

Study on Issues Relating to Sustainable Livelihood of Tribals and Marginalized Sections in Chandaka Wildlife Sanctuary

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Introduction

According to National Forest Policy 2002, at least 10 % of the total area of a state should be declared as protected area to facilitate conservation and protection of wild animals. However, out of total 1, 55,707 Square Kilometer of Orissa, 8111.55 square kilometer area has been declared as protected area so far, which is around 5% of the total geographical area. There are altogether 18 wild life sanctuaries and 1 national park in the state, out of which there are three elephant reserves. Despite lot of rhetoric by the wild life and forest department the wild life conservation scenario is dismal in Orissa. Now in the wake of this scenario, there is lot of pressure on the forest department to increase the area of the protected areas and the forest department has also mentioned it in their vision 2020 plan to increase the area up to 10% as early as possible. The most important question is as to how the forest department is going to deal with the large number of Tribal inhabiting these areas since ages within the purview of the Supreme Court order of November 23, 2001 and subsequent directions of MOEF to evict the Tribal from forest areas. And whether these policies pursued by government and following actions executed by their respective departments reflect any concern for the livelihood of the poor tribal inhabiting these areas. Keeping these and many other related questions in view, Chandaka-Dompara wild life sanctuary has been selected for the present study.

Study Site selection

The study was undertaken in three villages in and around the Chandaka – Dompara wildlife sanctuary; one inside the Sanctuary named Behentasahi; Krushnanagar, a rehabilitated village inhabited by people (62 households) shifted from Behentasahi and the third study site was Chudanga village located in the periphery of the sanctuary.

Focus of the Study

The primary objective of the study was to analyse the impacts of wild life conservation and forest conservation policies pursued by the government on the livelihood of Tribal people and other marginalized sections residing in and around the protected areas. Further an attempt has been made through the study to understand the process of alienation of the local poor and marginalized inhabitants from the natural resource base which has always remained an integral part in all spheres of their life.

Overview of the Chandaka – Dompara Wild life Sanctuary

Chandaka-Dompara from other being the only is located close to a

Profile of Chandaka WL Sanctuary Reserve forest – 7830.41 ha DPF – 8676.22 ha UDPF – 1802.09 ha Govt. land under RD – 216.97 ha Pvt. Land – 369 ha
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Wildlife Sanctuary is different protected areas in the sense it protected area in the state which city. The sanctuary is on the

outskirts of the Capital city of the State at a distance of around 15 Kilometers from the city and spreads over an area of 189 Square Kilometer. It comes under Dompara Wildlife Range of Chandaka Wildlife Division with a 174 Km boundary line and is adjacent to Nandankanan Biological Park & Lion Safari. The Sanctuary is spread over two districts, Khurda and Cuttack.

Chandaka forest was declared as Chandaka_Dompara Wildlife Sanctuary in the year 1982, however, the final notification is yet to be published.

Chandaka-Dompara wildlife sanctuary spreads over 19 forest blocks under two ranges i.e., Chandaka forest range and Dompara forest range out of which 5 are Reserve forest blocks, 10 Protected forest blocks and 4 undemarcated protected forest blocks. The Sanctuary has one revenue village inside it namely Gadjit consisting of five hamlets such as Behenta Sahi, Pithakhai, Nuakua, Dholkath and Dahanigadia. The forests extend over 4 civil sub-divisions and a total of 61 villages in the periphery.

Floral and Faunal diversity

Chandaka forests though have experienced heavy exploitation in the past yet it exhibits rich vegetation. The richness of the forest can be determined from the fact that it hosts 62 elephants which requires enormous amount of food. As said by the DFO, one adult elephant consumes about 200 kg of food everyday.

The vegetation is characterized by mixed tropical dry deciduous and moist deciduous forests with miscellaneous species dominated by Naguari, Sunari, Kochila, Kantaikoli, Teak(Plantation), Sal etc. In the past teak of Chandaka area was quite famous and considered at par with Burma teak. Bamboo brakes dominates inner areas of the forest. In the peripheral areas forest vegetation is mostly in scrub status. The forest can broadly be categorized as:

- Dry Xylia semi-ever green forest(Xylia xylocarpa present).
- Dry Miscellaneous semi-evergreen forests(Xylia xylocarpa absent).
- Coastal plain Sal forest.

Bamboo and planted teak provide ideal habitat for the wild animals such as elephant, leopard, hyena, spotted deer, wild dog, wild boar, ratel, pangolin, pea fowl, red jungle etc. The natural water body and forests provide suitable nesting ground for 120 species of migratory and resident birds, 300 plant species, 30 animal species and 27 kinds of reptile.

Strength of wild elephants in Chandaka forest:

Male elephants	13
Female elephants	30
Young elephants	19
Total	62

Water sources

Inside the Sanctuary some peripheral water reservoirs are found at Kumar Khunti, Deras, Manpur, Jhumuka Dam, Panasjhari, Jaria Dam, Haduapatta, Ambilo Tank, Baripokhari(local areas). Besides, there are 14 water falls and 17 seasonal streams flowing through the forest area.

Chandaka Forest : Past History and Management

In Chandaka area the first settlement was carried out during the British period in 1836. In 1880 forest areas were notified alongwith declaration of certain wild plants as protected species. People were stopped from doing toila cultivation. Chandaka and its neighbouring forest blocks namely, Churanga, Barhapita and Tarkoi blocks were declared Reserve forest (Notification No. 2962 dt 23.06.1885) in 1885 while Bhola forest block as Reserve Forest in the year 1911(Notification No. 1857-1860-T.R. dt -19.10.1911). Demarcation of Protected Forests was initiated in the later period in 1916-17.

Rights and Privileges

There existed no admitted rights in the Reserve Forest but in Demarcated Protected Forest people had certain rights, amended by the government from time to time. Tenants paying Nistar were allowed to collect fuelwood, brushwood and small timber for their bonafied use on payment of royalty at concessional rates from the coupes. Grazing was allowed on payment of fees both in DPF and RF areas except closed areas. The right holders enjoyed free collection of thorn, firewood, small timber for use and grazing.

Timeline of Forest Management Practices

The Reserve Forest and Demarcated Protected Forests were managed differently by the forest department. The following section describes about the management system underwhich Chandaka forest was managed in different periods:

(i) Management of Reserve Forest of Chandaka Range

1896 (Hatt's Plan)– Forest management under silvicultural lines was extended in 1896. Teak plantation inside the forest area was emphasized.

From 1905 (Monteath's Plan)– Forests worked under simple coppice and coppice with standard system on a 30 year's rotation basis. Teak plantations were raised.

1926-40 (Berry's Plan) – Forest areas with poor vegetation cover was worked under simple coppice with the rotation period reduced to 20 years . While good forest areas were brought under coppice with standard system on 40 years rotation period.

1930 – Regular teak plantation by Forest Department was undertaken.

1945-1964 (Dash Plan) – The earlier system was adopted.

1965-66 (Mitra's Plan) – All forest areas were brought under one management i.e., coppice with standard system on a 40 years rotation basis. Along with coppice growth, artificial regeneration of other species such as, Sal, Teak, Piasal, Sisoo, Gambhari, Kangra and Bandhan was emphasized.

Management system for bamboo and cane was worked out on a 12 year clear felling and 5 year cutting cycles basis.

(ii) Management of Demarcated Protected Forest of Chandaka Range

1919 (Haslett's scheme) – The forest areas were brought under silvicultural working for the first time. For these areas simple coppice system was adopted on 20-25 years rotation basis.

For controlled grazing one-fifth of the area was closed to grazing in first year and two-fifth in the second year.

1929-30 (Dodsworth's revised scheme) – Coppice with standard system was adopted on 20 years rotation.

1961 – Since this year regular plantations inside the forest areas were undertaken.

1966-67 (Das Plan) - It was since this period when emphasis was given more on artificial regeneration.

(iii) Management of Dompara Estate Reserve forest

The forests were managed just like the Demarcated Protected Forests but the coppicing period was kept 40 years on rotation basis.

History of the Protected Status

Chandaka forest for its richness in bamboo species provided a good home to wild elephants. Further due to the presence of regular corridors alongside the riversides of Mahanadi connecting Chandaka forest with Athgarh forest area the elephants enjoyed free riding within these areas.

Construction of new capital at Bhubaneswar alongwith rapid urbanization resulted into fast depletion of the rich Chandaka forest besides degradation of the elephant corridors. As a matter of this forest area got squeezed furthering attack of wild animals on human habitation in addition to increasing instances of heavy poaching of elephants and other wild animals. During the year 1980 there were 57 number of wild elephants in the forest which gave the signs of surviving population. Keeping in view the emerging threats it was thought of declaring the forest as Elephant Park/Reserve with dual objectives; one was to provide protection to wild elephants and secondly, to develop the area for tourism purpose. With this aim a scheme for forming Chandaka Elephant Reserve was prepared by the then wildlife conservation officer Shri Choudhury Gaurahari Mishra in the year 1980. The scheme invited intensive debate between the FD officials on the issue whether the Sanctuary area should include only RF and exclude the PF areas for the local people to meet their fuelwood need, grazing cattle etc. or it should cover all RF and PF areas. In the same time a group consisting of members of Asian Elephant Specialist group, Survival Service Commission of International Union for Conservation of Nature and Natural resources visited the proposed sanctuary area. In view of this the group articulated following major observations:

- Forest area has not lost its inherent potential and soil conditions in most of the areas have not deteriorated beyond retrieve. Given rigid protection against hacking, grazing and fire, nature will retrieve its original form of forests.
- Restricting the elephants to a small area may not succeed. The entire habitat covering both Reserve and Protected Forest should be included.
- The entire area can be developed into the Wildlife complex and the state will reap rich harvest from wildlife tourism.

- To cater to the needs of local population the adjoining wastelands should be devoted for social forestry.

(Source: Scheme for Chandaka Elephant Reserve, Wildlife Department, GoO)

Though initially the intention of the department was to constitute an elephant park but considering the fact that this may not acquire serious attention, and for obtaining a legal status for the area it was declared as wildlife sanctuary in the year 1982 which includes Reserve as well as Protected forest blocks of Chandaka and Dompara forest ranges. In order to meet the local needs 50 sq. km of Undemarcated Protected Forest area in the periphery were set up for social forestry plantations.

Though it was proposed in the Elephant Reserve Scheme prepared in 1980 to divide the forest area into three zones i.e., Core zone, Buffer zone and Tourism zone but such demarcation has not taken place at the ground level since inside the sanctuary (which is considered as core area) human habitations still exist and the forest department has not been able to evacuate the people from the area. Again, looking at the area of the sanctuary, which is very small having such demarcation of zones doesn't appear to be practicable was told by the DFO of Chandaka.

Villages inside the Sanctuary area:

As mentioned above there is one revenue village in the heart of the Sanctuary comprising of five hamlets namely *BehentaSahi*, *Nuakua*, *Pithakhai*, *Dahanigadia* and *Dholakatha*. These settlements come under the revenue administration of Cuttack District. Situated around 15-17 Kilometers away from the main gate of the Sanctuary, these hamlets are mostly inhabited by the Sabara adivasi Tribes. According to 1991 Census, the village had total 855 households with 4581 population.

These 5 enclosed hamlets are located inside Sunakhani II and Akhanaga Demarcated Protected Forest blocks. The total area of enclosed hamlets is 917 ha (approx.) out of which about 50% area is under cultivation.

The socio-cultural history of these villages and their relationship with the forests of Chandaka is more than 150 years old. They are surrounded by the forests of the Sanctuary from all sides. One of the major problems of the village is connectivity with the outside world and their access to Institutional Support like health center, Educational Institutions, Market, Panchayat Office etc. The local PHC at Dompara is around 9-10 Kilometers from Behentasahi and Nuakua. The positive thing about these villages is that all of them are located in the same vicinity and seemed to be drawing strength from the inherent network of relationships developed over centuries.

Behentasahi: Hamlet of Gadajit revenue village in core area

This core village is around 15 kms far away from the main entry gate of the sanctuary. There are 35 households in the village belonging to Sabara tribe. Though the exact period of establishment of the village couldn't be ascertained, however from the discussion with the people the village seems to be not less than 150 years old.

Krushnanagar: The Rehabilitated settlement

In the year 1994 half of the original inhabitants i.e. 38 families from Behentasahi got rehabilitated by the forest department in Krushnanagar in the periphery of the Sanctuary. During the process of rehabilitation the families were promised with independent house to every adult member by the forest department. Thus, presently altogether 62 households are there in Krushnanagar and all of them are Sabara adivasis(Scheduled Tribes).

Status of natural resources within the sanctuary area: the changing scenario

As the old people of Behentasahi and Nuakua recalls the forest surrounding their habitation was thick and a host to variety of plant species besides wild animals. To name a few the plant species found in plenty included Dhaman, Kerua, Nahalbeli, Kangda, Mango, Sal, Mai, bamboo, bena grass, canes, Naguari, Sunari etc. Besides, a variety of NTFP producing species such as Harida, Aonla (*Terminalia officinalis*), Bahada (*Terminalia chebula*), Karanj, Kochila etc. dominated the forest vegetation. The area had rich water resource. Number of seasonal streams originated from the forest areas, which formed important source of irrigation to the agricultural field of people in the sanctuary area.

The process of destruction of forest within the sanctuary area as hinted by Hari Majhi, a resident of Behentashi, had started long back when forest areas were given to contractors by the forest department for coupe operations. He recalled for having worked for the contractors and attributes the destruction to their activities within the forest area and involvement of O.F.D.C in the operations. The Tribal people had been employed by the contractors to dump timbers from outside their entitled patch into the area demarcated for them. Indiscriminate felling of big trees under coupe led to scarcity of fuelwood, which formed one of the important income source for the poor tribals. The entire process affected the livelihood of people badly. To compensate the lost income that they derived from fuelwood selling local people started charcoal processing within the coupe demarcated area All these activities robbed the forest of many valuable species.

Evolution of people's right and access over Natural Resources through the governance of Dompara Zamindar and State Government:

All the villages inside the sanctuary and the forests used to come under the revenue administration of Dompara Zamindar prior to 1947. The people of these villages had been provided right to cultivate over their agricultural land by the Zamindar through patta. Apart from the pattas provided by the Zamindar, they also used to acquire additional land sometimes by clearing some shrubs in forestlands surrounding their village. The people produced a variety of crops during the old days like paddy, mandiya, suan etc. in their agricultural fields which was sufficient to meet their needs throughout the year.

People remember that there were sufficient open lands for cultivation in those days. There existed free access regime and abundance of resource base in the area which gets reflected from the local proverb popular amongst the people i.e. "*Bhala Damapada bhalare, Pata nahin Pauti nahin, Maru maru jete bata gala re*". (In Dompara area People could plow as much area as they can without patta or tax. Cultivation depended upon the manpower of family).

There seemed to be some degree of flexibility over their land rights and an equally flexible system of payment of revenue for Tribal existed. Each village had its term of bethi where the

villagers were supposed to dump around one bhara of wood (head load) in the palace of Zamindar and he ensured feast for the same day.

During Zamindari period the people of Dompara enjoyed access to forest products such as fuelwood, small timber for house construction, agricultural implements and other necessary domestic requirements from the forest areas and in return people paid produces free of cost to the Zamindar or his agent. The artisan groups such as Kamaras, Sunnaries(Gold smiths) and Thataries enjoyed special concessions to manufacture charcoal free of cost from dry and useless species. Similarly other groups like Kansaries and Kumbharas (Potters) had the privilege to collect forest products for their profession on payment of a nominal fee annually.

Dependence of people especially the poor like Saharas, Bauris on forest for livelihood was high. These people undertook firewood selling as a major livelihood activity. As the area frequently faced heavy floods and drought, cultivation in the area was a risky enterprise. For this reason even better class people sometimes to supplement their income particularly during the period of natural calamities resorted to firewood selling activity. Though even during that period certain patches of forestlands were leased out to contractors for harvesting of big trees, yet the level of restriction over their natural resources never went beyond a certain point where they could feel that they were alienated from their traditional rights over forests and land.

However, the scenario started changing gradually after the area came under the revenue administration of state government. After the declaration of Sanctuary in 1982, the restrictions kept growing and eventually limited their access to forests and agricultural lands. The forestlands which were earlier used by people for vegetable cultivation was occupied by forest department four years back for plantation programme. Fuel wood selling and charcoal selling, which also used to supplement their income after systematic exploitation of forest resources by government through leasing, have also been restricted. Their mobility within the forest area has been limited significantly within last two decades. To be specific relatives & friends of the people in the core area no more can freely visit them and had to pay an entry fee for coming to the core villages. The entry of vehicles inside the sanctuary area is allowed after the permission of the authorities on payment of entry fee, however movement of vehicles after evening is restricted. For this it have been quite difficult for the people in the core area to carry the ill members of their family for treatment during emergency. The tribal people are prevented from beating drums during their marriage which is an essential part of their ceremony. Recently some households from Behentasahi received Indira Awas but the release of money was abruptly stopped by the government after first installment.

Rehabilitation

The rehabilitation process was initiated in the year 1994 with Behentasahi and Dholakath hamlets. In the first phase the wildlife department had planned to rehabilitate only 250 households from Behentasahi, Nuakuo and Pithakhai hamlets out of a total of 483 households scattered in five hamlets (estimation made based on door to door survey by the Revenue Department). Since the other two hamlets, Dholakatha and Dahanigadia are situated in the periphery so they were left out in the first phase. The idea behind this was that people from these hamlets would get motivated by others from the rehabilitated villages and would of their own move out from the forest area. However, on the intervention of the Collector of Cuttack District, since all the hamlets belong to a single revenue village, shifting in parts is not practicable, hence the idea has to be dropped out and the wildlife department included all

the hamlets in their rehabilitation plan. On the other hand the site for resettlement was identified only for 250 households and finding out new areas for resettlement of all the households in five hamlets and agricultural lands nearby have emerged as a big problem before the wildlife department.

Amidst these problems till now only 85 households have been resettled outside the sanctuary in Krushnanagar and Tulasideipur. Though several attempts were made by the department to rehabilitate the remaining households of Behentasahi and Dholakath as per the initial plan, but their earlier attempts in rehabilitation has back fired after seeing the visible impacts of rehabilitation on the people of Behentasahi. Since most of the promises of government failed in providing livelihood security to people of Krushnanagar and people have turned more vulnerable after the relocation of 1994, people from the core area have become more skeptic of the rehabilitation promise.

The people of Behentasahi are adamant on their decisions and have decided not to leave the area until their demand for fertile agricultural lands with patta, homestead land, drinking, education and other basic facilities necessary for securing a livelihood are met. The tribal women of Behentasahi emphasizing the importance of land in their lives laments that “Land gives us shelter, food; so our first and foremost demand is that we all should be given good agricultural lands. What shall we do with money? It gets spend on unwanted things and at the end we shall have nothing and nowhere to go.” Considering the restrictions imposed by the authorities which have limited livelihood options besides giving rise to several other problems the tribal people are willing to move out of the core area. The people have identified three sites for resettlement and the same was shared with the DFO but no further action had been taken by the department till the reporting period.

The promises that failed to materialize:

The promises which had lured the innocent Tribal of Behentasahi into accepting the offer made by the Government nine years back seem to have failed in many occasions. Prior to their rehabilitation the Sabaras of Behentasahi had been promised equally good land for their fertile lands apart from providing educational, health facilities, Drinking water and monetary compensation of around 12000 rupees per acre of agricultural land and 18000 rupees per acre of homestead land. The proposed agricultural land which has been demarcated for distribution is hard to cultivate and no legal records have yet been provided for such land. Apart from being placed at longer distance from their place of abode, the identified lands have already given rise to many scuffles with their neighboring village namely Daruthenga. The search for water has prompted them to dig in many places and then abandon the effort as the prospect of getting water seemed bleak. As for the promise by the department regarding land against land, people were first promised to be given 2.5 Acre all and then the limit was lowered to 2 acre. Again, people have not received the entire amount of monetary compensation as promised earlier against their constructed house in the old village, and had to keep fighting to get their dues which they are denied on the ground that the department has no fund for these activities.

Comparative status of interrelationship between people and forest resource and their role in conservation of the resources:

The Tribal while staying in Behenta Sahi seemed to have enjoyed a very healthy and symbiotic relationship with the thick vegetation surrounding their village. It had a holistic

impact on the sources of their livelihood as the presence of dense forest caused the water streams to flow round the year and brought the sources near their agricultural fields. And the forest had the abundance of big trees like Kangadu, Sisu, Tinia etc apart from the Non Timber Forest sources like Harada, Bahada, Amala , Kendu etc . Fruit bearing trees like mango helped most of the families to earn additional source of livelihood for two to three months. The streams flowing through the agricultural fields and forests were also flushed with fish (Seula, Keranda, Rohi, Todi etc) that provided additional source of food from the month of Phaguna until Shravana. They had also bullocks and other livestock like goat. The vast grazing area and shrubs of forest was good enough for their livestock to thrive.

The relationship with forest and their environment was deep and got reflected in many other socio cultural spheres as well. As Harimajhi, one of the old members of Shabara families laments about the role of the deities of forests and land in waking them up before any elephant attack on their harvests. He believed that their deities namely Badapathadarini ,Chotakandla and Sundilila used to wake them up long before any elephant attack and strangely enough they had a sacred relationship with their forests and the spirit of forest .

They seemed to have enjoyed a lasting relationship with the forest in Behentasahi which could never really be replaced by the barren areas in Krushnanagar. Their rehabilitated place neither had any forests nor any scope for their access to scarce forest protected by forest department surrounding their village. As most of their livelihood options have been snatched away through the ongoing rehabilitation process, the women of Krushnanagar have been forced to collect firewood conspicuously and sell it in nearby markets. The tribal of Krushnanagar had also been forced to occupy some fallow land in nearby areas for growing vegetable which came under reserve forest area. But then they had no other option but resort to use whatever natural resources available to them and in whatever way their circumstances forced them to.

Comparative Status of Agriculture in the old village and the rehabilitated village:

Paddy was the principal crop that ensured food for nearly 8-9 months in a year in Behenta Sahi. Most of the agricultural lands were fed with perennial source of water and each acre of land produced around 35-40 bags of paddy in Behentasahi. Most of the families appeared to have good quality of land and all of them had land records even prior to independence. Wage labour formed the secondary income source.

Water never appeared to be a problem for cultivation as villagers also produced Brinjal in large scale. Brinjal cultivation provided them a lucrative income of around Five to Six thousand rupees every year and they had access to the neighbouring market of Jatani. The linkage with the market as well as finance for the cultivation of brinjal was well established in Behenta Sahi. The traders of Jatani used to provide money in advance for cultivation of Brinjal and procured the produce from their doorsteps. Apart from brinjal, many other vegetables including chilly, tomato etc used to be grown in Behenta Sahi.

On contrary, tribal people of Krushnanagar are now lamenting about the fertility of their past agricultural land when they are comparing them with the proposed barren lands to be distributed to them by Government. The unfortunate thing is that people of Krushnanagar still haven't received records of their proposed agricultural lands. The perennial sources of water that irrigated their lands in Behenta Sahi and helped them to ensure their food for nearly one year was no where to be seen in Krushnanagar and ponds had to be dug several times before

being abandoned . Though they had tried to grow brinjal in some surrounding forestland in Krushnanagar, these lands in the later period were occupied by the Forest department for plantation. The other patches where they used to grow brinjal were lost owing to social conflicts and tension.

Thus, the proposed package of rehabilitation comprising of land as well as cash for their fertile lands have turned out to be very unproductive in comparison to their earlier assets.

Comparative status of social network between the old village and the rehabilitated village:

The rehabilitation process rendered the inhabitants of Krushnanagar vulnerable as most of their relation with their Tribal neighborhood was snapped. This is the most vital asset the Tribal seem to be possessing as their vulnerability is largely mitigated through the inherent system of sharing and bartering. The inhabitants of Krushnanagar had access to finance during festivals and marriage ceremonies from Tribal of Behenta Sahi as well as other nearby Tribal villages in their past dwellings. There was neither the pressure of interest nor any crude means of recovery. However, the opportunities for credit in the rehabilitated village have dried up which could further lead to striping of their marginal assets during scarcity. Probably it's the inherent cohesiveness of the Tribal communities and the bond of kinship that saves them from many shocks of rapidly changing society. It gets fragmented and the inherent safety net gets diluted when policies pursued in the name of conservation or development puts them in isolated places devoid of either natural resource base or social resource base.

Social conflict emanating from relocation:

While planning for the rehabilitation of the tribal people of Behentasahi, perhaps it never occurred to the forest department that some day people of Krushnanagar might face the competition of the neighboring village for gaining control over scarce resources. The irony was that land demarcated for distribution among the Tribal of Krushnanagar was also being claimed by locals of Daruthenga. Besides, the fight also expanded into other areas like fight over common property resources (pasture land) identified for the rehabilitated persons and the common agricultural land for vegetable cultivation. Sometimes contradictions lay within the decisions emanating from within the govt. department like one officer identifying around 50 acres of land for pasture land of Krushnanagar and then another officer giving a portion of the same on lease for mining activities to influential person from Daruthenga village. The villagers of Daruthenga are old inhabitants of the area and seem to be more dominating.

Scope of involving local communities in protection and conservation of wildlife and forest

Surrounding the Chandaka forest in some villages people are engaged in protection of Protected forest patches. These efforts are self-initiated and have come up responding to the situation of forest degradation. However, these community initiatives have not received adequate attention from the forest department till the date. Nor the department people appear to be enthusiastic in involving the local communities in the management of protected areas. According to the views of authorities, people and wild animals cannot exist together. Wild animals require isolated place free from human interferences and so there doesn't arise any question of co-existence of man and animals inside the protected areas. At present only 5% of

the State's total forest area comprises of protected areas in contrast to 10% as mentioned in the National Forest Policy 2002. Mentioning the fact, the Chief Wildlife Warden expressed that where shall the wild animals go if people wants to occupy and settle everywhere including the habitation sites of wild animals.

Despite the presence of numerous experiences of communities undertaking forest protection and management of their own, the authorities keep their eyes and mind closed on the issue of people's involvement in management of protected areas. The DFO of Chandaka Wildlife Division told that, in conservation of protected areas the role of communities is limited. People cannot be made managers of areas fostering rich bio-diversity. Rather efforts should be concentrated on providing alternatives for income generation to the people to reduce pressure over the resource. He shared his apprehension that if people are involved in management then short term commercial interests will take precedence over long term conservation which will have negative implications on the resource.

However, on this matter Shri C.G. Mishra (Retd. PCCF, Forest Department, GoO) shared a different opinion. In his view mutual survival of people and wild animals inside the protected areas is needed and is the only way to resolve man-animal conflicts, otherwise, no act/policy can be really effective in conserving the protected areas".(Oral communication, 2004).

Meanwhile the wildlife department has recently introduced the eco-tourism scheme in the area. The basic objective of the State besides developing the area as a tourist spot further has an intention to generate income avenues for the local people dependent on the resource for livelihood. The department is planning to involve these people as local guides, help them to develop rest house for the tourists where the tourist can be served local food and enjoy tribal songs and dances and so on, which would help the tribals to earn a livelihood.

Forest is important for survival of the wild animals and also for the tribal people. Keeping this in view, alienating people from forest in the name of conservation of wild animals in many areas has failed. Rather what is needed is to work out strategies which provides scope for mutual existence of people and wild animals inside the protected areas. As it has been rightly shared by the tribal people of Behentasahi and Nuakua hamlets, they shared a deep relationship with the natural resources in their surrounding which gets reflected in every sphere of their life. The forest close to their habitation gets protected and so are the wild animals, as the timber mafias and poachers dare not to loot the forest from this area due to the presence of habitations.

Impact of policies adopted by the State on the livelihood of tribal people:

The detail analysis of evolution of policies of government regarding control and management of forest resources reveals that the measures taken now to conserve the forests runs contrary to the earlier policies of exploiting the resources to the hilt. And nowhere the Tribal people who inhabited the area over centuries and coexisted with the flora and fauna in perfect harmony without any evidence of exploiting environment beyond minimal needs, ever figured in the grand scheme of conservation. Their view was never taken while leasing the forests to private contractors or while peeling off the valuable timbers through the Corporation (OFDC) over which their entire livelihood revolved. As the grand old man of Behentasahi recounted those days of their involvement as laborers, he revealed many other processes adopted by Forest Corporation and private contractors to take away timber from other areas at night other than the area demarcated for them. A forest contractor namely

Dhadi Ratha ruled the roost. Only the Tribal people were used as laborers and became the means over whom the burden of forest destruction could be shifted owing to their vulnerability. The livelihood of the Tribal revolved around the forests and the relationship was holistic in nature. Abundance of NTFP like amala, Bahada, Harida etc. and the fruits like mango, Jackfruit etc provided the villagers additional source of income. But destruction of these trees through coupe system not only stripped them of their livelihood sources it also caused the streams that drained in their fields to dry up gradually. All the water streams that flowed from the mountains were also rich source of fishes for nearly three-four months that provided them Additional source of food. These changes had their impact on the livelihood options of people which gradually dwindled due to massive destruction of forest. Contractors exploiting the situation at that time also encouraged people to go for charcoal processing within the area demarcated for coupe. Shrinking options of livelihood prompted people to take to charcoal processing as additional source of income. However, after the declaration of sanctuary the charcoal processing stopped gradually. The forest lands which were used for vegetable cultivation and which provided significant source of income (Around 5-6 thousand rupees from brinjal cultivation alone per family) for the Tribal families were occupied by forest department for plantation programme. These changes further resulted in increased livelihood burden especially on women who till now were primarily engaged in performing household non-monetised activities. Women in Krushnanagar now contribute significantly to the income of the family through collection and sale of fuelwood. The rehabilitation process resulted in loss of access to productive assets like agricultural land and under such situation of limited livelihood options wage labour and fuelwood selling formed the primary means of income earning for the people.

The process of rehabilitation and its subsequent impact on the livelihood of the people of the core area seems to have assumed tremendous importance as there are many other villages in the core area of the sanctuary which are about to be rehabilitated. The impact of that kind of rehabilitation where different facets of livelihood and interdependence of people with their environment is not being analyzed properly could at best be highly unsustainable if not devastating. The villagers of Krushnanagar who used to have all kind of capital assets that generated sustainable means through its interplay with the environment are now stranded. Their access to the asset base like Natural resources capital (Land, Water and Forest), Social Capital, Physical Capital etc have considerably eroded and their vulnerability context has changed due to lack of any perspective planning on the part of the Government.

Emerging issues:

Man-Animal conflicts

Crop depredation by wild elephants is growing and has emerged as a serious problem not only in core villages but even in the villages located in the periphery of the Sanctuary. The frequency of intrusion of elephants into the paddy fields of people increases during harvesting season when the herds destroy lot of standing crops falling on the way. Besides, attack on human lives have also increased and every year a case of human casualty is reported from the surrounding villages.

Human deaths reported during the period 1997 – 2002		
1997-98	–	1
1998 – 99	–	1
1999 – 2000	–	1
2000 – 2001	–	2
2001 – 2002	-	1

Despite of increased elephant attacks and heavy crop loss each year the forest department have failed to tackle the issue properly which has raised a great deal of discontent among the local residents. The local people have decided to put up a protest rally against the administration if measures are not taken soon to address their problem.

Steps taken by the State government in the past for prevention of elephant intrusion into Human habitation

To prevent wild elephants from straying into human habitations and agricultural fields of the surrounding villages construction of 22 mts long trench line along the sanctuary boundary have been initiated by Chandaka wildlife Division but it has been only partially completed due to non-cooperation by a few villages and interference of timber mafias. The reason being that the access of these villages on the forest for grazing their animals will get cut-off once the trench line is constructed. Again, Chandaka forest is a playground of timber mafias and they smuggle out timber through the roads of the surrounding villages. These mafias for their interest prompted the local people with money to protest and non-cooperate with the forest department for construction of trench line.

Establishment of Illegal country liquor brewing distilleries:

There have been increasing pressure over forest due to establishment of numerous illegal country liquor distilleries and timber mafias operating inside the Sanctuary area. There are more than 100 liquor distilleries operating illegally around the sanctuary area. These distilleries produces nearly 2000 lts liquor everyday which is channelised to nearby urban centers and towns like Bhubaneswar, Cuttack, Jatani, Khurda, Baliana, Banki and Begunia. These distilleries require huge amount of wood everyday which comes from Chandaka forest.

Felling by timber mafias:

Besides, timber from the forest area is indiscriminately felled by the outsiders coming from Cuttack, Bhubaneswar etc. These mafias engage poor local people for timber felling. These processes have resulted in scarcity of space for wild elephants inside the forest for which incidents of intrusion of wild elephants into the surrounding villages and Bhubaneswar city have increased since last few years. The other factors accentuating the problem are fire created by the distilleries, filling up trench lines by timber mafias & private builders and failure of the department in planting bamboos and other fodder species inside the forest for the wild elephants. (Source: Samaya, 12th December 2003)

Biotic pressure

There are around 61 villages in and on the periphery of the sanctuary consisting of local residents and the tribal groups migrated from Mayurbhanj and Keonjhar districts. Migration of the outsiders to the area became rampant during 1960s in search of work in the growing Bhubaneswar city. With this pressure over the forest for fuelwood for domestic consumption increased. Besides, tremendous pressure is exerted over the forest for fuelwood extraction for livelihood earning. According to 1980 census, the villages in the surrounding consisted of 14680 families with a total population of 81222 and from these figures one can imagine the extent of pressure exerted on the forest.

Apart from this, charcoal preparation is still in practice in a number of villages though it has been controlled to a great extent by the forest department. Charcoal from this area is exported

to Balikatha for manufacturing of utensils and this has devastating effects on the forest health.

Encroachment of forestlands by private builders:

Bhubaneswar is fast expanding towards Chandaka in housing, industrial complexes and agricultural farm lands. The land mafias are engaged in taking control over the lands surrounding Chandaka forest (since these lands are close to reserve forest so are available at low price) for construction of apartments and plotting purpose. In the process they also engage themselves in clearing the surrounding forestlands and through various unscrupulous means they get these lands registered in their names. Wherever the land is suitable peripheral areas are diverted for vegetable cultivation etc. All these processes has honeycombed the elephant home range as a result of which the frequency of wild animals entering into human habitations have increased.

Apart from the issues mentioned above another important issue which has become a flash point is related to the tribal groups residing in Chudanga village in the periphery of the sanctuary whom are facing the threat of being evicted from their homeland. For having a better understanding on the intricacies of the govt. policy and how these are being used against the tribals the issue in Chudanga village is being presented in details here.

Eviction of Tribals from Chudanga village

Chudanga village located in the Fringe area of Chandaka-Dompara Wildlife Sanctuary comprises of mostly Santhal and Kolha tribal groups migrated from Mayurbhanj and Keonjhar districts around 4 decades back. It consists of six hamlets namely Jenamani Sahi, Nuajo sahi, Hatigadua, Kanthini sahi, Khanduali and Bangali sahi. All the hamlets are scattered and their caste and household composition are presented as follows:

Hamlet	Caste	Total HHs
Jenamani sahi	Santhal (ST)	15
Nuajo sahi	Kolha (ST)	8
	Santhal (ST)	9
Khunduali sahi	Santhal (ST)	6
Bangali sahi	Khandayat(Genl), Harijan (SC), Tanti (OBC)	65
Kanthini sahi	Kolha (ST)	5
	Santhal (ST)	5
	Bindhani	1
Hatigadua sahi	Kolha (ST)	1
	Santhal (ST)	16
Total		131

All these Tribal groups had migrated in a large group around 40 years back from Mayurbhanj and Keonjhar districts half of whom had returned back. Few Bengali households (2-3) also migrated to this area at the same period. While most of them moved to this area in the year 1982 following the great flood in Ersama area under Jagatsinghpur. Infact, the Bengali population is original resident of Midnapore district located in West Bengal.

Major contention surrounding Chudanga village:

The villagers of Chudanga who had until now been served notices periodically by the Revenue and Forest departments since last few years are now being confronted with another department surveying the area and staking its claim on the area since 1951. The areas surrounding the Chudanga village fell within the boundary of erstwhile ex-state of Chudanga Gada and the Archeological Survey of India intends to develop the whole area coming within the fortified wall for tourism. Hence the drive to vacate the area has been hastened with the help of the forest department and the process of transferring the land to Archeological department for further survey and groundwork has already been initiated. The forest department is best poised to exert pressure on the inhabitants of the area showing the plea of reserve forest area. A plan is afoot to develop the whole area as tourist place and link it with the Nandankanan.

History of the village:

The area of Chudanga Gada had been identified by the Archeological Survey of India as an important site as far back as 1951. During the land settlement process in 1962 as the department didn't stake its claim, the land status of the area remained under the Revenue Department. However, during the British administration some influential employees of the administration had acquired land in their own name and latter transferred those lands to one person namely Mr. Abdul Bari . Mr. Bari also managed to acquire some more Government lands and the Chudanga Gada Lake apart from these above mentioned lands. He also brought around 6 Tribal families from the Thakurmunda of Mayurbhanj District who latter on brought their relatives (Source- Samaj, Mr. Prafulla Chandra Tripathy, Archeologist) .

Livelihood

The livelihood of the people inhabiting the area is closely associated with the forest and adjoining lands demarcated as forestlands by the forest department. Those forest lands have been put under agriculture by the tribal people since their migration in 60s. Settled agriculture in the cleared forest lands and the seasonally available employment opportunities in the nearby stone quarries, contract work in Barang market etc help them to tide over the scarce resources available in the area. It is important to note that unlike other areas of the reserve forest, the area surrounding the village had thin range of trees for use and only some bamboo bushes characterized the forest. Hence the prospect of augmenting their income through selling of firewood, charcoal and other forest produces as is evident in most of the core areas of reserve forest was very less. This of course has increased their dependence on the agricultural lands coming under demarcated forestlands. Paddy is the principal crop and it ensures food for nearly seven months. Apart from growing paddy, the related agricultural labor also provides them employment opportunities.

Status of Homestead and Agricultural land

The Tribal people of Chudanga village have been using the agricultural lands for growing paddy and vegetable since their migration to the area since last forty years. Most of these lands are falling within the demarcated forestlands and they do not have any records of either homestead or agricultural lands. However, some of them had been provided agricultural lands on lease during 1970s in the adjoining Bhalunka Mauja. These records were subsequently

cancelled through a series of notices showing the cause of irregularities in the distribution of land. Though the exact reason for cancellation of rights couldn't be ascertained, the revenue officials were of the view that many such Tribal groups from Mayurbhanj had earlier sold their lands to outsiders and returned to their native place after being given land records. The lands given to the villagers of Chudanga during 1970s in Bhalunka mauja seemed to have stopped cultivation due to the frequent elephant attacks. The opportunity was used by the Revenue Department to serve periodic notices to people for cancellation of their rights. Even people had paid tax up to 1986. The latest notice served to them by the forest range officer (Through amended Wildlife Conservation Act of 2003 vide section 34-A) clearly mentioned that as they had occupied the reserve forest land within the sanctuary without legal rights they had to appear before the officer on a certain date and had to provide sufficient reasons as to why their property would not be confiscated. When the villagers appeared before the forest range officer they were instructed to shift to a safer place 100 feet away from the demarcated Chudanga fort. The move clearly smacked of the ploy used by the forest department to clear the land for the Archeological Department. Some of the Bengali families however shifted to safer place adjoining the road owing to their insecurities borne out of minority status.

The first land settlement had been completed in 1962 and then another settlement process was about to be initiated in 2001 but the plan was later on dropped.

Details of notices served to people of Chudanga:

Sl No.	Name of the Department	Date/Year	Reason Shown	Issuing Authority	Specific Instruction
1	Revenue Department	23.04.94	Irregularities in distribution	Additional Tahasildar	To show proof of land records
2	Revenue Department	25.04.96	Verification of land	Additional collector	To appear for verifying proof of Govt land
3	Revenue Department	25.06.02	Verification of leased land	Additional Tahasildar	To show proof of land records
4	Chandaka Wildlife Division	10.10.03	Encroachment of reserve forestland	ACF, Chandaka Wildlife Division	To show reasons why they should not be evicted

Violation of their rights and harassment by forest officials:

The tribal groups of the Chudanga village had started cultivating on forestlands around 40 years back and had been paying regular tax since 1970s for their lands in Bhalunka Mauja. Several orders of Government relating to the Forest Conservation Act of 1980 instructed the District Administration to identify such lands of people who used to cultivate in forestlands prior to 1980 and regularize them. The District administration never showed any interest to acknowledge the rights of people over such lands and took any concrete step to issue pattas in their name. Forefathers of some of the people of Chudanga village had been provided in agricultural land on lease. Some examples of such leaseholders are given below.

Sl No.	Name of the lease holder	Plot No.	Amount on lease in Acre
1	Gobhar Singh	266/345	1 Acre
2	Shiva Singh	266/348	1 Acre
3	Anand Singh	266/344	1 Acre

4	Budhia Singh	266/351	1 Acre
5	Singha Singh	92/400	0.78 Acre
6	Arjun Singh	266/356	1 Acre

After the declaration of Sanctuary in 1982, the attitude of forest department towards the inhabitants of Chudanga was very antagonistic and they periodically reminded them to vacate the place. The continuous pressure from the forest department prompted some of the Tribal to vacate the place and move to some other areas like Chunakhali Village, on the outskirts of the Bhubaneswar city. When the villagers responded to the notices of the Govt. officials (Forest Department) and met them they were told flatly to vacate the place as they had no rights over their lands. Even their demonstration in front of the assembly couldn't yield any positive result. It was clear from the response of the Government that neither any of their concerned departments nor any leaders really ever bothered about the rights of most marginalized sections of society.

Amidst all these developments, it was also revealed that one real estate company namely Basundhara has managed to purchase some land from Tribal fraudulently. It appears quite strange that on the one hand lands are being taken back from the poor Tribal people of Chudanga on the plea of developing the area for tourism purpose and inconsistencies in cultivation, while on the other hand real estate Company like Basundhara is able to acquire land.

Regarding the rights of the tribal people of Chudanga the views of the authorities appears to be strange and anti-people. According to the DFO the people of Chudanga are not the original inhabitants of this area. As they have migrated from outside and they do not possess ancestral property here they cannot be considered as tribals. On enquiring about the compensation to the tribals of Chudanga, officials of Archeological Survey of India responded that only the patta holders will be given compensation and there is no plan for rehabilitation of others. Here it may be noted that the tribals though have been residing in the area and using the forestlands since last 40 years but they do not possess patta of these lands while on the other hand large patches of land from this area is occupied by an outsider.

It appears as though lack of any effective networking among such people, their distance from any organized group/political groups etc and lack of information about their rights prevents them from asserting their rights which eventually affects their manner of eviction/rehabilitation etc.

Annexure – 1

<u>Name of forest block</u> (RF/PF/UDPF)	<u>Area</u> (in acres)	<u>Area</u> (in hectares)
Chandaka Range		
Churanga RF	1314	531.76
Chandaka RF	7627	3086.60
Barhapita RF	8256	3341.15
Tarkai RF	1960	793.20
Bhola RF	192	77.70
Krushnanagar DPF (Part)	184	74.46
Dalua DPF	778	314.85
Derras DPF	928	375.55
Bhola DPF	448	181.30
Kuduamunda DPF I		
Kuduamunda DPF II	2985	1208.01
Bantal DPF	1008	407.93
Churanga UPDF	358	144.88
Dompara Range		
Akhanaga DPF	5560.00	2250.10
Sunakhani I (DPF)	3496	1414.81
Sunakhani II (DPF)	6052.00	2449.21
Haldiamunda UDPF	891.011	360.58
Pandramundia UDPF	2782.00	1125.85
Deoliamundia UDPF	422.00	170.78
Land to be acquired		
Churang marsh	131.00	53.01
Ramchandi Enclave	518.00	209.63
Dalua Enclave	547.00	221.36
Binghagiri Enclave	106.00	42.89
Bhalunka Enclave	146.00	59.08