowledge on plants and trees on the basis of their utilitarian aspects. The hypotheses that guided the enquiry were like – there are certain plants and trees about which every lay person in the community is familiar with and they are thus the most commonly known plants; for example, the edible fruits in the surrounding and the forests. Similarly, there are certain plants only known to specialists or the people who are occupationally related with these. For example, herdsman have a fair knowledge on ethno-veterinary drugs, fisherman knows better about poisonous plants useful for fishing, carpenter knows better about timbers, medicine man is well versed about medicinal plants, women know more about the wild edibles and NTFPs and the ornamental plants. The knowledge acquired by each group of people, as described here, may not be an exclusive domain of knowledge respective to the category of informants. A farmer also knows about quality of timbers for a given purpose but he may not be overtly describing about the timbers in a more familiar manner than the way he would be able to describe about the crops. A medicine man may know about some edible weeds growing in the swiddens along with other crops but he may not feel as comfortable as a woman describing about that edible weed, the season of its availability, the way it is cooked, and such. The authors tried these hypotheses to understand the utilitarian aspects of plants and the familiarity of categories of people with categories of plants from utility point of view.

Study Area and People

The study has been conducted in the Chuktia Bhunjia villages coming under Chuktia Bhunjia Development Agency (CBDA), Sunabeda that was established in the year 1994-1995 during 8th Five Year Plan (1992-97) with its head quarters at Sunabeda of Nuapada district. It is located 90 km away from the district headquarters at Nuapada. It is spread over 3 GPs in Komna Block. It comes under the jurisdiction of Sunbeda Wild Life Sanctuary of Nuapada Forest Division. The total

geographical area of the project is 150.00sq.km. The Chuktias basically depend on settled cultivation, shifting cultivation in few areas, agricultural labour, Non Timber Forest Produce collection, Bamboo artefacts, etc. They observe Nuakhai, Sunadei worship, Chaula Dhua, Chaitra as important festivals. Their dance forms are Bichdharia, Raisedena Cherchera, Sua, Gendi Holi, Karma and Mandli Dance.

Sunabeda Sanctuary comes under Nuapada district in the west of Orissa. Since its declaration as a sanctuary and wildlife reserve in 1983, it is considered as one of the important protected areas and recently declared as a tiger reserve. This indicates that the forest is well stocked, diverse and is important from biodiversity point of view. The area is full of high and undulating hill ranges, streams and dense forests. It is a sparsely populated area with dispersed and small villages and hamlets. Their erstwhile practice of shifting cultivation has affected the landscape of the region and now the *Chakutia Bhunjia* earn their livelihoods through the collection and sale of minor and non timber forest produce.

Apart from its importance as a sanctuary, Sunabeda is also of paramount religious significance for the shrine of Sunadei Thakurani. Many local people visit there on several occasions and people from the neighbouring state of Chhatisgarh also visit the shrine often in groups. Although people visit the shrine anytime in a year yet, Dasahara and Chait Parab are specific occasions when people visit the shrine in thousands to offer worship to the deity.

The original settlers in the sanctuary area include tribal communities like Bhunjia and Gond. Bhunjia is a very conservative tribe while Gond is not so. However, both the tribal communities have been residing there since ages and in several ways depend on the local forests. In their livelihood trends one can observe higher dependency on the forest land than trees in the forest.

From the livelihood point of view, as the local people describe, they were better off when they were practising shifting cultivation on the hill slopes and simultaneously doing paddy cultivation on available low lands or plain lands. Under shifting cultivation system they were doing mixed cropping of millets, finger millets, cow pea, black gram, sorghum, yam, pumpkin, etc. They were cultivating a patch of land continuously for three years after which they were abandoning the slope for natural regeneration of forests. Apart from the produces from shifting cultivation and wet cultivation people were also making good collection of forest products including Kendu leaves which they were selling to the local traders.

Methods and Techniques of Data Collection

In view of relevance of indigenous knowledge to a Scheduled Tribe categorized as Particularly Vulnerable Tribal Group like Chuktia Bhunjia, the primary approach of data collection was empirical including both diachronic and synchronic enquiries. The selection of villages was made in view of the remoteness and traditional lifestyle of villagers. Side by side, villages with some contact with the mainstream have been covered. As the primary objectives of the study were centered around folk/ indigenous knowledge on plants and trees, data mostly from the specialists and knowledgeable persons of the society were recorded in selected villages instead of choosing informants on the basis of quota sampling.

After collection of basic data, these findings have been randomly cross checked with neighboring villages. The base villages for the study were Holuapali, Cherchuan, Kholigaon and Sunabeda. The primary information gathered has been cross checked with villages like Majhagaon, Adara and Jamagaon in the vicinity of Sonabera plateau.

Like enquiries in social science, the methods and techniques of data collection started with participant observation. Moving with men and women to their work places, swiddens, discussions at work breaks, all had immensely helped to visualize, understand and collect relevant information presented in the paper. Organizing informal informant interviews without a structured schedule put the team of researchers in a position to collect primary data in relative details.

Results and Findings

Wild Edibles

Allmania nudiflora, Alternanthera sessile, Amaranthus polygamus, Amaranthus spinosus, Cassia tora, Chenopodium album, Cleome viscose, Clerodendron serratum, Commelina benghalensis, Ipomoea eriocarpa, Leucas aspera, Marsilea minuta, Mollugopentaphylla, Oxalis corniculata, Polygonum plebeium, Portulaca oleracea, Triumfetta rhomboids, as leafy vegetables; Asparagus recemosus, Curcuma zedoaria, Dioscorea pentaphylla, Dioscorea bulbifera, Dioscorea oppositifolia, Pueraria tuberose, as important tubers; Bombusa arundinacea, Careya arborea, Celosia argentea, Costus speciosus, Phoenix sylvestris, as shoots, stems and sap; floral buds of Bauhinia purpurea, Bauhinia variegate, Capparis brevispina, Cassia fistula, Celosia argentea, Indigofera cassioides, Madhuca longifolia, Woodfordia fruticosa; amongst fruits and seeds Annona squamosa, Antidesma ghaesembilla, Bauhinia racemosa, Bauhinia vahlii, Bombax ceiba, Bridelia stipularis, Bridelia retusa, Carissa carandas, Cordia dichotoma, Diospyros sylvatica, Ethretia canavensis, Embelia tsjeriam, Ficus racemosa, Flacourtia cataphracta, Flacourtia indica, Flemingia macrophylla, Gmelina arborea, Grewia tiliaefolia, Mangifera indica, Morus alba, Pithocellobium dulce, Phoenix sylvestris, Solanum nigrum, Solanum violaceum, Sterculia urens, Syzygium cumini, Tamarindus indica, Ziziphus rugosa, Ziziphus jujube.

To collect the information on wild edibles, common folks including women and children were consulted. Each one's information was collected on separate data sheets. When the information were put together the above enumeration of plants was possible. However, it has been observed from the data sheets that while women are well versed about the leafy vegetables and tubers, the children are familiar with berries, fruits and nuts. The common men and women know about the shoots, buds, fruits and seeds of different plants that are associated with their food habit. Looking from a different perspective, it is clear that in terms of knowledge on diversity of wild edible species the women have better knowledge compared to others in the society.

Plant Parts Used for Strengthening Intoxication

Artocarpus heterophyllus, Azadirachta indica, Bauhinia vahlii, Cassia fistula, Holarrhena antidysenterica, Mangifera indica, Mdhuca longifolia, Oryza sativa, Terminalia tomentosa are the plants and trees parts (root and bark, seeds) which are used for strengthening intoxication and quickening fermentation process of distilled spirits and fermented beverages. Observation on data sheets indicated that this is an exclusive domain of men's knowledge. Similarly, for poisoning fishes in a stream for an effortless fishing, parts of species like Alstonia scholaris, Caesalpinia digyna, Datura stramonium, Entada prusaetha, Euphorbia nivulia, Ficus gibbosa, Semecarpus anacardium, Thevetia peruviana are mainly used. It is the men again who are familiar with these kinds of plants.

Non Timber Forest Produces and Other Economic Plants

The forests within the sanctuary area has good production of certain NTFP like Charseed (*Buchanania lanzan*), Mahula (*Madhuka longifolia*) flowers and fruits, Neem (*Azadirachta indica*)seeds, Babul (*Prosopis* sps.) seeds, Harida (*Terminalia chebula*), Amla (*Emblica officinalis*), etc. The local people were able to make out a good part of household economy from collection and sale of the same.

However, since the sanctuary was declared and the Tiger Reserve, subsequently, the locals have been imposed with restrictions on collection and sale of these produces as they were doing earlier. The Tendu leaves (*Diospyros melanoxylon*) including the other NTFP species as mentioned above seems to be the most common set of knowledge known to almost all in the community. However, the other species that are valued as NTFPs or wild economic crops include *Acacia catechu*, *Asparagus racemosus*, *Bauhinia vahlii*, *Butea monosperma*, *Cassia fistula*, *Curcuma zedoaria*, *Embelia robusta*, *Phoenix sylvestris*, *Pollinidium angustifolium*, *Pongamia pinnata*, *Rauwolfia serpentine*, *Semecarpus anacardium*, *Terminalia bellirica*, *Tamarindus indica*, *Thysanolaena maxima*, *Woodfordia fruticosa*.

Conclusion

Folk knowledge on utilitarian aspects of plants in the surrounding is diverse among the Chuktia Bhunjia and Gonds inhabiting the Sunabeda Wildlife Sanctuary. While some forms of knowledge are common among all community members, there are also specialized and discrete knowledge systems known to specialists acquired out of their occupations. A systematic documentation of the knowledge systems not only would pave way for strategizing efforts for biodiversity conservation, at the same time, shall be very useful in promoting actions towards streamlining conservation and sustainable use of biological resources in the broader context of conservation and livelihoods.

In the contemporary context while integration of indigenous knowledge with other domain knowledge systems is highly pronounced in conservation and management of bioresources and ecosystems, the relevance of studying the traditional communities as knowledge bearers assumes to be of paramount significance. Information carved out through small studies as presented in this paper has the potential to contribute to develop co-management options and paradigms in the context of Protected Areas management by generating adequate scientific literature and justifiable arguments to say that local people have domain knowledge and management systems that need integration in the framework of larger management practice.

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Indigenous Plant Medicine for Fertility Regulation: A Study on the Bhumija Tribe of Odisha

Bijayalaxmi Dash ¹ N. C. Dash ²

ABSTRACT

The present paper makes an attempt to focus on the use of Indigenous plant medicine for fertility regulation among the Bhumija tribe of Odisha . The study reveals that eighteen plant species belonging to fifteen plant families are being used as traditional medicines for the cure of different fertility related problems. The village medicine men, who have a good knowledge about the herbal medicines usually diagnose and prescribe medicines for treating the patients. Many elderly persons of the village and the experienced women who attend the deliveries are also aware of the importance and use of such plant medicines. Various plants and plant-parts are being used for the preparation of medicines. It is found from the present study that even though the traditional reproductive health service is generally affordable and easy to access, yet most of the younger generation respondents are being attracted by the modern medicines. Further, due to the process of urbanization and cultural contact, there is always threat to this indigenous knowledge of treatment. Hence, there is an urgent need to execute a revitalization strategy for protecting such rich indigenous medical knowledge from complete desertion.

KEY WORDS: Indigenous plant medicine, Traditional healer, Fertility regulation

INTRODUCTION

India is the second largest country in the world in respect of human population. Over 550 tribal communities are covered under 227 ethnic groups residing in about 5000 villages of India in different forests and vegetation types (Sikarwar, 2002). Orissa has 62 different Scheduled Tribes with over a million of tribal populations. They are having a very good knowledge of the plant resources, based on generations' old experience. Our knowledge of intimate relationship between man and plants in his immediate surroundings has been passed on to us mainly through surviving tradition (Jain 2004). However, with the passage of time and development of technological medicine and health infrastructure, this knowledge is under a serious threat. The traditional knowledge about the use of the naturally available plants and their products has been transmitted through oral communication within the society and has passed from generation to generation. The uses of various plants and their products have been reported for post delivery care by Kaur (1999).

In recent times, with the increased knowledge of life and culture of the tribal communities, the social scientists are taking interest in ethno-medicinal studies. Many works have also been reported, especially from the rural and tribal communities of India (Bhadra and Tirkey 1997; Sharma Thakur 1997; Choudhury 2000). Ray and Sharma (2005) have given a description of ethno-

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medicinal beliefs and practices prevalent among the Savaras, a tribal community of Andhra Pradesh. Kumari (2006) gave an account on the concept of illness and disease and the application of folk medicine among the Sauras of Jharkhand. A number of organizations within India are concerned with maintaining India's Traditional Medicine System. Recently the importance of these traditional medicines has been realized worldwide as some of them proved to be more effective (Marini-Bettolo 1980). Nearly 80% of the world's population depends on traditional medicines, most of which involve the use of plant extracts (Sandhya et al. 2006).

Keeping in view of the importance of traditional medicine which provides health services to 80% of the world's population, increase demand of herbal drugs by the pharmaceuticals and depleting natural plant resources, it is high time to document the medicinal utility of less known plant available in remote areas of the country (Zaidi and Crow 2005). Moreover, the health care scenario in urban India as well as globally, is undergoing dramatic transformation; evolving into a new emerging situation that emphasizes preventive health, customized care, body-mind medicine and the use of natural products (Bodeker et al. 2005).

Studies on traditional medicine in Orissa though started recently, have given very encouraging results and is gaining momentum with more and more botanists taking the subject seriously (Kamla-Raj, 2011, Ethno Med, 5(1): 51-55). Noteworthy contributions on the subject have been made by Jain (1971), Pal and Banerjee (1971, 1974), Saxena and Dutta (1975), Mudgal and Pal (1980), Saxena and Brahman (1994), etc. However, limited tribe-wise or ethnographic explorations have been done in the state. Only a few studies (Saxena et al. 1988; Pandey et al. 2000, 2002; Pandey and Rout 2003; Rout 2005) have been carried out on the tribals of the state who utilize a number of medicinal plants available in the forests for the treatment of various diseases. But the information on plants used for reproductive health and fertility control is meager in these publications. However, in a study, Dash and Dash (2003) have observed that although a large number of plants are associated with food, economy and religion, the use of plant species as traditional medicines are dominant in the entire tribal society. The state has one of the oldest and richest cultural traditions of using medicinal plants. The tribal people of the state still depend on the common traditional ethno-medicine for their day to day primary health care. These medicinal plants gain further importance in the region where modern health facilities are either not available or not easily accessible. Guite and Acharya (2006) have shown that the acceptance of a particular health care system among the tribal people mostly depends on its availability and accessibility. So far no work has been reported on traditional medicine on reproductive health of the Bhumija tribe of Baleswar. However, Kabikanya and Dash (2003) have reported on the Bhumija Perception of Health and Health Care System in a unique socio-cultural system of Jajpur District of Orissa. Therefore, there is an urgent need for documentation of their traditional knowledge. The present work concentrates on the traditional medicines used by the Bhumija women of Baleswar for reproductive health and fertility control.

MATERIALS & METHODS

The authors have conducted an intensive exploration to collect data in the tribal (Bhumija) dominated villages of Baleswar District. Five villages of Remuna Block namely, Phulkiary, Jodabari, Ghatgharsahi, Jambani and Gudgudia and three villages of Nilagiri Block namely, Chaturkhunta, Chandipur and Makhapada of the district were covered. Rapport was established before collection of data. The data were collected from the village medicine-men whose treatments are believed to be very effective and also from the local knowledgeable elderly persons and from the old women who conduct the delivery. The medicine men and the elderly persons of the community were

interviewed for recording the local names, plant parts used, purpose of usage and the method of administration. In the collection of data, no structured questionnaire was used. Medicinal properties of plants were learned through in-depth, informal interviews. A number of group discussions were also conducted during the period of investigations. Data collection was carried out during 2007-08. In the following enumeration, the botanical name of the plants have been arranged alphabetically followed by family within parenthesis, local names in Oriya, locality of collection, plant parts used for medicinal purposes and their mode of use.

DESCRIPTION

Earlier, in the tribal societies, the use of traditional medicines was predominant. But with the advancement of modern medical facilities, the traditional medicine is losing its efficacy. Available evidence (Table 1) indicates that traditional medicines are involved in providing reproductive health care and fertility control. The use of traditional medicine for reproductive health care is due to subsisting cultural beliefs, as they consider pregnancy and pregnancy related problems as a natural occurrence. The tribal people are not interested in sharing their knowledge with outsiders. After developing intimacy with some traditional healers and experienced women, some information on traditional medicine could be collected and presented in this paper. In the present study, eighteen plant species of fifteen different families are being used for different reproductive health problems and for fertility control. The version of the villagers revealed that people have been shifting from traditional medicine system to modern medicine system. This is due to the effectiveness or quick action and easy availability of modern medicines. The present paper has highlighted the plants and plant products used as traditional medicines for reproductive health and fertility control. The Bhumija community is eventually Odia speaking. The important medicinal plants used by the Bhumija Tribe for reproductive health and fertility regulation are described below.

1. Scientific name and (Family): Abrus precatorius (FABACEAE)

Local name/Locality: "Kaincha"/ Chaturkhunta, **Plant parts /Purpose:** Seeds for contraception

Mode of use: Seeds soaked in un-boiled cow milk at night and taken in the morning

2. Scientific name and (Family): Annona reticulate (ANNONACEAE)

Local name/Locality: "Ramaphala"/Gudgudia, Jambani,

Plant parts/Purpose: Seeds for abortion

Mode of use: Seed powder mixed with black pepper (Piper nigrum) is taken by the pregnant woman up to 3-4 months.

3. Scientific name and (Family): Annona squamosa (ANNONACEAE)

Local name/Locality: "Ata"/ Jadabar, Makhapada **Plant parts/Purpose:** Root to induce abortion.

Mode of use: Dried root powder is taken orally in the morning for five days

4. **Scientific name and (Family)**: Asparagus racemosus (LILIACEAE)

Local name/Locality: "Satabari" - Chandipur ,Jadabari

Plant parts/Purpose: Tuber to initiate lactation

Mode of use: Fresh tuber paste is taken by lactating mothers

5. **Scientific name and (Family):** Bombax ceiba (BOMB ACACEAE)

Local name/Locality "Semuli"/Chaturkhunta,

Plant parts/Purpose: Root to promote conception

Mode of use: The root paste of young plants mixed with cow milk is taken early in the

morning for one week to regulate menstrual disorder

6. Scientific name and (Family): Borascus flabellifer (ARECACEAE)

Local name/Locality: "Tala" / Ghatgharsahi

Plant parts/Purpose: Inflorescence / for contraception

Mode of use: Mixture of burned male inflorescence and black pepper (Piper nigrum) is taken

by the woman with cow milk

7. **Scientific name and (Family)**: Crateva megna (CAPPARIDACEAE)

Local name/Locality: "Barun"/ Gudgudia

Plant parts/Purpose: Stem bark / for contraception

Mode of use: Stem bark juice mixed with black pepper (Piper nigrum) powder is taken by the

woman in the seventh day of menstruation

8. **Scientific name and (Family)**: Dillenia pentagyna (DILLENIACEAE)

Local name/Locality: "Rai"/ Chaturkhunta, **Plant parts/Purpose**: Stem bark / for easy delivery

Mode of use: Tree gum is used by the experienced lady (Dhai) for easy delivery.

9. Scientific name and (Family): Ficus hispida (MORACEAE)

Local name/Locality: "Dimiri"/ Chandipur, **Plant parts/Purpose:** Fruit/for milk secretion

Mode of use: Fruit is boiled and given to mother to prevent miscarriage and for more milk

secretion.

10. **Scientific name and (Family):** Hibiscus rosa-sinensis (MALVACEAE)

Local name/Locality: "Mandar"/ Phulkiary **Plant parts/Purpose:** Stem / for contraception

Mode of use: Mixture of flower paste, iron dust is taken by the women on the days of

menstruation for contraception

11. **Scientific name and (Family):** Millettia pinnata (FABA Chaturkhunta, CEAE)

Local name/Locality: "Karanja"/ Chaturkhunta,

Plant parts/Purpose: Stem /to control excessive bleeding

Mode of use: Extract of stem bark is taken for checking excessive bleeding after delivery

12. Scientific name and (Family): Nelumbo nucifera (NYMPHAECEAE)

Local name/Locality: "Padma"/ Chaturkhunta,

Plant parts/Purpose: Rhizome / To reduce white discharge

Mode of use: Decoction of rhizomes and Flowers is taken for fifteen fertility days

13. **Scientific name and (Family):** Oroxylum indicum (BIGNONIACEAE)

Local name/Locality: "Phanphani"/Chandipur, **Plant parts/Purpose:** Stem/To control bleeding

Mode of use: Decoction of stem bark with common salt is taken twice a day for one month to

control bleeding during menstruation

14. **Scientific name and (Family):** Phyla nodiflora (VERBENACEAE)

Local name/Locality: "Kicharanga"/ Makhapada

Plant parts/Purpose: Root/ for promoting sexual desire

Mode of use: Decoction of root with unboiled egg is taken by the women

15. Scientific name and (Family): Ricinus communis (EUPHORBIACEAE)

Local name/Locality: "Jada"/ Makhapada **Plant parts/Purpose:** fruit / for easy delivery

Mode of use: The oil is massaged gently on the belly for reducing delivery pain

16. Scientific name and (Family): Saraca asoca (CAESALPINIACEAE)

Local name/Locality: "Asoka" / Gudgudia **Plant parts/Purpose:** Buds / To increase fertility

Mode of use: Buds are taken orally with water for prescribed period

17. **Scientific name and (Family):** Tephrosia purpurea (FABACEAE)

Local name/Locality: "Bana Kolothia"/ Chandipur,

Plant parts/Purpose: Leaf/to avoid post natal complications

Mode of use: Decoction of leaf mixed with honey is taken by women twice a day for one month

to avoid post natal complications

18. **Scientific name and (Family)**: Zizyphus mauritiana (RHAMNACEAE)

Local name/Locality: "Barakoli"/ Jadabadi

Plant parts/Purpose: Stem bark / to get relief from abdominal pain.

Mode of use: Stem bark paste is taken twice a day after food during pregnancy

DISCUSSION

It is paradoxical to see the modern world of late focusing more on alternative medicine which has a predominantly herbal base. The modern medicine has brought a revolution throughout the world but the plant based medicines have its own unique position. With the influence of urbanization, the Bhumijas are gradually being attracted towards the advent of modern health care facilities and Government health measures. But still the prevalence of traditional medicines is observed in this tribal region. The present study is based on the data collected from several villages situated in the urban fringe. The local use of plants and plant products are particularly common in those areas, which have little or no access to modern health services. But, these people can easily avail modern medical facilities from the nearby town or District Headquarter hospital of Baleswar and it is found that the new generations have no interest in the indigenous methods of treating diseases. They are not even concerned about the importance of these herbal plants and its medicinal values.

Shankar (2007) has also highlighted that a section of the rural people in all social classes, including the poor are giving up traditional health practices and turning to western bio-medicine. For the rural poor, this replacement of tradition has serious economic consequences. Socio-economic surveys indicate that the single and largest cause of rural indebtedness is health expenditure. The observation also reveals that the Bhumijas use roots, stem, bark, flowers, rhizomes, leaves and seeds of the most common plants for the preparation of medicines to cure different reproductive health problems. Although the information given by traditional healers is not comparable to the modern medicine, their efficacy is claimed to be high by the Bhumijas. Prasad (2007) draws attention to the choice of traditional treatment among the poor which is

restricted and limited by a variety of factors such as affordability, accessibility and social distance. Despite of all factors, the tribal people are still using traditional medicines though the prevalence of these medicines is waning.

CONCLUSION

The study reveals that the Bhumijas have vast knowledge about ethno-medicinal use of plants growing in their vicinity. It has also been drawn that the Bhumija community has been changing at a certain pace along with their health seeking behaviour. The tribals inherit a rich traditional knowledge about the flora investigated and apply this knowledge for making crude herbal medicines to cure different diseases. But it is observed that the traditional knowledge which formed the basis for the origin of alternative medicine also paved way for the evolution of modern medicine. Now such indigenous knowledge is facing slow and natural decline. However, the study certainly points out that the traditional reproductive health care system still finds its meaning of survival in the tribal domain. In this study, it is also found that though the Bhumijas are in favor of taking the modern medical facilities, the older generation still has inclination towards traditional medicine. Presently, very few elders in the tribal community practice traditional medicine. If this trend continues, within a few years, there will not be a single elder member in the tribal community who would speak about the traditional medicine. The growing disinterest in the use of traditional medicine for reproductive health problems among the younger generation will lead to a disappearance of this traditional practice. Therefore, greater efforts are required to document the rich traditional knowledge of the local people so as to prepare a comprehensive account of it. Wild plants and other natural resources used as traditional medicine unfortunately are being eroded due to the loss and degradation of their natural habitats or over harvesting for commercial purposes. Urgent measures for conserving wild genetic resources, as well as for kick-starting largescale cultivation, are necessary (Shankar 2007). Therefore, there is an immediate need to execute a revitalization strategy for protecting the indigenous knowledge from complete desertion.

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Industrialization and Protest Movements in India: An Anthropological Perspective

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ABSTRACT

In the Indian context, the ongoing debate for technological development versus rights of the indigenous people with regard to industrial projects is a matter of concern. In recent times, the distribution of benefits and burdens of development projects have raised questions of equity, justice and equality before law in India. The already and potential project affected people (PAP) are no longer in a mood to suffer displacement along with its concomitant attributes which has given rise to growing protest movements marked by the creation of a national awareness of the problems. The pressure from civil society, the activist group, the non-governmental organizations have all combined together not only to educate the masses about the problems but also to built up a national consciousness. As a result of protest movements, construction of many projects has been delayed or withdrawn raising questions of economic viability. Thus, protest movements have forced the respective governments to reconsider the problems of displacement and take necessary measures to address these problems. The present paper highlights the success story of the systematic protests or resistance movements against the establishment of heavy industrial investments with special reference to Arcelor-Mittal steel project in Patana block of Kendujhar district in the state of Odisha, India. The paper also tries to unravel the attitude and role of the State Government and the Confederation of Indian Industry (CII) in this case.

Key words: Development Projects, Indigenous People, Protest Movements, displacement

Introduction

Every mega project essentially requires certain fundamental elements as raw materials and of these a large tracts of land is an important one. But in the present scenario, because of the continuous modernization activities and population explosion, getting large tracts of wasteland is very difficult. Planners are now focusing on small hilly hamlets and surrounding agricultural land and forest in the remote corners of the country (Verma, 2004). It is also noticed that in order to fulfill the demand for land, there has been alleged exploitation of the local people by industrial corporations in connivance with politicians and bureaucrats. As a result it has been observed that either there is large scale involuntary displacement of local people or resistance movements against the proposed project by them. Although Government of Odisha has signed more than 50 MOUs in the last ten years, the ASSOCHAM Committee Report dated June 2010, reports that Odisha has Rs. 498190 crores of investment under implementation and the rate of implementation is 44.3% which is below the national implementation rate. As such, Odisha is good at signing

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memorandums but inefficient implementation is a matter of serious concern. On the other hand, there has been growing protest movements against the mega projects which are proving to be a battlefield between natives, administration and the corporate sector.

Protest is seen as an important adjunct to democratic policy and as a significant factor in the transition from authoritarian to democratic regimes. The democratization of wave of the 1990s opened a new range of research about the form and role of protest movements which is becoming a key issue in the debate on development. Simply stated, protest indicates demonstration or expression of disapproval/dissent/discontent on some issue and has increasingly become a common mode of political expression in a democracy. An inseparable part of modernizing societies is growing socio-economic tension which has been an important source of a variety of protest movements. These movements emanate from the ever-widening gap between rising aspirations of the people, limited resource base and limited capacities of the society to fulfill them (Dhanagare, 1985). Wilson (1961) and Lipsky (1968) have provided two important models of protest and change. Wilson saw protest as a bargaining resource which enabled the politically powerless to mobilize resources and apply negative sanctions to decision makers. Without the conventional capabilities, necessary to gain access to the political system and bargain effectively, the powerless relied on unorthodox measures to create disorder and thereby apply pressure on their opponents. From the prospective of Lipsky, when protest resulted in change, it was not so much because the opposition was converted, but because the targets found policy-persistence too costly. However, many direct action conflicts have usually levied in convenience rather than substantial sanctions. Lipsky saw that the authorities were responsive to those who already had access and bargaining power within the political system. Hence, according to his model, protests attracted media attention and the publicity stimulated sympathetic but previously inactive liberal groups which had political resources to intervene on behalf of the politically powerless.

There are two perspectives which emphasize different aspects of the process by which protest movements emerge. Resource mobilization theory (Craig,1983) emphasizes the way in which social changes generate movements by altering different groups' capacities for collective action based on resources and organization. One variant of the resource mobilization theory (Mccarthy and Zald, 1997) assumes that grievances are either structurally given or manufactured by the mobilizing efforts of social movement entrepreneurs. Marxist approaches to the study of social movements have traditionally emphasized the way in which changes in the social organization of production generate protests based on antagonistic interests rooted in different relations to the means of production. Singh (1991) lists some of the distinctive features of protest movements to properly analyze and understand its dynamics. These features are:

- 1) It is directed against the political system or some specific class or segment of the society considered harmful to the interest of those who have activated the launching of such protests.
- 2) It involves collective action on the part of the people which is formally organized and is responsible in creating necessary interests of awakening among large number of people.
- 3) It is generally oriented towards bringing about change, either partial or total, in the existing values and norms of the society.
- 4) It is greatly influenced by the ideological moorings of the leaders and organizers of such movements which provide the vision or driving force which the protesters aspire to have.
- 5) It deploys both peaceful as well as violent methods to achieve the objectives.

A differentiation can be found in the objectives of the developed and developing countries towards the environment and natural resources. The objective of the western environmentalists is to uphold and promote the quality of life of all its citizens, whereas the objective of the environmentalists in the developing countries is subsistence of the masses rather than the promotion of quality of life of a few (Guha,1991). As such, in the west, resistance movements focus on consumption, productive use as well as conservation of natural resources whereas in India, these movements are based on use and alternative use of as well as control over natural resources, and such movements emerges only when the immediate livelihoods are directly affected (Guha,1991; Kothari, 1988).

The resistance to development projects is not new in India. By mid-nineteenth century, communities had mobilized to oppose colonial policies of resource extraction, as for example, the Epidemic Commission of 1854 and the Canal Commission of 1885 and 1888. There were also protests by the tribal groups against the Forest Act of 1876. After independence, the constitution of India under Article 19 (1) (a) guarantees the right to express dissent and (b) says that all citizens shall have the right to assemble peacefully and without arms. Thus, an important component of the Indian democracy is the right to protest and having the Government to listen to people's grievances. In the present context, the land acquisition process for setting up of mega industrial projects has an adverse impact since it is beyond the carrying capacity of the environment. Sharma (2003) writes that the growing demand for infrastructure is converting fertile agricultural lands into industrial and urban units. As such, in recent years the resistant movements question the very basis of mega projects implemented by the government in the name of public interest. Fernandes (1996) points out the lacuna of the Land Acquisition Act of 1894 wherein only patta holders of agricultural land and building are entitled for compensation. Thus, this act only recognizes individual property whereas many land oustees depend on Common Property Resources (CPRs) for their survival. The involuntary displacement of people create problems like landlessness, homelessness, joblessness, marginalization, morbidity, mortality, food-insecurity and loss of access to common property is also associated with the psychological stress emerging out of the fear of relocation (Cernea, 1991). The displaced people are deprived of their right to access a large number of resources and are not given an opportunity to demand an adequate price for this loss (Menezes, 1991).

This paper is an ethnographic study carried out in fifteen villages of Patana block of Kendujhar district where resistance movement was going on during field work period during December-March 2011. The following Table 1 shows the objective of the study as well as the method by which data was collected.

The Proposed Area and People

With a growing demand for steel all over the world, the steel giant Arcelor-Mittal signed a memorandum of understanding (MOU) on 21st December 2006 with the Government of Odisha to set up a 12 million tonnes steel plant as a green field project in 4 phases at Keonjhar district in Odisha, entailing an investment of \$12 billion (Rs 50,000 crores). According to the MOU, the Company had sought 8000 acres of land for setting up of the steel plant, captive power plant as well as the township in Keonjhar district. The Government of Odisha directed IDCO to take up land acquisition process in the fifteen villages under five Panchayats of Patana tahasil. This area is situated in the hinterland, about 30 kilometers from Kendujhar district and lies between NH 6 and the Baitarani River. All villages are revenue villages and bounded by agricultural fields and village forests. Most of the people depend on agriculture as their primary means of livelihood. The villagers practice mono cropping agricultural pattern and go for two crops a year as irrigation facilities are available. Paddy is produced in the low land and maize, sunflower, groundnuts, pulses etc are produced in the up-

land. Most houses have kitchen gardens where variety of vegetables is grown. Various secondary occupations of the people include forest collection, products from water bodies, animal husbandry and different artisan works. The following **Tables No. 2** to 6 highlights the demography, economy, land-holding pattern, annual income and infrastructure in the selected area.

Table No – 1: Objectives and Methodologies of the Study

| Objectives | Studying the village population demography and the important social organizations (material culture, social, economic, political, religious) to understand the people's culture (both qualitative and quantitative data) | Knowing the details of Mittal project according to local people, Listing the details of protest movements and studying various reasons of protest from the people's view (mainly qualitative data) | Knowing the Mittal company's view and the regarding the project and the people's protest as well as the state Government's role (both primary and secondary data) | Knowing about the project details, the various problems and prospects of Mittal project according to Government of Odisha (both primary and secondary data) |
|------------|--|--|---|---|
| | <u>→</u> | → ↓ | \downarrow | \downarrow |
| Methods | Household census, | Interview, | Interview, | Interview, |
| and | Observation, | Case study, | Secondary data | Secondary data |
| Techniques | interview | Observation, | from different | from different |
| used | | Focus Group | offices | offices |
| | | Discussion | | |

Table No - 2: Population Composition According to Reservation Category

| SI. No | Village Name | Gram Panchayat | | Tot | al Popula | ntion | | No. of House- holds | No. of BPL of House- holds |
|-----------|---------------------------|-------------------|------|-----|-----------|-------|------|---------------------------|-------------------------------------|
| | | | T | G | OBC | ST | SC | | |
| 1 | Jamunapashi | Jamunaposi | 1476 | 43 | 427 | 554 | 452 | 402 | 177 |
| 2 | Kodakhamana | Jamunaposi | 557 | 153 | 271 | 55 | 78 | 197 | 80 |
| 3 | Barudipashi | Jamunaposi | 467 | 0 | 7 | 374 | 86 | 124 | 63 |
| 4 | Padmakesharpur | Jamunaposi | 302 | 8 | 87 | 192 | 15 | 94 | 80 |
| 5 | Nuakhamana | Rajnagar | 803 | 4 | 203 | 596 | 0 | 195 | 136 |
| 6 | Kimirdapasi | Murusuan | 257 | 0 | 110 | 139 | 8 | 59 | 39 |
| 7 | Dharuapada | Murusuan | 163 | 27 | 73 | 63 | 0 | 33 | 23 |
| 8 | Raikala | Rajnagar | 531 | 56 | 160 | 312 | 3 | 112 | 69 |
| 9 | Nuagoun- balabhadrapur | Rajnagar | 523 | 0 | 120 | 310 | 93 | 106 | 52 |
| 10 | Chemana | Chemena | 1064 | 129 | 673 | 136 | 126 | 270 | 132 |
| 11 | Baliapasi | Chemena | 835 | 0 | 178 | 622 | 35 | 197 | 147 |
| 12 | Chilida | Chemena | 1085 | 4 | 619 | 297 | 165 | 244 | 137 |
| 13 | Bhringaraj | Chemena | 360 | 3 | 163 | 188 | 6 | 97 | 75 |
| 14 | Angikala | Chemena | 671 | 45 | 228 | 303 | 95 | 157 | 112 |
| 15 | Baradangua | Chemena | 396 | 73 | 159 | 128 | 36 | 92 | 69 |
| | Grand total | | 9490 | 545 | 3478 | 4269 | 1198 | 2379 | 1391 |

Different caste people are residing in the area and among them the dominant caste groups are Mohanta (OBC), Gond (ST) and Munda (ST).

Table No – 3: Occupational Pattern of the Studied Population

| SI. No | Village Name | Agricı | ılture | | ied vities | Pro | rest duct ection | Agri- | Labour | | n-Agri bour | | vice /Govt) | Busi | iness | Otl Profe | |
|-----------|---------------------------|--------|--------|-----|---------------|-----|------------------------|-------|--------|----|----------------|-----|----------------|------|-------|--------------|-----|
| | | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No | % |
| 1 | Jamunapashi | 359 | 65.6 | 53 | 9.96 | 11 | 2 | 69 | 12.6 | 1 | 0.18 | 17 | 3.11 | 20 | 3.66 | 17 | 3.1 |
| 2 | Kodakhamana | 181 | 59.3 | 38 | 12.5 | 4 | 1.3 | 53 | 17.4 | 7 | 2.3 | 2 | 0.66 | 4 | 1.31 | 16 | 5.3 |
| 3 | Barudipashi | 100 | 48.1 | 43 | 20.7 | 16 | 7.7 | 16 | 7.69 | 4 | 1.92 | 18 | 8.65 | 4 | 1.92 | 7 | 3.4 |
| 4 | Padmakesharpur | 65 | 46.8 | 10 | 7.19 | 2 | 1.4 | 32 | 23 | 7 | 5.04 | 6 | 4.32 | 14 | 10.1 | 3 | 2.2 |
| 5 | Nuakhamana | 253 | 65.2 | 65 | 16.8 | 8 | 2.1 | 39 | 10.1 | 1 | 0.26 | 8 | 2.06 | 2 | 0.52 | 12 | 3.9 |
| 6 | Kimirdapasi | 43 | 35.8 | 10 | 8.33 | 2 | 1.7 | 40 | 33.3 | 3 | 2.5 | 3 | 2.5 | 8 | 6.67 | 11 | 9.2 |
| 7 | Dharuapada | 38 | 74.5 | 3 | 5.88 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5.88 | 4 | 7.84 | 3 | 5.9 |
| 8 | Raikala | 97 | 41.6 | 54 | 23.2 | 1 | 0.4 | 36 | 15.5 | 2 | 0.86 | 18 | 7.73 | 10 | 4.29 | 15 | 6.4 |
| 9 | Nuagoun- Balabhadrapur | 93 | 54.4 | 32 | 18.7 | 2 | 1.2 | 22 | 12.9 | 2 | 1.16 | 6 | 3.5 | 3 | 1.75 | 11 | 6.4 |
| 10 | Chemana | 182 | 37.5 | 132 | 27.2 | 37 | 7.6 | 33 | 6.8 | 7 | 1.44 | 38 | 7.84 | 21 | 4.33 | 35 | 7.2 |
| 11 | Baliapasi | 165 | 44.2 | 121 | 32.4 | 9 | 2.4 | 17 | 4.56 | 20 | 5.36 | 25 | 6.7 | 6 | 1.61 | 10 | 2.7 |
| 12 | Chilida | 200 | 44.8 | 103 | 23.1 | 26 | 5.8 | 13 | 2.91 | 7 | 1.57 | 51 | 11.4 | 16 | 3.59 | 30 | 6.4 |
| 13 | Bhringaraj | 79 | 47 | 36 | 21.4 | 2 | 1.2 | 21 | 12.5 | 11 | 6.55 | 4 | 2.38 | 4 | 2.38 | 11 | 6.6 |
| 14 | Angikala | 111 | 41.1 | 78 | 28.9 | 20 | 7.4 | 25 | 9.26 | 8 | 2.96 | 11 | 4.07 | 7 | 2.59 | 10 | 3.7 |
| 15 | Baradangua | 72 | 45.6 | 22 | 13.9 | 8 | 5.1 | 13 | 8.23 | 16 | 10.1 | 11 | 6.96 | 7 | 4.43 | 9 | 5.7 |
| | Total | 2038 | 50.2 | 800 | 19.7 | 148 | 3.6 | 429 | 10.6 | 96 | 2.36 | 221 | 5.44 | 130 | 3.2 | 200 | 4.9 |

Table No - 4: Land Holding Pattern of the People

| SI. | Village | A | gricult | | | | TTO C | ing rate | | cultural I | | ttern | | 0 | nly | Total |
|-----|---------------------------|------------------|---------|-----------|----------------------|------------------|---------------------|----------|--------------------|----------------------|-------------|--|------|-------------------|------|-------|
| No | 5 | < 2.47 (acre) | | 2.4 <4 | 7 to 1.94 cre) | 4.9 ₄ | 4 to ove rre) | Irrig | nly gated nd | On Unirrig Lan | ly gated | Both Irrigated & Unirrigated Land | | Homestead Land | | |
| | | No | % | No | % | No | % | No | % | No | % | No | % | No | % | No |
| 1 | Jamunapashi | 354 | 88.1 | 26 | 6.5 | 1 | 0.2 | 85 | 21.1 | 260 | 64.7 | 36 | 9.0 | 21 | 5.2 | 402 |
| 2 | Kodakhamana | 154 | 78.2 | 33 | 16.8 | 0 | 0.0 | 24 | 12.2 | 154 | 78.2 | 9 | 4.6 | 10 | 5.1 | 197 |
| 3 | Barudipashi | 91 | 73.4 | 16 | 12.9 | 5 | 4.0 | 0 | 0.0 | 108 | 87.1 | 4 | 3.2 | 12 | 9.7 | 124 |
| 4 | Padmakesharpur | 86 | 91.5 | 4 | 4.3 | 0 | 0.0 | 7 | 7.4 | 80 | 85.1 | 3 | 3.2 | 4 | 4.3 | 94 |
| 5 | Nuakhamana | 148 | 75.9 | 20 | 10.3 | 5 | 2.6 | 7 | 3.6 | 136 | 69.7 | 30 | 15.4 | 22 | 11.3 | 195 |
| 6 | Kimirdapasi | 34 | 57.6 | 9 | 15.3 | 5 | 8.5 | 0 | 0.0 | 45 | 76.3 | 3 | 5.1 | 11 | 18.6 | 59 |
| 7 | Dharuapada | 24 | 72.7 | 6 | 18.2 | 0 | 0.0 | 2 | 6.1 | 5 | 15.2 | 23 | 69.7 | 3 | 9.1 | 33 |
| 8 | Raikala | 89 | 79.5 | 12 | 10.7 | 0 | 0.0 | 13 | 11.6 | 19 | 17.0 | 69 | 61.6 | 11 | 9.8 | 112 |
| 9 | Nuagoun- balabhadrapur | 87 | 82.1 | 10 | 9.4 | 1 | 0.9 | 4 | 3.8 | 81 | 76.4 | 13 | 12.3 | 8 | 7.5 | 106 |
| 10 | Chemana | 171 | 63.3 | 31 | 11.5 | 10 | 3.7 | 3 | 1.1 | 204 | 75.6 | 5 | 1.9 | 58 | 21.5 | 270 |
| 11 | Baliapasi | 151 | 76.6 | 16 | 8.1 | 0 | 0.0 | 31 | 15.7 | 115 | 58.4 | 39 | 19.8 | 12 | 6.1 | 197 |
| 12 | Chilida | 149 | 61.1 | 43 | 17.6 | 3 | 1.2 | 2 | 0.8 | 187 | 76.6 | 6 | 2.5 | 49 | 20.1 | 244 |
| 13 | Bhringaraj | 66 | 68.0 | 23 | 23.7 | 2 | 2.1 | 18 | 18.6 | 59 | 60.8 | 14 | 14.4 | 6 | 6.2 | 97 |
| 14 | Angikala | 106 | 67.5 | 26 | 16.6 | 2 | 1.3 | 3 | 1.9 | 128 | 81.5 | 3 | 1.9 | 23 | 14.6 | 157 |
| 15 | Baradangua | 70 | 76.1 | 9 | 9.8 | 1 | 1.1 | 14 | 15.2 | 53 | 57.6 | 13 | 14.1 | 12 | 13.0 | 92 |
| | Total | 1780 | 74.8 | 284 | 14 | 35 | 1.5 | 213 | 9.0 | 1634 | 68.7 | 270 | 11.3 | 262 | 11.0 | 2379 |

Single and multiple land holding are seen in most of the villages. In many cases, people own land in more than one village. The average land holding size among the families in the area is about 1.5 acres. So, most of the farmers are the marginal farmers.

Table No - 5: Population according to Income Group

| SI. No | Annual income (Rs.) | < 3000 | 00 | 3000 <500 | | 50000 <750 | | 7500 <10 | 00000 | >10 | 00000 | Total |
|-----------|---------------------------|--------|------|--------------|------|---------------|------|-------------|-------|-----|-------|-------|
| 110 | Village Name | N | % | N | % | N | % | N | % | N | % | N |
| 1 | Jamunapashi | 259 | 64.4 | 129 | 32.1 | 11 | 2.7 | 3 | 0.7 | 0 | 0 | 402 |
| 2 | Kodakhamana | 154 | 78.2 | 36 | 18.3 | 4 | 2.0 | 0 | 0 | 3 | 1.5 | 197 |
| 3 | Barudipashi | 75 | 60.5 | 27 | 21.8 | 13 | 10.5 | 6 | 4.8 | 3 | 2.4 | 124 |
| 4 | Padmakesharpur | 54 | 57.4 | 32 | 34.0 | 3 | 3.2 | 3 | 3.2 | 2 | 2.1 | 94 |
| 5 | Nuakhamana | 134 | 68.7 | 41 | 21.0 | 11 | 5.6 | 5 | 2.6 | 4 | 2.1 | 195 |
| 6 | Kimirdapasi | 18 | 30.5 | 24 | 40.7 | 15 | 25.4 | 1 | 1.7 | 1 | 1.7 | 59 |
| 7 | Dharuapada | 13 | 39.4 | 12 | 36.4 | 4 | 12.1 | 0 | 0 | 4 | 12.1 | 33 |
| 8 | Raikala | 66 | 58.9 | 36 | 32.1 | 7 | 6.3 | 3 | 2.7 | 0 | 0 | 112 |
| 9 | Nuagoun- balabhadrapur | 62 | 58.4 | 35 | 33.0 | 6 | 5.6 | 3 | 2.9 | 0 | 0 | 106 |
| 10 | Chemana | 170 | 63.0 | 43 | 15.9 | 26 | 9.6 | 22 | 8.1 | 9 | 3.3 | 270 |
| 11 | Baliapasi | 117 | 59.3 | 48 | 24.4 | 15 | 7.6 | 8 | 4.1 | 9 | 4.5 | 197 |
| 12 | Chilida | 146 | 59.8 | 49 | 20.1 | 26 | 10.7 | 12 | 4.9 | 11 | 4.5 | 244 |
| 13 | Bhringaraj | 65 | 67.0 | 31 | 32.0 | 1 | 1.0 | 0 | 0 | 0 | 0 | 97 |
| 14 | Angikala | 117 | 74.5 | 27 | 17.2 | 10 | 6.4 | 2 | 1.3 | 1 | 0.6 | 157 |
| 15 | Baradangua | 51 | 55.4 | 34 | 37.0 | 6 | 6.5 | 0 | 0 | 1 | 1.1 | 92 |
| | Total | 1501 | 63.1 | 604 | 25.4 | 158 | 6.6 | 68 | 2.5 | 48 | 2.2 | 2379 |

Related to income, farm based income is the primary source of income in the area. Average annual family income is about 30 to 40 thousands. As the income level is low, there are more than 50% families belongs to BPL category.

Table - 6: The Social Infrastructures in the Area, where People going to loose if land is acquired

| SI. No | Infrastructure | Total in Number | Belongs to |
|--------|-------------------------|-----------------|------------|
| 1 | Anganwadies | 15 | Government |
| 2 | ANM Center | 4 | Government |
| 3 | U.P. School | 16 | Government |
| 4 | M.E. School | 6 | Government |
| 5 | Temples | 15 | Communal |
| 6 | Burial ground | 17 | Communal |
| 7 | Club House | 6 | Communal |
| 8 | AyurvedicDdispensary | 1 | Private |
| 9 | Post Office | 2 | Government |
| 10 | Biogas plant | 15 | Private |
| 11 | Tube well | 99 | Government |
| 12 | Well | 411 | Private |
| 13 | Pond | 100 | Communal |
| 14 | Lift irrigation Project | 3 | Government |
| 15 | River | 2 | Communal |
| 16 | Livestock | 41844 | Private |
| 17 | Self Help Group | 30 | Communal |

The Signing of the MOU

Arcelor-Mittal is the world's leading and mining company. Guided by a philosophy to produce safe and sustainable steel; it is the leading supplier of quality steel products in all major markets including automobile, construction, household appliances and packaging. Arcelor-Mittal is present in more than 60 countries and has an industrial footprint in over 20 countries. When Mittal Steel, the world's largest steel maker, launched a hostile bid for acquiring Arcelor, the second largest, its boss, Guy Dolle had said, "The Luxembourg-based steel maker produced French perfume to Mittal's Eu de Cologne". Barbes notwithstanding, the bid went through and Dolle lost his job. Shortly after the \$33 billion takeover, Mittal came back to his roots. On 7th June, 2006 he landed at Bhubaneswar to meet Odisha's Chief Minister Naveen Patnaik. The agenda was setting up 12 million tonnes steel plant that could see an investment of Rs 50,000 crores. Patnaik assured Mittal of all help so that the project comes up on time. Accordingly, on 21st December, 2006, a memorandum of understanding was signed between the Government of Odisha and Arcelor-Mittal Company to set up a steel plant in Kendujhar district.

The proposed steel plant in Odisha was among the biggest foreign direct investments, India had attracted. The Government of Odisha had given administrative sanction for acquiring land in the Patana tahsil after the company had deposited Rs.4.03 crores with the Industrial Development Corporation (IDCO) as processing fees for phase -I land acquisition. The Government also appointed a nodal officer to oversee land acquisition process and other issues concerning the company's Greenfield project. Arcelor-Mittal is understood to have sought nearly 8000 acres of land for the purpose and the state is believed to have agreed to the request. The state owned Industrial Promotion and Investment Corporation of Odisha (IPICOL) had appointed M.N Dastur & Co as consultant to prepare a report on the land requirement of various industries after receiving complaints about companies demanding more land than they need for their projects. Arcelor-Mittal was one of the companies. According to M.N Dastur & Co, in the present day production process of steel, high technology, mostly latest Chinese technology was employed. For costeffective and qualitative management, the best option would be using less amount of land for keeping the daily inventory and waste disposal at the site area. This would prove time-friendly for both the state and the company. Basing on the report given by M.N Dastur & Co, IPICOL reassessed the land requirements of the projects and Arcelor-Mittal land requirement was assessed at 7,750 acres. The Government has cleared acquisition of 1,224 acres of land spread over 3 villages in the first phase of land acquisition. Out of these 1,224 acres, 431 acres consisted of Government land and 739 belonged to private owners. While the Government had fixed the price per acre of state land at Rs. 2 Lakhs, it was decided that the cost of private land would be fixed according to the rehabilitation and resettlement policy. According to Keonjhar district land acquisition office, out of total 7750 acres of land, 573 acres are leasable, 388 acres are Gocher, 573 acres are communal, 31 acres belong to other government departments, 1282 acres are forest lands and rest 4905 acres are private land. The following table No.7 is showing the total land details fixed by the Government of Odisha to be acquired.

According to IDCO, this area comes under the jurisdiction of R. D.C., Sambalpur Of the total area 7002.720 acre are for the steel plant and 750.589 acre, for township. Out of the total land, 1564.576 acre is government land, 4905.807 acre, private land and 1282.926 acre, forest land. However, so far no land is released to IDCO. Alienation proposal for government land is pending with district authorities and diversion proposal of forest land filed through IDCO is pending with MOEF for Stage - I Clarence. Acquisition proposal for private land are now pending at district level/government level in different stages. The project authority did not deposit the

estimated cost of land amounting to Rs 59.03 crores. As a result, all land acquisition proposals lapsed and the award of compensation could not be passed within two years of publishing the land acquisition declaration. The project authority did not even deposit the 10 per cent establishment charge of Rs 2 crore needed to move the land acquisition proposal in Childa and Baliaposhi villages. Arcelor-Mittal did not respond to repeated reminders to deposit the land cost and establishment charges.

Table - No.7 – Land Details

| | | | | Plant Site (| Land in A | cre) | | | |
|------|---------------|----------|--------|--------------|-----------|----------|----------|----------|----------|
| SI | Village | | Pı | roposed Gove | rnment l | _and | | Proposed | Total |
| N | | Leasable | Gochar | Communa | Other | Forest | Total | Private | Proposed |
| 0 | | | | 1 | Govt. | | Govt. | Area | Area |
| | | | | | Deptt | | Land | | |
| 1 | Childa | 7.128 | 16.960 | 40.895 | 14.53 | 32.472 | 111.990 | 269.208 | 381.198 |
| | | | | | 5 | | | | |
| 2 | Angikala | 48.008 | 48.591 | 41.264 | 0.000 | 62.981 | 200.844 | 287.019 | 487.863 |
| 3 | Chemna | 3.315 | 3.586 | 11.442 | 0.000 | 7.944 | 26.287 | 32.257 | 58.544 |
| 4 | Nuagoun | 18.947 | 12.430 | 47.291 | 0.000 | 81.883 | 160.551 | 317.428 | 277.979 |
| 5 | Raikala | 35.509 | 0.220 | 46.886 | 0.470 | 46.916 | 130.001 | 355.756 | 485.757 |
| 6 | Dharuapada | 4.566 | 0.000 | 7.272 | 0.000 | 5.400 | 17.238 | 35.427 | 52.665 |
| 7 | Kimirdaposi | 15.550 | 12.180 | 34.540 | 0.000 | 15.590 | 77.860 | 217.780 | 295.640 |
| 8 | Nuakhoman | 83.410 | 26.460 | 35.890 | 0.000 | 53.160 | 198.920 | 517.310 | 716.230 |
| 9 | Bhringaraj | 59.150 | 18.280 | 21.100 | 0.000 | 24.490 | 123.020 | 219.640 | 342.660 |
| 10 | Barudiposi | 61.760 | 29.160 | 42.050 | 0.000 | 10.380 | 143.350 | 418.160 | 561.510 |
| 11 | Padmakesarpur | 40.960 | 17.780 | 33.350 | 0.000 | 93.410 | 185.500 | 254.330 | 439.830 |
| 12 | Kodakhoman | 38.910 | 64.370 | 51.720 | 0.760 | 154.200 | 309.960 | 528.250 | 838.210 |
| 13 | Badadangua | 11.360 | 19.270 | 25.130 | 0.000 | 51.580 | 107.340 | 286.450 | 393.790 |
| 14 | jamunaposi | 73.991 | 96.950 | 52.240 | 15.86 | 229.170 | 468.211 | 680.173 | 1148.384 |
| | | | | | 0 | | | | |
| | Padmapur R. | - | - | - | - | 322.460 | 322.460 | - | 322.460 |
| | F. | | | | | | | | |
| Tota | al Area Plant | 502.56 | 366.23 | 491.070 | 31.62 | 1192.03 | 2583.532 | 4419.188 | 7002.720 |
| Site | | 4 | 7 | | 5 | 6 | | | |
| | I | - | | Township (| | | , | ı | |
| 1 | Childa | 20.682 | 9.842 | 8.541 | 0.000 | 20.350 | 59.415 | 75.594 | 135.009 |
| 2 | Baliaposi | 50.476 | 12.808 | 70.731 | 0.000 | 70.540 | 204.555 | 411.025 | 615.580 |
| | al area | 71.158 | 22.650 | 79.272 | 0.000 | 90.890 | 263.970 | 486.619 | 750.589 |
| | nship | | | | | | | | |
| Tota | al area | 573.722 | 388.88 | 570.342 | 31.62 | 1282.926 | 2847.502 | 4905.807 | 7753.309 |
| | | | 7 | | 5 | | | | |

(Source: Keonjhar District Land Acquisition Office)

The steel plant requires around 600 million tonnes of iron ore over a period of 30 years. While the company has got a coal block along with 5 other companies in Rampia and dip side Rampia, it is exploring the possibility of forging partnership with the mining company to source iron-ore till it is allotted captive mines. While the total reserves in Rampia and dip side Rampia is estimated at about 600 million tonnes, Arcelor-Mittal is expected to get about 85 million tonne. It gave a proposal requesting for an arrangement with the Odisha Mining Corporation that would enable them to go through captive iron-ore mine allocation process. The government set up a four-

member committee headed by the Chief Secretary to examine the feasibility of the proposal and chalk out the draft terms and conditions. Supply of raw material agreement with OMC would ensure a steady flow of iron-ore and offset price fluctuations. The company has asked M.N Dastur & Co to prepare the detailed project report (DPR) of the Kendujhar plant which was finalized by mid-2008. The scope of the DPR, among other things includes captive mining facilities, captive power supply, water supply and other infrastructural facilities like effluent disposal, environment and township for the company's employees etc.

In order to pressurize the state government, the company's chief executive officer Sasnak Mishra, told media persons that they would submit the DPR if the government recommends their names for prospective license for mines The company was also in the process of readying its rehabilitation and resettlement package (R & R) based on Odisha's Resettlement and Rehabilitation Policy 2006. The company will consider the issue for shares and land-for-land as part of its compensation to land losers in its R & R policy. It has earmarked about 1200 crores over a period of 5 years on its R& R package. This package also envisages dwelling units for each of the displaced families with common facilities like water supply, educational institution and primary health centers. It will also setup Industrial Training Institute to produce skilled workers. The project is also expected to provide jobs to 5,500 people directly and another 15,000 indirectly. The state government policy mentions convertible preference share as a compensation option for the displaced family subject to the provisions of the relevant laws in force. These convertible preference shares or secured bonds can be issued upto a maximum of 50% out of one time cash assistance. Other issues to be considered by the company are provision of alternative land for the displaced. It is also planning of making its own arrangement for its water requirements instead of taking the farmer's share of water. For this, a suitable option could be harvesting rain water and using technology that consumes the least quantity of water to reduce pressure on the natural resource.

Mittal Protirodha Mancha and Protest Movement

A day after the signing of the MOU, between Odisha Government and Mittal company, "The Mittal Protirodha Mancha" emerged as a resistance group whose main aim was to protest against Mittal project in a democratic way. Accordingly, from each village 5 active members were selected and listed as volunteers, while all the remaining members were in the general body of the Mancha. The president, secretary, vice president, assistant secretary and cashier were selected from the active volunteers. An advisor, Mr. Raghunath Das was selected from outside, who was a social activist as well as a state secretary of AlKKMS (All India Krusaka Kheta MajdurSangha). Mr. MuralidharSardar, Mr. Laxmidhar Mohanta were selected as President and Secretary of the Mancha respectively. In the first meeting it was resolved that the Mancha would meet atleast once a month or more if needed and to collect Rs 10 as monthly membership fee from all the members of the general body. The following table gives the protest movements in chronological order.

The basic purpose of these protest movements was to sensitize officials and the general public and cancellation of the MOU. Since agriculture was the main occupation of this area, the people didn't want to give up their fertile land in lieu of compensation.

The Mancha also refused to participate in the mandatory 15 numbers of Gram Sabha. Hence the company officials could conduct only 3 such Gram Sabhas. The Mancha was successful in delaying the land acquisition process and hence the company was not able to renew its MOU in 2011. The Mancha members also participated in the local *panchayat* election in 2012 as independent candidates and were successful in getting elected in 3 Panchayats. The Mancha also sought the support of influential political leaders and social activists to strengthen their cause and

accelerate their movement further. The degree of people's participation in Mancha in the area differs according to their interest towards the project and also it differs with regards to different castes. This distribution represents the range of support to the project among the villagers. The following table no.9 is showing the important reasons for the resistance movement.

Table No - 8: The Protest Movements in Chronological Order

| SI. | Date | Place | Highlight Point |
|-----|------------|----------------------------|--|
| No | | | |
| 1 | 22.12.2006 | Patna Tahsil | Refuse the project proposal in the area |
| 2 | 12.09.2007 | Lower PMG, Bhubaneswar | Demonstration against the project |
| 3 | 28.12.2007 | Collectorate, Keonjhar | Cancelation of MOU signed with Mittal company |
| 4 | 26.05.2008 | - do - | Refusal of discussion with representatives |
| 5 | 15.09.2009 | Kodokhoman village | Verification the area with District Collector |
| 6 | 09.06.2010 | Patna Block Office | Cancelation of memorandum |
| 7 | 10.07.2010 | Turmunga Police Station | Against the false cases against Mancha members |
| 8 | 23.09.2010 | Childa village | Block the road and non-cooperation to |
| | | | government officers |
| 9 | 24.11.2010 | Vrungarajposi village | Block the Mittal health van and detain the |
| | | | company staffs |
| 10 | 19.02.2011 | Collectorate, Keonjhar | Memorandum to Collector for keeping all the |
| | | | promises made by administration |
| 11 | 19.09.2011 | Keonjhar District | Cancelation of MOU |
| | | Headquaters | |
| 12 | 20.01.2012 | In front of State Assembly | Protest against the Chief Minister's view |
| | | | regarding the renewal of MOU |
| 13 | 15.03.2012 | In front of Parliament | Cancelation of MOUs |

Table No – 9: The Various Reasons Behind Resistance

| | Reasons of protest moment | | | | | | | | | | |
|--------------------|---------------------------|-----------------------|-------------------|-------------------|--|--|--|--|--|--|--|
| Social | Cultural | Environmental | Economic | Other | | | | | | | |
| Village and | The cultural | Healthy | Agriculture as an | Political | | | | | | | |
| neighbourhood | rituals in the | environment of | industry | interferences | | | | | | | |
| relationships | village | village | | | | | | | | | |
| Friendship and | Various | Baitarani river as | Fertile and | R & R policy | | | | | | | |
| other societal | religious | mother of local | irrigable land | | | | | | | | |
| relations | practices | people | | | | | | | | | |
| Family as a | Agricultural | The village forest, | Natural | Awareness of | | | | | | | |
| production unit | land as | animals, birds, water | surrounding and | people regarding | | | | | | | |
| | parental gift | bodies and their | supplement | mining, royalty, | | | | | | | |
| | | linkage | income | etc. | | | | | | | |
| Village as a | Future | The emerging new | The livestock and | Agricultural land | | | | | | | |
| permanent social | generations | diseases | family income | and residential | | | | | | | |
| unit: its name and | | | | land | | | | | | | |
| histories | | | | | | | | | | | |

Conclusion

On July 17th, 2013, Arcelor-Mittal walked out of its 12 million tons a year steel plant in Odisha. According to the Press release put up by the company, "Arcelor-Mittal has not been able to acquire the requisite land for the steel plant, nor has it been able to ensure captive iron-ore security, which is a necessary requirement for the project. Therefore, taking into account the current economic climate, Arcelor-Mittal has concluded it will no longer be pursuing its plans for a steel plant in Kendujhar at this stage." This fact corroborates with Confederation of Indian Industry (CII) that from January 2012 to July 2013, India has lost at least Rs 1 lakh crores in potential investment. Foreign Direct Investment (FDI) to India fell 21% to \$36.9 billion in fiscal 2012-2013 compared to \$46.6 billion in 2011-2012. In contrast China attracted FDI flows of \$111.6 billion in 2012.

Jamshyd Godrej, Former President of CII says that" the role of the government should be to create more competition and transparency, and then things will move. For steel plant, unless both land and tie-up for all raw materials needed are not ensured, the projects cannot begin. In such cases, the state has to provide the facilities and linkages in a time bound manner which did not happen in the case of Arcelor-Mittal. Besides, steel projects demand large tracts of land and in countries where acquiring land is becoming increasingly difficult and there is opposition from political parties, doing mega projects often means an indefinite wait. According to the CII, India is the second fastest growing producer and consumer of steel and along with China has decisively swung the balance of power in the steel industry towards the emerging world. To retain this growth momentum, India as well as Odisha has to overcome several infrastructural and operational hurdles such as the flowing factors:

- 1) Low per capital consumption with significant upside.
- 2) Increasing global competitiveness of Indian steel makers.
- 3) Increasing the focus on innovation.
- 4) Overcoming market imperfections and resource challenges.
- 5) Overcoming infrastructural challenges.
- 6) Ensuring resource mobility.
- 7) Developing global competitiveness.
- 8) Attaining local efficiencies.

These are the highlights of CII, Steel Summit 2012.

As regards the people protest movements, against mega projects, the main factor to be considered, both by the companies as well as the governments, is making them the stakeholders of the industrial process as well as helping them to retain their traditional culture as far as practicable. Another important realization by all the stake holders is maintenance of the environment which would help in satisfying people's demand in the long run. An important announcement in the press is that Arcelor-Mittal will make a bid to renew the MOU by end of October.

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Mining in Odisha and Tribal Displacement

Nishakar Panda 1

ABSTRACT

Minerals have a paramount significance and growing role to play in economic development in general. A country rich in mineral resources has got an enviable status. If it can effectively harness export-oriented mineral resources, it can dictate to the international market and earn huge amount of foreign exchange. Odisha is positively endowed with vast resources of varieties of minerals and occupies a prominent position in the mineral map of the country. There is a wide variation of mineral resources in different districts of the State. The vast mineral reserves of the State have also attracted the dominant multinational companies/cooperations to establish plants, industries in the State. A number of MOUs have been signed by the State Government with the reputed companies to establish mineral based industries. According to one estimate, 4,10,137.24 Acres of land had been acquired for mining projects which constitutes 17.36 percent of total land acquired for development projects. Out of number of total persons affected and displaced due to mining projects, percentage for Scheduled Tribe population is almost 50 percent in both the cases whereas percentage for general population is only 35 percent. Only 60 percent of the displaced persons in mining sector were rehabilitated. The Scheduled Tribes are mostly affected and the worst sufferers in mining projects of the State. Therefore, besides rehabilitating/ relocating the displaced Scheduled Tribes in colonies or other suitable locations, their food security should be guaranteed with provisions for agricultural land and water supply. Moreover, adequate and sufficient rehabilitation provisions should have to be guaranteed for their rehabilitation and relocation.

Key words: Mining, Economic Development, Land Acquisition, Tribals, Displacement & Rehabilitation.

Introduction

This chapter discusses the role of mining in economic development, status of mining sector in Odisha and its contribution to GSDP of the State. There are flashes of the density of tribal population in mining areas. The extent of land acquired for mining in the State, displacement and rehabilitation of tribals due to mining projects in the State are highlighted. There is a concluding remark of the author.

Mining, etymologically, is the extraction of valuable minerals or other geological materials from the earth, usually from an ore body, vein or (coal) seam. The term also includes the removal of soil. Materials recovered by mining include base metals, precious metals, iron, uranium, coal, diamonds, limestone, oil shale, rock salt and potash.

Role and Contribution of Mining in Economic Development

According to ICMM; Minerals, metals and the vast array of products that play a critical and evolving role in society, a role that will continue far into the future. Mining and metals activities, if well-managed, can provide lasting opportunities for economic growth and development¹. Minerals

¹ D.Litt. Scholar, North Odisha University, Baripada

have a paramount significance and growing role to play in economic development in general. Like any other commodity in the growth of economy, minerals have occupied a distinctive place amongst all the resources. They have to be produced like other economic commodities before they can be utilized for satisfying human needs. Minerals are indispensable not only for the well-being of man, but also for his survival. They are essential in the production of goods and services of various kinds. Minerals and mineral industries have an important micro link with the economy.²

A country rich in mineral resources has got an enviable status. If it can effectively harness its export-oriented mineral resources, it can dictate to the international market and earn huge amount of foreign exchange. Minerals are sometimes consumed by the producers by themselves in their own industries. Most of the minerals of mines however are transported to various mineral-based industries of the state and the country. Minerals are the base of all industries. Even some agricultural-based products like paper and textile, require minerals or mineral-based chemicals at various stages of production. The machines required for their production are made essentially out of iron ore and other minerals. Thus, Minerals and mineral deposits are the foundation of industrial development in any country.³

However, mining is a key contributor to economic growth and improved material quality of life. Mining's long time horizon, its need for skilled and unskilled labour, its links to regional infrastructure and service development as well as the importance of the products that it produces can make a unique and powerful contribution to sustainable development. Ample evidence exists in the country that adopts modern mining legislation and after an enabling environment car attracts private sector investment in mining exploration and production. This, in turn contributes to increased tax revenues, export earnings, employment opportunities, infrastructure development especially in rural areas, and transfer of technologies to the host countries. Besides its contribution to the economy, mining helps in poverty reduction in low and middle income countries/States. Mining in recent years has been the single most dynamic component of many poorer countries' total productive activity. Thus it has become a potential source of both direct and indirect incomes and a potential catalytic force for faster overall economic growth. The mining and metals industry can and should be recognized as an important potential contributor to the critical policy objectives of both job creation and poverty reduction. The formal mining industry not only creates mining jobs but also generates employment indirectly by stimulating demand for goods and services.

In the State of Odisha, mining contributes significantly to the State's economy in terms of its real GSDP. The mining sector in recent years has been contributing about 7.5% of Odisha's Real GSDP at 2004-05 prices. The contribution of mining sector in Odisha's real GSDP for the period from 2004-05 to 2012-13 is given in **fig.1**.

Mineral Sector in Odisha

Odisha is positively endowed with vast resources of varieties of minerals and occupies a prominent position in the mineral map of the country. Being a mineral rich state in the country, abundant reserves of high grade Iron Ore, Bauxite, Chromite, Managanese Ore along with other minerals such as Coal, Limestone, Dolomite, Tin, Nickel, Vanadium, Lead, Graphite, Gold, Gemstones, Diamond and Decorative Stones and others.⁴

Some minerals like Iron Ore, Limestone, manganese, graphite, dolomite, chromite and cola were known right from the beginning of 1st five year plan though their exploration and extraction in a moderate scale. Odisha has around 17 percent of the total mineral reserves of the

country. The State has 95.26 percent of chromite and 92.46 percent of Bauxite reserves of India⁵. Odisha has also got the country's 40.40 percent of manganese ore, 32.54 percent of Iron Ore, 24.90 percent of Fire Clay, 24.48 percent of Coal, 0.99 percent of Limestone, 0.26 percent of Asbestos, 21.90 percent of Pyrophylite, 4.83 percent of Quartlite and 0.02 percent of Tin. The details are at **table-1** below.

Figure- 1
Share of Mining & Quarrying in Odisha's Real GSDP Sector, 2004-05 to 2012-13

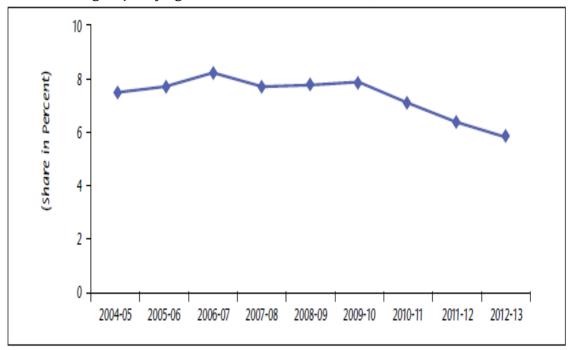


Table No. 1 Major Mineral Resources of the State vis-à-vis All India

| SI. No. | Minerals / Ores | All India Resources (MTS) | Percentage of the State |
|---------|-----------------|---------------------------|-------------------------|
| 1 | Bauxite | 3289.82 | 54.97 |
| 2 | Chromite | 213.06 | 95.26 |
| 3 | Coal | 253301.66 | 24.48 |
| 4 | Iron Ore | 14630.39 | 32.54 |
| 5 | Lime Stone | 175344.9 | 0.99 |
| 6 | Manganese | 378.57 | 40.40 |
| 7 | Nickel Ore | 188.71 | 92.46 |

Source: (i) Directorate of Geology

(ii) Activities Report of Steel & Mines Department, Government of Odisha 2012-13

(iii) Economic Survey (Odisha) - 2012-13

Within the State, Coal constitutes the lion's share (84.94%) of all mineral deposits followed by Iron Ore and Asbestos as detailed in Table No. 2.

Table No. 2 All Mineral Resources in Odisha

(As on 01.04.2010)

| | I | 1 | , , , |
|-----|----------------------------|---------------------|---------------------------|
| SI. | Mineral Ores | Total Reserve (MTS) | Percentage of Total State |
| No. | | (Million Tons MTS) | Reserves of all Mineral |
| 1 | Asbestos | 0.0567 | 7.26343E-05 |
| 2 | Bauxite | 1810.458 | 2.319249087 |
| 3 | Chinaclay | 280.926 | 0.359874335 |
| 4 | Chromite | 190.021 | 0.2434224 |
| 5 | Coal | 66307.25 | 84.94150597 |
| 6 | Dolomite | 673.045 | 0.862190121 |
| 7 | Fireclay | 175.462 | 0.224771899 |
| 8 | Graphite | 8.67465 | 0.011112478 |
| 9 | Iron Ore | 5930.233 | 7.596800075 |
| 10 | Limestone | 1782.987 | 2.284057941 |
| 11 | Lead &Zinc Ore (Basemetal) | 4.98 | 0.006379524 |
| 12 | Manganese Ore | 190.047 | 0.243455706 |
| 13 | Heavy Minerals | 226.00 | 0.28951254 |
| 14 | Mica | 0.10528 | 0.000134867 |
| 15 | Mineral Sand | 222.082 | 0.284493468 |
| 16 | Nickel Ore | 175.00 | 0.224180064 |
| 17 | Prophylite | 12.292 | 0.015746408 |
| 18 | Quarter and Quartzite | 70.114 | 0.089818063 |
| 19 | Tin | 0.01549 | 1.98431E-05 |
| 20 | Vanadium Ore | 2.500 | 0.003202572 |
| | Total | 78062.24912 | 100 |
| | | | |

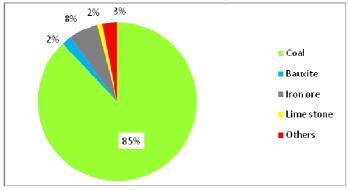
Source: (1) Directorate of Geology

(2) Activities of Steel & Mines Department: 2012-13, Government of Odisha

(3) Economic Survey, Odisha – 2012-13

Figure 2- depicts the percentage of major mineral reserves (Coal, Bauxite, limestone, Iron ore and others) in Odisha.

Figure 2
Mineral Reserve in Odisha, 2011-12



Geographical Spread of Mining in the State

There is a wide variation of mineral resources in different districts of the State. Almost one-thirds of the minerals ore confined to Keonjhar District alone. It is the most mine rich district of the State. Keonjhar together with Sundargarh constitutes more than 50% of the State's Mineral Resources⁶. Abundant deposit of Bauxite is found in Koraput District, which has the distinction of being called as the Bauxite capital of India. All these three districts are tribal dominated districts. Out of 30 districts, 22 districts of Odisha posses minerals. However, 11 districts possess major quantity of minerals in the State. It may be observed that about 66 percent of coal has been extracted from Angul district and the rest from Jharsuguda, Sundergarh and Sambalpur districts. Iron ore extraction is mostly confined to Keonjhar district which accounts for more than 68 percent of total extraction, followed by Sundergarh (27 percent). Koraput District has highest quantity of Bauxite reserve in the State. It produces more than 98 percent of the State's total Bauxite production. Coal is mostly mined in Angul and Jharsuguda Districts.

Demographic Profile of Mineral Rich Districts

People living in the vicinity of mines are dependent on wage based employment. Most of them are Scheduled Tribes (STs) and unskilled workers. Most of the skilled workers are engaged in operation of machineries in these mines. Majority of the skilled workers are truck drivers who are engaged for transportation of ore to different destinations. People living in those areas have still mix of activities based on different seasons of the year. Most of the women are engaged in NTFP collections. Total geographical area, mining area, percentage to total area of the State and percentage of mining area in mining Districts is depicted in **Table No.3**.

It has seen that Keonjhar district has the highest percentage of mining area followed by Sundergarh and Angul. As per the census 2011, population density of these districts is very less in comparison to the state average. Besides the less population density, their habitation is also scattered. As a result, infrastructure development and provision of services to these people becomes a tedious task for Government agencies. Mayurbhanj district has the highest ST population as well the highest female ST population among all the mining districts whiles least ST population and ST female population is in the Boudh district. **Table No. 4** shows the total population, tribal population and their density.

Density of population is the number of people living in per square Km. of the geographical area. Among the mining districts shown in the **table-4** below, Malkangiri District has the highest percentage of tribal population followed by Raygada and Kandhamal districts. Tribal Population Density is more than the General Population Density in all these Districts. In case of Malkangiri, General Density is only 106 whereas Tribal Density is 3,06,177. Similarly, in case of Kandhamal district, of Tribal Population Density is 1, 22,435 but the General Population Density is only 91. Tribal population Density among the mining districts is highest in Malkangiri District followed by Kandhamal and Sonepur districts.

On analysis of the **education profile** of these districts it is observed that Jajpur district has the highest percentage of literacy followed by Jharsuguda district. Jharsuguda district has also highest percentage of literacy rate among ST communities and the least is in Rayagada district. Keonjhar district has highest percentage of literacy among SC communities and the least is in Rayagada district. On analysis of the population of these mining districts, it is observed that Sundagarh district has the highest number of 10th pass youths who have registered their names in employment exchanges. It has also been noticed from the employment exchanges that Keonjhar district has the

highest number of intermediate passed youths, Jajpur district has the highest number of Graduation passed youths and Sundargarh district has the highest number of Diploma holders.

Human Development Index for the state was prepared in the year of 2004. Among all the 22 districts of Odisha, it is found that in the index, Jharsuguda district has a better rank in comparison to other mining districts while the district having the worst index is Koraput. In the category of Gender Development Index, Jharsuguda district has ranked better in comparison to other mining districts while the district having the worst index is Jajpur. In the category of Infrastructure Development Index, Jharsuguda district has a better rank in comparison to other mining districts while the district having the worst index is Keonjhar.

The tribal density (tribal population / mining area) is shown in **figure 3**. The distribution of the tribals in the mining areas varies widely ranging from 3.06 lakh in Malkangiri district to as low as 246 in Angul (assumption is taken here that all tribal people are remaining and depending on mining areas). The district with highest density of population are Malkangiri (3.06 lakh), Kandhamal (1.22 lakh), Nayagarh (0.75 lakh), Boudh (0.29 lakh) respectively. The district having lower density of tribal population in Mining Areas are Angul (246), Keonjhar (315), Sundergarh (547), Ganjam (564) etc. in comparision to the highest population depicts in Mining Areas. The figure shows the spatial distribution of density of population (**figure 3**).

Table No. 3
Mining Area of different Districts of Odisha

| SI. No. | Mining District | Total Geographical Area (Sq kms) | Percentage to Total aea of the State | Mining Area(Sq km) | Percentage of Mining Area |
|------------|-----------------|--|---|-----------------------|------------------------------|
| 1 | Angul | 6375 | 4.09 | 731 | 11.47 |
| 2 | Bargarh | 5837 | 3.75 | 79 | 1.35 |
| 3 | Bolangir | 6575 | 4.22 | 107 | 1.62 |
| 4 | Boudh | 3098 | 1.99 | 2 | 0.06 |
| 5 | Cuttack | 3932 | 2.53 | 66 | 1.67 |
| 6 | Dhenkanal | 4452 | 2.86 | 45 | 1.00 |
| 7 | Ganjam | 8206 | 5.27 | 211 | 2.57 |
| 8 | Jajpur | 2899 | 1.86 | 137 | 4.73 |
| 9 | Jharsuguda | 2114 | 1.36 | 181 | 8.56 |
| 10 | Kalahandi | 7920 | 5.09 | 67 | 0.84 |
| 11 | Kandhamal | 8021 | 5.15 | 3 | 0.04 |
| 12 | keonjhar | 8303 | 5.33 | 2601 | 31.33 |
| 13 | Khurda | 2813 | 1.81 | 4 | 0.13 |
| 14 | Koraput | 8807 | 5.66 | 611 | 6.94 |
| 15 | Malkangiri | 5791 | 3.72 | 1 | 0.02 |
| 16 | Mayurbhanj | 10418 | 6.69 | 388 | 3.72 |
| 17 | Nayagarh | 3890 | 2.5 | 1 | 0.02 |
| 18 | Nuapada | 3852 | 2.47 | 22 | 0.58 |
| 19 | Rayagada | 7073 | 4.54 | 208 | 2.94 |
| 20 | Sambalpur | 6624 | 4.25 | 21 | 0.31 |
| 21 | Sonepur | 2337 | 1.5 | 3 | 0.13 |
| 22 | Sundergarh | 9712 | 6.24 | 1940 | 19.98 |

Source: - (i) Statistical Abstract of Odisha, Govt. of Odisha, 2012-13

(ii)Activities of Steel and Mines Department, Government of Odisha: 2012-13

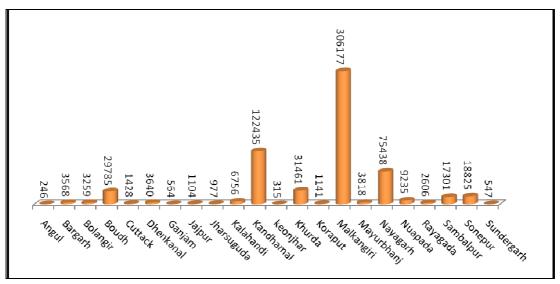
Table No. 4
Tribal Population and Density of Tribals in Mining Districts

| SI. | Mining | Total | Tribal | Percentage | Density of Tribals | General |
|-----|------------|------------|------------|------------|--------------------|---------|
| No. | District | Population | Population | | in Mining Area | Density |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 1 | Angul | 1273821 | 179603 | 14.1 | 246 | 200 |
| 2 | Bargarh | 1481255 | 281135 | 19.0 | 3568 | 254 |
| 3 | Bolangir | 1648997 | 347164 | 21.1 | 3259 | 251 |
| 4 | Boudh | 441162 | 55364 | 12.5 | 29785 | 142 |
| 5 | Cuttack | 2624470 | 93745 | 3.6 | 1428 | 667 |
| 6 | Dhenkanal | 1192811 | 162056 | 13.6 | 3640 | 268 |
| 7 | Ganjam | 3529031 | 118928 | 3.4 | 564 | 430 |
| 8 | Jajpur | 1827192 | 151432 | 8.3 | 1104 | 630 |
| 9 | Jharsuguda | 579505 | 176758 | 30.5 | 977 | 274 |
| 10 | Kalahandi | 1576869 | 449456 | 28.5 | 6756 | 199 |
| 11 | Kandhamal | 733110 | 392820 | 53.6 | 122435 | 91 |
| 12 | Keonjhar | 1801733 | 818878 | 45.4 | 315 | 217 |
| 13 | Khurda | 2251673 | 115051 | 5.1 | 31461 | 800 |
| 14 | Koraput | 1379647 | 697583 | 50.6 | 1141 | 157 |
| 15 | Malkangiri | 613192 | 354614 | 57.8 | 306177 | 106 |
| 16 | Mayurbhanj | 2519738 | 1479576 | 58.7 | 3818 | 242 |
| 17 | Nayagarh | 962789 | 58691 | 6.1 | 75438 | 248 |
| 18 | Nuapada | 610382 | 206327 | 33.8 | 9235 | 158 |
| 19 | Rayagada | 967911 | 541905 | 56.0 | 2606 | 137 |
| 20 | Sambalpur | 610183 | 57192 | 9.4 | 2785 | 92 |
| 21 | Sonepur | 1041099 | 355261 | 34.1 | 116935 | 445 |
| 22 | Sundergarh | 2093437 | 1062349 | 50.7 | 547 | 216 |

Source: - (i) Statistical Abstract of Odisha, Govt. of Odisha, 2012-13

(ii)Activities of Steel and Mines Department, Government of Odisha: 2012-13

Figure –3
Tribal Density in Mining Areas 2011



A Regression model on Mining Districtwise Tribal Population (in lakh) vrs mining area (in sq.km.) shows that there is positive co-relationship between tribal population and mining area of the mining districts, where the regression equation is:

 $Y = 0.0031x + 2.6595 \& R^2 = 0.3236$

It is observed that the increase in the mining area increases the tribal population of the districts as depicted in **figure 4**.

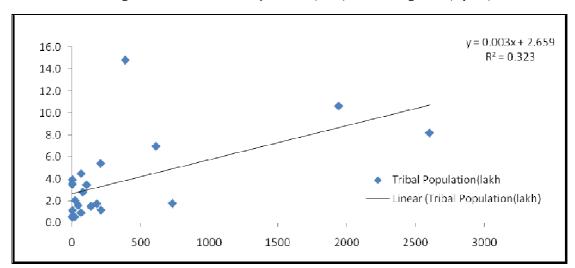


Figure - 4
Mining Districtwise Tribal Population (lakh) vrs. Mining Area (sq km)

A Regression Model on mining districtwise total Geographical Area vrs Tribal Population reflects that there is high positive co-relationship between Geographical Area of the district and the tribal population of the concerned districts, where the regression equation is:

 $Y = 0.001x - 2.5016 \& R^2 = 0.5421$

It depicts that the increase in the Geographical area increases the tribal population of the district as depicted in **figure 5**.

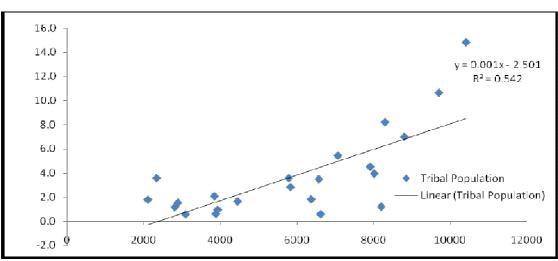


Figure-5
Districtwise total Mining Geographical Area vrs. Tribal Population

The picture in **figure-6** depicts the distribution of tribal population as a percentage to total population of the mining districts. The highest percentage of tribal are seen in the district of Mayurbhanj (59% of the total population) which is 10% of the total Tribal population of the mining districts followed by Malkangiri (58% and 9% respectively). The lowest percentage is observed in the district of Ganjam (3%) followed by Cuttack (4%), Khurda (5%) Nayagarh (6%), Jajpur (8%), Sonepur (9%) respectively.

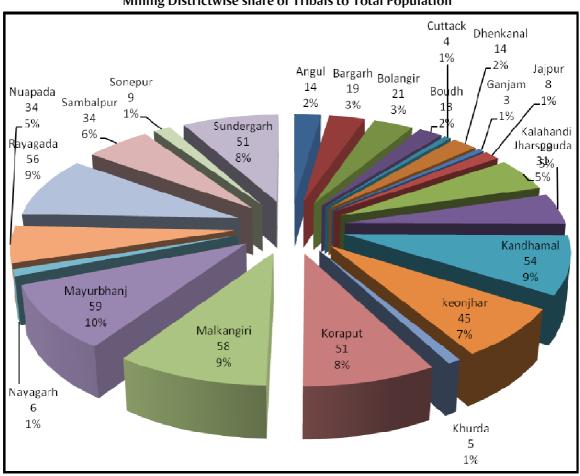


Figure-6
Mining Districtwise share of Tribals to Total Population

Land Acquisition Displacement & Rehabilitation due to Mining Projects in Odisha

A neo-liberal approach has been adopted by the Government of Odisha in its development policy to adress under-development and backwardness. Government of Odisha is constantly encouraging and inviting both domestic and foreign capital in these sectors in tandem with Globalisation approach of Government of India to attract foreign direct investment. With liberalization of the Indian Economy the vast mineral reserves of the State has also attracted the giant multinational companies/corporations to establish plants and industries in the State. A number of MOUs have been signed by the State Government with the reputed companies to establish mineral based industries. Prominent among these areas are: South Korean Company, POSCO, Vedanta Alumina ltd., TATA Steel, Utkal Alumina ltd., Jindal, Neelachal Ispat Nigam ltd., Sterlite Iron and Steel, Essar, Tisco, Konark MCT Coke ltd., and others.

Commissioning of these projects brings in its wake a large scale displacement, dispossession and dislocation of people. This development – displacement nexus in mining sector has an implication and bearing on socio-economic structure of the mining project area and spatial unevenness and regional imbalance /disparities in the State. Before dealing with magnitude of displacement and their rehabilitation, it is, therefore worthwhile to discuss briefly the socio-economic structure in general and the profile of mineral rich districts in particular.

Land Acquisition

Odisha is rich in mineral deposits. Extraction of minerals through mining and quarrying gathered momentum just after independence in the State. There are around 700 mines distributed through out the State. Exploitation of minerals from the mines requires large-scale land acquisition. The mines are mostly located in the tribal areas where the tribal people have been living in what is called 'encroached Government land' for generations together, having no patta or legal evidence of individual possession of land. Further, most of the mines, barring a few are operated by private parties on a lease basis. They manage to take over the land by satisfying its owners (Who is either partly affected or totally displaced due to the mining operation) with some compensation or other. Since such transactions are never legally registered, it is difficult to arrive at any reliable databse on the extent of displacement caused by mining. In mining operations in Odisha, the maximum displacement can be found in the coal mining sector. As the coal mining projects usually carry out open cast mining or strip mining, they bring about involuntary displacement of the people from their original homes. Mining of iron ores also, in the tribal areas in north Odisha, has displaced many people. But the extent of this displacement has neither been fully documented, nor properly assessed.

Between 1951 to1995, according to one estimate 410137.24 Acres of land had been acquired for mining projects which constitutes 17.36 percent of total land acquired for development projects as detailed in Table No. 5.

Table No. 5 Land Acquisition for Mining Projects in Odisha between 1951 to 1995 (In Acres)

| SI. | Types of | Land Acquired | Percentage to | Total Land Acquired | Percentage |
|-----|----------|---------------|---------------|-----------------------|------------|
| No. | land | for mining | total | for all dev. Projects | to total |
| 1 | Private | 68328.86 | 16.66 | 987651.85 | 41.81 |
| 2 | Public | 166638.76 | 40.63 | 661090.94 | 27.99 |
| 3 | Forest | 175169.62 | 42.71 | 713449.24 | 30.20 |
| 4 | Total | 410137.24 | 17.36 | 2362192.03 | 100.00 |

Source: Development induced displacement & Rehabilitation in Odisha 1951 to 1995 by Dr. Walter Fernandes & MD. Asif of Indian Social Institute, New Delhi, 1998

Displacement and Rehabilitation

As many as 1,00,000 persons have been displaced due to mining projects in Odisha during the same period of 1951 to 1995 of which 60,000 persons were rehabilitated and the remaining 40 percent, not rehabilitated. The details are given at **Table No. 6**.

Number of Scheduled Tribes affected and displaced due to mining projects vis-à-vis general population from 1951 to 1995 is shown in **Table No. 7**. It can be seen that out of total persons affected and displaced due to mining projets, Scheduled Tribe population is almost 50 percent in both the cases whereas General population is only 35 percent.

Table No. 6
Persons displaced and Rehabilitated due to Mining Projects in Odisha (1951 to 1995)

| SI. No. | Category of Persons | Number |
|---------|--|----------|
| 1 | 2 | 3 |
| 1 | Persons displaced | 1,00,000 |
| 2 | Persons rehabilitated | 60,000 |
| 3 | Percentage of rehabilitation | 60.00 |
| 4 | Persons not rehabilitated | 40,000 |
| 5 | Percentage of people not rehabilitated | 40.00 |

Source: Development induced displacement & Rehabilitation in Odisha 1951 to 1995 by Dr. Walter Fernandes & MD. Asif of Indian Social Institute, New Delhi, 1998

Table No. 7
Scheduled Tribes Affected /Displaced due to Mining Projects in Odisha (1951 - 1995)

| SI. | Category | Total no. of | No. of | Total no. of | No. of Persons |
|-----|------------|------------------|--------------|-------------------|----------------|
| No. | of Persons | Persons affected | Persons | Persons displaced | displaced due |
| | | due to all | affected due | due to all | to Mining |
| | | Development | to mining | Development | Projects |
| | | Projects | projects | Projects | |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | ST | 3,60,799 | 1,00,000 | 2,55,317 | 50,000 |
| | | (43.29%) | (50.00%) | (40.36%) | (50.00%) |
| 2 | SC | 1,34,822 | 30,000 | 73,620 | 15,000 |
| | | (16.17%) | (15.00%) | (11.64%) | (15%) |
| 3 | Others | 3,37,654 | 70,000 | 3,03,697 | 35,000 |
| | | (40.52%) | (35.00%) | (48.01%) | (35.00%) |
| 4 | Total | 8,33,275 | 2,00,000 | 6,32,634 | 1,00,000 |
| | | (100.00%) | (100.00%) | (100.00%) | (100.00%) |

Source: Development induced displacement & Rehabilitation in Odisha 1951 to 1995 by Dr. Walter Fernandes & MD. Asif of Indian Social Institute, New Delhi, 1998

Out of 8,33,275 people affected due to all development projects, 3,60,799 (43%) Scheduled Tribes were affected. Out of total 6,32,634 persons displaced, as many as 2,55,317 Scheduled Tribes (40%) were displaced. Similarly, in case of mining 2,00,000 and 1,00,000 persons were affected and displaced respectively and the corresponding figure for Scheduled Tribes were 2,00,000 (50%) and 1,00,000 (50%).

At the all India level, the displacement of persons due to mining projects is 21,00,000 between 1951 to 1990 against which 5,25,000 (25%) were rehabilitated according to an estimate by Fernades (1991). In Odisha rehabilitation of the displaced due to mining projects is slightly better standing at 60 percent.

Rehabilitation Policy for Mining Projects in the State

Government of Odisha had brought out a policy for rehabilitation of displaced persons/ families in case of mining projects in the State during 1998. This policy was circulated among all Revenue Divisional Commissioners and all Collectors vide erstwhile Revenue and Excise Department

letter No. 58349 dated 09.11.1998. The policy outlines the eligibility criteria for rehabilitation benefits, definition of family for the purpose benefits, definition of family for the purpose of rehabilitation, survey and identification of displaced families, employment, land for homestead purpose, facilities to be extended to homeland less and landless encroachers, incentive for timely vacation, indexation of rehabilitation grant and formulation and monitoring the rehabilitation plan. According to the policy, a family/person shall be termed 'displaced' and, hence, eligible for rehabilitation benefits if such family/person has been a permanent resident of Odisha and ordinarily residing in the project area for atleast three years prior to the date of publication of notification.

Two Case Studies of Tribal Displacement due to mining projects can be cited in this context. In case of Mahanadi Coalfields Ltd. (MCL), a Government of India undertaking which started in 1994, considerable land alienation has occurred with the increase in the landless category being the highest among Scheduled Tribes (16.70 percent) followed by Scheduled Castes (13.01 percent) and general castes (9.1 Percent). This indicates that the project has caused more land alienation among the small landholder categories. The trend remains the same in the marginal landholder category. In the small landholder category, however there has been no change in the Scheduled Tribes and Scheduled Castes whereas among the general castes there is a 3.6 percent decrease. Regarding the effect on livelihood, the rapid increase in open cast mining activity has adversely affected the women's livelihood. Earlier, they were able to grow vegetables in the kitchen garden, collect minor forest produce from the nearby forest and contribute to the family economy as agricultural wage earners. Now they are mostly jobless and earn no income. While the unemployment status of the Scheduled Tribe women remains unchanged, their level of income has been reduced to 80 percent after the opening up of mines. As against this, unemployment among the Scheduled Castes has increased by nearly 18 percent and the sources of earning have declined by 50 percent. In the general castes category the increase in unemployment status is marginal, with the reduction in cources of earning being 27.5 percent. On changes in the socio-cultural pattern, the advent of mining projects has upset the social fabric, so much so that almost all sample households indicated a change in their family structure and economic conditions. This is mainly due to land acquisition and payment of compensation in terms of money or employment. This factor has been very strongly indicated by the Scheduled Tribes and the general households.

Government of Odisha has signed an agreement with *Vedanta Aluminium Itd*. for bauxite mining-cum-refinery Project in Niyamgiri hills at Lanjigarh in Kalahandi District. The Union Ministry of Environment and Forest appointed NC Saxena committee whose report impacted a knockout punch on the Vedanta Aluminium Limited's Bauxite Mining-cum-Refinery Project at Lanjigarh in Kalahandi district. The four member panel said, the company should not be given permission for mining in Niyamgiri hills.

"The committee is of the firm view that allowing mining in the proposed mining lease (PML) area by depriving two Primitive Tribal Groups of their rights over the proposed mining site in order to benefit a private company would shake the faith of tribal people in the laws of the land. Since the company in question has repeadedly violated the law, allowing it further access to PML area at the cost of the rights of the Kutia and Dongaria Kondh, will have serious consequences for the security and well being of the entire country," the Saxena Panel said, in its 119-page report to MoEF. As the Vedanta tangle showed no sign of abating and complaints of violation of laws and atrocities on local tribals flooded the MoEF, the latter sent a three-member team for field inspection in January 2010. The team observed that the project could lead to disruption of the habitat and the way of life of the Dongria Kondhs, "which cannot be remediated or compensated"

The report added. "There is unrest palpable amongst the Dongria Kondhs. Uncertainty and anger that the entry of the company could mean an end to their lives."

Concluding Remarks

This paper is a bird's eye view of mining in Odisha, land acquisition and displacement of tribals by mining. Its limited data show that land acquisition and displacement has been high, particularly of the tribals. The Scheduled Tribes feel the negative impacts of displacement and environmental degradation more than the others do. They feel it more particularly because the number of jobs has declined and they go mostly to men from the dominant castes. Poverty is bound to grow if corrective measures are not taken. Mining projects frequently are located in remote areas where indigenous communities are members of a distinct cultural group, often a minority within a community of minorities. Here mining activities have a negative impact on the livelihood of indigenous people, especially with regard to issues concerning land tenure, often causing sociocultural conflicts within and among communities. The Scheduled Tribes are mostly affected and worst sufferers in mining projects of the State. They lost their home and hearth, livelihood and means of living permanently. Homelessness accentuated their pauperisation. Besides, mining has harmful and adverse impact on local environment.

Besides rehabilitating / relocating the displaced Scheduled Tribes in colonies or other suitable locations, their food security should be guaranteed with provisions for agricultural land and water supply. Mining activities should not be a potential threat to the health and livelihood of these poor and vulnerable groups who have little mobility or means of alleviating negative impacts. That apart, the harmful impacts of mining should be addressed through development of new technology that uses fewer chemicals during extraction and processing. Moreover, adequate and sufficient rehabilitation provisions should have been guaranteed for the rehabilitation and relocation of the indigenous tribes.

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Changing Food Habits and Nutritional Status of Savars in Jajpur District of Odisha

Kedarnath Dash *

ABSTRACT

This study is an attempt to collect all relevant information on food habits and nutritional status of the Savars of Jajpur district of Odisha. It tries to assess the changing perspectives regarding food habits and nutritional status among them. The information on traditional food consumption pattern of Savars, their various ways of obtaining food including the associated habits and beliefs are analyzed. The study ¹findings reveal that majority of the Savars depend on the indigenous flowers, leafy vegetables, seasonal fruits, cereals, and pulses available in the surrounding areas. Their food habits have been changed due to impact of deforestation caused by developmental activities. There is a great inadequacy of nutrients among the Savars in the changing food habits for which different health problems arise among them.

Key Words:-Recommended dietary allowances, Food practices, Nutrition, Deforestation

INTRODUCTION

Food is the only source of nutrition to the people and it nourishes the body. Human being is not restricted to any special category of food. Man can and does eat a variety of foods from both plant and animal origin. On the account of wide range of food habits, man is distinguished from other mammals. Therefore food is one of the most vital necessities of life from prenatal stage to extreme old age. Man has been showing natural interest to food since its origin as Homo sapiens and continued to grow from prehistoric period up to the present stage. Food is basic necessity for survival and is the only source of nutrition. A healthy body is an achievement and a source of pride for an individual. Consumption of balanced food indicates a good health. Food is anything eaten or drunk which yields energy for building up of new tissues and for repairing worn out tissues as well as for the regulation of metabolic process. Food and nutrition are complementary to each other. Nutrition, on the other hand, deals with the entire process of growth, maintenance and repair of the living body. Nutrients are the components of the food that are needed for the body in adequate amounts in order to grow, reproduce and lead a normal healthy life. Nutrients include water, proteins, fat, carbohydrates, minerals and vitamins (Shukla & Rastogi, 1999). It has been indicated that a nutrient can function in the body in three ways; (i) it may provide the body with fuel, when oxidized, releases energy for its activities, (ii) it may provide the materials that are necessary needed to regulate body processes, (iii) it may provide the materials for the building and upkeep of body tissues. A single nutrient may take part in any one of these functions or two or even all three.

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If the food ingested fails to observe these functions adequately, the architecture of the living tissues become imperfect, transformation of energy in the body becomes disturbed and metabolic process disordered with consequent abnormalities accruing in the body (Rani, 2002). Therefore for proper growth, storage and processing of nutrients is necessary. Richard (1948) indicated that of all the biological impulses, nutrition is that which must depend for its fulfillment on the habit complex in the individual's life time. It requires and at the same time an adaptation of the individual to the physical environment which must provide its diet, and also keeps relationships with other individuals of the species on whom it must rely in immaturity for its subsistence or with whom it must cooperate in later life in procuring food supplies.

Food is a pre-requisite of nutrition, thus nutritional status depends on the consumption of food in relation to the needs. Therefore it is necessary to understand the situation regarding food, nutrition and health among the tribal population. In most tribal areas, the food availability and pattern of consumption depend on either local or natural resources. Therefore the nutritional and health status of tribal population vary from place to place and time to time (Kumari, 1992). Over and above, people possess appetites and tastes. Self selection of food according to appetite and physiological need is the most prominent factor. The food habit defines the way in which individual or group of individuals, in response to social and culture pressure select, consume and utilize portions of the available food. In spite of the wide choice of food stuffs, tribal diet is limited by the traditional social regulations. The collection of food is determined by social norms. It is rare to find tribal people subsisting entirely upon one type of diet. In tribal Odisha a large part of the diet is obtained from locally available and produced food materials. Religious customs and local traditions relating to feasts, fasts and food taboos have a bearing on the dietary pattern of the people (Behura & Mohanty, 2006). The traditional problems of different tribals communities located at various stages of development were full of obscurities and very little scientific information on their dietary habits and nutrition status were available due to lack of systematic and comprehensive research investigation. An attempt has been made to examine the diet scenario of Savars, an autochthon tribe of Jajpur district of Odisha. It will be useful to examine the food and nutritional status of these tribal people from time to time that constitute a considerable section of labour force at state level, so that appropriate steps can be taken in time to check the negative trend and to maintain a normal life. An assessment of food and nutritional status has been one of the most important elements of a community.

Jajpur is the homeland of many tribes among whom Savar or Sahara is one. Dharmasala, Sukinda and Badachana are the blocks of Jajpur district considered as Savar or Sahara's homeland. They have a economy based on settled agriculture. Some anthropologists hold the view that their name owes its origin from the Arabic word 'Saher', meaning forest. It thus means that the people residing in forests are called Saharas or Savars. According to Cunningham, the word 'Shahar' is similar to the Paithion word 'Saur' or 'Sawar' meaning an axe. In the past they were known as axe man working in the forest as they always keep an axe on their shoulders. The Savars or Saharas are supposed to be a part of the great Savar tribe to which the Saora belong. They have been classed among the Munda groups of aborigines of India, sometimes called Kolarian group on racial, cultural and linguistic grounds. The population of the Savar tribe is 4, 73,233 according to 2001 census in the state of Odisha and 31,840 in the Jajpur district of Odisha. The Savars are considered socio economically backward tribal community of Odisha as they suffered a lot at the hands of local rulers, traders, colonial powers, non-tribals and other similar forces. They have adjusted themselves in their ecological and geo-climatic conditions throughout the state.

The Jajpur district lies between 20 degrees.12' and 86 degree.20' of latitude and longitude respectively. Climatically the area comes within the tropical monsoon region. The maximum temperature varies between 35-42 degrees Celsius and the, minimum between 8-13 degrees Celsius. The mean annual humidity is nearly 60 percent. The mean rainfall is about 1287mm. The area is mostly rocky with lateritic stones and granite stones mixed in the soil, helps in growth of trees and bushes in the area.

METHODOLOGY

For the present study the author has collected the sample from five Savar dominated villages such as Ranibandhi, Khandiabandhi, Khatuapada, Mahakhala, and Subhadrapur. The present investigation is based on 205 individuals of Savars of Jajpur district. Sample has been selected randomly from each household of the villages. The raw foods used for each meal for the whole family before cooking and after cooking have been recorded. Weight of cooked food consumed by the adult man and woman, aged man and woman, pregnant woman, child and infant of the family has also been recorded. In this way the raw weight of the food consumed individually is computed.

OBJECTIVES

The study was conducted with the following objectives:

- a) To study the traditional food habit and nutritional status of the Savar tribe.
- b) To study the influence of socio-cultural and economic factors on the dietary habit of the Savar community.
- c) To study the change in dietary habits of Savar community due to industrialization and modernization.

GENERAL DIETARY HABITS

The food habits of Savar or Shahar shows an overvaluation of eating. Whenever they get sufficient food, particularly at the time of harvest, they eat it till they have a feeling of fullness. Emphasis is laid on bulk rather than on quantity. This they do in great anxiety lest their moneylenders or merchants take it away in repayment of their debts. Scarcity of food is one of the striking features among the Savars. Prolonged suffering of the Savars from the scarcity of food and frustration has given rise to food anxiety of immeasurable gravity. Among the Savars, there is multiplicity of rituals associated with growing of crops and food habits. It is the belief among the Savars that their dead ancestors and spirits are thirsty and hungry to the same extent as they are and therefore demand tasty foods, alcoholic drinks and sacrificial animals. Any neglect on the part of the Savars in offering such items to the dead ancestors cause illness. In spite of the wide choice of food stuffs, the diet of the Savars is limited by the traditional regulations of the society so as to say the collection of food is determined by social heritage. The Savar people are subsisting entirely upon one type of diet, yet the economic organization of the Savars is complex. Among them, a large part of the diet is obtained from locally available and produced food materials. The food eaten by Savars varies from season to season. They have no fascination for a particular type of food throughout the year. Generally the food which they take consists of rice, pulses such as horse gram, black gram and millets. Besides they also eat a great variety of green leaves and fruits collected from the forest. They also eat vegetables which they grow in their kitchen garden or on the ridges of paddy fields. The food of the Savar or Shahar is very simple and natural. Almost each food item is eaten either roasted or boiled. Their daily diet consists of cereals, pulses, leafy vegetables or seasonal vegetables. They occasionally use wheat, lentil and gram etc. as a part of their diet. They have the system of cooking food twice daily i.e. in morning and evening. In breakfast if available they take Pakhalabhaat (water Rice) i.e. previous days rice left for next morning. Their general daily diet consists of boiled cereals, millets and one curry of boiled vegetables or tubers or roots or leaves or simply gruel made from the food grains with a small quantity of boiled vegetables added with salt and chilies. Rarely do they take non-vegetarian items in their food nowadays due to prohibition of hunting in the forests by the government, although they are fond of eating non-vegetarian items. Sometimes they take egg/fish with country liquor for better taste. The Savars try to prepare something special during the visit of their kinsman and guests. They do not like wheat.

In the ancient times, Savars were fully dependant on forests. They use forest produce as their food along with hunting animals from the surrounding hills and forests. After passage of a long time, their shift to agriculture has brought a change in their food habits. In earlier times a number of wild roots, fruits, leaves etc were being collected by Savars round the year which constituted their main diet. The Savar women are laborious and are expert in locating the places where these were found in the hill ranges. The Savar people do a lot of strenuous work for their survival. As they are settled agriculturists, they generally take staple food i.e. rice, maize, edible roots, shoots, leaves vegetables and millets which they prefer to eat. The Savars are not in a position to grow crops for the whole year, so sometimes they are compelled to remain without food for even days together. Their diet is subject to seasonal variations. There are three major sources of food for the Savars: (i) their own crop fields, (ii) local forest and water resources (iii) local markets. But due to the rapid depletion of resources, the Savars are badly affected. The Savar tribes of Jajpur district of Odisha by and large depend on agriculture either in own land or leased land for their survival. They are settled agriculturists though they supplement their income with hunting, gathering and collecting. The agriculture of Savar is characterized by unproductive and uneconomic land holdings, land- alienation, indebtedness and lack of irrigation facilities etc. In general, they raise only one crop during the monsoon, and therefore have to supplement their economy by other types of subsidiary economic activities.

Paddy is the principal crop produced both in dry and wet land. The chief cereal consumed by them is rice which is about 500gms per head per day. The consumption of rice per day is not found uniformly throughout the year. It provides about 70 percent of their calorie intake. The pregnant women are given food items prepared out of millets in liquid form. Their harvest and post harvest period extends from November to March during which they depend on the yield of their crop fields. Besides cereals, they produce pulses like Mugo (*Phasculous mungo*), Kolatha (*Dolicos biflorus*), Harada (*Cajanus cajan*), Bargudi (*Nigna katjung*), Masoor (*Ervum kens*) and Biri (*Phasculaus aureaus*) for their consumption. Pulses are not very common for them. They take about 30grams pulses per head per day. Deficit intake of pulses causes various diseases among them.

The diet of Savars is supplemented with leafy vegetables, roots, fruits, tubers, herbs and mushrooms. The inadequate intake of cereals and pulses is compensated with normal and excess intake or roots, tubers and green leafs, A variety of vegetables are eaten by them and are considered as good source of vitamins for them. Few families cultivate onion (*Allium cepa*), garlic (*Allium sativum*), chilies and ginger in their kitchen garden for their own consumption. They have special liking for those spices.

A large part of the diet of this tribe is obtained from the forest, locally available and produced food materials. The Savars are mainly distributed in the forest areas of the Jajpur district of Odisha.

Savars and forests have a symbiotic relationship through the ages. The use of forest is closely related to the survival and sustenance of the Savars. They collect fruits, flowers, tubers, roots, leaves for food and medicines. For them, forest is the abode of food material and women were actively involved in gathering and using forest based food products throughout the year. Leaves are important items among the forest products which is eaten both as a vegetable as well as the staple food. Different types of mushrooms are collected from forest areas especially during the rainy seasons. The Savars possess and astonishingly carries a wide knowledge based on the usages and ecology of the rich fauna and flora. For non-cereal food during lean period they largely depend on the forest resources. From April to June, they almost completely depend on various types of wild berries, palm fruit, date palm, sago palm, mango, wood apple, blackberry, jackfruit, cashew fruits, banana, papaya and wild games such as peacock, deer, rabbit, wild boars and birds. And from August to October which is the acute lean period for most of them, they depend on the seeds of mango, jackfruit bamboo shoots of forest and tubers for their survival. Fishing in local water reservoirs in the forest was the regular practice among them and supplemented the ill balanced diet by fulfilling the protein deficiency. But now their entry into forest is considered as an encroachment and moreover, forest resources in recent times have been greatly depleted for over exploitation by non-tribals and Government (Behura & Mohanty, 2006).

Vegetables such as beans, ladies finger, pumpkin, gourd, bitter gourd, potato, cauliflower, onion, brinjal, cucumber etc are grown by the Savars and sometimes they purchase from the local market. During the post harvest season they largely depend on the market for non-cereal food items. Generally the use of spices is not common among the Savars. They usually use spices such as Dhania (Coriander), Elaichi (Cardamom), Jira (Cumin), Laung (Clove), Dalchini (Cinemas), ginger (Gengiber officinale) and salt. Some edible oils such as mustard (Brassica capestris), caster (Ricimus communis), linseed (Linum usifatissumum), sesamum (Gaizotia abyssinica) are common among them. These oils are used in little quantity due to high cost in the market. Besides it, the Savars purchase the sea fish from the weekly market. Sugar is rarely used by them due to its high price.

Table 1: Average Nutrient Consumption of Savar women in Normal and Special Condition

| Food Content | Normal Case | | Pregnanc | y Period | Lactatio | n Period |
|-----------------------------|--|-----------------|----------|----------|----------|----------|
| | Recommended Daily Allowances (A) | Consumption (B) | (A) | (B) | (A) | (B) |
| Calories (Kcal) | 2875 | 2100 | 3300 | 2300 | 3400 | 2300 |
| Protein (gm) | 60 | 45 | 60 | 45 | 70 | 50 |
| Calcium (mg) | 400 | 450 | 900 | 700 | 900 | 700 |
| Iron (mg) | 28 | 25 | 40 | 30 | 32 | 25 |
| Vitamin-A (fg) | 2400 | 2100 | 3000 | 2600 | 4600 | 2600 |
| Vitamin-B ₁ (mg) | 1.4 | 1.0 | 1.7 | 1.2 | 1.7 | 1.2 |
| Vitamin-B ₂ (mg) | 1.6 | 0.8 | 2.0 | 1.7 | 2.0 | 1.7 |
| Vitamin-C (mg) | 40 | 32 | 40 | 32 | 80 | 45 |
| Niacin (mg) | 18 | 10 | 22 | 12 | 23 | 12 |

In view of the dietary practices, infants, children, pregnant women and lactating mothers are worst sufferers. The children are given roasted cake, *chuna kunda* cake, turmeric cake, boiled potato, goat milk etc. Most of the children suffer from malnutrition and are prone to infectious diseases. The pregnant and lactating women are given foods such as Baunsa, Dhana, Mandia, Jau, Chuda, Kanda Tasar Pokka, Pimpuli Sunthi, Gua Ghia etc. for which they suffer from nutritional deficiency and give birth to low weight infants.

The nutrients of the diet contribute a lot to the energy requirements of the individual and regulate the processes of the body. The diet of Savars can be said not to be satisfactory. The normal women are found deficient in calories, protein, calcium, and vitamin-A, vitamin-B, vitamin-C and niacin. Likewise during the pregnancy period, the women are more deficient in calories, protein, calcium, iron, vitamin-A, vitamin-B, vitamin-C, and niacin. The iron deficiency among the pregnant women results in anaemia. Specially the pregnant women who are deficient in vitamin-A have higher maternal mortality among them. The severe deficiency of calories and vitamin-A is marked in lactation period of women (Table-1). Deficiency is also found in the daily consumption of calories among the men. The diets are also generally deficient in calcium, vitamin A, vitamin C, niacin and protein (Table 2). The diseases such as 'pellagra' is found associated with deficiency in niacin. The systems of 'pellagra' are referred to as the "three diseases"-diarrhea, dermatitis and dementia which causes sickness and death among the Savars of Jaipur district. Night blindness and low resistance to infection among the Savars is caused by the deficiency in vitamin-A .The prolonged vitamin-B1 deficiency may be associated with stunted growth among the children of Savar community. Calcium deficiency is related to low bone mass and weakening of bones due to osteoporosis and convulsions. For a good nutritional health, all of the essential inorganic and organic nutrients should be available or obtainable to them in an appropriate balance.

Table 2: Daily Consumption of Nutrients by Savar/Shahar men and Recommended Daily Allowances of Nutrients by I.C.M.R

| Nutrients | Daily Consumption of Nutrients | Recommended Daily Allowances | Deficiency |
|-----------------------------|-----------------------------------|---------------------------------|------------|
| Calories (Kcal) | 1750 | 2875 | 1125 |
| Protein (gm) | 51 | 60 | 9 |
| Calcium (mg) | 375 | 400 | 25 |
| Iron (mg) | 25 | 28 | 3 |
| Vitamin-A (fg) | 2000 | 2400 | 400 |
| Vitamin-B ₁ (mg) | 0.8 | 1.4 | 0.6 |
| Vitamin-B ₂ (mg) | 0.8 | 1.6 | 0.8 |
| Vitamin-C (mg) | 33 | 40 | 7 |
| Niacin (mg) | 13 | 18 | 5 |

CHANGING FOOD HABITS

The Savars of Jajpur district are one of the most backward tribes of Odisha and have been coping with their physical environments for income generation on the basis of their respective cultures for eking out an existence. But the existing economy of the Savar community has drastically changed and people have to face a great deal of hardship because they can't cope up

with the required bio-cultural adaptation, which is crucial for their survival. Industrialization has caused rapid deforestation. The Savars who were largely depending on forest resources for survival are now facing starvation with imposition of restriction on the use of forest. During the monsoon months, the Savars face acute shortage of food. Hence as an alternative they are forced to look for other means of supplementing their livelihood. A large number of the people of this area invariably find their way to other places daily during the off season where they work as daily wage workers. The Savars face different ailments in rainy season due to unbalanced food and lack of essential requirement of protective food in vitamins, minerals etc.

Food habits of the Savars have been modified due to change in income and occupation and also due to immigration of outsiders. Due to wage-labour economy in the changing scenario which enable them to either purchase easily available wheat flour to prepare bread instead of the habit of taking rice as major food. Food habits have also been affected by adopting the changed occupation. Due to working in manual stone-cutting industries, their working hours do not allow them to maintain their traditional routine and timing for eating food. They have to go long distances from their native place for a work. Most of the persons are not in a position to take their meal before leaving for the work. In such a situation they carry their food with them and get it in the leisure time.

The influence of modernization could be noticed in their life styles including food habits. Traditionally the Savars were depending on weekly markets to purchase the food items along with dependence on forest resources. But now very few food stuffs are being brought from weekly market and there is growing dependence on daily market as they have accepted to some extent new food habits with cultural reservation. As the Savars are working now-a-days as labourers in stone-crushing industries and quarries of lateritic stone , transport sector, few families have started to take bread, pulses, spices, fish, meat and milk products instead of rice, millets, roots, tubers as the staple food.

The method of preparation of food has also changed. 40 percent of the families cook rice by excess water method. For cooking cereals, absorption method is not adopted to retain soluble nutrients. But pulses and vegetables are generally cooked by absorption method. Non-veg items are prepared by frying method of cooking in the changing context. It has been observed that there are three common methods of preserving food i.e. sun drying, pickling and salting for paddy, roots, tubers, fruits and non-vegetarian food respectively. The cooking utensils such as earthen pots have been replaced by aluminum and steel utensils.

The Savars are very fond of tea without milk and has become a common drink for every member of the community. Almost all males and females including children take large quantity of tea in the morning, evening and even in mid day. But nowadays they have started to drink tea prepared with milk.

Earlier the Savars take their food in the village by the family members sitting together on the floor, but gradually they have become accustomed to taking food lonely under the tree or in open field in quarry site or in manual stone crushing industrial area. Sometimes the known persons take their food in a common place to avoid loneliness, thus indicating that there has been a change in the manner of eating.

It has been found that monthly expenditure on food varies from family to family and on an average the Savar family spends about Rs 3000 per month on food items. The workers of the Savar

community who earn more do rice and wheat preparations daily. The educated Savar people take balanced diet with non-vegetarian items for good health.

The Savars were not habitual drinkers earlier but now-a-days they are taking rice beer and distilled country made liquor. These drinks are generally continued during evening. They usually drink without any proper food and sometimes they take liquor on an empty stomach which creates further injuries to their health. Consuming milk and milk products became visible in their community though less in number. They use cow and goat milk occasionally in the preparation of tea. They usually sell the milk and milk products in the neighboring non-tribal people.

Fruits are valuable in human nourishment because they are the good sources of vitamins and minerals. In earlier time a number of types of fruits were collected from forest for their own use. But due to depletion of forest, non-availability of fruits has become a factor for deficiency of vitamins and minerals among them. The non-vegetarian food items have become a dream for the Savars due to the rapid-deforestation of the area and prohibition of hunting of wild animals. However they sometimes eat chicken and egg from their own poultry. The Savars of the Jajpur district have accepted slightly new dietary habits with cultural reservations. The influence of income is exhibited on the variety and the quality of food. In general they depend on low cost food due to limited income of their family. The traditional beliefs also play an important role regarding traditional dietary habits.

CONCLUSION

From the above discussion it is concluded that the Savars/Shahars of Jajpur district of Odisha generally conserve most of the food available in the surrounding area i.e. agricultural crops and forest edibles and in the food from local market. Their staple foods are rice, leafy and non-leafy vegetables. For non-cereal food during lean period they largely depend on nature while during post harvest period they largely depend on the market. They do not take much spices, oil and sugar in their food. Due to deforestation and prohibition on hunting they take non-veg food occasionally. They are habitual drinkers of country made liquor and rice beer available in the locality. The Savars are not in a position to provide special diet for the pregnant and lactating woman, children due to acute poverty.

The Savars are both under-nourished and susceptible to many communicable and vector borne diseases. From nutritional point of view it has been found that the status of Savars food is very low. Their habitual drinking further aggravates the situation. The food items consumed by the Savars are deficient except leafy vegetables and wild berries. Deforestation has become the major cause of not getting balanced diet in the study area. Some socio-cultural factors also regulate consumption of healthy diet among the Savars. Thus the study of cultural factors in food and nutrition should be taken into consideration.

Food consumption mainly depends on natural resources. The present intake of the different nutrients is not very satisfactory. The nutritional status of the Savar people also varies under different ecological settings and during different seasons. Balanced food is essential to sustain good health and active life. The diet of the Savars is predominant in cereals and deficient in other essential nutrients, because the cereals are comparatively less expensive; provide the required bulk and traditionally the staple food in the state of Odisha for ages. The lack of calories, proteins and other nutrients in the diet of the Savars is mainly responsible for the incidence of various deficiency diseases. It has also been seen that the Savars suffering from malnutrition are more

susceptible to diseases. Due to poverty, the Savars except very few families are not in a position to get regular and balanced diet throughout the year. The children, pregnant and lactating women do not get extra calorie intake or special food to compensate the weak physical conditions which is responsible for poor psychological state and mental performances etc. But the situation can be improved by providing nutrition education to them by anthropologists and nutritionists.

With the new types of living and occupation due to industrialization, the food habit of the Savars has been changed to some extent. Change in the food habits sometimes caused due to force and sometimes due to own accords. But most of the individuals express dissatisfaction over the change in food habits as this affects their health and energy.

The I.C.M.R prescribes a minimum of 2400 calories intake per day in the rural area. But it is found that the Savar's calorie intake is much below the requirement which indicates inadequacy of food supply to meet their needs. The food containing the required calories in proper quantities and preparation has therefore to be taken by an individual according to their age, sex, working conditions etc to meet the requirements of the body. The reasons for calorie deficiency are poverty, illiteracy and unawareness regarding growth and development of human body. This study confirms the findings of Ali (1987) who studied the tribal communities of Odisha and found an ecological imbalance caused by rapid deforestation which has resulted not only in depleting food resources, but in prolonged droughts adding to starvation.

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Employment and Livelihood Patterns of the Adivasis In Odisha and Their Economic Development : An Empirical Analysis

Kartik Prasad Jena 1

ABSTRACT

The economic development of a community depends on its employment, livelihood pattern, occupational and wage structure. Though unemployment among the Adivasis of Odisha is low, most of them are engaged in low paid works. The wage they get is very low, as a result, a large number of them suffer from acute poverty. The settled agriculture as well as shifting cultivation are the most important livelihood option of the Adivasis in Odisha followed by collecting forest products, hunting and employment in mining, manufacturing and retail trade. The traditional practice of shifting cultivation coupled with the excessive dependence on the monsoon in absence of irrigation facilities has resulted in low productivity which in turn has resulted in massive food shortages among tribes. For improving the livelihood condition of the tribals, there is need to first improve the production and productivity of their agriculture -both settled and shifting. This can be done by providing them with improved agricultural inputs such as seeds, fertilizers and agricultural implements and improvement in agrarian technology and practices. Their income can also be increased by restoration of the land alienated from them and by increasing the productivity of forests by plantation of degraded forest, facilitating the tribes in collection of such products and by ensuring them a proper return for such product by organizing their marketing.

1. INTRODUCTION

Adivasis, the historically deprived group, presently recognized as Scheduled Tribes, is one of the most marginalized communities of India facing many challenges in their daily lives such as poverty, social exclusion, poor access to health care, education and employment opportunities, displacement from their lands and forests, coerced migration and trafficking and the like. The economic status of a community is an important indicator of its level of human development. Its health and educational status, its well-being, miseries and vulnerabilities, though not solely but to a large extent depend on the income its members and the resources they command. The material well-being of a community depends on its employment status and occupational and wage structure.

The Adivasis in Odisha engage themselves in a wide range of activities for their livelihood such as agriculture, collection of forest products, hunting and different forms of employment in mining, manufacturing and retail trade. The Report on 5th Economic Census of Odisha 2005 states that 86.92 percent of STs are engaged in "agriculture services" category under agricultural activities, where as only 9.91 percent of them are involved in "livestock rearing" and a small 3.34 percent in "fishing activities".

Adivasis in Odisha practise the traditional mode of cultivation which is mainly labour intensive with minimal usage of modern tools and techniques. However, their continued practice of shifting cultivation has resulted in an ecological imbalance. They, being subsistence

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farmers mainly, cultivate cereals such as paddy and millets. Besides these, they also grow *Ragi*, *Kurat*, *Jhuna*, *Alsi* and *Gurji* (Often used as an inferior substitute for rice in their consumption) in large quantities. However, the excessive dependence on rainfall, which is the gamble in monsoon and erratic in nature, has resulted in low productivity which in turn affects the food security of the tribals. Poor irrigation accounts for the low productivity and inter-district and inter-social group variation in the yield rate in Odisha.

Adivasis in Odisha practise the traditional mode of cultivation which is mainly labour intensive with minimal usage of modern tools and techniques. However, their continued practice of shifting cultivation has resulted in an ecological imbalance. They, being subsistence farmers mainly, cultivate cereals such as paddy and millets. Besides these, they also grow *Ragi, Kurat, Jhuna, Alsi* and *Gurji* (Often used as an inferior substitute for rice in their consumption) in large quantities. However, the excessive dependence on rainfall, which is the gamble in monsoon and erratic in nature, has resulted in low productivity which in turn affects the food security of the tribals. Poor irrigation accounts for the low productivity and inter-district and inter-social group variation in the yield rate in Odisha.

The Adivasis constitute the largest chunk of the agricultural labourers in the tribal dominated areas. Their wage earning (different wage rates for men and women) usually lies within the range of Rs.30 to Rs.60 per day and is not uniform throughout the year. This is the reason why their earning is not sufficient to fulfill their needs. Given such low levels of earnings, they rarely save any money. The low level of earning and absence of assets, especially land, make them more vulnerable to shocks such as illness and natural calamities. Taking loans is a common coping strategy to come out of such distress situations. However, they are often unable to resettle these loans and thus are unable to come out of this low—level income trap.

Land holdings, the key assets of the Adivasis, are used for cultivation purpose or can be mortgaged with the money lenders to take loans. Most of the Adivasis in Odisha have very small and scattered land holdings. Forest is also considered to be the most important source of livelihood during food crisis. It supplements their consumption and income. The Adviasis here heavily depend on forest products and hunting. The dependence of Adivasis on non timber forest products (NTFPs) has grown over the years.

2. OBJECTIVES

The main objectives of this paper are (i) to examine the level of employment and livelihood pattern of Adivashi in Odisha; (ii) to estimate the level of development and deprivation of the Adivasis of the state; (iii) to explore the causes of the gap in their status vis-àvis others and (iv) to find out the appropriate remedial measures.

3. METHODOLOGY

To achieve the above objectives, the present study has adopted a combination of primary and secondary data analysis. Primary data have been collected by using the following three methods such as (i) Focused Group Discussions (FGD) with the S.T. People –Vrs.- Upper Caste People; (ii) In-depth interviews with the Key Informants of the College Hostel - S.C. & S.T. Students and (iii) Non-participant Observations. Wide range of secondary data sources such as Census 1961 -2001, National Family Health Survey (NFHS), National Sample Survey (NSS) and other relevant sources have also been used. For primary data collection in the urban areas two S.C. & S.T. College Hostels, one from B.J.B. College, Bhubaneswar and other from Bhadrak Autonomous College, Bhadrak have been selected for in-depth interviews with students of +2 and +3 level classes. For primary data collection in rural areas, 8 villages and 2 resettlement colonies were selected from 5 blocks of 3 districts of the state of Odisha. Dhangadi block from Jajpur District, Lanjigarh from Kalahandi District and Bisra and Nuagaon block of Sundergarh District were selected for data collection.

4. DATA ANALYSIS ON EMPLOYMENT AND LIVELIHOOD OF ADIVASIS

Odisha is rated as one of the most underdeveloped states India in spite of its vast natural resource base. It lags behind the country in all the major development indicators of income, health and education and tops in the incidence of poverty. There is wide regional and social disparity in the state. The coastal area is more developed than the other 2 regions (northern and southern) of the state. Among all the social groups, the scheduled castes and scheduled tribes are the most deprived and depressed classes comprising about 40% of the total population of Odisha, with SC at over 17% and ST over 23% as per the 2011 Census. District-wise concentration of SC & ST population and their literacy rate are given in **Table -1**.

Table -1
Districtwise Total and Percentage of Scheduled Tribe and Scheduled Caste Population of Odisha (as per the 2011 Census)

| | Name of the | Odisiia (| as per the 201 | Population | | |
|---------|---------------|-----------|----------------|------------|------------|-------------|
| SI. No. | | Tatal | Sch. Tribe | | Cala Casta | 0/ to Total |
| | district | Total | | % to Total | Sch. Caste | % to Total |
| 1 | Anugul | 1273821 | 179603 | 14.10 | 239552 | 18.81 |
| 2 | Balangir | 1648997 | 347164 | 21.05 | 294777 | 17.88 |
| 3 | Baleshwar | 2320529 | 275678 | 11.88 | 478586 | 20.62 |
| 4 | Bargarh | 1481255 | 281135 | 18.98 | 298780 | 20.17 |
| 5 | Baudh | 441162 | 55364 | 12.55 | 104934 | 23.79 |
| 6 | Bhadrak | 1506337 | 30428 | 2.02 | 334896 | 22.23 |
| 7 | Cuttack | 2624470 | 93745 | 3.57 | 498633 | 19.00 |
| 8 | Debagarh | 312520 | 110400 | 35.33 | 52112 | 16.67 |
| 9 | Dhenkanal | 1192811 | 162056 | 13.59 | 234079 | 19.62 |
| 10 | Gajapati | 577817 | 313714 | 54.29 | 39175 | 6.78 |
| 11 | Ganjam | 3529031 | 118928 | 3.37 | 688235 | 19.50 |
| 12 | Jagatsinghpur | 1136971 | 7862 | 0.69 | 248152 | 21.83 |
| 13 | Jajapur | 1827192 | 151432 | 8.29 | 433387 | 23.72 |
| 14 | Jharsuguda | 579505 | 176758 | 30.50 | 104620 | 18.05 |
| 15 | Kalahandi | 1576869 | 449456 | 28.50 | 286580 | 18.17 |
| 16 | Kandhamal | 733110 | 392820 | 53.58 | 115544 | 15.76 |
| 17 | Kendrapara | 1440361 | 9484 | 0.66 | 309780 | 21.51 |
| 18 | Kendujhar | 1801733 | 818878 | 45.45 | 209357 | 11.62 |
| 19 | Khordha | 2251673 | 115051 | 5.11 | 297472 | 13.21 |
| 20 | Koraput | 1379647 | 697583 | 50.56 | 196540 | 14.25 |
| 21 | Malkangiri | 613192 | 354614 | 57.83 | 138295 | 22.55 |
| 22 | Mayurbhanj | 2519738 | 1479576 | 58.72 | 184682 | 7.33 |
| 23 | Nabarangapur | 1220946 | 681173 | 55.79 | 177384 | 14.53 |
| 24 | Nayagarh | 962789 | 58691 | 6.10 | 136399 | 14.17 |
| 25 | Nuapada | 610382 | 206327 | 33.80 | 82159 | 13.46 |
| 26 | Puri | 1698730 | 6129 | 0.36 | 325133 | 19.14 |
| 27 | Rayagada | 967911 | 541905 | 55.99 | 139514 | 14.41 |
| 28 | Sambalpur | 1041099 | 355261 | 34.12 | 191827 | 18.43 |
| 29 | Subarnapur | 610183 | 57192 | 9.37 | 156219 | 25.60 |
| 30 | Sundargarh | 2093437 | 1062349 | 50.75 | 191660 | 9.16 |
| | ODISHA | 41974218 | 9590756 | 22.85 | 7188463 | 17.13 |

Source: Census Report - 2011 & SCSTRTI, Govt. of Odisha

The State has the unique distinction of having 62 different Scheduled Tribes and 93 Scheduled Caste Communities spread over 30 districts and 314 Blocks of the State. Of these two categories, scheduled tribes are the most underprivileged, backward and marginalized class. 2001 Census report suggests that, 94.5 percent of the tribal population of the State lives in villages and majority of them are concentrated in the Fifth Scheduled Area of the state. The proportion of urban population among Scheduled Tribes (STs) of this state has increased from 2.1 percent in 1961 to 5.5 percent in 2001. Also, the population of the tribes in the state has been increasing, from 4.2 million in 1961, to 8.1 million in 2001, which amounts to an increase of 1.9 times over these 40 years.

There exists a wide inter-district variation in the decadal growth rate of the ST population during the period 1991-2001. These indicate an inter- district migration of the ST population from their traditional belt in search of better livelihood opportunities. Districts with a high tribal concentration such as southern Odisha are relatively backward than those which have no or negligible tribal population. The sex ratio in the tribal communities of Odisha has always remained healthy; it was as high as 1,016 females per 1000 males in 1961 and 1,003 females per thousand males in 2001.

Our field data suggest that unemployment among the tribals is low, much less than among the SCs, OBCs and Others, but most of them are engaged in low-paid works. The wage they get is also very low, as a result, a large number of them suffer from acute poverty. The Usual Principal Status (UPS) unemployment among them is less than 2 per cent in both the last two quinquennial rounds (61st round for the year 2004-05 and 66th round for the year 2009-10). It was 1.4 per cent in the year 2004-05 and 1.7 per cent in the year 2009-10. The unemployment among the SCs, OBCs and Others was 8.1 per cent, 8.4 per cent and 12.6 per cent, respectively, in the year 2004-05 and 2.4 per cent, 3.5 per cent and 6.9 per cent, respectively, in the year 2009-10 (see Table- 2).

Table 2
Unemployment among the Adivasis and other communities by Usual Principal Status (UPS)

| | | | | 2004- | 05 | | | | 2009 | 9-10 | |
|-------|----------|------|------|-------|--------|-------|-----|-----|------|--------|-------|
| | Region | ST | SC | OBC | Others | Total | ST | SC | OBC | Others | Total |
| Rural | Coastal | 2.3 | 9.8 | 12.9 | 15.8 | 12.2 | 2.1 | 4.4 | 3.0 | 8.9 | 5.6 |
| | Southern | 1.3 | 4.3 | 1.8 | 4.8 | 2.2 | 2.2 | 0.2 | 3.2 | 0.9 | 2.1 |
| | Northern | 0.9 | 3.4 | 2.4 | 4.7 | 2.2 | 1.2 | 1.5 | 3.5 | 11.7 | 3.1 |
| | Total | 1.2 | 6.4 | 7.5 | 12.8 | 6.4 | 1.9 | 2.0 | 3.2 | 8.1 | 3.5 |
| Urban | Coastal | 11.2 | 29.6 | 20.2 | 16.9 | 20.0 | 6.1 | 6.2 | 9.2 | 2.1 | 4.5 |
| | Southern | 8.2 | 9.9 | 8.0 | 9.5 | 8.9 | 0.0 | 2.2 | 4.0 | 3.5 | 3.0 |
| | Northern | 4.0 | 17.8 | 10.7 | 5.4 | 8.9 | 2.4 | 4.8 | 6.0 | 5.8 | 5.1 |
| | Total | 5.2 | 22.4 | 15.7 | 12.1 | 14.2 | 3.1 | 5.0 | 6.5 | 3.2 | 4.3 |
| Total | Coastal | 2.7 | 11.9 | 13.8 | 16.1 | 13.2 | 2.3 | 4.7 | 3.6 | 7.4 | 5.4 |
| | Southern | 1.4 | 4.5 | 2.3 | 6.2 | 2.6 | 2.1 | 0.3 | 3.3 | 1.7 | 2.1 |
| | Northern | 1.1 | 5.3 | 3.2 | 5.0 | 3.2 | 1.3 | 2.2 | 3.8 | 9.9 | 3.3 |
| | Total | 1.4 | 8.1 | 8.4 | 12.6 | 7.3 | 1.7 | 2.4 | 3.5 | 6.9 | 3.6 |

Landlessness and availability of other employment opportunities such as collection of non-timber forest products (NTFP), casual work, artisan work and other traditional occupations account for the low unemployment rate among the tribes, especially in rural areas. But those who live in or have migrated to urban areas face a higher level of unemployment. The unemployment among them was 5.2 per cent and 3.1 per cent, respectively, in the years 2004-05 and 2009-10. This was because of the absence of the above mentioned opportunities in urban areas. Even in urban areas, however, the extent of unemployment among them is less than those of other communities mainly because of their readiness to accept all types of menial works and also because of their wider acceptability by the employers as they do not suffer from caste-based work specialization and untouchability as experienced by many of the SC communities.

Data from last 2 NSS rounds suggest that the rate of unemployment among the STs has increased in the rural areas, whereas it has declined among other communities. The most probable reason is the growing landlessness among them, or may be because of land alienation and displacement owing to development projects, decline in their dependence on forest because of growing deforestation and also because of restriction on their entry to the forest and fall in the demand for the traditional tribal products.

In spite of low unemployment among the tribals, their economic condition is very bad. This is because a large number of them work as casual workers and the wage rates of such workers are very low in Odisha. As per 66th round of NSS (2009-10), the wage rate for casual labourers in rural areas is Rs81 for male and Rs59 for female in this state while except Madhya Pradesh in all other states these are higher. The average wage in the country for such workers is Rs101 and Rs69 for males and females, respectively.

Diversification of Employment and Livelihood by Adivasis

Adivasis in Odisha diversify their occupation out of distress caused by seasonal fluctuations in demand for their goods, services and labour and also because of the seasonal variations in availability of raw materials and opportunities. The occupational diversification is also their strategy to minimize risks associated with fluctuations in earning from different activities. They engage themselves in a wide range of activities starting from agriculture to collecting forest products, hunting and different forms of employment in mining, manufacturing and retail trade.

The Report on 5th Economic Census of Odisha, 2005, states that 86.92 percent of STs are engaged in "agriculture services" category under agricultural activities, whereas only 9.91 percent of them are involved in "livestock rearing" and a small 3.34 percent in "fishing activities". The Census 2001 also reveals a similar story in almost all the districts of Odisha the majority of Adivasi workers are engaged in the agriculture sector. In tribal dominated districts, however, a larger proportion of tribal workers are engaged in agriculture sector than in the non-tribal dominated districts. More than 90 percent of the tribal workers of tribal dominated districts of Malkangiri, Nabarangpur and Gajapati are engaged in agriculture sector; in none of the non-tribal dominated districts they constitute such a proportion of the workforce. It is a non-disputed fact that the workers use agriculture as a residual sector of employment and, therefore the incidence of disguised unemployment is very high in this sector. We, therefore, find that the districts where a larger percentage of workers of all social groups are engaged in non agricultural occupations (or agricultural occupations) also have a larger percentage of tribal workers engaged in such occupations. The percentage of tribal other labourers (labourers engaged in non-agricultural occupations or agricultural occupations) also have a large percentage of tribal workers engaged in such occupations. The percentage of tribal other labourers (laborers engaged in non-agricultural occupations) and percentage of other labourers of all social groups have a very high positive correlation (r = 0.74). However, barring two non-tribal dominated districts (Jagatsinghpur and Puri), in all other districts a smaller percentage of tribal workers are engaged in non-agricultural occupations than the workers of all social groups. This shows that the tribals, in general, have lower access to non-agricultural occupations than the workers of other social groups.

Settled Agriculture

Field study reveals that Adivasis in Odisha mainly depend upon settled agriculture for their subsistence. They mainly cultivate food crops for self-consumption. They have very little surplus which they sell in the market and buy other essential items. They cultivate cereals (rice, ragi, maize and millets etc.), vegetables (cucumber, brinjal, tomato, ladyfinger, radish, pea, and bean etc.), pulses and oilseeds (green gram, *til*, blackgram, *arhar*, groundnut, Niger mustard, sesame etc.). Apart from these crops, fruit bearing trees such as mango, jackfruit and banana are also cultivated. These crops are grown in appropriate land, for example, rice is grown on ancestral or sharecropped low lands as they are more suitable for growing rice, whereas, millets are grown in "padar lands" (dry lands) and vegetables on high lands and kitchen gardens. Apart from these, livestock production is also among the important sources of their agricultural livelihood.

Shifting / Podu Cultivation

Adivasis find "Shifting cultivation" also known as "podu chas" as viable and sustainable in the ecological zone where they live. It is a traditional cultivation practiced by some of the Adivasi communities of Odisha since the past. Like in some other parts of the world, their social, cultural and religious practices also revolve around this form of cultivation. Every year approximately 5,298 sq.km. of land in Odisha is cultivated using this method. It is generally practiced in places such as Kalahandi, Koraput, Kandhamal and few districts of South and West Odisha covering approximately 119 blocks. The Kondhs, Kutia Kondhs, Dongaria Kondhs, Lanjia Sauras, Parajas, Godabas, Koyas, Didayis and Bondas are among the tribal groups who practice this form of cultivation.

Cropping Pattern

Table -3
Social Group-Wise Percentage of Different Cropped Area to Gross Cropped Area

| Social | Gross | Paddy | Total | Total | Sugarcane | Total spices |
|------------|--------------------|-----------------|---------------------|--------------|-------------|--------------|
| group | cropped | | cereals | pulses | | and |
| | area | | | | | condiments |
| SC | 100 | 76 | 79.6 | 13.9 | 0.17 | 0.21 |
| ST | 100 | 73 | 82 | 8.7 | 0.11 | 0.53 |
| Others | 100 | 74.9 | 76.7 | 16.2 | 0.41 | 0.17 |
| All Groups | 100 | 74.7 | 78.6 | 13.8 | 0.31 | 0.29 |
| Social | Total | Total | Total | Total | Tatal | Tatal Nam |
| Social | i Otai | iotai | lotai | Total | Total | Total Non- |
| groups | Fruits | Vegetables | Food | Oilseed | Fibers | Food Crops |
| | | | | | | |
| | | | Food | | | |
| groups | Fruits | Vegetables | Food Crops | Oilseed | Fibers | Food Crops |
| groups | Fruits 0.55 | Vegetables 1.46 | Food Crops 96 | Oilseed 3.57 | Fibers 0.33 | Food Crops 4 |

Source: Agricultural Census of Odisha, 2001.

Cropping pattern of Adivasis suggests that as subsistence farmers, they mainly cultivate cereals such as paddy and millets on 82 percent of their gross cropped area while the other communities cultivate these in about 76 percent of their gross cropped area. Among the cereals, they mostly raise dry land crops as the area lacks irrigation facility and the lands have low fertility and low moisture retaining capacity. Paddy is grown by them on 73 percent of the gross cropped area while other communities grow it on less than 2 percent of their gross cropped area. **Table 3** shows the data.

5. MAJOR FINDINGS

The field investigations conducted reveals that paddy is the main crop grown by the Adivasis of Odisha. Besides paddy, they also grow Ragi, Kurat, Jhuna, Alsi and Gurji in large quantities. The Adivasis in Lanjigarh block of Kalahandi District were found to be cultivating paddy in their low-lying fertile lands and Ragi, Kurat, Jhunu, Alsi and Gurji on less fertile dry lands. Inhabitants of Gangaitoli village, Lanjigarh and Sundergarh blocks brought to notice the havoc created by wild elephants in the form of destruction of crops and property. They attributed the ever decreasing forest land as the reason behind elephants straying into human habitation.

Low Agricultural Productivity Trend in Tribal Dominated Districts

The average productivity and variability in production in tribal dominated (Scheduled Area) districts is almost the same as that of the other districts or of the state on the whole. Odisha Agriculture Statistics, 2008-09, as given in Table -4 shows that the average yield of tribal dominated districts is better than that of overall Odisha, as well as that of other districts. The Coefficient of Variation (CV), which is measure of variability of output, is also a little less than that of the state or non-tribal dominated districts. Across the State there is high regional variation in agricultural productivity and it is extremely low in many of the tribal dominated districts of the state. This issue has been raised by many scholars. There exists a strong regional difference in the agricultural productivity in Odisha. In addition, they have claimed that Mayrubhanj, Keonjhar, Koraput and Sundergarh are the most backward districts in terms of agricultural productivity. Here, one point to be noted is the fact that all these districts are highly tribal dominated.

Table 4
Tribal dominated District-wise Yields (in kg/hectare)

| Districts | Percentage of ST | Kharif | Rabi | Total | Rank in the state in |
|-------------|-------------------|--------|-------|-------|----------------------|
| | population (2001) | | | | productivity |
| Nabarangpur | 55.03 | 1,942 | 1,480 | 1,903 | 1 |
| Sambalpur | 34.50 | 1,650 | 1,974 | 1,717 | 4 |
| Jharsuguda | 31.34 | 1,603 | 770 | 1,476 | 6 |
| Mahurbhanj | 56.60 | 1,471 | 786 | 1,412 | 8 |
| Koraput | 49.62 | 1,241 | 1,276 | 1,246 | 10 |
| Rayagada | 55.76 | 1,319 | 672 | 1,239 | 11 |
| Sundargarh | 50.19 | 1,252 | 646 | 1,190 | 14 |
| Keonjhar | 44.50 | 1,197 | 633 | 1,122 | 17 |
| Kalahandi | 28.65 | 987 | 1,220 | 1,053 | 20 |
| Malkangiri | 57.43 | 1,120 | 514 | 1,022 | 23 |
| Deogarh | 33.60 | 1,062 | 560 | 988 | 26 |
| Gajapati | 50.78 | 1,074 | 599 | 963 | 27 |
| Nuapada | 34.71 | 1,057 | 594 | 962 | 28 |

Source: Odisha Agricultural Statistics, 2008-09

Table 4 shows the yield of Kharif (summer), Rabi (winter) and total crops in tribal dominated districts. Barring a few, the yield rates in most of such districts are very low; much

less than the state average of about 1,800 kg per hectare. Though the figures for 2008-09 of tribal districts such as Nabarangpur, Jharsuguda and Sambalpur show a high yield rate but other tribal districts as Deogarh, Nuapada and Guajarati have registered low yield rates. Among these districts, Nuapada figures at the bottom of the list as it has the lowest yield rate for Khariff at 1,057 kg/hectare and Rabi at 594 kg/hectare.

An analysis of the data for the period 1978 to 1998 shows that in Odisha, there is a positive and significant correlation. This shows that, of all other inputs, irrigation has the maximum influence on the yield rate and low yield rate has been attributed to poor irrigation. It is one of the key reasons behind the low productivity and inter – district and inter social group variation in yield rate in Odisha. The tribal farmers of all land holding size have a smaller percentage of net irrigated area than the farmers of all social groups.

Forests as Important Source of Livelihood

The forests have a special significance in the lives of Adivasis in Odisha. Forest is considered to be the most important source of livelihood for them during food crisis. The forests cover a huge chunk of area in major tribal dominated districts. It supplements both their consumption and income. They heavily depend on forest products and hunting. Mohanty has explained that it is difficult to separate Adivasis from forests by either ecological or economical means. The "ecological" aspect pertains to their association with the forest throughout the year for a variety of purposes. They have emotional attachment to the forest with which they have symbiotic relationship.

Table 5
Month-wise Calendar of Non Timber Forest Product

| Name of the Odia month | Calendar month | NTFP Collection |
|---------------------------|-------------------------|--|
| Chait, Baisakh | March – May | Barda Saag, Mango, Siali leaves, Mahua seeds, Small Khajoor, Mahua flowers, (in Chait) |
| Aashar, Jeth | May- July | Barda Saag, Mahua seeds, Small Khajoor, Kendu fruit, Char Phal, Jackfruit, Sal seeds, Jamun, Nangalkandha. |
| Sawan, Bhado | July – September | Mushrooms (Bino Chatti, Sawan Chatti, Bati Chatti, Bans Chatti, Bali chatti), Karkat Phal. |
| Aaswin, Kartik | September – November | Peeta Kanda, Karke Kanda, Babe (a type of grass used to make ropes), Honey, Jhuna. |
| Aghan, Push, | November – January | Amla, Harira, Behera |
| Magh, Phagun | January – March | Mahua, Tamarind |

Source: Seba Jagat, Sillshare International India, 2014

The "economic" aspect of forest is, thus, very important for these Adivasis. Forest is a source of food and earning that includes collecting Minor Forest Products (MFPs) or NTFPs; though this pattern of collecting NTFPs is seasonal. The NTFPs include *kendu* leaves, medicinal plants, edible leaves, fruits, seeds, mushrooms and nuts. Among all these NTFPs *kendu* is one of the most important items for them. They consume *kendu* fruit, burn its wood for cooking purposes and use its leaves for making *bidi*, which is sold to earn some money. During summer, there is a shortage of employment opportunities for Adivasis resulting in limiting their earnings. Particularly in the lean period, the collection and selling of *kendu* leaves at least gives them some earnings. **Table 5** gives a list of the NTFPs they collect in different seasons.

Recent Trend of Seasonal Migration of Tribes in Kalahandi District

Field investigation reveals that seasonal migration among the tribals of Lanjigarh block and Madanpur Rampur block is a recent phenomenon, wherein mainly male members have started migrating in the last 2 years. The age group of these migrants varies between 18 and 28 years. They mainly migrate in order to compensate for their limited earnings during the lean periods. However, people like Moli Majhi and Mahano Majhi from Kanchanmuli village of Lanjigarh block reported the lure of urban lifestyle, especially in terms of better access to markets, clothes and other facilities, as the driving force behind migration. These people arrange for the initial amount required to migrate by taking loans or by selling off their livestock assets such as goats. Such a tendency to migrate has been mainly stimulated by previous migrants although at other times agents have also played a crucial role. At the destination, they engage in works such as masonry, cutting and bending of rods and breaking of stone chips. No proper training is given to them though work specific instructions are always there. Their daily wage rate ranges between Rs.250/- to 400/- based on their skills. Ten people in Kanchanmuli village and 23 people in Talgora village of Lanjigarh block have migrated to work in Kerala. 14 people from Gundurupi village in M. Rampur block have migrated to Rajkot. This form of migration is generally temporary in nature which varies from 2 to 4 months and then they return home after the work is completed. An interesting aspect is that permanent migration is never in option for these tribes although they earn better when they migrate. Generally, employers provide them one time food during the day and also take care of their health issues if directly impacted by their work.

Migration among the Tribes in Nuagaon Block of Sundergarh District

Field investigation also reveals that migration in Relaposh village is a recent phenomenon quite similar to that in the Madanpur - Rampur and Lanjigarh blocks but migration in Lupumbera village has started 10 years back. Unlike in the case of other villages, migration in Lupumbera village is primarily confined to the women. In this village, instances of permanent migration have also been reported, wherein many families have permanently migrated to Pathankot. In these areas agents played a crucial role in migration; especially female migration and Vimal Oraon is one such agent facilitating the process of migration in Relaposh village. In this context, members of DISHA have highlighted that the agents take advantage of the social vulnerability of the tribal women. They try to identify those who have been facing social problems such as heated arguments with their families over marriage issues or any other issue related with their husband or those who are fascinated with the urban lifestyle. In these circumstances, it is comparatively easier to motivate these tribal women to leave their villages. They are then taken to the placement agencies where they undergo pregnancy test and if they are found pregnant, the agents ensure that the child gets aborted. Thereafter, these women are placed as housemaids in the metropolitan cities. The salary due to these women is received by the placement agencies from the owners. The women are given only a part of it when they visit their hometowns during festivals or other occasions. The agencies falsely assure the women that they will be paid their full salary afterwards, which seldom materializes.

6. CONCLUSION

The settled agriculture as well as shifting cultivation are the most important livelihood options of the Adivasis in Odisha followed by collection forest products, hunting, fishing, art and craft activities and working in mining, manufacturing and retail trade. The traditional practice of shifting cultivation coupled with the excessive dependence on the monsoon in absence of irrigation facilities has resulted in low productivity which in turn has resulted in food shortages among the tribals. They resort to take loans from the money lenders by mortgaging their land in order to overcome such distress situations which more often than not remain

unsettled and thus prevent them from coming out of the low-level income trap and vicious circle of poverty. This has resulted in land alienation, loss of assets and in some cases even of bondage. They collect NTFPs such as *kendu* leaves, medicinal plants, edible leaves, fruits, seeds and nuts from the forest. They can be benefitted more from the sale of NTFPs if they are given training in certain skills for processing and value addition to the forest products along with the support of the government. Migration to urban areas has exposed them to risk of being exploited. Though unemployment among the tribals in Odisha is very low due to their above mentioned manifold engagements yet, most of them are engaged in low-paid works. The wage they get is also very low, as a result, a large number of them suffer from acute poverty. This calls for improving the livelihood condition of the tribals by Government as well as NGOs initiatives.

7. REMEDIAL MEASURES AND POLICY SUGGESTIONS

For promoting the livelihood opportunities of the tribals, there is a need to first improve the production and productivity of their agriculture - both settled and shifting. This can be done by providing them with improved agricultural inputs such as seeds, fertilizers and agricultural implements and improvement in agrarian technology and practices. Their income can also be increased by restoration of the land alienated from them and by increasing the productivity of forests by plantation of degraded forest, facilitating the tribes in collection of such products and by ensuring them a proper return for such product by organizing their marketing. Above all, the law preventing alienation of tribal land should be effectively enforced.

* * * * * * * *

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Development Projects and Tribal Rights: The dimension of Tribal Human Rights violations in independent India

Anil Ota *

ABSTRACT

Undertaken in the Tribal-preponderant Districts of Odisha, Jharkhand and Chhattisgarh, the present empirical study intends to unravel both the factors responsible for as well as the dynamics and nature of Tribal Human Rights violations caused by Industrial and Mining Projects in independent India. Adhering to a participatory approach of research enquiry, the Researcher-author has employed a carefully selected range of Sociological and Anthropological data collection techniques upon a sample identified through Stratified Random Sampling technique. Based on the findings of the present study as well as the grueling literature review of pertinent publications, the Paper has also approximated the implications that the Study might have in relation to the prospects of Human Rights protection of Tribals in India as well as abroad.

KEY WORDS

Development Projects, Human Rights, Human Rights Violation, Industrial Project, Mining Project, Tribals

INTRODUCTION

The culmination of British rule in India apart from bestowing upon the citizenry of the Country the pride of being a self-administered and independent people, entrusted the ruling machinery with the mammoth task of not only developing the vast stretch of land mass encompassing the Nation but also building upon and furthering the process of critical infrastructure development especially in the isolated and backward regions, a phenomenon which was initiated by the imperial administrators themselves during the late 18th and early 19th Century. Comprehending the need for setting up Development Projects of a variety of categories such as Dam projects for irrigation, checking flood and generating electricity¹, Linear Projects (Road and Railways)² for improving connectivity particularly to regions situated at far-flung distances from major urban conglomerations, Mining Projects³ to harness the bountiful mineral deposits for earning revenue

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^{1.} Ota, A.B. (2010). *Development Projects and Displaced Tribal – An Empirical Study*. Scheduled Castes and Scheduled Tribes Research and Training Institute (SCSTRTI), Government of Odisha, Bhubaneswar. ISBN 978-93-80705-07-1. pp. 3, 9

^{2.} Ota, A.B. (2011). *Golden Quadrilateral Project – Problems and Prospects of the Affected Persons*. Inter-India Publications, New Delhi. ISBNs 81-210-0452-7 and 9758121004527. pp. 27

^{3.} Ota, A. (2010). *Displacement and Rehabilitation Issues in Tribal Area – A Diagnostic* Analysis. Inter-India Publications, New Delhi. ISBNs 81-210-0438-1 and 9798121004380. pp. 21

and generating employment (Including Downstream Employment) opportunities, Defense Projects for manufacturing of military hardware, arms, ammunitions, equipments and armaments for upholding the National Security and Integrity were set-up by the Welfare Government immediately after independence for guaranteeing all-round development of the Country.

However, two of the major factors of differentiation in relation to the nature of Development Projects being set-up immediately after independence and in the 21st Century epoch include; (a) A dramatic shift in the typology of Development Projects from large dam-based multipurpose and Irrigation Projects in coastal regions of the Country to Mining and Industrial Projects⁴ situated in interior, sparsely populated, densely forested and completely isolated pockets especially of Central and Eastern India and (b) Shift in the demographic composition of Project Affected Persons (PAPs) from non-Tribal majority to Tribal-dominated. Coupled up with the fact that Mining and Industrial Projects tend to have much wider, enduring and lethal social and ecological implications on the peripheral communities, the fact that most of such projects are situated in Tribal-preponderant regions make it even more imperative for a study of the present nature to be carried out which apart from focusing on the central issue of Tribal Human Rights violation by Development Projects also deliberates on critical allied areas of concern such as its genesis, extent, causes and plausible mitigation measures.

HUMAN RIGHTS – CONCEPT AND DEFINITIONS

Human Rights has become a buzz word in the civil society with its use and misuse being linked more to the prevailing and proposed revenue and profit margins of major Business and Industrial Houses or for that matter of fact electoral margins during ballot exercises than for the benefit and welfare of the common masses. One of the major factors that can be held responsible for the prevailing phenomenon of lack of defined boundaries of the framework or scope of its usage is the lack of any universally accepted definition of the term. While inspite of conscientious efforts being made on part of Government and Non Government Organizations (NGOs) to bridge the divergence of opinion amongst different Agencies, Organizations, Bodies etc. relating to the subject-matter of defining Human Rights and drawing its framework of application has to a considerable extent failed to meet its desired intents, there are two critical aspects related to the issue whose construal on part of all major players in the domain seem to be largely similar. The issues referred to in the former sentence include; (a) The fact that Human Rights as a social cause was recognized at the pan-global level and its adherence was regarded to be imperative by the international community only after the Second World War ended in 1945⁵ owing to the gross violation of civil rights and liberties of an inestimable number of people (Including the loss of several millions of human lives) that took place during the period of this disastrous conflict spanning over a duration of more than 6 Years and (b) The fact that the nature, spirit and essence of all Legislations, Conventions, Laws and Regulations related to Human Rights being devised across the World draw their character and content from the Universal Declaration of Human Rights (UDHR) which as a resolution of the United Nations (UN) was proposed and accepted in the General

^{4.} Ota, A. (2012). Impact of Mining on Tribal Livelihood – An Empirical Investigation into the customary frameworks and Issues affecting Sustainable Livelihood in Eastern India. Parikalpana – KIIT Journal of Management. ISSN 0974-2808. Volume 7. pp. 60 – 71

Dairiam, S. (2003). "Mainstreaming Women's Human Rights in Development Work" In Economic and Social Commission for Asia and the Pacific – United Nations (authored) *Putting Gender Mainstreaming into Practice*. United Nations Publications. ISBNs 9211201691 and 9789211201697. pp. 115

Assembly in 1948⁶. It is pertinent to mention here that while the UN UDHR serves as the foundation for the legislative framework on Human Rights around the World, upon a comprehensive assessment of its constituents, it can be stated that almost all major Human Rights Conventions or Laws enacted at National and International levels on any specific critical aspect/micro area of Human Rights traces its origin to its fundamental philosophy. The succeeding paragraphs of this section of the Paper have been used to illustrate the definition of Human Rights propounded by various Conventions or the construal/meaning of the term by eminent Organizations/ Agencies operating in protection, guaranteeing and safeguarding of the same.

- "... recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world."
 - Preamble of the Universal Declaration of Human Rights (UDHR)
- "...reaffirm faith in the fundamental human rights and to promote social progress and better standards of life in larger freedom."

United Nations Charter – Article 55

Exhibit 1 Examples of Human Rights (Freedoms, Rights and Prohibitions related to Human Rights)

In the area of civil and political rights

- 1. Right to life
- 2. Freedom from torture and cruel, inhuman or degrading treatment or punishment
- 3. Freedom from slavery, servitude and forced labor
- 4. Right to liberty and security of person
- 5. Right of detained persons to be treated with humanity
- 6. Freedom of movement
- 7. Right to a fair trial
- 8. Prohibition of retroactive criminal laws
- 9. Right to recognition as a person before the law
- 10. Right to privacy
- 11. Freedom of thought, conscience and religion
- 12. Freedom of opinion and expression
- 13. Prohibition of propaganda for war and of incitement to national, racial or religious hatred
- 14. Freedom of assembly
- 15. Freedom of association
- 16. Right to marry and found a family
- 17. Right to take part in the conduct of public affairs, vote, be elected and have access to public office
- 18. Right to equality before the law and non-discrimination

In the area of economic, social and cultural rights

- 1. Right to work
- 2. Right to just and favorable conditions of work
- 3. Right to form and join trade unions

^{6.} Claude, R.P. and Weston, B.H. (2006). *Human Rights in the World Community – Issues and Action – Pennsylvania Studies in Human* Rights. University Pennsylvania Press. ISBNs 0812219481 and 9780812219487. pp. 214

- 4. Right to social security
- 5. Protection of the family
- 6. Right to an adequate standard of living, including adequate food, clothing and housing
- 7. Right to health
- 8. Right to education

In the area of collective rights

- 1. Right of peoples to:
 - Self-determination
 - Development
 - Free use of their wealth and natural resources
 - Peace
 - A healthy environment

2. Other collective rights:

- Rights of national, ethnic, religious and linguistic minorities
- Rights of indigenous peoples

Source: Nowak, M. (2005). *Human Rights: Handbook for Parliamentarians*. Inter-Parliamentary Union – Office of the United Nations High Commissioner for Human Rights. ISBN 92-9142-266-5. pp. 2

From a comprehensive examination of the aforementioned definitions, it can be observed that as indicated earlier, the nature and spirit reflected from the arrangement of words illustrating the scope, boundaries and framework of the terminology, "Human Rights" as well as its practical applicability can be largely regarded as similar. While the minor deviations in viewpoints of inclusion, exclusion or deliberate reduction in the degree of significance associated with certain elements of Human Rights remain by and large the theme of conflict on the issue that has kept the civilized world at bay from possessing a universally acceptable definition on the term, its common constituents as reflected in the preceding paragraph include the following; (a) Avoidance of discrimination of people based on race, creed, place of birth, gender etc., (b) Guaranteeing freedom of speech, political participation and access to proper life and livelihood including water and sanitation etc. Similarly, the doctrine of Human Rights include four fundamental and inviolable principles such as; (a) Universality, (b) Inalienability, (c) Indivisibility and Interdependence and (d) Non-discrimination⁷.

INSTRUMENTS FOR UPHOLDING TRIBAL HUMAN RIGHTS IN INDIA

Human Rights of the Tribals and other vulnerable sections of the Indian society has been a central theme of deliberation within the civil society as well as for legal luminaries and the administrative set-up since independence. Such prolonged and often intense debates on this delicate issue which assumes both socio-economic as well as legal ramifications have been the key propellant behind the robust framework of protective measures that have been put in place in the Country for guarding the basic (Human) rights of the Tribal people encompassing within its fold both the Constitutional as well as applicable Legislative Provisions. It is pertinent to mention here that although the enterprise for upgrading and when required even introducing new protective

^{7.} Nowak, M. (2005). *Human Rights: Handbook for Parliamentarians*. Inter-Parliamentary Union – Office of the United Nations High Commissioner for Human Rights. ISBN 92-9142-266-5. pp. 4 – 5

legislations to avoid discriminatory treatment of the Tribals in the Country made by the Welfare Governments (National and State Governments) is praiseworthy but the persistence and escalating scope for their contravention also keeps on propping up⁸ at an equivalent or even faster pace making most progressive legislative interventions in the matter largely futile and ineffective. The succeeding paragraphs of this Section of the Paper have been used to provide a brief overview of the Constitutional provisions through relevant Articles and Parts, applicable National and State-level Legislations and ratified International treaties and conventions through which the Republic of India has been endeavoring to safeguard the Human Rights of the Tribal Population of the Country.

1. Indian Constitution

Swearing an oath of commitment towards elimination of all forms of discrimination against its citizenry based on the prejudiced foundations of Caste, Creed, Faith, Place of birth etc., the Constitution of India comprehending the social and economic vulnerability of the largely impoverished forest dwelling Tribal population of the Country⁹ through a range of protective and positive discriminatory measures intends to address their predicaments in the spheres of Education and Culture (Educational and Cultural Rights – Articles 15 (4), 29, 46 and 350), Social Rights (Articles 23 and 24), Economic Rights (Articles 244 and 275), Political Rights (Articles 164 (1), 243, 330, 334 and 371), Employment Rights (Articles 15 (4), 16 (4) and 16 (4A) etc.

Exhibit 2 Subject-wise allocation of responsibilities to the Scheduled Tribes and Scheduled Castes Development Department for Tribal welfare

Union Subjects

- 1. Welfare of ex-Criminal Tribes
- 2. Inclusion and Exclusion in the Scheduled list for Tribes
- 3. Prevention of atrocities so far as they relate to Scheduled Tribes

State Subjects

- 1. Welfare of Scheduled Tribes Execution of Special Schemes and Co-ordination of the works undertaken by other Departments of the Government in this Direction
- 2. Submission of Annual Reports to the President regarding Administration of Scheduled Areas
- 3. All matters relating to Tribes Advisory Council
- 4. Application of Laws to the Scheduled Areas
- 5. Regulations of peace and good governance in Scheduled Areas
- 6. Problem of Shifting Cultivation
- 7. Organization and control of SCs and STs Research and Training Institute
- 8. Central Grants under Article 275 (1) of the Constitution of India
- 9. Sub-Plan for tribal regions and matters related thereto
- 10. Matter relating to the Orissa Reservation of Vacancies in Posts and Services (for Scheduled Castes and Scheduled Tribes) Act, 1975 and rules framed there under
- 11. Matters relating to Tribal Development Co-operative Corporation Limited
- 12. Education of Scheduled Tribes
- 13. Matters relating to Tribal Academy of Tribal Dialect and Culture

^{8.} Brysk, A. (2000). From Tribal Village to Global Village – Indian Rights and International Relations in Latin America. Stanford University Press. ISBNs 0804734593 and 9780804734592. pp. 265

^{9.} Gupta, V.S. (2004). *Communication, Development and Civil Society – Essays on Social Development and Civil Society*. Concept Publishing Company. ISBNs 8180690504 and 9788180690501. pp. 115 - 116

- 14. Rehabilitation and resettlement of Tribals
- 15. All Plan, Non-Plan, Central and Centrally Sponsored Schemes concerning Tribals
- 16. The entire field establishment and matters relating to Education under the erstwhile Harijan and Tribal Welfare

Source:

Annual Report 2006-07. *Scheduled Tribes and Scheduled Castes Development Department and Minorities and Backward Classes Welfare Department, Government of Odisha*. pp. 6

Schedules V¹⁰ and VI¹¹ of the Indian Constitution assumes special significance in relation to the guarantees that this fundamental manuscript of governance makes towards the welfare and protection of the Tribal people in the Country by including within its fold all such geographical regions where this vulnerable section of population have been enumerated to register a demographic majority. The pattern of administering such regions enlisted under this Schedule has been earmarked to be carried out by the President of India through the Governor/ Lieutenant General of the respective State/ Union Territory with a report illustrating the progress made with regards to the progress of the Tribal folk of the region in particular and the region in general to be prepared and submitted by each State/ Union Territory to the Center on an annual basis.

2. Other relevant National Legislations

Legislations for Tribal welfare and protection of their Human Rights in India are propounded by both the Central Government as well as by different State Governments. The primary purpose of formulating and implementing legislations with regards to the Tribes of the Country is to uphold and put into effect the commitments made by the Constitution in relation to their wellbeing. To be precise, the Tribal legislations in India cover or encompass within their fold a range of socio-economic aspects which have been serving as impediments for the growth and welfare of the Community such as equal or positive discrimination with respect to seeking education and employment opportunities in the Public Sector, recognition of their rights (customary rights) over forest land, representation in the form of reservation of selected Constituencies to the National and State Legislatures for adequate public representation etc.

Exhibit 3 Major National and State-level Legislations for Tribal Welfare in India

National Legislations

- 1. The Scheduled Tribe's Bonded Labor Abolition Act, 1976
- 2. Scheduled Caste and Scheduled Tribe (Prevention of Atrocities) Act, 1989
- 3. Panchayat Extension to Scheduled Area Act, 1996
- 4. Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006

State Legislations

- 1. The Andhra Pradesh Scheduled Areas Land Transfer Regulation Act, 1959
- 2. The Andhra Pradesh Scheduled Commodities Order, 1973
- 3. The Karnataka Scheduled Castes and Scheduled Tribes Act, 1978
- 4. The Tamil Nadu Acquisition of Land for Harizan Welfare Schemes Act, 1978

^{10.} Fifth Schedule (Article 244) provides for the administration and control of Scheduled Area and Scheduled Tribes

^{11.} Sixth Schedule (Articles 244 and 275) provides provisions for the administration of Tribal areas in Assam, Meghalaya, Tripura and Mizoram

As in case of most Countries as well as International Conventions, even in case of India, the Legislative Provisions for vulnerable sections of people such as the Tribals can be segregated under two heads based on their approach and orientation towards the welfare and wellbeing of the intended Community. To be precise, in case of India while National Legislations such as the Scheduled Caste and Scheduled Tribe (Prevention of Atrocities) Act, 1989¹² proposes to terminate the socially and economically degenerating conduct that these population segments have been subject to in the Country since hoary past, progressive legislations such as the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006¹³ also popularly known as the Forest Rights Act intends to legitimize customary Tribal ownership over forest lands which the members of the Community have been depending upon and have been in possession of for several generations and which serves as the sole source of livelihood for most of them.

3. International Obligations – Ratified Treaties and Conventions

Associating paramount importance to global conventions as a part of its commitment towards adhering to international-level treaties and conventions, the Republic of India has ratified to such accords and legislations in the sphere of Human Rights which apart from being consistent with its own regulatory framework for the purpose impels for upholding of the protection and guaranteeing of the legitimate exercise of this critical aspect of democratic governance especially by the vulnerable sections of the Country's citizenry. The succeeding exhibit illustrates the major international treaties and conventions to which India has ratified concerning Human Rights, its protection and guaranteed exercise within the geographical jurisdiction of the Country.

Exhibit 4 Major International Treaties and Conventions to which India has ratified

- 1. International Covenant on Civil and Political Rights (ICCPR)
- 2. International Covenant on Economic, Social and Cultural Rights
- 3. Convention on the Elimination of all forms of Discrimination against Women
- 4. Convention on the Rights of the Child (CRC)
- 5. Optional Protocol to the CRC on the Involvement of Children in armed conflict
- 6. International Convention on the Elimination of all forms of Racial Discrimination

Source: Amnesty International Report 2011. pp. 368 to 587

It is pertinent to mention here that on grounds of incompatibility between National Law and International legislative requirements stipulated by certain conventions, India has on purpose not ratified to specific Global conventions such as the International Labor Organization (ILO) Convention Number 169. To be precise, two major reasons can be attributed to the Country choosing not to ratify the Convention such as; (a) The convention primarily deals with the human rights of the Indigenous and Tribal peoples and the term "Indigenous" itself is non-existent within the framework of the Indian Constitution¹⁴ from which it can be surmised that

^{12.} Naval, T.R. (2004). *Legally Combating Atrocities on Scheduled Castes and Scheduled* Tribes. Concept Publishing Company. ISBNs 8170229944 and 9788170229940. pp. 419

^{13.} Patnaik, K. and Patnaik, P.P. (2011). *Land Alienation and Its Dimensions – A Study of Schedules Districts of* Orissa. Concept Publishing Company. ISBNs 8180697665 and 9788180697661. pp. 45

^{14.} Xaxa, V. (2008). State, Society and Tribes – Issues in Post-Colonial India. Pearson Education India, ISBNs 8131721221 and 9788131721223. pp. 10

the Law of the Land does not recognize the existence of such people in the Country and ratification to such a treaty might cause legislative complications and set course for a clash between National legislations and International obligations and (b) The ratification of the earlier version of the Indigenous and Tribal people in the form of the ILO Convention Number 107 had invited widespread criticism to the Country on the pretext that its clauses were not consistent with the Constitution consequent upon which the ruling establishment did not want to repeat the mistake committed in the past.

A BRIEF ABOUT THE STUDY

1. Rationale for the Study

The study on the basis of which the present paper has been formulated was considered prudent to be undertaken primarily in view of the gross violations of human rights and a variety of other basic civil liberties and Constitutional entitlements of the Tribal population of India (With special reference to Eastern and Central Indian Tribes) that has taken place in the wake of a recent surge of setting up of Development Projects with special reference to Industrial and Mining Projects in the thickly forested and mineral-rich States of Odisha, Jharkhand, Chhattisgarh and Andhra Pradesh which happen to be the home of a variety of forest dwelling Communities. The rationale for the present study or the justification of the empirical study based on the outcomes of which the present paper has been devised can be outlined as follows:

- a. Enactment of Industry-friendly legislations such as the Industrial Promotion Resolution (IPR) 2001 by the Government of Odisha (GoO) has resulted in the levels of industrialization with special reference to the Mining Sector Projects to receive a major boost¹⁵. As most Mineral deposits in Eastern and Central India are situated in mountain cappings which are inhabited by the Tribal populace, it becomes critically important to assess the wide range of adverse implications that mining and industrial operations might have including the dimension of potential human rights violation on this vulnerable Community
- b. While Tribal pockets in the study area (Eastern and Central India) have been exposed to Development Projects right from the post-independence times, their acquaintance with Industrial and Mining Projects is minimal with only a few Tribal-dominated regions in the said expanse experiencing such activities. Hence, the coping strategy to such projects and its immediate socio-economic and environmental impacts amongst the Tribals is largely poor, contraventions of both of which are regarded as violation of Human Rights by the UDHR. In view of the fact that global conventions and international regulations state that a large number of substantiate rights fall within the framework of Human Rights, a comprehensive assessment of the real-time predicaments being countered by the Tribals in such regions was considered imperative so that radiance can be tossed at newly emerging yet genuine dimensions of concern relating to Human Rights and its violations in Tribal India before they can be used as a reference point to address such grave issues
- c. While the Tribals themselves on account of their illiteracy/ lower levels of educational attainment are not aware of their own Constitutional and legislative entitlements in relations to protective rights and civil liberties, no constructive enterprise has been made

^{15.} Ota, A. (2010). *Displacement and Rehabilitation Issues in Tribal Area – A Diagnostic Analysis*. Inter-India Publications. ISBNs 81-210-0438-1 and 9798121004380. pp. 37-38

to assist the Community in comprehending the same on part of the Welfare Government which has resulted in a massive vacuum which the left-wing separatists have identified and in a coordinated manner endeavored to fill up? To be precise, while cases of Tribal Human Rights violations largely remain unreported in isolated forested pockets of Eastern and Central India, the pain and grief of the suffering Tribals are being used by internal separatists as a foundation to extend their reign of terror by deceiving the innocent forest dwellers and instigating them against the State. Through this study and its ensuing findings, it is expected that adequate measures are taken in view of the emerging aspects of Human Rights violations in Tribal India to effectively and in a conscientious manner address them before the prevailing scenario of Left-wing extremism in the Country assumes the manifestation of a Civil War

2. Objectives of the Study

A large of Industrial and Mining Projects as indicated earlier have come up in the Tribaldominated regions of Eastern and Central India which also happen to be the store house of a variety of high grade mineral reserves. The genesis of such Projects can be traced through two overlapping sets of development phenomenon both of which were purposefully introduced through specially crafted legislative enactments such as; (a) The Development Projects in the form of Linear Projects (Roads and Railways) were set-up immediately after independence so as to facilitate convenient and hassle-free access to such regions which were recorded for their bountiful mineral deposits paving path for the Industrial and Mining Projects of the present epoch and (b) Industry-friendly legislations such as the IPR 2001 which provide a range of concessions and other enable circumstances for Industrial Houses to set up their business concern and for industrialization at large to take shape. While Linear Projects which came up in the 1950 and 1960s although displaced people but had environmental and socio-economic implications that were not as lethal as Mining Sector Projects, the present-day ventures of Industries and Mining seem to have contravened almost each and every aspect of Human Rights especially of that of the Tribal population as such enterprise are mostly situated in the habitation site of this vulnerable Community. Apart from identifying the major forms of violations of Tribal Human Rights by Development Projects with special reference to Mining Projects in independent India, the present Study has been undertaken with the following broad objectives:

- a. To provide an overview of Human Rights including the genesis of its origin, concept, definitions and constituents
- b. To illustrate the regulatory mechanism for protecting and guaranteeing hassle-free exercise of Human Rights by the Tribal Populace of India encompassing within its fold Constitutional Provisions, National and State-level Legislations and International Conventions to which the Country has ratified
- c. To shed light on the rationale on the pretext of which the present Study was carried out including its objectives
- d. To put forth the anticipated implications of the Present Study and its outcome on the broader domain of Tribal Welfare with special reference to protection of Tribal Human Rights in India as well as abroad

3. Geographical Coverage, the Sample (Sampling Technique used and Sample Size) and Data Interpretation

The empirical exercise encompassing the findings of which the present Paper has been formulated was undertaken in the Tribal-dominated pockets of Odisha, Jharkhand and Chhattisgarh. Two qualification criterions were laid down as pre-requisites for a region within the Study States to be included within the geographical framework of the empirical study; such as: (a) The region i.e. either the Community Development (C.D.) Block of the Gram Panchayat should be home to atleast one Mining Project or an Industrial Project having causing physical displacement and livelihood dispossession of a substantial number of Tribal people and (b) The Projects should have been set-up necessarily after the independence of the Country in 1947 so as to ensure that enough records and information on the Project Affected Persons (PAPs) (Including Displaced Persons) is available for analysis.

Table 1 Geographical Coverage and the Sample

| State | Districts | Sample C.D. Blocks | Sample Population |
|--------------|---------------|--------------------|-------------------|
| Odisha | Koraput | 1. Koraput | 50 |
| | | 2. Laxmipur | |
| | Keonjhar | 1. Keonjhar | |
| | | 2. Joda | |
| Jharkhand | Lohardaga | 1. Lohardaga | 50 |
| | | 2. Bhandra | |
| | West Singbhum | 1. Chaibasa | |
| | | 2. Chakradharpur | |
| Chhattisgarh | Korba | 1. Korba | 50 |
| | | 2. Kartala | |
| | Bilaspur | 1. Sadar | |
| | | 2. Jhandutta | |
| Total | 6 | 12 | 150 |

Source: Research Design

To ensure that the sample is free from prejudice and that the selection of respondents was not made on the basis of favoritism, Stratified Random Sampling Technique was employed. In fact, the different stratas used to segregate the universe for the purpose of facilitating the collection of a truly representative form of sample for the study included; (a) Type of Project – Mining and Industrial, (b) Nature of Project Impact – Physically Displaced and Economically Affected, (c) State Affiliation – Odisha, Jharkhand and Chhattisgarh, (d) Economic Status of the Sample – Below Poverty Line (BPL) and Above Poverty Line (APL), (e) Educational Attainment – Illiterate, Semi-Literate, Literate and Highly Literate (Graduation and above), (f) Number of Times Displaced – First and Multiple. Comprising up of the respondents drawn from the aforementioned six Stratas, a total number of 150 sample units were selected upon which the different Sociological and Anthropological Techniques of data collection were employed to obtain the requisite information for the study and simultaneously meet the predetermined objectives with which the empirical exercise was carried out.

Comprehending the lack of a Mathematical Model in place for assessing the implications of Mining and Industrial Projects on exercise of Human Rights by the Tribal people and in view of the fact that the Study was intended to identify the factors responsible and shed light on the

dimensions of Tribal Human Rights Violations caused by Development Projects in India and not develop a Quantitative Framework for the purpose, it was considered prudent only to qualitatively analyze the observations and collected information from the sample respondents during the course of the empirical exercise. Moreover, the rampant illiteracy in the Study area also barred the Researcher-author from employing quantitative data collection techniques as the realization of the same on part of the sample respondents would have been a mammoth task which even after being accomplished would not have guaranteed a genuine response from the subjects especially in view of their lack of comfort with numbers. However, to ensure that the qualitative deciphering, analysis and interpretation of the data and information collected was legitimate, the professional expertise of two subject-matter specialists having an experience of more than four decades each in the sphere of Tribal Studies was taken.

4. Profile of Major Activities and Limitations of the Study

The study on the basis of the findings of which the present Paper has been formulated was undertaken over a duration of Eight weeks. The major activities undertaken during the course of the study along with the timeframe/ duration (In Weeks) has been illustrated below in a tabular format.

 Table 2
 Profile of Major Activities

| SI. No. | Name of the Activity | Time Taken (In Weeks) |
|------------------|---|-----------------------|
| 01 | Review of Literature | 1 |
| 02 | Selection of Research Tools (Including Pre Testing) | 1 |
| 03 | Data Collection and Data Interpretation | 2 |
| 04 | Formulation of First Draft Paper | 3 |
| 05 | Review of First Draft and Final Paper Layout | 1 |
| Total Time Taken | | 8 |

Source: Research Design

Although all possible enterprise was made so as to ensure that the present study does not suffer from any limitations, similar to all other Empirical Exercises certain unavoidable limitations or research shortcomings could not be avoided, a brief of which is as follows:

- a. While the sample study areas within the States of Odisha, Jharkhand and Chhattisgarh were selected based on a map assessment of the Tribal demographics on one hand and existing Mining and Industrial Projects in the region on the other, on account of lack of adequate and appropriate transportation and unavailability of desired logistics support, two such geographical expanses had to be on purpose left out
- b. The unfriendly and at times even violent behavior exhibited by some sample respondents (primarily the ones who were the worst impacted people of mining and industrial projects or were multiple displaced persons) compelled the Researcher-author to exclude such formerly selected sample population from the framework for the empirical exercise and replace them with randomly selected sample
- c. Even the basic information on the Mining and Industrial Houses on account of whose' operations Tribal Human Rights violations were caused could not be put forth in the present Paper amid opposition from such Organizations inspite of the Researcher-author's proposal of limiting the legitimate information provided by them for research purpose only

KEY FINDINGS OF THE STUDY

Before elucidating the findings of the Empirical Exercise which illustrate the major factors responsible for Tribal Human Rights violation in the Study area, it is pertinent to converse regarding the imperativeness of Human Rights in relation to the Tribal Community and the dimension of their violation by Development Projects with special reference to the Industrial and Mining Sectors. In fact, Human Rights as a fundamental aspect of any Constitution emphases the need for its protection and espousing with regards to the vulnerable sections of the population and in the Indian context, as indicated earlier, the Tribal people constitute the susceptible segment of the Country's citizenry. While leading a life characterized by isolation and absolutely minimal contact with the outside population, the Tribals seldom experienced any major contravention of their civil liberties, growing influx of people propelled by setting up of Industry and Mining Projects in such regions most of which physically displace a large number of forest dwellers apart from adversely impacting their means for sustenance have caused severe flouting of Human Rights regulations of the Community especially in Eastern and Central India. The cause of Industry and Mining Projects assume special significance in comparison to Linear Projects, Defense Projects, Dam Projects or for that matter of any other Projects with regards to their effects on local ecology and society because the impact of the former two categories of Projects are much worse and engulf within their vicious fold a large number of people owing to their nature of operations. For instance while a Linear Project such as expansion of a National Highway might displace and economically impact some people but the ensuing effects are one time i.e. a person will lose his residential dwelling or cultivable land only once (However, the aftermath of the acquisition of land on the displaced/ affected person and his economic wellbeing can be argued to be long term) whereas an Industry or Mining Project abiding by their phenomenon of operations are set to cause environmental pollution affecting both the local ecology as well as violate the right to a healthy life and livelihood of the peripheral communities throughout its lifecycle. Other contributing factors such as the lethality of the environmental pollution caused and its nature of effects (fatal/ non-fatal) on the impacted also serve as supplements to the aforementioned claims of Industry and Mining Projects posing a more severe threat to the peripheral environment and society than any other Sector Projects.

- 1. Lack of appropriate Community Consultations for seeking Free, Prior and Informed Consent from the peripheral inhabitants on critical environmental, social and livelihood issues
 - a. Background Setting: The customary framework of community involvement in Development Projects in India was limited to the participation of the population inhabiting the proposed Project Site in the Baseline Socio-economic Survey intended to enumerate the prospective impacted population including the Physically Displaced and Affected People. In fact, neither were the enumerated Displaced population consulted while laying out the Resettlement Matrix for their sustainable rehabilitation nor for that matter of fact the opinions and views of the land losers taken into account while finalizing the rate of payment of acquired land or on other critical issues related to the project affecting the common masses of the region. To be precise, the Rehabilitation Plans/ Peripheral Development Plans of almost all the major Development Projects in the post-independence epoch till almost the 1990s were conceptualized and implemented by the State in collaboration with the Project Proponents adhering to a top to bottom approach where the views of the beneficiaries was not even considered let alone their consent being sort.

The dawn of the 21st Century saw a perceptible transformation in both International guidelines as well as the National Regulatory mechanism for seeking public opinion or engaging the local population through community consultations to consider their opinions, views and suggestions on critical aspects of the Project that might impact them. Although it has been little more than a decade since guidelines and legislative provisions relating to community consultations have come in vogue but, the language therein relating to the nature and scope of public participation that they espouse have been amended to a considerable extent. For instance, while the term *consultation* was initially used to refer to the process of approaching the impacted community for comprehending their version of the project and their suggestions concerning the same, it was soon replaced by the phrase *consent* (for Indigenous Peoples) which meant that the broader mandate of the participants of community consultations was required to be sort¹⁶. This transformation from consultation to consent has supplemented the entire public engagement process with the ethos of democracy, social equality and egalitarianism.

b. Study Findings: Almost all Sample respondents during the course of the empirical exercise furiously stated that either their opinions and views concerning the Project were never sort or if they were sort, they were never implemented or even considered for implementation. A large section of the sample also expressed their dissatisfaction at the procedure of coercion and intimidation that was adopted by Project Proponents to distort and on purpose manipulate community opinion and concerns on a range of issues related to the Project. In fact, there were instances where even the signatures and thumb impressions of the participants of Community Consultation exercises were either forcibly taken or were rigged to project an acceptable portrayal of the Project and the dimension of local acceptability of the same. However, a handful of Sample Respondents registered their views concerning the nature of Community Consultations carried out by their Project Proponents which were diagonally opposite to what had been expressed by their fellow study participants. This segment of the sample stated that not only was an open and democratic platform for expressing the opinion and views of the impacted people facilitated by the Project Proponents but any adverse remarks or suggestions unfavorable to the cause of the Project were taken due note of and upon ensuing deliberations were considered appropriate or not appropriate for implementation.

2. Contravention of the Constitutional Right to Settle and Reside anywhere in the Country [Article 19 (1) e]

a. Background Setting: The Indian Constitution via Article 19 (1) e has empowered its citizenry with the Right to Settle and Reside anywhere in Country¹⁷. Interaction with Constitutional Experts prior to the empirical exercise revealed that one of the major

^{16.} The International Finance Corporation's (IFC) 2012 revised Policy on Environmental and Social Sustainability encompassing within its fold 8 Performance Standards (PS) holds two different views for community participation in Development Projects. While PS 3 states that Informed Consultation and Participation (ICP) needs to be carried out with local communities, PS 7 requires Project Proponents to seek Free Prior and Informed Consent (FPIC) in case the local communities are Indigenous Peoples which mandates need for their assent to be sort

^{17.} Ota, A.B. (2010). *Development Projects and Displaced Tribal – An Empirical Study*. Scheduled Castes and Scheduled Tribes Research and Training Institute (SCSTRTI), Government of Odisha, Bhubaneswar. ISBN 978-93-80705-07-1. pp. 7

rationales for including the Right to Settle and Reside anywhere in the Country within the framework of the Constitution was to facilitate each and every unit of the Country's populace irrespective of Caste, Creed, Religion, Sex, Linguistic affinity, birth place etc. the legitimate authority to inhabit a place of their choice and preference so that the ethos of social and demographic diversity being propagated by the Political Leaders can be translated into reality with special emphasis on protection of the interests of minority groups.

b. Study Findings: All Development Projects involving involuntary displacement of people are in direct contravention of this rather inviolable Constitutional Right. While appropriate legislative policy measures to replenish the Constitutional infringement have been endeavored at being formulated at the Central and State levels by the Welfare Governments which offer a set of mere consolation-like meager compensatory monetary package to the dislocated people, their effective implementation to at least salvage the enduring damage caused to the impacted at the ground level could not be observed in case of any of the study Development Projects during the course of the empirical exercise. Three major observations with regards to the opinions being sort and the decisions being made in relation to displacing and relocating communities by Development Projects were made such as; (i) The opinions and views of the people on both displacement as well as plausible alternative land resources for avoiding displacement were either not sort or were forged by Project Proponents, (ii) The choice of the relocation site/ resettlement colony was not sort by any Project in a desired manner and the proposed site for the rehabilitation colony were superimposed upon the displaced and (iii) In case of multiple displacement where people have been displaced more than once during their lifetime, no special assistance was provided by the Project Proponents which as a practice needs to be exercised not only on humanitarian grounds but also based on the principles of economic justice. To supplement the aforementioned observations and their genuineness, for instance, in case of one Mining Project, the Resettlement Colony was situated barely 2 Kilometers from the Mining Site which indicates that either the consent of the people regarding the relocation site in the case was not sort or information concerning the mining site, its location and plausible adverse effects in the form of environmental pollution was never shared with the displaced people if the relocation took place during the pre-mining period. The observations of the author were also substantiated by similar responses from the sample population which collectively tosses radiance at the dynamics of the contravention to Article 19 (1) e of the Indian Constitution caused by Development Projects.

3. Infringement of the Constitutional Right to Life and Livelihood (Article 21)

a. Background Setting: The Right to Life and Livelihood (Article 21)¹⁸ assumes a typical manifestation in Tribal societies where dependence on nature in the form of forest or local ecology becomes indispensable for human existence. Forest dwelling Tribal Communities often inhabit impregnable hilly jungle terrains and extract the available flora and fauna to meet their food quest. With limited literacy and absolutely restricted access to the contemporary mode of living and sources of livelihood such as industrial engagement or any other form of constructive occupation other than foraging, hunting, crude agriculture and customary arts and crafts, the Tribals in an event of involuntary displacement also

^{18.} Ota, A. (2010). *Displacement and Rehabilitation Issues in Tribal Area – A Diagnostic Analysis*. Inter-India Publications. ISBNs 81-210-0438-1 and 9798121004380. pp. 24

necessitating restricted access to their sole source of livelihood i.e. neighboring forests are compelled to plunge into destitution and unbounded economic misery posing as a threat to their life. In view of the aforementioned interaction, it is pertinent to mention here that while the Right to Life and Livelihood as a Constitutional entitlement is applicable to the entire citizenry of the Country but its magnitude of effect is considerably more in case of the vulnerable Tribal people as their philosophy of livelihood itself is entrenched in one single source of living i.e. as indicated several times earlier their local ecology which is an event of being acquired or restricted access to serves as a catastrophe for the entire Community.

b. Study Findings: The sample respondents during the course of the empirical exercise revealed that although legislative requirements mandated the Project Proponents to develop community forests which in local terminology is known as "Grameen Jungle Jogya Jameen" in an event of such category of forests being acquired for a Development Project to facilitate the rehabilitated population with a source to eke out their requirements for which earlier they depended on the acquired forest resources, such provisions were either not being put into effect or were being implemented in a cosmetic manner with the size of such artificially-created forests, their location, constituents in the form of fruit-bearing and other essential flora etc. being grossly inappropriate. In an event of non-restoration of even the pre-displaced or pre-project standards of living, the affected people witness a gradual worsening of their livelihood status which also adversely impacts their life often resulting in their extermination. Taking cue from the above discussion, it can be stated that the issues identified to be affecting the displaced or affected people especially in case of Industrial and Mining Projects with regards to Article 21 include the following: (i) Compensation for land acquired of all categories including cultivable land registered in the name of the Project Affected Person (PAP) is being made through cash, (ii) The location of "Community Forests" which are being set-up by Project Proponents are often close to the mining site or in such unfavorable areas where both the prospects of nurturing of the planted saplings is poor as well as their access becomes difficult and (iii) The constituents of such created forests in the form of the types of flora planted is often determined by the Project Proponents without consulting the beneficiaries or the local Forest Department which under most circumstances are not suited to the community needs and are tailored to the requirements and comforts of the Project. Non-restoration of the livelihood of the displaced and affected populations especially in case of rural communities with special reference to the sample Tribal respondents also indirectly infringes their right to life and together with their professional limitations of lack of adequate and appropriate skills set for industrial and other forms of engagement in the organized work setup contravenes Article 21 of the Indian Constitution.

4. Infraction of the Right to Health and Healthy Environment

a. Background Setting: While severe interferences with local ecology and environment during the 17th Century Industrial Revolution in Europe caused unprecedented harm to human health and wellbeing, the case of recognizing the right to a healthy environment as a constituent of global human rights for the first time was brought to the international podium for deliberation only in 1972 during the Stockholm Conference. In fact, Principle 1 of the Stockholm Declaration provides explicit mention of environmental rights as an inseparable constituent of human rights. The Stockholm Conference in general and the Stockholm Declaration in particular paved way for the United Nations (UN) Conference on

Environment and Development in Rio da Janerio, Brazil in June 1992 where 27 Principles¹⁹ were identified for promoting sustainable and environmentally sound development across the UN Member States through the Rio Declaration laying the foundation for environmental activism and encompassment of the issue within the framework of Human Rights to spread across different ecologically vulnerable pockets of the World.

"Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well being, and he bears a solemn responsibility to protect and improve the environment for present and future generations."

- Principle 1 (Stockholm Declaration)

b. Study Findings: Sample respondents during the course of the empirical exercise stated that reckless environmental pollution caused by industrial and mining operations within close vicinity of their habitation resulted in a remarkable deterioration of the region's environment which in turn affected both their livelihood prospects as well as their health and physical wellbeing. In the sample mining projects that were covered by the study, the case of ground water contamination and severe pollution of nearby rivers and other forms of still and stream water were observed to be common and with water pollution, instances of water borne and other allied diseases have become a rather common phenomenon amongst the peripheral population of such projects. Similarly, in case of industrial projects, discharge of industrial waste and effluents caused appalling damage to the water ecosystems of the nearby areas thereby affecting even the animal and plant life depending upon them. Both mining and industrial projects were also observed to cause deposition of a thick layer of dust on the leaves of trees in their immediate neighborhood making the local population to whom they served as a source of livelihood vulnerable to ensuing health predicaments. Instances of unabated air pollution caused by such projects were also narrated by sample respondents which apart from serving as a direct health hazard earned through breathing also resulted in inadequate, poor quality and sick crop yield impacting the economic prospects of the already marginalized and small scale farmers of the study projects.

IMPLICATIONS OF THE PRESENT STUDY IN RELATION TO TRIBAL HUMAN RIGHTS PROTECTION

While Human Rights as an area of social research in India has assumed importance within the broader domain of Social Development only recently but, its imperativeness in the global arena can be dated back to the middle of the 20th Century when Plant Earth was just learning to cope with the war devastation that she had witnessed in the eve of the Second World War and the literary masses were frantically searching for ways and means to avoid the recurrence of what had occurred. India being a third world Country and being categorized as a Developing Economy did not encompass within the fold of its citizenry-base the requisite number of literate and intellectual personalities who would sensitize the popular masses concerning the relevance and need of Human Rights in contemporary human society and Tribals being the most backward and vulnerable section of the Indian society were the last people to relish and satiate the benefits of Human Rights, a process that has only begun and has to go a long way before its genuine potential is realized and its actual intents met.

^{19.} Kiss, A.C. and Shelton, D. (2007). *Guide to International Environmental Law.* BRILL. ISBNs 1571053441 and 9781571053442. pp. 39

The present study assumes pivotal significance with regards to the welfare and wellbeing of the Tribal population of India as it is perhaps one of the first endeavors made to identify explicitly the adverse implications of or the role being played by Development Projects with special reference to Industrial and Mining Projects on the infringement or contravention of Tribal Human Rights in independent India. Apart from demonstrating the key findings which serve as the crux material of the present empirical study, the Paper has also put forth in a systematic manner the concept of Human Rights and the regulatory mechanisms in place for their protection and upholding with respect to the Tribal populace in the Country. While the findings are expected to serve as vital inputs to key Government Policies, Plans, Schemes and Programmes formulated and devised keeping in mind the need to reinforce Human Rights for Tribal welfare, the section of the Paper depicting the regulatory provisions for protecting Tribal Human Rights can be used by a cross-section of readers for both comprehending in a lucid manner as well as gaining an introductory overview of the framework for Tribal Human Rights (protection, safe-guarding and exercise) in India. It is sincerely hoped that with growing awareness and sensitization concerning Human Rights amongst the Tribal folk through conscientious efforts made in this regard by the welfare State in collaboration with NGOs and INGOs, the cause of Tribal Human Rights protection in India will most certainly be strengthened and dissemination of education amongst the impoverished forest dwelling Adivasis will further supplement the purpose.

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Status of Didayi Women of Malkangiri District of Odisha

Gopinath Pradhan¹

ABSTRACT

Didayi is one of the Primitive Tribal Communities of Orissa. In this paper an attempt has been made to analyze the status of Didayi women and also to identify some of the important determinants of women empowerment. Where economy is predominantly agrarian and forest dependent and majority of the population is rural and tribal, the status of women is not low. She is considered as the dominant partner. The status of women in a society is a significant reflection of the level of gender equality and social justice in that society. The data has been collected from the Didayi area of Malkangiri district. The analysis reveals that the role performance of the Didayi women is worth noting. In the economic affairs of the Didayi, we find that women really enjoy no leisure and remain busy from early morning to late evening for which they maintain a better social status in their society.

Introduction

Tribals who are considered to be the most neglected section of the society, live in the forests, hills and isolated regions. The problems of land alienation, exploitation, migration, bonded labour etc are serious issues of tribals in Odisha as well as in India. The education and health status of the tribals is very low as compared to other sections of the society. The tribals are primarily forest dwellers. Their productivity is very low which leads to poverty, unemployment, illiteracy, low standard of consumption and living. Odisha is also a least developed state where the standard and status of tribal is relatively low. Most of the tribal groups racially belong to Proto-Australoid racial stock while linguistically they belong to Austro-Asiatic, Dravidian and Indo-Aryan Language families.

Women occupy a central place in the organization of a family. The well-being of a family is influenced by gender issues viz. to what extent the women are on an equal footing with men or to what extent, the women are discriminated against men. Gender inequality, unfavorable to females is an important issue in the social development in India as well as in Odisha. Sex ratio in Odisha is 972 females per 1000 males as against 933 in India (2001 Census) shows discrimination against females.

Gender analysis reveals the roles and relationships of women and men in society and the inequalities in these relationships. The much quoted UN Statistics remain true today as they were when they were formulated over a decade ago:

Women perform two-thirds of the world's work.

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- Women earn tenth of the world's income.
- Women are two-thirds of the world's illiterates.
- Women own less than one-hundredth of the world's property.

For the present study, the status of Didayi women of Malkangiri district of Odisha has been taken into consideration.

Malkangiri District:

Malkangiri district is also one of the tribal dominated districts in Odisha which is situated at an elevation of 150-300 meters above the sea level. The Didayis are found only in Malkangiri district (a part of the erstwhile undivided Koraput district). Their habitat is within the Malkangiri uplands of the Saberi basin, which constitute one of the morphological units of the rolling uplands developed to the west of the Eastern Ghats. These rolling uplands are characterized by lower elevations (150-300 meters) compared to high plateaus, flat in nature and contain good soil suitable for paddy cultivation in wet areas. Physiographically the area shows undulating topographical features. The district is divided into 7 blocks. Out of seven blocks, two blocks are the abode of Didayi tribe.

Didayi: A Tribal Community of Odisha

India has the second largest tribal population in the world. Among the Indian states, Odisha has the second largest tribal population. It has the highest tribal concentration in its population which constitutes 9.7% of the total Indian tribal population. As per the 2001 census, the tribal population constitutes 22.13% of the total population in the state. As per the census data from 1981 to 2001, their decadal growth rate declined from 22.43% to 22.13%. It has also the largest variety of ethnic groups numbering 62 Scheduled Tribes (ST). More than one third of the area of the state is declared as "Scheduled Area". As per 2001 census data, Mayurbhanja district has the second largest S.T population (57.87%) following Malkangiri 58.36%.

The Didayi live in the immediate neighborhood of another tribal community i.e. the Bondo highlanders (Guha et.al. 1970). Mr. R.C.S Bells states in the Koraput District Gazetter that the Didayi are confined to a stretch of twenty miles in Machhkund valley between Duduma and Kondakamberu and that they are more similar to the Gadaba than to the Bondo (Guha et.al. 1970). Dr. Verrier Elwin (1950) describes the Didayi as a 'Wild Tribe'. In the past, the Didayi were in the habit of shifting their settlements from place to place for bringing suitable patches of forestland under shifting cultivation (Choudhury, 1990:98). Now they lead a settled life in the-plains, in hills and the cut-off area as well.

The area inhabited by the Didayi has been categorized into three distinctive sub-areas. The first sub-area known as the plains lying between the Bondo hills and the Jeypore-Chitrakonda road is in fact partly plain and partly hilly and includes 6 Didayi villages. The inhabitants of this sub-area mostly practice settled cultivation. The second sub-area called the hill area is characterized by rugged and mountainous terrains covering about 130 sq. kms where the elevation of land varies from 3000 feet to 4000 feet and includes as many as 18 villages inhabited by the Didayi. The inhabitants of this area depend on shifting cultivation. The third sub-area consisting 15 villages lying on the left bank of the river Machhkund at an altitude ranging approximately from 1500 feet to 2000 feet is called the cut-off area. This sub area is cut-off from the main land because of the Balimela Reservoir consequent upon the construction of the Balimela Hydro-Electricity Project. These villages however have been connected by motor launch. The seclusion of these villages from

the main land has tremendous impact on the socio-economic and cultural life of the inhabitants.

Social Life

The Didayi social organization consists of a number of totemic clans. Among the Didayi a simple nuclear family consists of a man, his wife (or wives) and their unmarried sons and daughters. Generally, a son has to leave his parental home after his marriage. Therefore, a Didayi family is normally nuclear and monogamous. Monogamy is the common practice among Didayi but polygamy is also not unknown. The duties and responsibilities of each member of the family are clearly defined. Certain activities like fetching of firewood and water, keeping the house clean, cooking and colleting certain roots and tubers are entrusted to women. Men plough the field, cut bamboo and go for hunting etc.

Although Didayis are patriarchal, the status of women is not low. They are considered as the dominant partners. Boys and girls exercise their choice in selecting their mates only with the condition that they must not choose anyone from their own clan. Various forms of marriage are prevalent among Didayi such as marriage by negotiation (toso), marriage by ceremonial capture (udulia), marriage by service (garjya), marriage by intrusion (gaisamuddi) etc. The negotiation marriage is prestigious but costly because of the payment of bride-price, observation of rituals and arrangement of feasts. The widow re-marriage and junior levirate are permitted in their community.

Political Life

The traditional village *panchayat* or the village council (*Lepar*) is the oldest and the most powerful socio-political organization at the village level. Every head of the household and in fact every adult male has the right to participate in the meetings of the *Lepar*. Its functions embrace all corporate activities in social, political, economic and religious spheres of the village. The head man of the village is called *Naik* who is assisted by a *Chalan* and a *Barik*. They along with the head of each family constitute the village council. It decides cases brought before it relating to such matters as theft, quarrel, divorce, offences of sex etc. It also imposes punishment according to nature of the case mostly in terms of fine.

Didayi Women and Their Status

The all round development of a country is incomplete without women who constitute nearly 50% of the population. The status of women in a society is a significant reflection of the level of social justice in that society. Women's status as often described in terms of their level of income, employment, education, health and fertility as well as the roles they play within the family, the community and society (Ghosh, 1987). A tribal woman occupies an important place in the socioeconomic structure of the society. The Dhebar Commission Report (1961) says that the tribal woman is neither a drudge nor a beast of burden. She is found to be exercising a relatively free and firm hand in all aspects related to her social life unlike in non-tribal societies. The tribal women in general and in comparison with castes, enjoy more freedom in various occupations. Traditional and customary tribal norms are comparatively more liberal to women.

A Didayi woman has her passion and emotion, love and jealousy, possessiveness and devotion to her husband and children. The Didayi community has accorded to her an elevated position and granted a good deal of freedom. Although men can only inherit ancestral property, women have granted liberty for mobility and enviable role in household decision-making process. A woman can choose her husband and can change him at her will. She can go to forest alone and go to market alone. She plays major role in the management of the household.

Currently, in the changing scenario, the role performance of the Didayi women is worth noting. Besides the traditional roles, the emerging roles have resulted in making them more vibrant, dynamic and outward-looking. In this context, the participatory roles of the Didayi women which provide clues to explore their potentialities for involvement in the planned development intervention are discussed below.

Participatory Role of Didayi Women:

1. Traditional roles.

- Husking of paddy and other cereals.
- Grinding of pulses and spices.
- Cutting of vegetables, fruits and green leaves.
- Cutting of edibles including baking.
- Cooking of edibles among family members.
- Storage of edibles for future consumption.
- Fetching of drinking water, storage of drinking water and water for other use.
- Cleaning of household utensils and appliances.

2. Management roles.

- Participation in house building.
- House cleaning and maintenance.
- Cleaning of house premises.
- Nourishing and caring of children.
- Caring of other family members and guests.
- Participation in household decision making process.
- Taking decision in choosing life partner.
- Taking decision in the dissolution of marriage and re-marriage.

3. Participation as economic partner.

- Food gathering, fuel wood and seasonal forest collections.
- Cleaning of shifting land by cutting and up-rooting small plants, grass and shrubs.
- Weeding, reaping or harvesting and threshing.
- Carrying farm harvests home through head load, storage and preservation of produce and carrying food and drinks to the field.

4. Participation in domestication of animals and birds.

- Regular cleaning of animal sheds.
- Feeding of animals and birds.
- Working as wage-earner in agricultural sector and non-agricultural sector.
- Participation in barter and market exchange.
- Contributing to the family income, saving for future.
- Contingencies and other income generating activities.

5. Other emerging roles:

- Participation in elections.
- Participation in Self-Help-Groups (SHGs) in entrepreneurial activities for the diversification of their existing economic base.
- Participation in the Immunization Programmes for children.

Socio-Economic Status

Women are considered as a valuable part of our society. In the social life, the tribal ladies of the rural areas enjoy relatively a more respectable life. From her early childhood, she works in her parent house and becomes an economic asset. In her husband's house, she performs all household works and extends her helping hand to her husband in agricultural field and forest collections. She along with other ladies of her age does the marketing in the nearby weekly markets. In the economic affairs of the Didayi, the women really enjoy no leisure and remain busy from early morning to late evening. Didayi women are no doubt enjoying greater freedom in social life.

In the present scenario, the status of women has been changing due to various reasons. With the spread of education and awareness, women are moving from the four walls of the house to higher levels of socio-economic activities. Enactment of a series of legislations from time to time has raised the socio-economic status of tribal women in the country.

A number of anti-poverty programmes and rural employment programmes like the JRY, EAS, IRDP, DWCRA, TRYSEM etc. have been launched by the Central Government as well as the State Government with the view to raise the socio-economic status of the poor. A number of tribal women in rural areas have been benefited in these programmes.

The Didayi is one of the Primitive Tribal Group (PTG) of the State. They are one of the most backward tribal communities in the Malkangiri District. By keeping this view, the government established the Didayi Development Agency (DDA) in August 1986 with the main objective of all round development of this primitive Tribe. The DDA covers two villages of Rasabeda Gram Panchayat of Khairput Block and 37 villages in Nakamamudi and Andrahal Gram Panchayat of Kudumulugumma Block of Malkangiri district.

Health Status

Health is an important element and determinant of well being of people in a society. Improved health is desirable to enhance the physical capacities to work and to participate in economic development. There are 635 tribal communities including 75 primitive tribal communities living in India. A majority of tribals need health care on account of malnutrition, lack of safe drinking water, poor hygiene, environmental sanitation and poverty. Several studies also reported that the health status of tribal women is low because of their illiteracy, poverty and lack of awareness etc.

In the study area, it has been found that the average quantity of food consumed by Didayi woman is inadequate either in normal case or in special condition. From the nutritional point of view, it has been seen that the status of Didayi women is very low.

Religious Status

The women are debarred to take part in rituals, but all works related to the performances of religious activities are done by them. During the festivals and ceremonies, women's role is praise worthy. In each ceremony sacrifice of animals like fowl, goat and pig is common. These are celebrated with dancing and singing continuously for several days. Dhemsa dance is performed by the young ladies.

Conclusion

From the above discussion, it is clear that the Didayi women of the study area have active participation in all activities for increasing the income of family. There are many household

activities, which are unpaid and done mostly by women. They keep themselves busy from early morning to late evening. It is noteworthy that the all round development of a country is incomplete without women who constitute nearly 50% of the population, but their status is not equal to that of men. The Indian constitution grants women equal rights with men but strong patriarchal traditions make the women subservient. It is for this reason; the state government has launched Mission Shakti for organizing and assisting women Self-Help-Groups. The problem of women development should constitute an important segment in the planning process. Our late Prime Minister, Pandit Jawahar Lal Nehru rightly said "In order to awaken the people, it is the women who have to be awakened, once they are on moves, the family moves, the village moves and the nation moves".

To conclude, awareness, willingness and capacity building measures are basic factors on which the overall development of women depends. Six decades of political democracy with the introduction of Panchayati Raj Institution in the 90's has certainly raised the awareness among the rural and tribal people. Still many improvements are possible with enhancement of capacity to participate and empower all sections of the people.

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Santal Durbar and Its Democratic Role

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ABSTRACT

After India's independence a very systematic effort is being made by the government to bring the tribal groups to the mainstream population. In this process many rich traditional cultural heritage of our tribes is being lost forever. Different factors such as modernization, rapid industrialization, spread of education, development of communication and acculturation has brought drastic changes in the traditional structure. But many traditional socio-political organizations still play a very significant role in maintaining law and order in the intra and inter village levels. Present empirical study is a humble attempt to highlight the traditional political organization, specially the institution of Durbar of the Santal society. This study was conducted in the Santal villages of Rairangpur area in Mayurbhanj district. Special emphasis has also been made to understand the role of traditional leaders like Pargana and Majhi and their democratic way of decision making by taking the opinion of the fellowmen. They are not only maintaining the law and order but also preserving and reviving the culture of the Santal society.

Key words: Sasang Beda, Durbar, Sarna Dharam Sakhikate, Patia Bered.

INTRODUCTION

India is a country of more than 600 tribal communities with its peculiar traditional structures. Various factors such as rural-urban migration, globalization, emergence of newly moneyed classes and emergence of modern democratic and bureaucratic institutions have weakened the traditional structure to varied degree depending on the ethnic groups and the area they live in. However, paradoxically most of them are still in favor of practicing their traditional customs and practices to maintain equilibrium in the society.

The tribe, Santal is one of the advanced and numerically dominant tribal communities of Orissa. Santals are also found in the states of West Bengal, Bihar, Assam and Jharkhand. Stantal were divided into 12 clans in 'Sasang Beda'- the so called place of origin. From Sasang Beda they migrated towards east and settled in Chotnagpur plateau (Murmu 1994). From Chotnagpur plateau they migrated to different parts of India. Santals have well preserved their traditional socio-cultural practices too. The rise of Santal sub-nationalism through the development of Olchiki script and a separate Jharkhand state has made the Santals to think more about the preservation and continuity of their good old culture. Here in this paper, the case of traditional political organization especially

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the institution of '*Durbar*' has been cited for the purpose. The present study was conducted in Rairangpur area of Mayurbhanj district in the state of Odisha.

Methodology

For the present empirical study various anthropological methods have been used for a depth understanding of the Santal Durbar. Only qualitative data has been collected using observation method (both participant and non-participant), interview method, case study method, FGD etc. Several Durbar meetings were observed to understand the entire process and how final decisions are taken in a very democratic way. Key informants like Majhi (village head) and Parganas were interviewed separately to understand the structure of the organization as well as their role and perception on the institution of Durbar. Besides common people were also interviewed to have an idea about their level of understanding and direct participation in decision making process. Using Case study method various cases have been collected to justify the institution is still functioning in the Santal society even with the existence of modern legal system. Focused Group Discussions were conducted to cross check and understand the different dimensions of stated problem.

SANTAL TRADITIONAL POLITICAL ORGANIZATION

A political organization may be defined as the aspect of social organization related to the management of public policy, social, cultural and law and order in the society. All society has rules of conduct but rules are not automatically obeyed. They have to be enforced in some way by someone or other, if the rules are held to be important for the society's continuance and well being. The Santals have their own traditional political organization for the maintenance of law, order & peace in the society.

Describing role of headman, Clyde Kluckhohn and Dorothea Leighton (1974) have mentioned that, "Headman have no power of coercion. Decisions as to community policy can be reached only by the consensus of a local meeting". In Santal society, the system of administration has been divided into four levels, such as, 'Atu' or village level, 'Saonta level,' 'Pir level' and 'Disam level'.

HIEARACHY OF SANTAL LEADERS IN ASCENDING ORDER

| Majhi | Saonta Majhi | Pargana | Desh Pargana |
|----------------|--------------|----------------|----------------|
| Single Village | 6-7 Villages | 50-60 Villages | At State Level |

It is worth mentioning that a "Patta" (a license / Identity Card) is issued by the Adivasi Socio-Educational & Cultural Association (ASECA), Rairangapur, Mayurbhanj, Odisha to all Desh Pargana and Parganas to protect them from the action of police and modern court.

According to an organization called 'All India Majhi Madowa' (Bharat Jakat Majhee Madowa), Paschim Medinipur West Bengal, the Santal system of administration has been divided in to seven levels.

| Single village | Number of villages | Muluk | Sub-division | District | State level | India |
|-------------------|--------------------|---------|--------------|----------|-------------|---------|
| Majhi | Pir Pargana | Muluk | Tallat | Jilla | Desh | Disom |
| | | Pargana | Pargana | Pargana | Pargana | Pargana |

MEMBERSHIP IN THE VILLLAGE LEVEL:

At the village level, "Majhi" or village headman is the highest authority; he is selected once in a year by villagers (only one male from a family). Earlier this prestigious position was hereditary in nature, and it was ordinarily passing to the eldest son of the former headman. Majhi does not get salary for this position. Next to Majhi is Parnik. Parnik is a deputy Majhi. Then comes the position of Jog Majhi (Assistant of Majhi). Next in this order is Godet who acts as a messenger and lastly, Atu Mone Hal (Villagers) who are the permanent members of the traditional village council (Murmu 1994). At the village level, officials are elected and nominated in the month of Magh (January and February). In the village Durbar, the penalty money collected from the offenders is usually shared by all in the form of feast. As regards the power of Majhi, Datta-Majumdar (1956) mentioned that, "By the police rules of 1856, the Majhi or Headman of every Santal village and the Pargana or Head of a group of villages were entrusted with police duties". Time and again various researchers have established the fact that in all village matters, the male Santals of the village meet and Majhi or Head man acts as the president and gives the meeting a firm lead. W. G. Archer (1975) has established that in the village level Majhi or Headman has the power to decide each and every matter and he has also mentioned about the organization of the Santal that at the "Tribe" level which is known as Santal parliament or High Court is composed of the Headman of five villages."

SAONTA MAJHI

There is a position of *Saonta Majhi* for six to seven villages. He is chosen by the *Majhis* of those six or seven villages. Sometimes few cases which cannot be decided in the village level Durbar are forwarded to *Saonta Majhi* for its resolution.

PIR LEVEL (MEMBERSHIP)

A *Pir* consists of 50 to 60 villages and it is the middle unit of the system. *Pargana* is the head of the *Pir*. He is called Pir Pargana. He is elected by the Majhis of the villages once in every three years. A person can be a *Pargana* for many years if he gets support from the *Majhis*. *Pargana* gets a special share of money which is collected from accused as punishment in the *Pir* level *Durbar*. *Pir Godet* is nominated by *Pargana*. He acts as a messenger and his duty is to spread message regarding forthcoming Durbars and other meetings.

DISAM LEVEL (STATE LEVEL)

This is the highest level of administration in the Santal Society. Undecided disputes in the *Pir* level are resolved in *Disam* level Durbars and other meetings. It is headed by Disom Pargana who is elected by *Pir Parganas* once in every three years. No specific salary, but a special share is given to him from the amount collected in *Disam* level *Durbar* from the accused. Another post is *Disam Gode*t, who is nominated by *Desh Pargana*. His tenure is also three years.

ROLE AND RESPONSIBILITY OF TRADITIONAL LEADERS:

In the village level *Durbar*, *Majhi* (Village headman) presides over the meetings. He summons the Durbar and other village level meetings. He gets the message first regarding *Pir* level and *Disam* level *Durbar* and other meetings and informs the villagers. *Majhi* gives final decision after consulting villagers (*Atu Mone Hol*) in village level Durbars. *Majhi* is a prestigious position, who has the knowledge of customary laws and regulations. He was also impartial in judgment, honest, expert in argument, efficient in motivation and economically sound. History of the village is preserved in the tradition handed down concerning the headman's ancestry (Culshaw 2004). *Majhi*

represents his village in higher level Durbars. Earlier when the Santals were the rulers in their land, *Majhi* had the power to distribute land to the villagers. Now–a-days, *Majhi* also acts as the village priest in few villages.

Parnik is a deputy *Majhi*. In the absence of *Majhi* he presides over the village level *durbars* and other meetings. He also monitors the works of the office bearers and brings them to the notice of the villagers.

Jog Majhi also plays important role in village level administration. The Santali term 'Jogh' means 'always ready'. He acts as an assistant of the Majhi. His responsibility is to see that whether the discipline is maintained during village dance and no mischief is committed by anybody. During birth, marriage and death rituals, he is the next to Majhi to attend and with the permission of Majhi, he arranges necessary persons to make the ceremony successful. Godet is the other personnel who also play a very important role in the arrangements of Durbar and other meetings. He acts as a messenger and also collects dues from the houses for a feast in connection with village level worships in Jaher Thaan and other places. On the advice of Majhi, he informs all the villagers about Durbars and other meetings. He functions strictly as per the directions given by the Majhi.

At the *Pir* level, *Pir Pargana* presides over the meetings. He is the administrative head of the *Pir*. Undecided village and inter village disputes are brought to his notice and he tries to resolve the cases in consultation with the *Manjhs* in *Pir* level *Durbar*. His responsibility is to arrange the place and time of the Durbars and send message to all the Majhis of the *Pir*. *Pir Godet* is nominated by *Pargana* and his duty is to inform all the Majhis regarding *durbar* and other meetings on the advice of *Pir Pargana*. He must immediately pin point the defaulting Majhi and guide him for corrective steps. He also makes arrangements of quarterly meeting with all his Majhis to discuss various issues of Santal society and culture.

At the *Disam* level, *Desh Pargana* presides over the *durbar* meetings. Undecided disputes in the *Pir* level are resolved in the *Disam Durbar*. Mostly social disputes related to marriage are decided at this level. *Desh Pargana* makes final decision after consulting *Pir Parganas* and *Majhis*. He fixes the date and place of *Disam* level Durbars. *Disam Godet* acts as a messenger and informs *Pir Parganas regarding* forthcoming Durbar meetings.

DURBAR AND ITS IMPORTANCE

Societies are also characterized by internal conflict and competition between persons and groups which need to be worked out or controlled in some way. Conflicts occur in all societies and are not necessarily unfortunate or harmful. Even in Band societies, old and young, sick and healthy, men and women do not want the same thing at the same time. Every culture therefore must have structural provisions for resolving conflicts of interest in an orderly fashion and for preventing conflicts from escalating into disruptive confrontations.

Santal Durbar is a village council ('Kulhi Durup' as mentioned by George E. Somers, 1977) in which varieties of issues and disputes in the *Santal* society are resolved. At the village level Durbar, disputes like husband and wife conflict, witchcraft and sorcery, inter family conflict, disputes relating to marriage, adultery, land, conflicts related to cattle, misbehaviour with a woman etc. are resolved. But in *Pir* level and *Disam* level *Durbar*, inter village disputes related to marriage, inter caste marriage, adultery and undecided disputes in the villages level are resolved. Very serious cases like murder are directly referred to local police station by village head. Most striking feature of this traditional institution is that cases are resolved in the same day of registration. Except the

cases which are not decided in the lower level take little time but within one month the victim gets justice in a very democratic way. So Durbar plays a significant role in the Santal society.

PROCESS OF DECISION MAKING IN SANTAL DURBAR

As mentioned earlier, Santals have divided the unit of administration into four systematic levels. So Durbars are also held in four levels. In the village level Durbar *Majhi* summons the meetings after receiving a case. *Godet* informs both accused and victims and also witnesses if any on the advice of *Majhi* regarding the time and place of Durbar. In the morning *Godet* informs all the villagers about the meeting. A speaker is nominated from the audience before starting the process, whose duty is to ask questions (*Eejhar* in Santali) to the accused, victims and witnesses. The Speaker first asks *Godet* regarding the purpose of assembly. *Godet* replies that "*Majhi* told me to call the meeting". Then *Majhi* elucidates the matter in brief and mentions the name of victim and accused. Similarly in case of *Pir* level Durbar *Pir Pargana* explains the purpose of meeting and in *Disam* level *Desh Pargana* explains the matter in brief. After revealing the names of victim and accused, they are asked to pay an amount of money which is called "*Laj Dah Mandi*" or "*Patia Bered*"; a kind of registration fee. This amount varies from village level to *Disam* level.

Then Speaker solicits the victim, accused and witness respectively about the issue / disputes in detail. They have to take an oath that is "Dharam Sakhi Kate" means "Keeping religion as witness". After hearing from both the sides and from the witnesses, Majhi consults important and elderly persons, if any in the village Durbar (Atu mone hol) and announces final decision. In the Pir level Durbar Pir Pargana makes final decision after consulting the Majhis. While deciding the penalty in cash, presiding authority also takes opinion of the audience and the decision is finalized in a democratic way. If both the parties are found responsible for the dispute, then usually both are punished. If the amount is too much for the culprit, then he/she is given specific time period to pay. If the person does not obey the final decision, he and his family may be prohibited to avail all the facilities in the villages as well as society and no body co-operates with them which is called 'Baron or Nim Dhaurah' (Ex-Communication).

ADMINISTRATION OF FINE

In Santal Durbar, the decisions are always accompanied by some form of punishment out of which the usual one is the payment of cash fine.

(a) At the Disam Level Durbar

The fine collected at this level is divided into three equal divisions. One share is given to victim, second share goes to *Desh (Desh Pargana, Parganas, Majhis* and other participant) and third share is deposited in *ASECA* (Adivasi Socio-Educational and Cultural Association). Such fines are usually collected in the form of cash.

(b) At the Pargana Level Durbar

In a similar way, here also fine amount is divided into three equal divisions in the following manner.

- (1) One share for victim.
- (2) Second share for *Desh* (Pargana, Majhis and others).
- (3) Third share goes to ASECA (Adivasi Socio-Educational and Cultural Association).

But in case of village level meetings, fine amount is generally shared by the participants in the form of feasts. No special share is given to *Majhi* who presides over the village level meetings.

Victim also does not get any compensation at the village level. When a victim files a case before *Majhi* and says that he/she is not safe in her/his house (Especially in case of husband and wife disputes), it is the responsibility of the *Majhi* to provide her/him food, shelter and protection till the case is decided in the village level Durbar.

DEMOCRATIC PRINCIPLES AND LAWS

Laws and principles in Santal society have not been recorded so far. So they are orally remembered and transmitted from generation to next generation. While making a final decision regarding punishment, earlier resolved cases are taken as precedents. There are democratic rules and regulations which are strictly followed.

- (1) Women are not allowed to participate in the Durbar except as accused, victim and witness.
- (2) Durbars are held in the day time only.
- (3) Weapons and musical instruments are strictly prohibited.
- (4) The persons who used bad languages are immediately punished.
- (5) Drunkard persons are not allowed to speak.
- (6) Nobody is allowed to speak by pointing finger.

DEMOCRATIC WAYS OF RESOLVING THE PROBLEMS IN THE SOCIETY

Disputes in the Santal Durbar are resolved in a democratic way where public opinion plays a very important role and considered by the leader while making final decisions. Different types of matters / disputes are decided in Durbar. Here are few resolved cases to highlight the nature of conflict and decision making in the Durbar.

Case -1

The first case is from Pahadpur village. This case was resolved in the village level Durbar. Laxman Besra and his wife with two children are the residents of Pahadpur village in Mayurbhanj district of Odisha. Laxman Besra had gone outside for few months in search of work. So his wife and children were staying alone in the village. In course of time Heto Bersa (Laxman's wife) committed adultery with Rajen Hansdah, a person from the same village. When Laxman came back and knew the matter, he decided to divorce his adulterous wife. So he filed a case before Majhi who summoned the Durbar meeting. After knowing the truth final decision was Rajen Hansdah had to marry Laxman Basra's wife and pay the entire amount of bride price to Laxman which was paid during their marriage.

Case -2

Here is another village level Durbar case which happened in Uparbeda village (Mayurbhanj district). A person named Kali Charan Tudu had love affairs with a girl of the same village. Girl became pregnant. But Kalicharan refused to marry her. Girl's parents reported the case to *Majhi* of the village. In the Durbar it was decided that Kalicharan have to marry the girl, otherwise action would be taken against him. So Kalicharan married her and bond was signed by mentioning that if Kalicharan and his family torture her, further action would be taken by the council.

Case-3

A case study about a recent case decided in the *Pir level Durbar* that was attended by Gaichand Murmu, a person of Pahadpur village of Mayurbhanj district in Odisha. A girl from Kundrughutu village was *Jabar Itut* (forcefully putting of vermillion on an unmarried girl's head). In

Santal society when vermilion of any colour is put on a girl's head by any male person, she is considered as married in the society. Person who *ltut* the girl was a non-tribal. Girl's parents reported the incident to the village head (Majhi) but he failed to resolve the matter at the village level Durbar. They appealed to *Pir Pargana* and in the *Pir level Durbar*, it was resolved and the accused was punished. The fine amount was Rs. 32,000 out of which Rs. 15,000/- was given to the girl as compensation and rest was divided among the *Pargana* and *Majhis* who attended the Durbar. A case was also filed in nearby police station and the accused was arrested.

Case -4

This incident was happened in Pahadpur village. Madhu Purty, a man from Ho community and Dumni Murmu (a lady from Santal community) of the same village loved each other and decided to marry. But tribals strictly follow the principle of community endogamy. As a result, when their parents came to know about the affair they opposed such marriage. So the couple ran away from the village. After few days they were searched and brought back to the village and girl's parents reported the incident to the village head (Majhi). In the meeting the Santal girl was asked whether she is happy or not with the marriage, she strongly expressed her willingness to go for the marriage. Then marriage was given social recognition in the Durbar and the Ho boy had to pay all the requirements for purificatory rite (20 kg rice, one goat, three cocks and rice beer). A grand feast was arranged with this amount after which the marriage was given social recognition.

Case -5

Jaher Thaan (scared grove) is considered a very sacred place in Santal society and various rules and regulation are observed strictly to keep this place pollution free. Once during Baha festival, a person named Dhone Murmu of Pahadpur village vomited inside the Jaher premises due to over drinking of rice beer. As a result, Jaher became polluted. In the Durbar, he was found guilty and had to pay for the expenses for the purificatory rite. He was warned not to repeat such conduct in future.

Case -6

This incident had occurred in Uparbeda village of Mayurbhanj district. It was a case of conflict among the joking relatives of the same village. Main cause of the conflict was the passing of bad comments by the boys to the girls. Boys repeated the same for few days. When it became intolerable, the girls in anger slapped the boys and boys also misbehaved with the girls in return. Girl's parents filed a case before the village head. In the Durbar, large numbers of people participated from nearby villages also. In the meeting boys were found guilty and a written bond was signed by the boys and they were warned not to repeat it, otherwise they would be punished heavily in subsequent decision making. In that meeting it was also said in public that joking relatives should not cross the limit while joking.

Case -7

A married woman had an affair with a person of the same village and lived with her lover without complete dissolution of her first marriage. Automatically, the first husband rejected her. But she could not stay with the second husband because of some problems. The woman's parent reported the matter to the *Majhi* to decide with whom she would live. However, *Majhi* in the Durbar failed to decide the matter and forwarded it to *Pargana*. In the *Pargana* Durbar the woman's parents were ordered to return bride price to the first husband and the first husband to return all the gifts given to his wife at the time of marriage by her parents. The second husband was also punished with a cash fine. *Majhi* of that village was also fined by *Pargana* because without objecting

to the illegal affair he had indirectly given social recognition to second marriage without final dissolution of first marriage. Thus, the girl finally lived with the second husband by the decision of the Durbar. This Durbar was presided over by the Pargana Samdev Tudu of Sonaposhi village in Keonjhar district

Case -8

This was a dispute between the husband and wife of Uparbeda village of Mayurbhanj district. Few years after marriage, Laxman and his family started torturing his wife. At last Laxman decided to divorce her. His wife was mentally strong and stayed there in spite of ill-treatment from husband's side. Her parents reported the matter to *Majhi*. In the presence of *Majhis* of both the villages and other seniors, Laxman and his mother were declared guilty. The matter was compromised in Durbar and a bond was signed by both the parents and couple that the husband family members will not torture her in future.

Case -9

This case was published in the Santali monthly news paper 'FAGUN' October -2011, Bhubaneswar. It was the case of conflict between avoidance relations. Laba Marndi son of Madan Marndi and Rano Marndi of Tursibuni village (Chandua Pir, Mayurbhanj) married to Saunri Soren, daughter of Purna Chandra Soren of Katguda Village. The marriage was a love marriage (Guldau Napam). From the very beginning parents of Laba Marndi did not like the girl. Quarrel in the family always occurred and they tortured the girl. Sunari informed the matter to her parents. One day her father came to Laba's house to solve the problem. In course of discussion situation became worse and Laba's mother physically assaulted Purna Chandra Soren. Both of them were avoidance relatives and according to Santal rules they must not touch each other. It was a very serious social crime. Immediately matter was reported to the Majhi and inter village Durbar was called. Majhis and people of both the villages attended the meeting. In the Durbar mother of Laba was found guilty and he had to pay for the expenses of conducting appropriate purificatory rite. The fine for this crime in the Santal society is one goat, three fowls, 20kg rice, one pot of rice beer (Handia) and khalah holong (rice powder). It is believed that this kind wrong deed pollutes the village and also the Santal society. In this case Naeke (village priest) worshipped for village purification and a shaman made a worship to purify the Santal society (Fagun, October 2011).

CONCLUSION

From the above discussion it is found that leaders in Santal society always take decisions with the consent other members or common villagers in a Durbar. It is the central institution which plays a very important role in the maintenance of unity as well as law and order in the society. With the imposition of the statutory Panchayatiraj institution in the Indian villages, a new administrative head of the village has come into existence. Earlier all the issues were being decided in the meetings presided over by the traditional village head (Majhi Baba). But now issues related to implementation of developmental policies and programmes are being done by the Ward Member. Undoubtedly it has created conflict between two heads in the same village. Position and respect of the traditional head is also declining and people are not taking so much interest to take such position. It is quite gratifying that in spite of modernization and globalization all around, Santals have well preserved all their traditional institutions especially the Durbar and trying best for its revival and continuance.

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Cultural Continuity and Change Among the Snake Charmers of Odisha

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ABSTRACT

The forces of modernization and technological revolution of the last century have victimized the artisans and their crafts and professions to a much larger extent than other aspects of traditional societies and cultures. Many a times, the artisans are forced to abandon their traditional crafts and adapt new ways of life for the sake of subsistence. This has also happened among the traditional snake charmers in Odisha. There are three major forces that have made them to give up snake catching, grooming and charming which was their main traditional occupation since ages. These forces include Urbanization, Sanskritization and the implementation of the Wild Life (Protection) Act that had forbidden them from catching snakes from the forest, let alone make them play for subsistence. This study makes an attempt to understand the impact of these forces and the way the traditional snake charmers or "Sapua Kela" as they are known in Odisha, adapt themselves to the new situation. In the process, most of their cultural features are changing baring a few.

(Keywords: Socio-Cultural Change, Urbanization, Sanskritization, Wild Life (Protection) Act)

This paper addresses the aspects of both continuity and change in social and cultural environments among the Sapua Kela of Padmakesharipur. Change is a progressive phenomenon. It is not a biological matter; rather it is a cultural and social phenomenon. Change can be understood in the context of adaptation, as adaptation is a smooth system which does not have controversies and it is continuous whereas, changes always have gaps. People adapt new things to give better comfort to their life, which change their culture and social system. The human mind is the most complex natural phenomenon and it is the product of the evolutionary process which is vitally illuminating, that aside from those properties acquired by chance, the mind consists of a set of adaptations designed to solve the long standing adaptive problems. As a result, all cultures are inherently predisposed to change and at the same time, to resist change. There are dynamic processes of things that encourage the acceptance of new things while there are others that encourage changeless stability. Since humans always live in a dilemma, in one stage they have the fear of losing their identity and in another stage they have the fear of isolation. Fear of isolation makes changes whereas identity makes resistance.

History of Snake Charmers:

Snake charming is an age old profession in India. By circa 100-700 BC the Rig Veda refers to '....musicians, bards, acrobats, jugglers, conjurers and snake charmers,' and they were popular then as now.' (Basham; 1954:210). Maharajas used to keep snake charmers as snake charming

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was a quite popular and exciting means of amusement. In Odisha there are a few communities who pursue a semi-nomadic way of life and the snake charmers are one among them. As performing folk artists they enrich the cultural heritage of folk traditions of Odisha. They are the colourful snake charmers called as "Sapua Kela" in Odisha.

The Oriya lexicon, the *Purnachandra Bhashakosa* traces the origin of the term 'Kela' meaning sports. It also mentions that, Kela is "A wandering tribe living on begging, jugglery, snake charming and catching birds; the Indian gypsies" (Vol. II, 1932:1762). The term 'Kela' is not only applicable to Sapua Kela. 'Kela' is rather a generic term encompassing a number of distinctly endogamous groups who lived in different part of Odisha in small and varying numbers bearing different names according to their respectively different occupational specializations. Purnachandra Bhashakosa provides 8 groups of Kelas: - Sapua (or) Nageswaria, Goudia, Sabakhia (or) Mundapota, Nalua, Matia, Bajikaria, Airi Goudia and Chauli Kela. According to the Puri District Gazetteer (1977), the Kela group is divided into five sub-groups, such as: Sapua (or) Nageswaria, Nalua, Matia, Gaudia and Sabakhia.

Being a wandering group, the origin of Sapua Kela and their history of migration are lost in antiquity. However some old people among them remember their ancestors up to 7 generations, which they have heard from their forefathers. According to them, their ancestors inhabited the village Thakurgaon in Medinipur district of West Bengal. During the great famine of the late 19th century they migrated to Tigiria area of Cuttack district, and from there to the village Godipatna near Choudwar under Tangi Police Station. Their habitation site near the Choudwar Paper Mills is still called 'Kela Padia' (the field of the Kela). From there they shifted to Patia village with the permission from the Feudal chief, Shri Dibayasingha Deb² about 95 years ago. Finally they are settled down near Patia almost 65 years ago. The new settlement of Sapua Kela is named Padmakesharipur after the name of an ex-king of Raj Kanika³. (Patnaik & Chowdhury, 1989:4)

An Overview of their Life Style:

The snake- charmers popularly called as Sapua Kelas are familiar figures in the rural and urban settings of the traditional society of Odisha. They developed the art of entertaining masses with their performances in the streets, market places, fairs in rural and urban localities. They keep the audience spellbound by playing snakes and mouse, performing jugglery, showing magic and selling of herbal and magical charms like Sapamani (a type of gemstone collected from the head of old cobra). The knowledge and experience of the ancestors handed down from father to son is the stock-in-trade of these Sapua Kelas. Though they are nomadic and travel from place to place in groups in search of snakes and their livelihood, still they live in a village called Padmakesharipur, near Patia.

They have other socio-cultural dimensions like strict rules of group endogamy, inbreeding or intra-kin marriage and frequent change of life partners, dominance of women in domestic affairs, active participation of women and children in social and economic spheres and so on. Their traditional occupation demands them to adopt semi-nomadic way of life. While wandering they camp at different places.

The economic base of the Sapua Kela is fragile. Basically, they are not producers but consumers. They thrive upon the contribution of others and hence call themselves 'mangta', i.e.

² Gajapati king of Puri - Sri Dibyasingha Dev was energetic, patriotic, religious and popular figure of Orissa

³ Why Raj Kanika comes to picture is explained in chapter-2, Pp-23

the beggars. They mainly depend on their traditional occupations of snake catching and charming supplemented by jugglery, bird catching, mouse play, sale of herbs, medicines, magical charms, toys, cheap ornaments and cosmetics, tattooing and begging.

At the time of snake shows they charm the audience by their charming talks, songs and music. Particularly their popular and sweet *padmatola* song sung at the time of playing snake with the support of the simple musical instrument, *dambaru* (Dumb-bell) shows the natural expression of their emotions and the events of their life. After the performance, the folk artist sells his herbal and magical remedies and collect coins and food grains from the onlookers. Their women move from door to door alluring the rural women for tattooing and selling cheap toys, cosmetics, ornaments and stationary articles by their sweet talks and songs. While tattooing they sing different songs to divert the attention of the subject and relieve her pains. In return they get money, food and clothes from their clients.

Gone are those days when the folk artists were being patronized by the rulers, feudal lords and common people and their shows were drawing large audiences. In those times they were popular and earning livelihood was not very difficult for them. But the time and environment have changed. Education, modernization, development intervention and invasion of electronic mass media has affected the people's life styles, attitude and tastes which in turn have delivered a lethal blow to many forms of folk arts and traditions. The Sapua Kelas are no exception to this trend.

There are three general sources of influence or pressure that are responsible for changes⁴.

- 1. Contact between societies.
- 2. Forces at work within a society.
- 3. Changes in the natural environment.

Sanskritization, Urbanization and Wildlife (Protection) Act come under these three general sources.

Contact between Societies:

When the Sapua Kela people came in contact with other societies they slowly changed their life style, beliefs, rituals, festivals etc. These changes happen predominantly because of their nomadic nature. When they visit places and encounter situations outside their culture they observe them and absorb them into their own culture according to their suitability and its accommodative nature. Influential factors in this regard are: Sanskritization and urbanization. The *Sapua Kela* people are settled closely around the Hindu people and the place is situated at the fast growing capital city of Bhubaneswar⁵,. They also visit different urban centers and villages to perform snake charming. This entire changing process can be understood through three different, but interrelated aspects, such as Diffusion, Acculturation and Transculturation.

Diffusion:

Diffusion is the movement of things and ideas from one culture to another. When diffusion occurs, the form of a trait may move from one society to another but not necessarily changing its original cultural meaning. The concept becomes important to understand the

⁴ Here I use the terms "change" and "adaptation" as synonyms.

⁵ The modern city of Bhubaneswar was designed by the German architect Otto Königsberger in 1946. It became the political capital of the state of Odisha in 1948, a year after India gained its independence. Before Bhubaneswar, Cuttack was the capital of Odisha until 1947.

Sanskritization process through which they adopt life style of Hindu caste people without knowing the actual and the entire meaning of it, for example: in the *Sapua Kela* community many people are practicing the festival of "*Chaita Mangala Osa*" in the month of "*Chaita*" (March-April) on Tuesday. The procedure of the performance of the festival is that: on the month's all Tuesday mornings all married women gather in a square place or *chowk* of that area and perform their *puja* at that place and it should not be changed to more than one place. But in the *Sapua Kela* village they do not know the entire procedure of this ritual, but perform it superficially. They have learnt this procedure from their neighboring Hindu villages. In this regard a lady named Arati Das (40 years) says that they are doing this for their familys' well being. About the procedure, she says each family has their own different ways and they are not practicing this festival as a group or community, but individually. They are not even aware whether any rule exists to perform it in a group.

Ornaments which carry great significance for traditional Hindu married women are adorned by them without giving much thought to it. For example, women wear "Mangalsutra" and toe ring (Jhuntia), but do not know their ritual and symbolic significance. They use it for adorning their body, which means treating the ornaments out of its context.

In case of urbanization, these people are residing in the urban centers. As a result many urban traits have also affected them, basically in their life style as they use many electronics gadgets such as television, refrigerator, dish antenna, mobile phone and other material equipment. They are fascinated about possessing these items irrespective of their generally poor conditions. Many of the above items are put to minimal utility as they do not utilize them for the purpose they are meant for. For them it is a matter of pride to possess the goods. Almost all families possess mobile phones, but many of them do not know the use of these. They use it to show off their status in front of other community people and young unmarried males are flaunting the riches to flirt with the girls.

Acculturation:

Acculturation is what happens to an entire culture when alien traits diffuse on a large scale and substantially replace traditional cultural patterns. Initially after the establishment of the village they have borrowed the cultural traits heavily from the neighboring villages. This had gradual impact on their own traditional way of life. These changes that have occurred were wholesome: family, marriage, kinship terminology, social organization, rituals, food habit, dress pattern, language, village council, body care, economic activities, social solidarity, festival, religious belief and practices etc.

Marriage:

Effects on marriage have its bearings on other related institutions. These changes can be understood in the context of changing ways of acquiring mates, marriage rituals, procedures etc. Earlier most of the marriages were arranged marriages, but now more of love marriages are happening which is an impact of urban centers. The impact of television cannot be ignored in this respect. Marriage rituals were practiced only for two days and it was not mandatory but now it is mandatory and the rituals are being practiced for 7 days. According to the convenience of the community, marriage was being performed on any day of the week. Subsequent marriage celebrations were being made in the auspicious days of *Rajasankranti* and *Dushera*. Now the marriage rituals are being conducted as per Hindu calendar. Opinion of the bride was not considered during the selection of groom in the past, but it has become important now-a-days. In the early days people outside the community were not welcome to the wedding, but now things

have changed and invitation is open to the other communities as well. Marriages were not such a gala affair as they were being performed in Verandahs, but now they put up altars as an attempt to emulate the Hindu castes.

Family:

Earlier nuclear family was common in their society and now they are shifting towards joint family or lineal joint family. This is because of two reasons; one is their traditional residential pattern which is, after marriage both bride and groom should move out and live in a newly constructed house, is undergoing a change due to the shortage of land in their locality which makes them to stay together. Another is the impact of imitating the Hindu caste people. The Hindu families are joint families and in the process of imitation Sapua Kela people are living together as in joint families. These two reasons are changing their family structure. The interfamily relationship also changes to some extent. When the families were small and nuclear in nature there was little interaction between other family members. However, once they started staying jointly, the relation between mother-in-laws and daughter-in-laws has changed; relation between sister-in-laws and between brothers has also changed. Now there appears to be more intimacy within their family members than earlier. In the past, maintaining of old parents and inlaws was guided by "Sudamanta principle (pure obligation)". Social sanctions were being imposed upon the violators. But now, carrying of old parents and in-laws is a moral responsibility. This moral feeling, over period of time, has developed as they reside under one roof. Long and continuous exposure to Hindu Shastras and songs about the roles of father, mother, sons, daughter etc is also responsible for their realization of responsibility towards the elder. They are not only following the Hindu beliefs but are also following urban way of life. Some people believe as in Hindu Shastras to carry parents is a moral obligation, but at the same time some other people believe that parents are a burden. Family size has increased due to the joint family but the number of children is decreasing with passing generations. Earlier they had 6 to 7 children but now it's 3 to 4 children. It is due to the family planning program initiated by the Government.

Kinship:

Kinship is the web of relationships woven by family and marriage. Traditional relations of kinship have influenced the lives of Sapua Kela people by determining what land they would use, whom they would marry, and their social status. Although different cultures have recognized various kinds of kinship, but in general kinship means much more than blood ties of a family or household. It includes a network of responsibilities, privileges, and support in which individuals and families are expected to maintain. In this community, kinship relations are unique due to their marriage system. They follow group endogamy which raises confusion in terms of kinship. In order to avoid it they have devised mechanisms. For instance, if a marriage occurred between two groups and they are previously related, they follow the previous name and ignore the new terminology for the new relation. In case of Kapura Das's family- Her son was married to her sister's daughter. After the marriage his aunt becomes his mother-in-law. He has to call her mother-in-law but he is continuing his earlier relation i.e. "Aunt". According to him they follow it to avoid confusion.

There are changes in kinship obligations which they are adopting in a new form from the neighboring Hindu people. In Hindu society, people have gift giving relationship which is reciprocal. For instance, in a marriage every kin gives some gift to the bride and groom and in return after the marriage the father and mother of bride and groom reciprocate their kin's gifts as an obligation. Earlier for *Sapua Kela* people this was not a regular feature which also does not

mean they did not have gift giving relation, but it was not reciprocal but now-a-days they have adopted this tradition.

Table 1.1: Old and New Terms of Address:

| Terms of Relationship | Terms of Address (Old) | Terms of Address (New) |
|-----------------------------------|-------------------------|-------------------------|
| Father | Baba | Вара |
| Father's Father | Dada | Jeje Bapa |
| Father's Mother | Ae | Jeje Maa |
| Father's elder brother | Baba | Bada Bapa |
| Father's younger brother | Kaka | Dada |
| Father's elder sister | Pisi | Ара |
| Father's younger sister | Pisi | Ара |
| Mother | Ма | Bou, Ma |
| Mother's father | Dada | Aja |
| Mother's Mother | Ae | Ae |
| Mother's brother | Mamu | Mamu |
| Mother's Sister (elder & younger) | Bada Mausi & Sana Mausi | Bada Mausi & Sana Mausi |
| Son | Po/By name | Pua/ By name |
| Daughter | Jhi | Jhia |
| Husband's father | Baba | Вара |
| Husband's mother | Ма | Ma, Bau |
| Wife's father | Baba | Вара |
| Wife's mother | Ма | Ma, Bau |
| Father's younger brother's wife | Kakima | Khudi |
| Mother's brother's wife | Mami | Main |
| Son's wife's father | Samadi | Samudi |
| San's wife's mother | Samaduni | Samuduni |
| Daughter's husband | Jamei/ By name | Jhoin |
| Daughter's husband's father | Samadi | Samudi |
| Daughter's husband's mother | Samaduni | Samudini |
| Husband's father's father | Dada | Jeje Bapa |
| Husband's father's mother | Ae | Jeje Maa |

Change has also taken place in the kinship terminology. Earlier they followed their own terminologies but now they are following the Odia terminology. These changes happened basically in terms of address.

Rituals & Festivals:

Sapua Kela performs a number of rituals and ceremonies at different stages of life such as at the time of delivery of child, initiation, puberty, marriage and death. Currently the rituals, beliefs and practices of the *Sapua Kelas* are more or less same as that of the Hindus. Many changes have occurred in their rituals and festivals. Earlier, women were allowed to deliver their children in the husband's house, but now women are delivering in hospitals. So the belief and rituals related to this has relatively changed.

In the past they believed that, the new born infants and the mother are not to be touched. The person who touches them becomes "Chhuan", (polluted). It is believed that if an unclean person who touches the utensils or the hearth, the entire food would be polluted and anybody

who takes that food would suffer from health problems. But due to the hospital facilities, this belief has changed. Hospital facility also had another effect on their belief system like, after the birth of baby no male should see the baby and the mother at least for 12 days, but currently it is not being practised because the mother comes back within two to three days from hospital after which everybody visits the house to see both the baby and mother. Due to the hospital facilities the role of traditional "Dhai" is declining and related rituals have also declined. On the fifth day, after the birth the "Dhai" collects the ashes from the entudi fire, and put these in an earthen pot. The lamp that burns near the entudi is placed inside the pot with some vermilion, a piece of iron, a conchshell, a blade and a betel leaf. The pot is then carried by holding with a small stick and earthen pot to a nearby bush. After that the Dhai become impure. She takes bath to be pure and takes a drop of liquor for inner purity. Chengapani after the delivery has totally disappeared as almost all women are delivering in the hospital. It not only hampers the role of Dhai but also reduces the role of the husband, elderly women, and in-laws. After the birth of the first baby the mother is not allowed to set foot inside the temple and is also not allowed to take non vegetarian food, but now it is not being followed. Earlier the birth purificatory rituals were being practised for three months but now it has changed. For a male child and a female child it is 21 days. Now the mother can enter into the kitchen after the 21 days of birth, earlier it was three months.

Mamita Das, aged about 22 had a baby named Rumansu Das (M, 7 month). She delivered him in the hospital. According to her, this change has happened because of their awareness about the infant mortality rate and free access to the hospital facility as against domestic delivery. Another factor responsible for this hospital delivery is the incentive of Rs. 1400 which the mother receives by delivering the baby in a hospital which is not given in a domestic delivery. The hospital facility has changed their traditional birth rites. The role of Dhai is totally absent and lost. Mamita says, earlier they had 3 months of impurity period, in these days mother should not enter to the kitchen and also should not see any stranger's face. But now they are observing 21 days of birth pollution and the last of these days is celebrated as a ceremony and they call it *ekausia* day. After these days she can enter into the kitchen and cook food for the family. Earlier they don't have naming ceremony but now on the *ekausia* they christened the child in a ceremonious manner along with "Jatak" 6 ceremony. Earlier they did not have this "Jatak" ceremony which they are now practising. They learnt it from the "Hindu" people. According to her, all the earlier rituals related to birth have changed.

In their festivals, they worshiped their village Goddess named *Champa nahakani*, but now they are worshiping many Gods and Goddesses and celebrating many Hindu festivals. Currently the annual cycle of rituals is a conglomeration of theirs and Hindu rituals. The different festivals along with the period of celebration are described in **Table1.1**.Besides the above festivals they also worship different Hindu gods and goddesses related to different days. On Monday- Lord Siva, Tuesday- Maa Mangala, Thursday- Maha Laxmi, Friday- Maa Santoshi, Saturday- Hannuman, Sunday- Surya. For Wednesday they are not practising any rituals.

The role of women in the field of rituals and festivals has changed remarkably. Earlier they were not allowed to take part in any rituals, even they could not conducting any worship, if there is any male member in the family. It's because, in the olden days when marriage were simply contractual and number of divorces happened, the participation of couples in the rituals were never practised. And in the changing scenario of the Snake Charmers social life, marriage has become sacramental. Now the women are participating in the rituals. Now in every religious

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⁶ When a child is born, a birth plate (Jatak) is made in palm-leaf indicating date and time of birth and position of stars of the child as per Odishan traditional almanac (Jyotish Panjika).

rite the presence of wife is essential. Without a wife a husband is not allowed to perform any religious work. This is a norm now. In the time of *Raja sankranti* Kela women plant a tuber namely "Gada: an imperilling medicinal plant", now is not being practised. When I asked a lady named "Mahari Das (55)" about the plantation of "Gada" at the time of *Raja sankranti*, she said they are not practising this in these days, because people are not interested to pursue their traditional occupation, so there is no need to practise this.

Table 1.2: Old and New Festivals:

| Type of Festival | Name of the Festival | Month in which celebrated | Name of the Deities | Who performs the Worship | |
|---------------------|--|--------------------------------------|--|---|--|
| | Mahavisuva Sankranti (Pana Sankranti) | Baishakha (April- May) | Ancestral Spirit | Eldest male member of the household | |
| Old Festivals | Raja sankranti | Jyastha (May-June) | Village deity Champa nahakani) | Eldest male member of the household | |
| restivais | Dussehra (Durga Puja) | Aswina (September- October) | Village deity Champa nahakani' | Village Priest "Kalishi" | |
| | Dipabali (Pimpei Amabasya) | Kartika (October- November) | Ancestral spirit | Eldest male members of the household | |
| | Khudurukuni Ossa | Bhadraba (August- September) | Goddess Mangala (incarnation of goddess Durga) | Group of Unmarried girls | |
| | Laxmipuja (Manabasa) | Margasira (November- December) | Goddess Laxmi | Married female member of the household. | |
| New Festivals | Bata Ossa (Panthei Ossa) | Pusa (December- January) | The King of Soul (Yama) | Several Married women | |
| | Mangala Puja | Chaitra (March- April) | Goddess Mangala | Married women | |

An elderly person named Raidhar Das (85) says, they did not have so many rituals as they have now. They only worshipped their village goddess *Champa nahakani* and observed festivals like *Raja sankranti* and *Dassehara* in those days and it was a mechanism for solidarity within the community. Earlier women were not allowed into the temple for worship; they could see the rituals but could not participate in it. Worship at home was also not allowed to them. With time they slowly adopted different beliefs, different faiths on different Gods and subsequently they started worshiping at home

A lady named Maguni Das is dead now. She first started worshiping goddess *Mangala*⁷. At that time people made fun of her, because they did not believe any other goddess except their village deity (*Champa nahakani*). In this regard, her son Chitta Das (56) who is now the village Head faced opposition from his villagers. But the lady did not listen to any one. Many times village council fined her for the same. However, she continued with her faith and practice. When Chitta Das became the Village Head he made necessary rules for practising Mangla Puja. Now almost all people are worshiping Goddess *Mangala* who is currently their village deity.

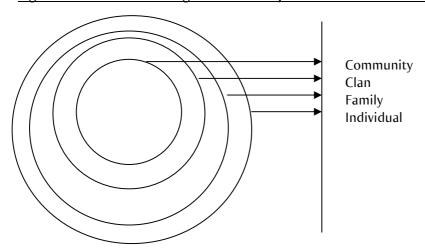
.

⁷ Goddess Mangala a manifestation of the Mother Goddess Durga, Her Temple is located in the town of Kakatpur in the Puri District of Orissa.

Social Organization:

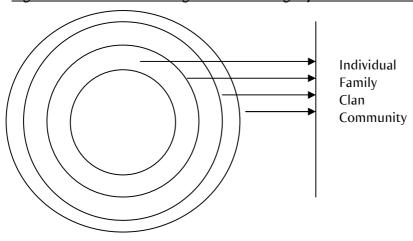
The above diagram shows their older social organization. Earlier they were more concerned towards their community. They work as a unity in daily dealings, economic pursuits and mutual cooperation. So community was at the centre of all the activities, followed by the clan. Community has controlled over all the other aspect. Individual was least important. But now it is totally in opposite direction. Due to the impact of urbanization, people of this community are more concerned towards themselves than the community. Now community is less important and individual is more, other important aspect followed by family.

Figure 1.3: Earlier Social Organization of Sapua Kela of Padmakesharipur



The above diagram shows their older social organization. Earlier they were more concerned towards their community. They worked as a unit in daily dealings, economic pursuits and mutual cooperation. So community was at the centre of all the activities, followed by the clan. Community has control over all the aspects. Individual was least important. But now it is totally different. Due to the impact of urbanization, people are more concerned towards themselves than the community. Now community is less important and individual is more and family comes in between.

Figure 1.4: Present Social Organization among Sapua Kela of Padmakesharipur



Political Organization:

The Sapua Kela settlement was being controlled by a traditional council called Pancha, which constitutes four member of Baund group and a member of Behera family. The Pancha was headed by Behera. This position was hereditary. There were other functionaries called Kalisi, the village priest and the messenger called Dakua, who were also the member of the council. Earlier the role of village council was vital in deciding all the intra-village disputes. Women were not allowed to participate in village council meetings. The village council imposed fine under "Siddi" principle on any offender of the community, who was found using any filthy languages. Under this principle an amount Rs 1000/- to 1200/- was being collected as fine in a year. Adult unmarried females were not allowed to perform any physical labour outside the family.

This has undergone a major change in the post-independent times after of the imposition of statutory *panchayat raj* system. The role of village council has weakened. The post of *Behera* is now selective. Women are actively participating in village council meetings. For example: Subhalaxmi Das aged 24 (F) was elected as "Sarapanch" for Padmakesharipur, Kalarahanga and Enjana villages. This shows how women are participating in the political field and have gained acceptance from public.

The collection of fine under the "Siddi" principle was putting financial pressure to poor and helpless people. So the village council has declined its importance. Due to the rise of industries and decline of traditional occupation women are performing all types of work, irrespective of their marital status.

In the case of Tirana Das's family, her two adult daughters, named Kali Das (23), Gundei Das (17) are working outside the village as wage labourers. They also help their mother in her vending business. Earlier they were not allowed to perform neither of the jobs. Tirana Das says one's survival comes first then thinks about the rest. So she is happy with this. Apparently no body helped her out after the death of her husband and she is not bothered about these me people. It shows a decline of another vital aspect, i.e. the loss of village solidarity.

Sun-set Law:

According to this law framed by their village council, women were not allowed to remain outside the village after sunset. If any woman violated this rule she and her family would be out casted. To get back to her caste she has to go through the appropriate corrective ritual. In this process, her family has to give a feast to the *Baund* group and has to wash their feet in the presence of all the villagers. But now certain modifications are made to it. If a woman has a boy with her, then she can remain outside the village after sunset. The rule is that she has to be with a boy who belongs to their community. There is no such hard and fast rule about the age of the boy; he can be a child or a baby as well.

There are many changes in the material culture, dress pattern, house pattern, household equipments etc. Earlier their dress pattern was different than now. Earlier girls after attaining puberty were seen mostly in sarees, but now no such restrictions are forced even after the marriage. So the cultural necessity of wearing saree is declining. Boys are wearing trousers and T-shirts, full-shirts. Under the "Indira Awas Yojana" almost all the family got financial support from the government and has built their own *pucca* houses. Now this village looks like a semi-urban

settlement rather than a traditional village. They are using modern equipments like: cooking gas, pressure cooker, mixer grinder, refrigerator, fan, television etc.

The above facts show how they are changing not only culturally but also socially and materially.

Transculturation:

Transculturation is a term coined by Cuban anthropologist Fernando Ortiz in 1940 to describe the phenomenon of merging and converging cultures. Transculturation encompasses more than transition from one culture to another. It does not consist merely of acquiring another culture (acculturation) or of losing or uprooting a previous culture (deculturation). Rather, it merges these concepts and additionally carries the idea of the consequent creation of new cultural phenomena (neoculturation). It is what happens to an individual when he or she moves to another society and adopts its culture. Immigrants who successfully learn the language and accept the cultural patterns of their adopted culture as their own are said have transculturated.

From the above explanation it is clear Hindu culture has influenced the culture of Sapua Kela massively. People of the present generation have begun to think that the current tradition is their age old tradition, but it is not. It shows how much they are attached and attracted to the new trend. New generation people say that, they cannot adjust with their age old rules and regulations. New society gives a better opportunity not only for them but also for the next generation. With each new generation this belief is growing.

According to Mayabini Das (24), in older days, there were many rules, regulations and fines. If they had been in that (old) generation then they would have grown poorer by paying fines and more fines because in earlier days, if a woman misbehaved with her in-laws then she has to pay a fine. At the time of serving food if she had green leaf tied against the waist then also she had to give fine. At the time of giving "Pan" (betel) to her in-laws if she threw it then also she had to give fine. At the time of sleeping if her ornaments made sounds in the next morning she would have to pay fine. In their daily life a little mistake meant fine, so they are happy with the new changing scenario.

This changing culture is massively accepted, and people are willing to forget their age old customs and traditions and started to believe this new trend as their tradition.

Forces at Work (within society):

The above explanation shows how they are attached with the neighbouring culture and forgetting their own culture. It gives rise to another aspect which is affecting the group solidarity, i.e. "Status Feeling". Earlier the community as a whole was important but now it is individual centered. This status feeling has severed their traditional ties with their kinsmen and has made themselves centered. It creates lots of pressure among the members of the community. Earlier this pressure was in work place but now it is present in both the work place and within the community. Now people are divided into groups depending upon their economic success. The poor remained poor. This status feeling puts them under pressure and forces them to earn more to raise their status. This resulted in people moving towards other sectors of livelihood, because of the ban over their livelihood. Less income from the traditional occupation and status pressure in their community makes them to change their traditional occupation. Basically, the new generation is moving towards other sector jobs, because of the increasing felt need for mobility.

Magi Das aged 50 (M) is a book seller who moves on his bicycle selling books. He is not satisfied with his income. So along with this he also works as a labourer. Not only has he and his wife (Hinimani Das,

45 is also engaged in similar works. They say that, their income is not enough because they are living in the town where everything is costly and they also think about the future of their children, health etc. For this they have to earn more.

Changes in the Natural Environment:

The natural environment encompasses all living and non-living things. The natural environment is contrasted with the built environment, which comprises the areas and components that are strongly influenced by modern humans. But now people enter into the natural habitats giving up their naturalist feeling. This not only affects the natural environment, but also affects people who are depending on that like the snake charmers. Due to the modern human interference, natural environment is in a bad shape. To save the endangered species government has started new plans and introduced "Wild Life (Protection) Act, 1972". According to this catching, hunting, trapping, snaring, coursing etc... injuring or destroying or taking any part of the body of any such animal or in the case of wild birds or reptiles, damaging the eggs of such birds or reptile is coming under the criminal activity.

During the late sixties, Sapua Kela suddenly found themselves falling from favour when snakes were declared an endangered species and their number began dropping due to rapid urbanization. The blame however, fell on snake charmers, who were accused of torturing the reptiles, importing them, force-feeding them on milk and skinning them for profit. The ban on snake charming is much more than a loss of work or means of livelihood. Snake Charmers in Padmakesharipur are facing livelihood crisis following the governments' ban on catching snakes and exhibiting them in public. While wildlife officials raise concern over the lives of the reptiles, the snake charmers demand alternative source of livelihood.

Significantly, before the Indian Wildlife Act came into force in 1972, snake charmers had a field day and were even promoted by the government during fairs and festivals and at historical sites, mainly as tourist attractions. But after the enforcement of Wildlife Protection Act, government promoted activities to shift them away from Snake Charming and to different other sectors of work. For their awareness forest department organizes workshops.

Previously, snake charming constituted the charmer's only source of income. It is less true today, because of less number of snakes, Government prohibition and urbanization. Now many snake charmers work as labourers, hawkers selling items such as amulets and jewelry or they perform at private parties to make a surviving income.

Drona Das aged 56 (M) is a snake charmer. Now he is also selling tubers and amulets. According to him, selling of amulets and tubers give them better income, and people also believe in the abilities and powers of the amulets. However, they bluff people by projecting the amulets as possessing supernatural powers. Some people like Jagan Das (34, M), Abhimanyu Das (40, M), Gurudeva Das (52, M) sing and dance with their snakes in the private parties such as marriages and other ceremonial occasions. This is because there are no other sources for income and they cannot leave their traditional occupation. Drona Das says this present generation is not aware about their village or their identity; they are just following urban trends. For this, many people have given up their traditional occupation.

People often regard snake charmers as traditional healers and magicians as well, especially in rural areas. Those charmers create and sell all types of medicines and lotions for various ailments. This is true, but now people are withdrawing from this occupation. Earlier there were 5 to 6 magician families but now there is only one. His name is Sanyasi Das (52). He has been

a magician from his childhood. He has two sons and neither of them is interested in magic so they are working as wage labourer. After him, there will be no magician in their village. Some people are practicing healing by tantric tradition and have their special role and skills in connection with poisonous snakes. Sapua Kelas are usually knowledgeable persons in this regard. And they are very rich in indigenous knowledge, which helps them to strike a balance with nature. "Kalishi" is a term for medicine man. Earlier there was a Kalishi, who was a specialist on medicine and was able to treat common diseases like dysentery, fever, stomachache as well as tuberculosis, leucorrhoea, menstrual disorder, snake bite etc. But now due to the popularity of modern medicines and for better result people are leaving traditional practices. According to Mahendra Das (75, M) who is a Kalishi, people are moving towards hospitals because they feel more secure, and now a days it is very difficult to find out the raw materials for these type of medicine because of the environmental degradation. He says it is better that people are moving towards modern medicine.

The Indian cobra's name comes from its popularity as a snake of choice for snake charmers. Because of the cobra's dramatic threat posture makes a unique show as it appears to bend to the tune of a snake charmer's song. Cobra is the largest venomous snake in the world-not to say that they have the most deadly venom, but they inject amounts that would be deadly to a full-grown elephant, or about a dozen adult humans, all in one bite or in multiple 'chewing's' as it holds on to its victim. The King Cobra can reach 18 feet (over 5 meters) in length and can move with its head upright. It can stand over five feet high (one-third of its length). It can spray venom aimed at the eyes/face of its victim to make it still. Now this species is in danger. Government has imposed ban over capturing any endangered species. This is another reason for the snake charmers to become indifferent to their traditional occupation.

With the passage of time some changes have been marked in the life of the snake charmers both socially and culturally. Some of the changes have been abrupt and show a positive impact on their life and style of living, whereas others have contributed negatively.

Each moment brings a change. Everything is in constant flux. As an example: A candle, straight in the morning, bends under the heat of the afternoon sun. (Roxanne Marie Kurtz: 2006) However this change is only an adaptation of a particular time, because the surroundings (heat) make the candle bend. Numerically it can be changed but in depth it is the same candle as earlier. Same thing also happened in Sapua Kela society. For an example changes in their religious beliefs is only an adaptation. Here they are living around the Hindu people, so to cope up with them they have to adopt their life style and belief or else they would be isolated from the mainstream. People adopt something for the betterment of their life. Therefore Sapua Kela adopts, and these adaptations give them new identity. Earlier the connotative term of "Kela" was used as a term of abuse to a person, because of their life style. According to B. Choudhury:

"Sapua Kelas are economically parasite and vulgar, indecent quarrelsome and garrulous by nature. They accept food from anybody irrespective of caste and creed. They can cook their food at any place. They can change their life patterns frequently and a person can marry several times during his/her life time." (1966:1)

Above quote gives an idea that, how other people think about them. Their lifestyle makes them ashamed. Their status in front of others (Hindu neighbours) is very miserable. When they started to settle down in Padmakesharipur, they slowly noticed this type of behaviour. So to change their status in the society they started to adopt the life style of their prosperous

neighbours. These changes are only for the betterment of their life. In the mean time they are also continuing with some core values, which are the base of their society and those core values never change. According to Levi-Strauss's structuralism, it is a shift from understanding of structure to culture as surface phenomena, which varies but there is an underlying structure or base structure which never varies. He says it is deep structure. Noam Chomsky (1995) says, this deep structure is representing in the surface structure as the form of culture via transformation.

Various institutions in Sapua Kela community may exhibit various surface structure/phenomena, but their deep structure lies in the contribution of men and women towards a particular phenomenon.

From the earlier explanation it is clear that, they were hunters and gatherers. And their primary survival method involves the direct procurement of edible plants and animals from the forest. Hunter-gatherers obtain most from gathering rather than hunting; up to 80% of the food is obtained by gathering. A vast amount of ethnographic and archaeological evidence demonstrates that the sexual division of labor in which men hunt and women gather wild fruits and vegetables. It is an extremely common worldwide phenomenon among hunter-gatherers. It is clear that Sapua Kela were also had this type of division of labour in the past, and even now it can be observed in their social activities. According to Noam Chomsky the deep structure is present in the surface phenomena. Like in Sapua Kela society, "men's and women's contribution towards the family" is the deep structure and it is continuing from the earlier period when they were in forager stage. This deep structure is shown in the surface structure in the form of their culture. This contribution of both the sexes makes equality between men and women in their community, even women have more advantages then men.

B. Choudhury says that,

The Kela society gives maximum freedom to its women, who are also dominating and important to their semi-nomadic habits. They are also equally important from the economic point of view. A wife is highly essential for them. (1966:3)

The woman in snake charmers community is a cultural necessity. It is believed that woman forms an integral part of their society. Without the help of woman, any work will be incomplete. In every sphere of activity, the active participation of women along with the men is marked spectacularly. The beauty of women is very keenly observed by their male counterparts and described in innovative terms. When a girl child is born, the members of the Bound group come to the house and bless the young baby and compare her with the most beautiful woman in the world as compared to the princess of Ghumsar⁸.

In economic field they consider their women as the deities of prosperity. They have a belief that by cherishing woman one cherishes the goddess of wealth and prosperity and by afflicting her one is to said to pain the goddess of prosperity.

In religious field also, women are the centre of all auspicious occasions. The snake charmer's plant a tuber plant (Gada - an imperiling Medicinal plant) on the auspicious occasion of "Raja Sankranti". The women plant it in their respective household premises which is harvested and used by the male folk as life saving herb during catching and charming of snakes. The plantation of such tubers is a religious work performed by the women which save the community from danger as there is every possibility of snake bite to the male folk in pursuing the profession.

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⁸ Gumsar is the kingdom of Sabara, the name of princess, Rajanika.

The guardian deity of the village "Champa nahakani" is bathed by the 'Kalishi' a male member, while the water for the purpose is brought by the female member.

Apart from being good housewife, shouldering the required responsibility for the maintenance of household, at times they are the bread earners and decision makers. When they lived in Medinipur District, their main occupation was puppet show and both male and female participated in that and earned money. When they came to Odisha they changed their earlier occupation and started a new occupation called snake charming and in this occupation there were no role for women. So women slowly developed new kind of occupation called "Tattooing". They have learned it from a group called "Pathania Kela" of Balakati. This attempt has been made by women to earn more income. They have also learned selling of stationary articles from "Nalua Kela". They also engage in preparation of 'mats' and musical instruments like "Beng-patia" (the product of bamboo) and sell them in the street. And now they are engaged in wage labourer. So there is no specific traditional occupation for them, they just adopt new occupations for better income and to fulfill their duty (i.e. their contribution towards family).

The men and women are indispensable in snake charmers' community and culture. Their association and active participation in all spheres of activities make the position of both men and women more meaningful. In all sphere of life like, social, cultural, economic etc. their active participation attracts the attention of any outsiders. Changes happened in every sphere but besides these there is one thing which never changes i.e. the equal role of both sexes in every sphere. And this is the underlying structure.

Conclusion:

To conclude, it would be easy to just let snake charming come to an end in an era of modernization and globalization. On the other hand, a lot can be done to save this community. Made discussions with the people and the wildlife authorities like Director of Forest department and Mr. Prafula Kumar Lenka, (Senior Forest Extension Officer) for a possible solution. It may bring a compromise between their traditional livelihood and conservation of snakes.

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Education of Tribal Women in Odisha: An Insight

Kasturi Panda 1

The Tribal people of Odisha, are found in varying concentration in almost all the 30 districts of the State. Their concentration is heavier in the districts of Mayurbhanj, Sundargarh, Nayagarh, Nawarangpur, Malkangiri, Keonjhar, Kalahandi, Kandhamal, Gajapati than the districts like Cuttack, Kendrapada, Puri which are sparsely inhabited by the tribals. Each tribe is characterized by distinct language, culture, festivals, rituals and socio-cultural features. Tribals are an integral part of Indian civilization and therefore they can not be isolated from the process of social and economic development.

Literacy and educational attainment are powerful indicators of social and economic development. It is known from various statistics that STs are the most deprived in terms of education – the key to full fledged development. Therefore they are in the last rung of social ladder. The educational level of the tribals of Odisha and tribal women in particular however, is very low, not only less than the state and national average but also less than the average of tribals of the country.

Objectives of the Study

In this paper an attempt has been made

- 1) To analyze the trends and disparities in educational status of tribal women.
- 2) To ascertain the problems and barriers encountered by women from tribal communities in pursuing higher education.
- 3) To recommend policy changes and other remedial measures for increasing the number of tribal girls in higher education.

This present paper is based entirely on secondary sources of data, mainly drawn from various studies conducted in this field, journals, which have been duly acknowledged.

The Status of Tribal Women in Education

Tribal women play a significant role in the economic development of tribals as they contribute in various economic activities and education is one of them. Education is a crucial requirement for the sustained growth of a developing society and lack of it is largely responsible for the exploitation and pitiable plight of the tribals.

ANALYSIS

Though the overall literacy rate of Odisha is almost equal to that of the country as a whole, the literacy rate of tribals is lower than overall literacy rate and almost 20% less than the overall tribals of the country. The picture is more dismal when we consider the female literacy among tribals which is just 23.37% according to 2001 census whereas the overall female literacy is 50.5%.

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TABLE 1

Top Ten Districts in Sex-Wise Literacy Rate of Odisha

| CI | District | ST | | | | All Communities | | | |
|-----------|---------------|-------|--------|-------|--------|-----------------|--------|-------|--------|
| SI. No | | Male | Female | Total | Gender | Male | Female | Total | Gender |
| NO | | | | | Gap | | | | Gap |
| 1 | Puri | 73.37 | 42.11 | 58.72 | 31.26 | 88.08 | 67.57 | 77.96 | 20.51 |
| 2 | Jharsuguda | 71.86 | 42.27 | 57.23 | 29.59 | 83.04 | 59.23 | 71.47 | 23.81 |
| 3 | Sundargarh | 64.66 | 40.90 | 52.75 | 23.76 | 75.69 | 54.25 | 65.22 | 21.44 |
| 4 | Sambalpur | 66.92 | 38.40 | 52.67 | 28.52 | 78.99 | 55.16 | 67.25 | 23.83 |
| 5 | Sonepur | 69.53 | 34.29 | 52.16 | 35.24 | 78.94 | 46.17 | 62.84 | 32.77 |
| 6 | Bargarh | 65.87 | 34.44 | 50.2 | 31.43 | 77.41 | 58.48 | 63.99 | 18.93 |
| 7 | Khurda | 65.43 | 33.07 | 49.91 | 32.36 | 87.9 | 70.36 | 79.59 | 17.54 |
| 8 | Jagatsinghpur | 59.87 | 35.91 | 48.62 | 23.96 | 88.55 | 69.28 | 79.08 | 19.27 |
| 9 | Nayagarh | 64.81 | 28.83 | 47.09 | 35.98 | 82.66 | 57.64 | 70.52 | 25.02 |
| 10 | Boudh | 68.29 | 25.81 | 46.65 | 42.48 | 76.23 | 39.02 | 57.73 | 37.21 |
| | Odisha | 75.35 | 50.50 | 63.08 | 24.80 | 51.48 | 23.37 | 37.37 | 28.10 |

Source: Census 2001

The literacy rates of tribals in tribal dominated areas like Malkangiri (14.69%), Rayagada (20.23%) and Koraput (18.68%) are quite poor. The literacy rate of the tribals is usually high in the districts with a high percentage of non-tribal population and low in the areas having high percentage of tribal population. This proves that the benefit of development is not evenly distributed throughout all the regions. From Table 1, it can be clearly seen that only 3 tribal dominated districts viz, Jharsuguda, Sundargarh and Sambalpur have been included in the list of those districts with a tribal literacy rate more than the State's average.

TABLE – 2
Six Tribal Dominated Districts with Sex-Wise Literacy Rate

| SI. | District | ST | | | | All Communities | | | |
|-----|------------|-------|--------|-------|---------------|-----------------|--------|-------|---------------|
| No. | | Male | Female | Total | Gender Gap | Male | Female | Total | Gender Gap |
| 1 | Gajapati | 41.60 | 14.83 | 27.77 | 26.77 | 54.71 | 28.42 | 41.26 | 25.85 |
| 2 | Kalahandi | 51.70 | 17.15 | 34.99 | 34.55 | 62.66 | 29.29 | 45.98 | 33.37 |
| 3 | Kandhamal | 62.72 | 26.87 | 44.47 | 35.85 | 69.79 | 35.86 | 52.86 | 33.93 |
| 4 | Koraput | 29.25 | 8.38 | 18.68 | 20.87 | 47.20 | 24.26 | 37.72 | 22.94 |
| 5 | Malkangiri | 22.05 | 7.5 | 14.69 | 14.55 | 40.14 | 20.91 | 30.53 | 19.23 |
| 6 | Rayagada | 31.16 | 10.07 | 20.23 | 21.09 | 48.18 | 24.56 | 36.15 | 26.62 |

Source: Census 2001

Just like in any communities, the gender disparity in literacy is prevalent among STs of Odisha also. The literacy rate of its males is 51.38% and of the females is 23.37%, thus making a gender gap of 28.1%. The gender disparity among them is more than that of the State (24.8%) and even more than that of the tribals of the country. This gender disparity is the greatest in two tribal dominated districts, namely Kandhamal (35.85%), Kalahandi (34.5%). The disparity is the least in Malkangiri district (14.5%)

Comparison of Sex-Wise Literacy Rates

There has been a continuous increase in literacy rates of STs, both of males and females since 1961 (Table - 3). Also the literacy rate of male has been continuously higher than that of females. The consistent improvement in the female literacy rates have resulted in increase in the overall literacy rate of the entire tribal community.

TABLE – 3
Literacy Trends for ST's in India from 1961 - 2011

| | 1 | otal Popula | tion | STs | | | |
|------|-------|-------------|-------|-------|--------|-------|--|
| Year | Male | Female | Total | Male | Female | Total | |
| 1961 | 40.40 | 15.35 | 28.30 | 13.83 | 3.16 | 8.53 | |
| 1971 | 45.96 | 21.97 | 34.45 | 17.63 | 4.85 | 11.39 | |
| 1981 | 56.38 | 29.76 | 43.57 | 24.52 | 8.04 | 16.35 | |
| 1991 | 64.13 | 39.29 | 52.21 | 40.65 | 18.19 | 29.60 | |
| 2001 | 75.26 | 53.67 | 64.84 | 59.17 | 34.76 | 47.10 | |
| 2011 | 82.10 | 74.00 | 78.00 | 71.70 | 54.40 | 63.10 | |

Source: National Commission for SC and ST's, Fifth Reports & Census, 2011

However, this improvement in the literacy rate has been accompanied by an increasing gender gap in the literacy rate. It was 11.27% in 1961 but has gradually increased to 28.11% in 2001. This trend is extremely disturbing. However the encouraging aspect is that the decadal growth rate has slowed down in recent years.

The **table 4** shows that the gender gap after a steep rise between 1971 and 1991 has started narrowing.

TABLE - 4
Decadal Growth Rate of Literacy Rates During (1961-2001)

| | 1961 | 1971 | 1981 | 1991 | 2001 |
|--------|-------|-------|-------|-------|-------|
| Male | 13.04 | 16.38 | 23.27 | 34.44 | 51.48 |
| Female | 1.77 | 2.58 | 4.76 | 10.21 | 23.37 |
| Total | 7.36 | 9.45 | 13.96 | 22.31 | 37.37 |

Source: Census 1961 - 2001

Factors Responsible for Poor Female Literacy Rate

Historically various factors have been found to be responsible for poor female literacy rate.

a) Gender based inequality

i.e., Preference to educate a boy rather than a girl by the parents.

b) Social discrimination and economic difficulties

Most tribal girls undergoing higher education come from lower income group i.e., with an income less than Rs.35,000/- per annum. Hence, paying tuition fees becomes difficult for them.

c) Domestic Engagement of girls

Mostly girls are pressurized to spend considerable time in domestic chores, caring for younger siblings so that they get little time for studies.

d) Low enrolment of girls in schools

Due to gender discrimination the enrolment of girls in schools is lower than boys because parents feel that educating a girl is waste of time and money.

e) Low retention rate and high drop-out rate

The drop – out rate is high among tribal children girls in particular. The reasons range from parental poverty to lack of interest in studies. The other reasons include lack of access to schools, household works, compulsion to earn for living, rigid school timing etc.

f) Low transition rate

Besides high dropout, the transition rate of the children from primary to high school is also very low. The low transition rate is due to the distance of high schools and also because of the cost involved in pursing high school education.

g) Language Barrier

Language is another factor which has proved to be a barrier in pursuance and completion of school education. The mother tongue of the tribal children is different from the medium of instruction, the Odia language. They fail to follow the lessons taught and therefore fail to learn their lessons and become disinterested.

Suggestions and Recommendations

- Establishment of tribal residential schools for girl students
- Supporting the tribal students with special scholarship, hostel facilities, remedial coaching particularly for girl students.
- Support the institutions located in boarder, hilly remote areas and educationally backward areas
- Teachers in the local areas should be appointed for conducting awareness campaigns among the parents about the importance of women education.
- Use of the mother tongue or local language as medium of instruction in early stages of education is desirable.
- Appointment of more tribal teachers with understanding of tribal cultures and practices for increasing schooling participation.

CONCLUSION

Tribal women of Odisha are economically, socially and educationally backward when compared to the mainstream society. The literacy rate of the STs is very low compared to the general population. In case of tribal women literacy the situation is far from satisfactory. There exists a wide gender gap in literacy.

For the educationally marginalized tribal women of Odisha there is an urgent need to mobilize their social position through education. Education itself is a powerful weapon that can assure inclusive growth. In order to bring them within the ambit of inclusive growth, the Govt., NGOs and voluntary organizations must frame genuine policies and provide means to improve

their social position, especially through education. The educational system of the dominant non-tribal population is of very limited value in the tribal cultural milieu because it does not match with the lifestyle and the needs of the tribal community. Linking school education to day-to-day life in general and the needs of the tribal community in particular are the most important steps that need serious attention.

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