

CHAPTER – 4

THE PROTECTED AREA AND THE INTERFACE LAND USE SITUATION

4.1. The existing situation in the zone of influence (ZI).

4.1.1 The location, extent, boundaries and natural attributes of the ZI.

Villages comprising of both tribal & non-tribal communities, situated in side and outside the sanctuary within 10 Kms of radius, traditionally dependent on the resources of the sanctuary. The residents of these villages have their subsistence economic activities extending to forests inside & outside the sanctuary as well. Such extent of area has been taken as maximum 10 km away from the sanctuary border. Hence all the forests and villages situated within 10 km radius of Satkosia Sanctuary boundary has been taken as zone of influence, in which the people's activities extend.

Villagers of the Zone of Influence suffer a lot due to loss of job opportunities following stoppage of almost all forestry operations within the sanctuary viz. timber coupe working, bamboo extraction, collection of NTFP by different lessees, stoppage of kendu leaf operation, restriction in fishing and movement of boats in river Mahanadi etc. Other consequences include drastic curtailment of resources used by people, appearance of new wildlife problems at

the interface such as crop raiding, destruction of property, cattle killing, injury to people or man animal conflict attributed to wild animals.

4.1.2 Villages inside and outside the P.A, Ethnic identity and customs, relationship with forests.

There are 99 Revenue villages inside sanctuary viz. 32 in Angul district, 21 in Cuttack district, 26 in Nayagarh district and 20 in Boudh district. The total human population in Revenue villages is 31,586 and corresponding cattle population including goats and sheep comes to 35,235. There are 180 villages within 5 km. and 232 villages within 5 to 10 km of sanctuary boundary. Most of the people depend upon Rain fed agriculture while the rest earn their livelihood as daily wage labourers.

Some of the people belong to Kandha and Kolha tribe. Besides them, there are some fishing communities numbering about 800 in 20 villages along the river Mahanadi. The ethnic identity is thus varied, tradition and customs also vary accordingly. There is no major rift between communities and they mostly live in harmony with existing socio-political scenario. Almost all tribals are sanctuary resource dependent but a few non-tribals resort to illicit felling and poaching as a means of earning quick money.

Rights and concessions of the people :

Name of the Division	Name of the RF	Area in Acrs as per working plan	Notification No. & Date	Rights & Concessions
Angul Division	Nuakhet a	7415.00	1597 dt.20.3.1894 3523 dt.23.7.1895	<p>Section – XIII: Rights and Concessions: Reserved Forests of Angul Sub-Division</p> <p>69. No right exists in the reserved forests of Angul Sub-Division but the following concessions are allowed.</p> <p>Tenants of Angul Sub-Division, were being supplied timber and bamboos from the reserved forests of Angul Sub-Division at the concessional rate of 50% of scheduled rate for their own domestic & agricultural requirements only and not for any other purpose, if these trees could not be had in the forests adjacent to their villages or in the neighboring protected forests. The tenants would not however be entitled to the supply of timber of the species Sisoo, Gambhari, Piasal & Teak under this concession. As ascertained from the Divisional Forest Officer (vide his letter No. 13104 dt.21.11.88) no supply of forest materials had been done to the tenants from the reserved forests of Angul Forest Division. The supply has been made from U.D.P.Fs only on realization of one time full schedule rate of royalty. However prior to removal, application must be made to the Divisional Forest Officer who, before, granting such produce, will satisfy himself that;</p> <p>(i) The produce required is not available in any of the protected forests near the applicant's village.</p> <p>(ii) The produce is required for the applicant's own use & not for sale or barter in or beyond the limits of Angul Sub-division. In meeting the requirements of the tenants, no deviation from prescriptions of sanctioned working plan will be</p>
	Balanga	9182.77	1597 dt.20.3.1894 3523 dt.23.7.1895	

				permissible. That is to say that supplies will be made from the coupes of the year & subject to yield capacity. Grazing is allowed as per provisions of "The Orissa Forest (Grazing of Cattles) Rules, 1980".
Name of the Division	Name of the RF	Area in Acs.	Notification No. & Rate	Rights & Concessions
Athagarh Division	Balikiary	13650.00	34016-12-F-179(M)-57-D dt.9.11.1957	<u>SECTION - IX - Rights and Concessions.</u>
	Nuagarh	10550.00	-do-	<p><u>(A) Rights and Concessions.</u></p> <p>36. The Rights & Concessions are regulated by rules & regulations framed during durbar administration for each Ex-state & declarations made by Ex-Rulers from time to time. They are different in each ex-state and are dealt with separately in the following paragraphs.</p> <p>37. No right exists.</p> <p>38. The following concessions have however been allowed in the Narsinghpur State Project Rules, 1933 & declaration made by the ex-ruler vide extraordinary gazette dated 4th August, 1947.</p> <p>39. <u>'A' class Reserves - (Rule 15, 16 & 17 of Narsinghpur Forest Rules, 1933).</u></p> <p>The cess paying tenants and the aboriginal tribes are allowed to collect edible roots, fruits, creeper dry fuel and such items of minor Forest Produce as have not been leases out, free of payment for their own personal consumption. They are allowed to take bamboos at half the royalty rate and timber of</p>

				reserved species at full rate from the current coupes of the year. Grazing is allowed for all kinds of cattle excepting sheep & goat on payment of grazing fee.
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Tribal custom:-

People of Kandha tribe are seen in villages like Matia sahi of Purunakote, Dhipisahi, Malasapadar, Purunapani and many other places. They observe a festival called KARMA on Bhadrab Shukla Ekadashi. They also observe PUSHA PUNEI ceremoniously. On southern side of river Mahanadi the tribal people congregate near a deity “ PANTHEI THAKURANI” in Mahanadi RF comp. no. 8. They sacrifice ram (male goat) and chicken before the deity, consume country liquor and organize a feast in the night. Both male and female folk celebrate separately and spend night separately. Now a days they are organizing operas and theaters near the deity. In the next day early morning they return to their villages.

Marriages in Kandha community are very much peculiar. The system prevails is marriage by elopement. The eligible boy kidnaps the desired girl from her village and bring her to his house and keeps for some days with his family. Then the girl is allowed to go back to her house and negotiation follows. If marriage is settled, the groom has to pay the Bride Price in shape of goat, chicken, clothes and money. Then marriage takes place in the house of the groom.

4.1.3 The state of people's economy vocation land use, use of forest, and non-forest based natural resources by people and season patterns.

The general state of people's economy within the sanctuary are very bad. Not much importance has been given for their economic upliftment. The people resort to one time agriculture in a year, as the agriculture is rain fed. Paddy is the principle crop. In some areas people do sugar cane. Rarely two crops are raised. People leave the land fallow for the rest of the year due to lack of irrigation facility. Drought situation is inherent due to configuration of the land and geology. However the soil in the valleys and in plain areas within and around the sanctuary is very fertile due to deposition of humus layer.

People go for paddy as the principal crop as it is the staple food. People also cultivate some sugarcane as cash crop. The pulses and oilseed raised comprises of Groundnut, Sunflowers, Blackgram, Greengram, Horsegram, Arhar, Mustard and Seasamum. Few people grow vegetables like bringal, tamato, cabbage, cauliflower. Cultivation of citrus is most common in Pampasar area. People often go out of their villages to coastal area as labourers. Some people resort to bamboo artisan job as Salia and Daba bamboo are plentifully available. Fishing is mostly confined to people staying in villages along river Mahanadi. Forest is the part and parcel of most of the people living within and adjacent to sanctuary.

4.1.4 Implication of land use and resource dependency for the conservation of the P.A.

The present land use is not sustainable for the conservation of the PA, viz. people in Angul district side mostly go for cultivation of Brinjal and tomato by using high input. They use chemical fertilizer, insecticide profusely which is inimical to soil fertility and productivity, rendering the soil unfit as there is no biodegradation of chemicals. The soil also is being rendered barren as soil micro fauna dies. Similarly cultivation of paddy in summer exhausts more ground water resources as water requirement and irrigation requirement of paddy is highest. It will be better, if more water is conserved by different soil and water conservation measures.

Every year, people set fire deliberately to the forests during the summer, to get good flush of kendu leaf and for collection of mahua flower which causes immense damage to forest and wildlife. People want the burnt forest materials to be washed away and enrich their cultivated fields on the foothill side. Similarly fishing reduces the food for the muggers and crocodiles in river Mahanadi. The grazing and browsing by the village cattle cause shortage of forage for the wild animals and sometimes spread castle diseases among the wild animals.

In brief the present land use and resource dependency of villagers is not sustainable for long term conservation of Satkosia.

4.1.5 Forest / PA Management practices and their implications to People.

People often consider creation of sanctuary has restricted their access to the various resources of the sanctuary. Previously a lot of coupe working of timber and bamboo was going on inside the sanctuary and the people were getting employment for nearly six months in a year earning their livelihood. Now all the coupe working, collection of NTFP has been stopped, thereby rendering the villagers unemployed. Sanctuary rules were enforced rigidly and departmental works were curtailed drastically due to paucity of funds. There is fewer funds available to provide alternate work to people through habitat improvement measures or any such allied conservation activities. This has created a gap between P.A. Management and People.

4.2 The development programmes and conservation issues.

4.2.1 A few developmental works is being taken upon in and around the sanctuary by the Government which is quite insignificant for the villagers in the process of their economic upliftment. Mostly the works are implemented through Panchayat funded by D.R.D.A.

There are few N.G.Os working in the sanctuary area. The NGO namely FES (Foundation of Ecological Security) headquarters at Angul is doing some work for livelihood support in Tainsi area of Satkosia WL Division .

The list of schemes being undertaken by DRDA are :

1. SGRY
2. MPLAD / MLALAD

3. EGS (Employment Generation Scheme)
4. I.A.Y. (Indira Awas Yojana)
5. Rural Sanitation Programme

4.2.2. The interplay of market forces and their impact on the subsistence economy of the local people.

Taking the poor condition of the people living inside the sanctuary area certain external market forces have come in to prominence. For cultivation of Brinjal, tomato, the cultivators have been encouraged by out side market forces providing loan facilities to purchase hybrid seeds, insecticide and Chemical fertilizers. Omfed has come up in development of dairy sector in the sanctuary; loan of hybrid varieties of cows, opening of milk points for purchase of milk from the farmers. Also the people are encouraged to rear more cattle.

4.2.3. Summary of problems faced by people that affect the management of the P.A. and the ZI.

A. Natural Factor.

1. Rain-fed agriculture.
2. Inaccessibility and remoteness of area.

B. Social Problems.

- (i) Poverty and increase in population.
- (ii) Illiteracy.

- (iii) Poor health facility especially Malaria.
- (iv) Mal nutrition.
- (v) Lack of awareness.
- (vi) Lack of alternative employment opportunities.
- (vii) Poor infrastructure.

C. Problems due to Sanctuary.

- (i) Denial of access to resources (NTFP, Fuel wood, fodder, Grazing, Medicinal plants etc.)
- (ii) Stoppage of forestry operations, coupe working of timber, bamboo working etc. leading to loss of employment opportunity.
- (iii) Human and Wildlife conflict.
 - Crop raiding by wild animals.
 - Cattle kill by large carnivores.
 - Human injury by wild animals.

Quantity of crops damaged and the economic loss :

Annually the loss caused due to elephants in Tikarpara section of Tikarpara Wildlife Range is given below, village wise.

Tikarpara	25 bags
Hatibari	100 bags
Ramimunda	75 bags

N.B: Each bag of paddy weights 75 kg approximately.

At least 20% of the standing paddy crop is damaged mostly during harvest season, out of which 10% is trampled and rest 10% is consumed by elephant.

Similarly in Baghamunda Section, Purunakote section of Purunakote Range, in Kumuri section of Pampasar range, Katrang section of Jilinda range the following paddy crop is lost due to elephant depredation annually.

Baghamunda	50 bags
Purunakote	50 bags
Kumuri	50 bags
Asanbahali	60 bags
Katrang	50 bags
Siaribhundi	50 bags
Kushakhali	50 bags

In Tulka section of Purunakote range and Raigoda village of Raigoda range, in Labangi and Bolong villages just on sanctuary border, the loss of paddy crops due to elephant depredation is around 50 bags in each village. However during summer elephants feed on mangoes, ripe jackfruits in these villages.

In Siaribhundi village of Jilinda Range, the elephants also damage sugarcane crops during January and February. No report has been received regarding house raid by the elephants inside Satkosia Sanctuary. However occasionally lone tuskers have ventured in to barnyards where harvested paddy crop is stored for some time. During harvest season, the farmers watch the crops during night; drive away the lone or elephant groups by torches, mashals, beating of drum.

