

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

Kanna Kumar S.¹, and Sweta Mishra²

^{1,2}Vasundhara, A - 70, Saheed Nagar, Bhubaneswar - 751007, Orissa, India.

Abstract

It is obvious that Community Forestry Management (CFM) had a remarkable impact on the natural resources as well as the local institution in various ways. This has led to regeneration of vast areas of degraded forest patches in different parts of the State. In the process, forest based livelihood as well as local capacity for collective action have also enhanced. CFM has contributed significantly in increasing the local capacities in management of other Common Property Resources (CPRs) and addressing social issues. It also enhance to people's capacity to assert their rights and voice their concerns on various issues related to forest and natural resources. But the question here is why are the communities conserving the forest? How and why did communities initiate conservation? Where lays the contact point between people and conservation? Once a contact has been made what challenges did the communities face? What kind of changes ensued both in the resources and communities following the initiation of forest conservation? And finally, where lays the foundation of community-based forest conservation?

With these perspectives a study was carried out at 09 villages in 03 districts of Odisha. The self-initiated forest protection groups of Odisha provided a rare opportunity to study and explore the parameters and contours of the judicial shift in natural resource governance and examine the foundations of community-based forest governance systems. These self-initiated forest governance systems by the local communities were found to have emerged in confrontation with the forces responsible to forest degradation and livelihood deprivation. The local communities faced many challenges while trying to alter the power dynamics surrounding the issue of conservation and the solutions that emerge out of such negotiations were found to be incredibly successful.

Introduction

There exists a long history of forest conservation initiatives by the communities in *Odisha*. The State has the unique privilege to have a large number of local self-initiated forest protection committees. According to the latest available estimates, more than twelve thousand community-based forest protection committees are actively involved in forest conservation in the State. This community based forest management arrangement, popularly referred to as *Community Forest Management* (CFM), which is based on collective efforts and displays diversity in origin, institution, management rules and regulations that are context and situation specific.

It is obvious that Community Forestry Management (CFM) had a remarkable impact on the natural resources as well as the local institution in various ways. This has led to regeneration of vast areas of degraded forest patches in different parts of the State. In the process, forest based livelihood as well as local capacity for collective action have also enhanced. CFM has

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

contributed significantly in increasing the local capacities in management of other Common Property Resources (CPRs) and addressing social issues. It also enhance to people's capacity to assert their rights and voice their concerns on various issues related to forest and natural resources.

There is no uniformity in the concept and initiative of forest protection in the state. The diversity is due to area specific need and localized response like acute scarcity of fuel wood, fodder and small timber to meet daily domestic and agricultural needs. There were also instances where villagers started protecting forests as an economic asset. In some tribal dominates parts like Koraput protection was initiated to protect the cultural heritage associated with forests. Similarly, it was the scarcity of small timber, firewood and poles for house building that prompted people in Balangir to start protection. These are the reasons which prompted the communities start protecting nearby forests without bothering much about the legal status of the forests. There are also instances in Orissa where one family initiated forest protection leading to whole village and then to a cluster of villages taking up the cue.

It is obvious that there are so many reasons for the initiation of forest conservation by the local communities but the questions that are to be explored were how did communities initiate forest conservation? Where lays the contact point between people and conservation in a given geographic location? Once the contact has been made what type of challenges did the communities faced? What kind of changes ensued both in the resources and communities following the initiation of conservation? And finally, where lays the foundation of community-based forest conservation?

It was presumed that studies capturing and documenting the learning gained by the communities through their own experiences would be enriching and has a potential to create space for evolved learning. But rarely, if ever, this learning is fed back or integrated into mainstream learning to create a considerable impact. As a result, the conservation initiatives of these local communities do not enjoy the success they truly deserve. Hence, a study was conducted to examine the foundations of community-based forest governance systems of nine villages from three districts of Odisha, with an aim to bring more recognition to self-initiated forest protection initiative of the local communities.

Methodology

The study was carried out adopting “collaborative embedded research”, a term borrowed and adapted from the approach of early anthropologists like Elwin and Haimendorf. It is an effort to develop research methodologies that move from being participant observation to collaborative research with the actors in praxis, wherein learning goes beyond mere implementation of a program. The effort of collaboration is rooted in the effort to jointly (researchers and communities) theorize the realm of new social movements and collectively contribute to the development of the theory.

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

Both quantitative and qualitative methods were adopted for this study. Specially designed semi structured questionnaires with open ended questions were adopted for the survey and interviews were conducted to record the information necessary to write this report. Primary data was collected with the support of village volunteers who underwent an orientation programme on methods of information collection for this study. Secondary information was gleaned from literature review and authentic secondary sources to cross check and corroborate the primary information and to draw conclusions.

Sample Selection

This study involves documentation of biographies of nine villages from three densely forested, *Keonjhar*, *Nayagarh*, and *Deogarh* districts of *Odisha*, with significant tribal and other forest dwellers population. The districts were selected in collaboration and involvement of the local organizations, institutions and forestry federations. The sample villages were selected randomly with the help of these organizations and institutions. The final research report was prepared after narrating these case studies to the villagers for authentication, verification and participatory ownership of the study.

The State of *Odisha*

Odisha is located on the eastern coast of the Indian sub-continent and is laden with rich natural resources. The geographic area of the State is 1, 55,400 km² (4.74% of India's landmass) with a population of 36.71 million (2001 Census). *Odisha* State occupies a distinct place in India as it represents a unique unity among various social castes, communities, and minority groups. There are 62 Scheduled Tribes, each one different from the other and 95 Scheduled Castes in the State. The State has the privilege of having the highest number (13) of Primitive Tribal Groups (PTGs). Both ST and SC together constitute 38.66% of the total population of the State (ST: 22.13% and SC 16.53% as per 2001 census). While the recorded forest area constitutes about 37.34% of the total geographical area of the State, actual forest cover exists over only 31% of the geographical area and out of this 13 % are open degraded forests. The State has a recorded forest area of about 58,136.23 km², classified as Reserve Forests, Demarcated Protected Forest, Un-demarcated Protected Forest, Unclassified Forest, Village Forest, *Khesra* Forest and others.

Keonjhar:

Keonjhar district, lies between 21°1' N and 22°10' N latitude and 85°11' E to 86°22' E longitude and presents a panorama of many millennia, both from the geographical and anthropological perspective. Anthropologically, its two important tribes, namely the *Juangs* and the *Bhuyans* have a distinct and interesting legacy. Total geographic area of the district is 8303 km² about half of which (i.e. 3097.18 km²) is covered under forests of tropical moist deciduous type and contains *Sal*, *Asan*, *Piasal*, etc.

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

Nayagarh:

Nayagarh is one among the old districts of *Odisha*. It is at a distance of 87 km from *Bhubaneswar*. It lies between 19°54' N and 20°32' N Latitude and 84°29' E and 85°27' E Longitude. The total geographic area of the district is around 3890 km², and it borders *Puri* and *Khurda* districts in the East, *Phulbani* district in the West, *Ganjam* district in the South and *Cuttack* district in the North. With a forest area of 2080.97 km², about 46% of the district it is one of the densely forested districts of the State.

Deogarh:

This district is bordered by *Angul* District from East to South, *Sambalpur* district on the West and *Sundargarh* district on the North. It has a hilly terrain and located between 21°11' N and 21°43' N latitude and 84°28' E and 85°15' E longitude. The important tribes of the district are *Bhuiyan*, *Ganda* and *Kisan* along with the Primitive Tribal Groups (PTGs) of *Paudibhuiyan* and *Mankadia* found in isolated geographic pockets. The Forest cover of the district is around 1560.2 km² against the total geographical area of 2940 km².

Results and discussion

Status of forest before the initiation of protection

It was deduced from the narration of villagers that the forests were degraded considerably following the nationalization of forest resources. Forests around the sample villages were cleared indiscriminately either for the expansion of agriculture or to establish new/expand existing village settlements or due to timber smuggling. Illegal tree felling was rife and timber mafias abetted by the timber contractors were very active in all the three districts. People in the past did not realize the value of forests and there was no control to check forest destruction in spite of the existing forest protection rules. Villagers also complained that the forest department officials remained indifferent and blind to forest destruction! Even worse, they colluded with the timber mafia/contractors and facilitated timber smuggling. All these activities eventually doomed the forests and wildlife. In addition, unregulated hunting and poaching pushed the wildlife to extinction at all the sample villages. After the large scale forest destruction it became difficult for the locals to collect even fuel wood and small timber. The availability of forest products decreased considerably and as a result, the local livelihoods were jeopardized.

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

Village institution for collective forest protection

Reasons for the initiation of forest conservation

It is evident that forest protection has been initiated at all the sample villages as a reaction to forest degradation which affected their survival and livelihoods. The decrease in forest cover has led to scarcity of forest products vital for their survival. Indisputably, “*livelihood security*” has been the “common factor” and “*contact point*” for the initiation of forest protection at all the sample villages but it is also obvious that different actors played crucial roles to kindle, galvanize and precipitate the entire process. For instance, the elders and community leaders, the village youth, members of the forestry federations or the local NGOs have played a vital role to initiate forest conservation at these villages. Forest conservation was a collective effort of three villages (*Dengajhari*, *Lunisahi* and *Mardakot*) at *Dengajhari*.

Year of initiation and extent of forest area being protected

Forest protection was initiated during early 1980s at four sample villages and during early 1990s at three sample villages. While the protection initiatives dates back to 1960s and early 1970s at two sample villages *Guptaganga* and *Gundurabadi* respectively. All together the nine sample villages are protecting an area of 10,997 ha of forest out of which around 80 ha is *Khesra* forest and the rest is Reserve forest. The largest area (10,000 ha) of forest is being protected by the villagers of *Gundurabadi* while the smallest area (20 ha) of forest is being protected by the villagers of *Khajuribahal*. The forest patch under the protection of *Khajuribahal* does not come under Reserve Forest category.

Institutional arrangement

Though the forest conservation efforts dates back to early 1970s at a couple of sample villages and the rest during 1980s but the constitution of formal institutions to oversee forest protection issues is a recent phenomenon. The local forest protection governing bodies have been constituted recently for the past 02 – 05 years at the sample villages. All the sample villages now have a general body and an executive committee to enact and enforce forest protection rules and regulations. Exceptionally, a couple of sample villages (*Dengajhari* and *Budhabahal*) have two executive committees. However, reasons for the constitution of two executive committees are different at these two villages. At *Dengajhari* for instance, one committee has been constituted under traditional forest governance system by the villagers while the other has been constituted by the forest department to implement Joint Forest Management (JFM) project. The reason is entirely different at *Budhabahal*; an all women executive body has been constituted to tackle the timber mafia. As the timber mafias (usually men) do not attack women for cultural reasons hence, this arrangement proved to be effective while dealing them.

All the villagers (at least 02 adults) from every household are members of the general body at all the sample villages. It is observed that the general body membership is usually free at most of the

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

sample villages but a nominal annual fee as cash or material is collected at 03 sample villages. This fund is utilized for the management of forest protection committee activities. There is a variation in the composition of executive committee from village to village. The composition of the executive body ranges from 02 members (minimum) at *Dengajhari*, to 27 members (maximum) at *Gundurabadi* but majority of the executive committees of the sample villages has 07 to 17 members.

Interestingly, there are exclusive women executive committees found at three sample villages (*Gundurabadi*, *Dengajhari*, and *Budhabahal*). All the above three executive committees have women as the chairperson and secretary. Even the decision making power is vested with the women which is remarkable! The number of women in the executive committees at rest of the sample villages is either 03 or 04. The responsibility of the executive committee is to protect the forest, ensure everybody's participation in forest patrolling on a rotation basis through "*Thengapali*" and resolve conflicts related to the forest as well as to the village.

The frequency of general body meetings also varies from village to village. Except *Gundurabadi*, *Dengajhari*, *Brahmanimal*, and *Khajuribahal*, the general body meetings are convened once in every month at five sample villages. The general body assembles once and twice in a year at *Dengajhari* and *Gundurabadi* respectively, while it assembles once in every three months at *Brahmanimal*, and *Khajuribahal*. The entire village participates in these general body meetings to discuss the issues related to the village and the forest. The executive committee assembles fortnightly at all the sample villages. Both general body and executive committee meetings are convened more than the stipulated number of times if situation demands, especially in case of emergency.

The rules and regulations of forest protection are framed collectively at the general assembly. These rules are framed in-sync with the local conditions and situations. Forest rules and regulations thus framed are approved by the executive committee and resolutions are passed only after collective decision. The decision making is collective but the execution power is vested with the executive committee. The general body elects the executive committee and even evaluates the performance of the executive committee which is similar at all the sample villages. The executive committee is dissolved and a new executive committee is elected if the general body is dissatisfied with the performance of the existing executive committee which is also found to be similar at all the sample villages.

Role of women in forest protection

It is evident that women are not a part of the traditional village governance systems but their role in the natural resource governance systems is phenomenal! Women seem to have assumed a crucial status in the management of natural resources and it is reflected at all the nine sample villages. One of the most remarkable and historic events took place at *Dengajhari* when *Smt*

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

Budhei Bewa, an old widow, along with the support of other women challenged 200 illegal loggers and successfully foiled their efforts and recovered the illegally felled timber. When forest protection efforts came to a stand-still following a dispute among the men, women took over forest patrolling and protection responsibility at *Gundurabadi* and *Dengajhari*. Women are actively involved in forest protection in these villages.

There are exclusive women executive committees present at three sample villages (*Gundurabadi*, *Dengajhari*, and *Budhabahal*). All the three executive committees have women as the chairperson and secretary. Even the decision making power is vested with the women which is remarkable! The number of women in the executive committees at rest of the sample villages is either 03 or 04. Women at all the sample villages actively participate in forest patrolling and management duties. Women usually share the forest patrolling duties by the day and men share the duties at night. Even locals at *Rangamatia* said that “they have realized the importance of involvement of women in the entire process and emphasized that unless women are educated and sensitized, nothing is going to be fruitful. Women play a major role in our society when it comes to livelihoods which include collection, processing and sale of MFPs. Hence, their active participation and involvement should be ensured in forest protection efforts”.

Methods adopted for forest protection

The forest protection committee deals with the day-to-day affairs of the forest at all the sample villages. The main responsibility of the forest protection committee is forest protection and resolution of conflicts related to the forest. “*Social fencing*” has been adopted as a strategy to protect the forest and to deter the perpetrators at all the sample villages. Villagers patrol the forest in groups; usually in a group of 04 individuals daily on rotational basis. These individuals are locally called as *Palia*. Except *palias* others are not allowed to wander in the forest. If anyone other than the “*palias*” is found in the forest, they are brought before the committee for further action. The forest patrolling duties are assigned to the individuals on a rotational basis. A baton is used for handing over the patrolling duty hence; this arrangement is locally called, “*Thengapali*”.

Forest patrolling was earlier confined to day time at the sample villages but the villagers were forced to patrol the forest round the clock due to increase in timber theft incidents at nights. Now the patrolling duties are shared among the men and the women. Women usually patrol the forest by the day and men patrol the forest at night. Forest is open for everyone to collect fuel wood and MFPs but green felling and pollarding are restricted. The permission of village forest protection committee is mandatory to harvest timber from the forest and any defiance to this agreement is liable to punishment at all the sample villages. Hunting of wildlife is also forbidden at all the sample villages.

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

Methods adopted for forest regeneration

It was observed that some special measures were taken at five sample villages during the initial days of forest protection to enhance forest regeneration. Except controlling tree felling, and ensuring not to damage the trees while harvesting MFPs, fuel wood, or small timber no special activities were carried out at the rest four sample villages but elaborate and scientifically sound silvicultural operations have been carried out at the rest five sample villages to enhance forest regeneration. People were allowed to collect only dry fallen twigs for fuel wood but lopping for fuel wood was restricted during the initial days of forest protection. The collection of fuel wood from forest area was banned and villagers were encouraged to meet their fuel needs from other village common land and homesteads. Collection of fuel wood from the *Khesra* forest was totally prohibited and villagers were asked to meet their energy demands from the reserve forest at *Khajuribahal*.

Special forest management operations were also carried out to ensure better regeneration of forest. Activities such as thinning, weeding, bush clearing, climber cutting, singling, and coppicing were carried out at five sample villages to enhance primary growth and forest regeneration. These silvicultural operations continued for more than 12 years at *Budhabahal*. Fire lines were made to prevent and decrease the incidence of forest fires. Shifting cultivation (*podu*) has been contained to already existing plots after the initiation of forest protection at *Krushnapur*. Grazing is confined to few patches of the forest while ban on grazing in the forest area continued for over 10 years at *Gundurabadi*. A patch of forest is earmarked for the extraction of small timber required to construct houses and make agriculture implements and the extraction of timber from other parts of the forest is forbidden at *Khajuribahal*.

Benefit sharing mechanism

It is observed that there are no restrictions on local villagers to collect MFPs and fuel wood from village forests at all the sample villages however, there are certain *ad hoc* regulations existing at five sample villages to share the benefits of commercially important forest products. For instance, commercially important MFPs such as *kusum* flowers and mangoes are deposited with the forest protection committee at *Guptaganga*. The committee then divides the harvest into equal parts and distributes them to all the households of the village. *Siali* leaves are usually collected by the *siali* leaf harvesters at *Budhabahal*. The harvested *siali* leaves are deposited with the executive committee which sales them at the nearby market. The money from the sale is distributed among the harvesters as per their contribution and the profit out of such sale is retained with the executive committee and disbursed for village welfare fund. MFPs like *mahula* flowers and *sal* seeds are collected by the women at *Khajuribahal*. It is mandatory to deposit the entire amount of *mahula* flower and *sal* seed collected at the village forest committee and the committee then divides and distributes all the harvest equally among households of the village. This mechanism allows equal distribution of resources and ensures that every family receives its share of the harvest.

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

There are plans at one of the sampled villages (*Gundurabadi*) to channelize the benefits from the sale of *tolo* (Oil extracted from *Mahua* flower). The benefit sharing mechanism adopted at one of the sampled villages (*Brahmanimal*) to harvest and sale *kendu* leaves could not be sustained for long. There is no benefit sharing mechanism existing at two sample villages (*Gunduriposi* and *Rangamatia*) to share the benefits of commercially important MFPs. Though the villagers at all the sample villages are allowed to collect MFPs and fuel wood without any restriction but the extraction or harvest of timber and bamboo from the village forest without the consent of the executive committee or the general body is restricted. Villagers can extract timber or bamboo for domestic purposes by paying a preset amount to the forest protection committee but they are strictly prohibited from sale of the same at the market. The village general body and the forest protection committee decide the amount of small timber and fuel wood that can be extracted from the village forest. Besides, the committee also oversees proper and equal distribution of the extracted resources.

Neighboring villagers are usually allowed to collect fuel wood and forest products at seven sample villages but restricted at two sample villages. The extraction of timber, bamboo and small wood is restricted for neighboring villagers at all the sample villages. It is also observed that certain preset amount is collected from the neighboring villagers to extract timber, small wood and bamboo from the village forest. The amount is usually decided as per the timber species being harvested from the forest. The amount collected from neighboring villagers to cut bamboo, poles and timber as well as the amount charged as fine from the perpetrators for stealing timber along with the money earned from the sale of timber, confiscated from the offenders, is usually pooled at the executive committee and utilized for village welfare and communal activities.

Rights of locals and neighboring villagers on village forests

It is noticed that villagers at all the sample villages enjoy the *de-facto* rights on the forest land which include cultivation, collection of MFPs, access to sacred groves located inside the forest, grazing the cattle, access to the burial ground, fishing in the streams, using stream water for irrigation purpose. In return villagers at all the sample villages incurred the responsibility of protecting the forest and wildlife. People at the sample villages consider protection of forest and wildlife as a duty because forest provides them with food and shelter and protects them from natural calamities. Despite owning individual agriculture plots all the villagers depend on the forest to some degree. The dependency of marginal sections is much greater as their livelihood is totally dependent on the forest. There is no restriction on MFP collection, grazing the cattle, collection of dry fallen twigs for fuel wood etc., but one should take the permission of the forest protection committee to extract poles and timber necessary to make agricultural implements and house construction. Interestingly people at *Gundurabadi* said that the most important right of villagers is to protect the forest and then comes the right to manage the forest. Villagers of

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

Gundurabadi believe that forest could be regenerated only when it is protected effectively. While sustainable harvest of MFPs with efficient management would enhance local livelihoods.

The right to access forest resources varies slightly between locals and outsiders at all the nine sample villages. In spite of asserting sole ownership on their forest, neighboring villagers are usually allowed to collect fuel wood and forest products at seven sample villages but restricted at two sample villages. The extraction of timber, bamboo and small wood is restricted for neighboring villagers at all the sample villages as they are not actively involved in forest protection but draw benefits from the forest. Hence, a preset amount which depends on the product being extracted is collected from neighboring villagers at all the sample villages. Villagers of *Krushnapur* share a special relationship with nomadic communities like the *Malar community*. These people are nomads who move from one forest to other foraging *Jhuna* (lac) and honey. The locals never restrict them as they are very poor and never harm the forest.

Conflicts over forest resources

Intra village conflicts

Discrepancies prevailed among the locals during the initiation as well as in the initial days of forest protection. The reasons for disparity among local villagers in relation to forest protection range from the fear of losing livelihood (in case of artisans), cease of timber sale and smuggling (in case of lumber-jacks and timber mafia) and non-cooperation (due to involvement in other activities). It is important to note that critically resource dependent groups are disassociated with the forest protection efforts at eight sample villages; ironically they are the ones who would benefit the most from the increase in forest resources. The families which opposed forest protection at *Guptaganga* were local artisans who make a living by making and selling agricultural implements of timber extracted from the forest. They feared that forest protection initiatives would cripple their livelihoods. On the other hand, being lured by the money from timber mafia, some of the locals try to incite others against forest protection. The locals are afraid that this could lead to dichotomy of interests among villagers thereby undermining the forest protection efforts at *Guptaganga*. A group of lumber-jacks at *Gunduriposi* dissented with the forest protection initiative as they make a living from the sale of fuel wood collected from the forest. They feared that restriction of access to forest resources would impact their livelihood. While few others raised apprehension about the committee as they were of the opinion that the committee members would collude with outsiders and help them to plunder the forest, therefore, they dissented with the constitution of a committee.

Arriving at a communal consensus over forest protection proved to be a difficult task at *Krushnapur* as a group was still engaged in timber smuggling when forest protection was initiated. There was a mild dissention from the forest dependent communities at *Gundurabadi* as they make their living from collection and sale of fuel wood and bamboo from the forest: for

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

them restriction on access to forest resources is tantamount to impoverishment. During the initial days, 04 Hh at *Dengajhari* refused to extend their support to forest protection by showing preoccupation with agricultural activities and non-dependency on forest for livelihood as reasons for their non-availability. A group of locals at *Brahmanimal* continued to pilfer the forest resources during the initial days of forest conservation despite our repeated request not to harm the forest.

In the year 2000 some of the villagers at *Khajuribahal* started felling trees in the forest for sale. This led to a conflict among the villagers, as a result, the forest protection efforts were kept in abeyance for almost five years till 2005. Fortunately, there are no intra-village conflicts now regarding forest protection at the sample villages. Besides, there had been a perpetual disparity in *Krushnapur* (one of the village hamlets) in relation to forest conservation. This hamlet consists of families displaced from the *Rengali* dam project, rehabilitated at *Khajuribahal*. People of this hamlet remained stubborn despite repeated requests to extend their support to forest conservation. Moreover, locals fear that the involvement of people of this hamlet in illegal felling and timber sale could undermine their forest conservation efforts.

Local people's organization '*Banabasi Chetana Mandal*' played an important role at *Guptaganga* in creating awareness among the opposing group about the significance of forest and forest protection. The locals as well as *Sri Raban Marandi* and *Sri Phaturam Tudu* played a vital role in motivating the villagers to initiate forest protection at *Gunduriposi*. Extensive discussions conducted by external agencies at *Krushnapur* created awareness among locals about the importance of forest and the need for forest conservation. The dissent group at *Gundurabadi* was convinced to join the forest protection efforts when they were allowed to collect necessary forest products from the forest. After watching the forest regain its luster and the availability of fuel wood and MFPs encouraged the non-cooperating group at *Dengajhari* to join the forest conservation efforts. Repeated counseling and awareness programmes conducted by the local villagers and outsiders at *Brahmanimal* helped the timber smugglers to give up their habit. Members of the federation especially *Sri Hiradhar Sahu*, played a vital role at *Khajuribahal* in motivating the locals to resume the otherwise abandoned forest conservation efforts.

Inter-village conflicts

It is evident that most of the inter-village conflicts arise due to disagreement between neighboring villages on forest use. Villagers at *Gunduriposi* complain that neighboring villagers still knock down trees in the forest. Unfortunately, they could not deter them from doing so as they were afraid of them. An inter-village conflict arose between the villagers of *Rangamatia* and their neighbours when the former tried to restrain the later from extracting fuel wood, timber and MFPs from the protected forest patch. A prolonged conflict arose between the villagers of *Gundurabadi* and their neighbours when the later continued to bargain for a larger share in the forest patch and the former denied their request. In another case, following a conflict between

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

Mardakot and *Lunisahi* villagers, the *Mardakot* villagers stayed away from the forest protection activity. The conflict arose when marginalized scheduled caste families of *Mardakot* village extracted bamboo from the forest and *Lunisahi* villagers raised their objection. Fiery arguments culminated into a scuffle and a case was registered at the local police station. *Mardakot* villagers withdrew from forest protection, while *Lunisahi* villagers started protection of their own forest patch located close to their village which is a part of the *Pathargand* hill.

“The neighboring villagers of *Brahmanimal* sneak in and steal timber and small wood from our forest at nights which makes our laborious day-time vigilance futile and ineffective.” Inter village conflicts arose between *Budhabahal* and its neighboring *Kandhal* and *Bhalupali* villages during the year 1980 and 2006. The villagers of *Kandhal* opposed the forest protection efforts during the initial days of forest protection when the former restricted them from entering the forest to harvest MFPs and timber. The conflict with *Bhalupali* villagers was over community protected forest area boundaries. The villagers of *Bhalupali* claim that they are the right owners of the reserve forest as they have been protecting it. Hence, all the benefits of forest resources should be enjoyed by them but the villagers of *Budhabahal* deny their claim. The villagers of *Khajuribahal* lament that the forest is in grave danger from surrounding big villages as the local timber contractors reside in those big villages. These paymasters of the local timber mafia are trying relentlessly to plunder the forests. Moreover, there is a strong resistance from the neighbouring *Tilimal*, *Chakulia*, *Kanchada* villages to the forest protection initiatives of the locals.

Conflict with the forest department

It is obvious from the case studies that people of all the sample villages have no faith in the forest department. There is an inherent fear and distrust prevalent among locals towards the forest department officials. The myriad reasons put forward by the locals for hating the forest department are lack of support to community conservation efforts, corruption, collusion of the forest personnel with the timber mafia, lack of respect for locals, misappropriation of funds, etc. The villagers of *Guptaganga* had dissent over implementation of plantation under JBIC project in their protected village forest area; moreover the villagers claim to have caught forest officials while felling trees illegally. The villagers of *Gunduriposi* say that forest department personnel are least bothered about the unprecedented forest destruction in their area. They allege that forest department officials seldom visit. They show up only to coerce money from the locals in the name of encroachment or illegal felling but they let go timber mafia who smuggle timber in broad daylight.

The villagers of *Rangamatia* say that the forest department claims that ‘forest does not belong to people’ and that it is Government’s property but they disagree with it. They argue that the forest department never pays attention to forest protection and it is the locals who protect the forest. The villagers of *Krushnapur* say that their relationship with the forest department is poor as the

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

forest guards' coerced people to pay cash, rice or fowl as bribe to collect MFPs, fuel wood or small timber. While the marginalized and poor of the village were tortured regularly by the forest guards.

A conflict arose between the villagers of *Gundurabadi* and forest department personnel when the villagers harvested timber from the forest for sale but the forest department objected to this and seized the timber. In an unexpected event the forester took away all the timber without notice or permission of the locals. When people demanded compensation and share the forest department officials dismissed their demands and argued that they were not entitled to enjoy any benefits as the village forest protection committee is not registered under JFM. The villagers are still fighting for justice. The villagers of *Dengajhari* were disappointed when the forest department remained cold when they approached them to resolve the conflict between *Lunisahi*, *Mardakot* and *Dengajhari* regarding illegal green felling. The locals allege that the forest department personnel arrived and left with the timber but did not show any interest to resolve the conflict. They lament that the forest department is least concerned about local people's interests or forest protection. The locals also say that the forest department has constituted a *Van Samraskhyan Samiti* (VSS) and promised rights over forest resources and financial assistance for forest and village development. But the villagers did not receive any support from the former except receiving an amount Rs. 3000/-. The villagers learnt later that the forest department officials duped the illiterate villagers to sign on receipts worth Rs. 60,000/- and misappropriated the funds received to implement JFM project.

The villagers of *Brahmanimal* complain that the forest department did not take any action against the perpetrators of felling trees even when the locals nabbed the offenders and handed them over to the forest department. The offenders were found moving freely with impunity. They say that villagers were discouraged by the nonchalant attitude of the forest officials and lost trust in the forest department. Now the conflicts are resolved within the village, and in the worst cases, *Zilla Jungle Mancha* is approached for support. The villagers of *Budhabahal* said that they denied the implementation of JBIC and JFM projects in their forest area because of the apathy shown by the forest department officials when locals approached them to resolve the conflicts. The villagers of *Khajuribahal* felt that forest conservation efforts of the locals made the forest department personnel lazier. Locals say that forest department officials are enjoying their time sitting idle at home despite taking monthly pay-cheques; they do not even visit the forest.

Conflict with the timber mafia

It is certain that timber mafia is actively operating around the sample villages. It is also apparent that the timber mafia often operates through the local people who are controlled by the paymasters, usually the rich and powerful timber contractors. Fierce conflicts with the timber mafia have been reported at all the sample villages. The locals of six sample villages reported that they received life threats from the timber mafia while the remaining three had serious

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

confrontations with the timber mafia. It is clear that timber mafia is here to stay and the forests are threatened from the lurking danger of the timber mafia. Incredibly, in spite of threat to their lives the locals persevere with their conservation efforts and have successfully challenged the timber mafia to a large extent.

For instance, at *Guptaganga* locals were said to have nabbed the timber mafia several times for felling the trees illegally. They were apprehensive that timber mafia is alluring locals with money to fell trees which could lead to dichotomy of interests among villagers thereby undermining the forest protection efforts. The villagers of *Gunduriposi* are sad that the forest is completely destroyed by the timber mafia. They feel intimidated by the heavily armed timber mafia. Being a small hamlet with few people and for the fear of their lives they cannot thwart the timber mafia from felling trees in their forest. The villagers of *Rangamatia* say that the location of the forest adjacent to the main road has made it vulnerable to theft. The road provides an easy access to the timber mafia. The locals are scared of the timber mafia as they receive life threats from them. The villagers of *Krushnapur* said that they had conflicts with the timber mafia during the initial days of forest protection and all the villagers received life threats from the timber mafia.

The villagers of *Brahmanimal* said that there were instances of serious conflicts with the timber contractors who are the pay masters of the local timber mafia. There were incidents at which locals were manhandled by the goons and timber mafia employed by the timber contractors. The villagers of *Budhabahal* complained that the timber contractors tried to discourage and dismantle their efforts several times. The locals received life threats from the timber mafia employed by these wealthy timber contractors. The villagers of *Khajuribahal* also received life threats from the timber mafia and timber contractors. Locals said that the contractors and timber mafia tried their best to discourage them from continuing the conservation efforts. They are worried that the threat from timber mafia and illegal timber contractors would never go! And that they are always waiting for an opportunity to destroy the forest.

Inter and intra-village conflict resolution

All the sample villages have their own ingenious traditional mechanism for conflict resolution. These age-old traditional conflict resolution mechanisms or systems are highly efficient and participatory. These systems are no doubt hierarchical yet provide enough space for all the civilians to contribute. For instance, at *Guptaganga* all the villagers assemble at '*Mandaghara*' (village community hall) to resolve intra-village conflicts. Intra-village conflicts are usually resolved in the presence of the *Pradhan* (village chief) and inter-village conflicts involving only *Juang* villages are resolved in the presence of the *Sardar* (chief for a group of the *Juang* villages) at the *Pidah* (group of villages) level. The conflict resolution mechanism is a bit different when it involves people, communities or villages other than *Juang*s. Inter-caste or community conflicts or conflicts between *Juang* villages and other villages are usually resolved at the *Danti Sabha*.

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

At *Gunduriposi*, any individual seeking justice should deposit an amount of Rs 1.50/- with the *Pradhan* to file a petition. Inter-village conflicts are arbitrated by the *Pradhan* and villagers of both the villages. Conflicts are resolved in the presence of *Diyuri* (Village priest) and the elders of the village at *Rangamatia*. At *Krushnapur*, the intra-village conflicts are usually resolved by the executive committee but the inter-village conflicts are usually resolved with the involvement of the general body and people of all the villages involved in the conflict. The village committee of *Gundurabadi* is responsible to resolve inter and intra-village conflicts and the executive committee of the forest protection group is responsible to oversee the issues related to forest protection and conflict related to forest.

Intra-village conflicts at *Dengajhari* are usually resolved within the village in the presence of the entire village and conflicts that cannot be resolved at village level are referred to Government officials, village council or caste *panchayat*. Inter-village conflicts are usually resolved in the presence of elders of the village, village council, executive committee and people of both the villages involved in the conflict. The executive committee of the forest protection group is responsible to oversee the issues related to forest protection and conflicts related to the forest. Inter-village conflicts over forest are resolved in the presence of the executive committee and the general body. Inter-village conflicts related to forest are usually resolved in the presence of members of the forest federation, *Maa Mani Nag Jungle Surakhiya Parishad*, elders of the village, executive committee and people of all the villages involved in the conflict.

Both inter and intra-village conflicts related to either village or forest are resolved in the presence of the ward member, *sarpanch* or elderly persons of the village at *Brahmanimal*. Both inter and intra-village conflicts are resolved collectively within the village in the presence of villagers and community leaders at *Budhabahal*. The entire village gathers at a common meeting to decide over village matters. Inter and intra-village conflicts in connection to forest are resolved by the executive committee in the presence of the general body. Both inter and intra-village issues and conflicts at *Khajuribahal* are usually resolved in the presence of the village committee. Unresolved conflicts or issues are usually reported to the village *Panchayat*. The executive committee with the support of the general body of the forest protection group arbitrates conflicts and offences related to the forest. Any unresolved conflicts at the village level in relation to forest are referred to the forest department.

Relationship among different stakeholders in connection to forest protection

Community Forest Management (CFM) has a remarkable impact on the (conservation) of natural resources and on the local institution in various ways. The efforts of the locals have led to regeneration of large areas of degraded forest patches in many parts of *Odisha*. Forest based livelihood as well as local capacity for collective actions have also been enhanced in the process. CFM has contributed significantly to the increase of local capacities necessary to manage the

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

other Common Property Resources (CPRs) as well as response to other social issues. It has also increased people's capacity to assert their rights and voice their concerns on various issues related to forestry.

CFM has not only improved coordination among locals for collective action but has also contributed a great deal towards improving their relations with neighbouring communities and villages. The villagers of seven sample villages say that the relationship with their neighbouring villagers has improved now after a setback during the initial days of forest protection initiation. The fact is that the neighbouring villagers are able to enjoy the benefits of improved availability of forest products despite their non-involvement in forest protection. Interestingly, three sample villages have claimed to have inspired their neighbouring villagers to initiate forest conservation. Incredibly, the villagers of *Budhabahal* could inspire thirteen surrounding villages to initiate forest conservation. Now the villagers proudly proclaim that they are the pioneers and crusaders of forest conservation.

The relationship between locals and the forest department at six sample villages remains neutral as the forest department neither intervenes nor supports local forest conservation efforts. The rest three sample villages grumble that they do not share a healthy relationship with the forest department as the forest department personnel always remained indifferent to forest destruction and never shown interest in conflict resolution. Moreover, locals allege that the forest department personnel often collude with timber mafia and facilitate illegal felling. The villagers of *Dengajhari* allege that the forest department has embezzled funds allocated for the implementation of JFM project at their village. The villagers of *Budhabahal* feel that the presence of forest department is a liability rather than an advantage to forest and the conservation efforts of locals.

The study shows that others institutions and local organizations have played a pivotal role to influence and motivate local communities towards forest protection. Individuals such as *Sri Hiradhar Sahu*, (*Convener of Deogarh Zilla Jungle Manch*) played a vital role and motivated the villagers of *Khajuribahal* and *Budhabahal* to initiate as well as resume the otherwise abandoned forest conservation efforts at both the villages. The *Juang* Development Authority (JDA) was established by the government at *Gonasika*, only because of the interest shown by *Sri Phani Bhusan Das*, District Collector, during 1980. People's organizations like *Sarvodaya Seva Samiti*, established by *Sri Rabi Patnaik* works for the development of the *Juangs* at *Guptaganga*.

Forest federations such as *Zilla Jungle Mancha* of *Deogarh*, *Maa Maninag Jungle Surakhiya Parishad (MMJSP)* of *Ranpur*, helps the villagers in dealing with forest related conflicts, acts as an interface between villagers, forest department, other government agencies, NGOs and politicians. Members of the forest federation have been playing a vital role in resolving issues and conflicts associated with the forest. They conduct meetings regularly to create awareness

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

among the villagers and keep them abreast with current affairs related to forest policies and conservation.

NGOs have also played major roles in sustaining the processes at many places. Noted NGOs like *Vasundhara*, RVDO and CACD have been playing a vital role in motivating the locals and sustaining the community conservation efforts. The villagers of *Krushnapur* said that they came to know about NREGA after their collaboration with CACD. They are happy that they are assured of 100 days of employment under NREGA project. Villagers of *Keonjhar* district claim that RVDO and CACD organizations came forward to support their conservation initiatives. They have conducted orientation programmes to enhance the knowledge, create awareness among the villagers about the benefits of forests. They even contributed to the development of holistic plans for village development.

Conclusion

It is evident that livelihood security has been the driving force behind the initiation of forest protection at all the nine sample villages. It could be perceived as a reaction to forest degradation which affected their survival and livelihoods. These community-initiated initiatives can be perceived as a response to the rapid degradation of forests and consequent threats to livelihoods, subsistence and environment. They can be depicted as the ground level democratic response to a highly centralized, ineffective and inefficient forest governance system. Interestingly the regions, which witnessed rapid degradation of forest, marked a strong presence of Community Forest Conservation Groups. These self-initiated forest governance systems by the local communities have emerged in confrontation with the forces responsible for forest degradation and livelihood deprivation. The local communities faced many challenges while trying to alter the power dynamics surrounding the issue of conservation and the solutions that emerge out of such negotiations were incredibly successful.

Though livelihood security has been the common contact point for the initiation of forest protection at all the sample villages, the cultural affiliations of locals with the forest cannot be overlooked. It can be observed here how efficient local people are in dealing with the problems related to their day-to-day lives and finding solutions to overcome them. However, the local communities are still grappling with the impending danger from the timber mafia, deforestation from government promoted development projects, which are a cause of concern. It is expected that if these community-based conservation initiatives are legally recognized some of the above problems could be addressed to a large extent as it gives the local community legal ownership thereby greater control and responsibility.

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

References

Agarwal, 2000: *Cited in:* Das, Nimai, 2009: **Understanding of Social Capital in Gender-based Participatory JFM Programme: An Evidence from West Bengal.** MPRA Paper No. 15304, posted 19. May 2009/11:32. Online at <http://mpra.ub.uni-muenchen.de/15304/>

Agrawal, A. 2001: **Common Property Institutions and Sustainable Governance of Resources**, *World Development*, 29 (10) pp1649-1672.

Agarwal, B., 1997: **‘Environmental action, gender equity and women’s participation’**, *Development and Change*, vol 28, no 1, pp1–44.

Agarwal, B., 2001: **Participatory Exclusions, Community Forestry, and Gender: An Analysis for South Asia and a Conceptual Framework.** *World Development* 29(10): 1623-1648.

Amitabh Behar, 2002: **Peoples’ Social Movements: An Alternative Perspective on Forest Management in India.** Overseas Development Institute, 111 Westminster Bridge Road, London, SE1 7JD, UK.

Amitabha Sarkar and Samira Dasgupta, 2009: **Aspects of Tribal Culture in the Forest Environment of Bastar.** *Kamla-Raj, Stud Tribes Tribals*, 7(2): 81-89 (2009).

Angana P. Chatterji, : **Community Forest Management**, Orissa. (http://planningcommission.nic.in/reports/sereport/ser/seeds/seed_fortry.pdf)

Arvind Khare, 1998: **Community based conservation in India.** In: Kothari et al. (eds.) *Communities and Conservation. Natural Resource Management in South and Central Asia.* Sage Publications. New Delhi. ISBN: 81-7036-739-5.

Augusta Molnar, Sara J. Scherr, and Arvind Khare, 2004: **Who Conserves the World’s Forests? Community-Driven Strategies to Protect Forests and Respect Rights.** Preliminary Version as of July 19, 2004, *Forest Trends*, Washington, D.C.

Bahuguan, V.K., 1992: **Collective Resource Management: An Experience in Harada Forest Division.** Regional Centre for Wastelands Development, Indian Institute of Forest Management, Bhopal.

Ballabh, V., Balooni, K & Dave, S. (2002): **Why Local Resources Management Institutions Decline: A comparative Analyses of Van (Forest) Panchayats and Forest Protection Committees in India,** *World Development*, vol.30, no.12, pp.2153-2167.

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

Bikash Rath, 2005: **Vulnerable Tribal Livelihood and Shifting Cultivation: The Situation in Orissa with a Case Study in the Bhuyan-Juang Pih of Keonjhar District.** Vasundhara, A/70, Bhubaneswar-751007, Orissa, India.

Bikash Rath, 2006: **The Identity Crisis of Bamboo in Indian Forest Act, 1927, and Its Implication in the Joint Forest Management in Orissa.** Report prepared and submitted under Winrock International India's Forestry Case Study Programme. Winrock International India, 1, Navjeevan Vihar, New Delhi-17, India.

Cleaver, 1998: *Cited in:* Das, Nimai, 2009: **Understanding of Social Capital in Gender-based Participatory JFM Programme: An Evidence from West Bengal.** MPRA Paper No. 15304, posted 19. May 2009/11:32. Online at <http://mpra.ub.uni-muenchen.de/15304/>

Conroy, C.; Mishra, A.; Rai, A., 2002: **“Learning from Self-Initiated Community Forest Management in Orissa, India”.** Forest Policy and Economics, 4: 227-237.

Czech Conroy, 2001: **Learning from Self-Initiated Community Forest Management Groups in Orissa: Final Technical Report, Volume 1.** Social and Economic Development Department, Natural Resources Institute, University of Greenwich.

Dasgupta, T., Bhattacharya, D., Das, C., Das, N., Mahapatra, S.C. and Chattopadhyay, R. N. 1996: **Gender Portrayals in Forest Management of Nayagram,** Participatory Forest Management Series 7, IIT, Kharagpur, pp. 4-5 (1996).

David Edmunds and Eva Wollenberg (eds.), 2003: **Local Forest Management: The Impact of Devolution Policies.** Earthscan and CIFOR. UK.

District statistical handbook, Nayagarh, 2001.

Desalegn Chemed, Edossa, Seleshi Bekele Awulachew, Regassa Ensermu Namara, Mukand Singh Babel and Ashim Das Gupta, 2007: **9 Indigenous Systems of Conflict Resolution in Oromia, Ethiopia.** CAB International 2007. *Community-based Water Law and Water Resource Management, Reform in Developing Countries* (eds B. van Koppen, M. Giordano and J. Butterworth).

EETAP WG10, Draft Report: Case Study on - **Ethical Frameworks for Research and Policy in Environmental Ethics.**
(http://www.unescobkk.org/fileadmin/user_upload/shs/Energyethics/WG_10_Case_Study_1.pdf)

Golam Rasul and Madhav Karki, 2009: **A Comparative Analysis of Community-based Forest Management Policies and Practices in South Asia.** XIII World Forestry Congress Buenos Aires, Argentina, 18 – 23 October 2009.

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

Hobley, M., 1996: **Participatory forestry - The process of change in India and Nepal**. Rural Development Forestry Study Guide -. London : Overseas Development Institute.

Indranil Bose, 2010: **How did the Indian Forest Rights Act, 2006, emerge?** IPPG Discussion Papers, Series Thirty Nine May 2010. IPPG Programme Office, IDPM, School of Environment & Development, University of Manchester, Arthur Lewis Building, 2.023, Oxford Road, Manchester M13 9PL. (www.ippg.org.uk)

Kailas Sarap, Tapas Kumar Sarangi, 2009: **Malfunctioning of Forest Institutions in Orissa**. vol xlv no 37, Economic & Political Weekly.

K.D. Singh, Bhaskar Sinha and S.D. Mukherji, 2005: **Exploring Options for Joint Forest Management in India**. Forestry Policy and Institutions working paper.

Kelkar, Govind and Dev Nathan, 1991: **Gender and Tribe: Women, Land and Forests in Jharkhand**. Kali for Women, New Delhi.

Kulbhushan Balooni, 2002: **Participatory Forest Management in India - An Analysis of Policy Trends amid 'Management Change'**. Policy Trend Report, 2002: 88 – 113.

Kundan Kumar, Pranab Ranjan Choudhary, Soumendra Sarangi, Pradeep Mishra, Sricharan Behera, 2005: **A Socio-Economic and Legal Study of Scheduled Tribes' Land in Orissa**. Vasundhara, A/70, Bhubaneswar-751007, Orissa, India.

Lovleen Bhullar, 2008: **The Indian Forest Rights Act 2006: A Critical Appraisal**. *LEAD Journal (Law, Environment and Development Journal)*, 4/1 *Law, Environment and Development Journal* (2008), p. 20.

Madhu Sarin, Neera M. Singh, Nandini Sundar and Ranu K. Bhogal, 2003: **Devolution as a Threat to Democratic Decision-making in Forestry? Findings from Three States in India**. Overseas Development Institute, 111 Westminster Bridge Road, London, SE1 7JD, UK.

Madhu Sarin, 2006: **Laws, Lore and Logjams: Critical Issues In Indian Forest Conservation**. GATEKEEPER Series 116, International Institute for Environment and Development.

Malhotra, K.C., D. Deb, M.Dutta, T.S. Vasulu, G.Yadav and M. Adhikari, 1992: **Role of Non-Timber Forest Produce in Village Economy**. IBRAD, Calcutta.

Mamta Borgoyary, Sushil Saigal, & Neeraj Peters, 2005: **Participatory Forest Management in India: A Review of Policies and Implementation**. Overseas Development Group, University of East Anglia, Norwich NR4 7TJ, UK.

Manoj Pattanaik, 2002: **Community Forest Management in Orissa**. RCDC, Community Forestry / Volume1 / Issue 1&2 / January 2002.

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

Michael Warner and Philip Jones, 1998: **Assessing the Need to Manage Conflict in Community-Based Natural Resource Projects**. ISSN: 1356-9228 © Copyright: Overseas Development Institute, Portland House Stag Place London SW1E 5DP, UK.

Mohapatra, R., 1999: **On the war path**. Down to Earth. Vol. 08 (09), 32-42, New Delhi.

National Forest Policy, 1988: Resolution, No. 3-1/86-FP, Government of India, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, Lodi Road, New Delhi – 110003, India.

N.C. Saxena, 2003: Working Paper 223: **Livelihood Diversification and Non-Timber Forest Products in Orissa: Wider Lessons on the Scope for Policy Change?** Overseas Development Institute, 111 Westminster Bridge Road, London, SE1 7JD, UK.

Neera M Singh, 2001: Women and Community Forests in Orissa: Rights and Management. **Indian Journal of Gender Studies September 2001 vol. 8 no. 2 257-270.**

Nihal C. Jain and Kalpana Jain, 2002: **Social Capital in Community-based Institutions: Trends and Emerging Lessons from Western India**. Paper presented at the Fifth International Conference of the International Society for Third-sector Research, held in Cape Town, South Africa.

Poffenberger, M. 1995: **India's Forest Keepers**. Wasteland News XI (1) Aug – Oct. New Delhi.

Poffenberger, M., P. Bhattacharya, A. Khare, A. Rai, S.B. Roy and N. Singh, 1996: **Grassroots Forest Protection: Eastern Indian Experiences**, Asia Forest Research Network Report No. 7. Berkeley.

Prasant Mohanty, 2005: **Challenges before Democratizing Natural Resource Governance: Experience of Community Forestry network in Orissa**: Vasundhara, 15- Saheed Nagar, Bhubaneswar-751007, Orissa, India.

Prateep Kumar Nayak, 2006: **Politics of Co-optation: Self-organized Community Forest Management and Joint Forest Management in Orissa, India**. Thesis Submitted to the Faculty of Graduate Studies at **Natural Resources Institute** University of Manitoba, Winnipeg, MB, R3T 2N2, Canada.

Raju, G. 1998: **Institutional Structures for Community-Based Conservation**. In: Kothari et al. (eds.) *Communities and Conservation*. Natural Resource Management in South and Central Asia. Sage Publications. New Delhi. ISBN: 81-7036-739-5.

Robin Mearns, 1999: **Access to Land in Rural India, Policy Issues and Options**. World Bank Policy Research Working Paper 2123.

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

Sankar Prasad Pani, 2008: **Community Struggle for Forest Conservation: A case-study of Banadurga Jungle Surakshya Committee, Khedapada, Nayagarh, Sambalpur, Orissa.** Nought without cause (eds: Milind Wani), Global Forest Coalition, Underlying Causes Initiative 2008.

Sarin, M., 1996a: **Actions of the Voiceless: The Challenge of Addressing Subterranean Conflicts Related to Marginalized Groups and Women in Community Forestry.** Theme paper for the FAO E-Conference on addressing Natural Resource Conflicts through Community Forestry, Jan-April.

Sashi Kant, Neera M. Singh, and Kundan K. Singh, 1991: **Community Based Forest Management Systems: Case Studies from Orissa.** Indian Institute of Forest Management, New Delhi, India.

Sathya Gopalakrishnan, 2005: **Collective Action In The Management Of Commonpool Resources: Is There An Alternative To The Rational Choice Model?** A Plan B Paper Submitted to the Department of Agricultural Economics, Michigan State University.

Satyapriya Rout, 2003: **Conflicts Over Natural Resources and Legal Pluralism: A Case Study From Orissa.** Working Paper 137, Institute for Social and Economic Change (ISEC), Nagarbhavi – PO, Bangalore – 560 072, India.

Singh, N.M., and Kumar, K., 1993: **Saving Forest for Posterity.** Down to Earth: Vol. 1, p. 26, New Delhi.

State of the Environment Report - Orissa, 2007: Centre For Environmental Studies, N-3/56, IRC Village, Bhubaneswar – 15, (Forest & Environment Department) Government of Orissa, India.

The Indian Forest Act, 1927.

The Orissa Forest Act, 1972: (ACT 14 OF 1972), Enacted by the Legislature of the State of Orissa in the Twenty-third Year of the Republic of India.
(www.ielrc.org/content/e7201.pdf)

THE SCHEDULED CASTES AND THE SCHEDULED TRIBES (PREVENTION OF ATROCITIES) ACT, 1989, No. 33 OF 1989.

The Wildlife (Protection) Act, 1972: (No. 53 of 1972).

Vasundhara, 1996: **Community Forest Management in Transition: Role of the Forest Department and Need for Organizational Change.** Mimeco. Bhubaneswar.

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

Vasundhara, 2005: **Development Policies and Rural Poverty in Orissa: Macro Analysis and Case Studies**. Vasundhara, A/70, Bhubaneswar-751007, Orissa, India.

Vasundhara, 2009: **Forest Rights Act and Primitive Tribal Groups, *Case studies of selected PTG***. Based on the discussions held with the communities and experts during the workshop on 'Rights of PTGs under FRA'. Vasundhara, A/70, Saheed Nagar, Bhubaneswar-751007, Orissa, India.

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com

FOUNDATIONS OF COMMUNITY-BASED FOREST GOVERNANCE SYSTEMS IN ODISHA

Table: Showing the general information of the nine sample villages

S.no	Name of study Site	Location / District	Total Hh	Total ST Hh	Forest Protection Hh	ST Communities in the study area	Dominant Community	Total Agri. Area in Ac	Total Forest Area in Ac	Year of protection initiation
1.	Guptaganga	Keonjhar	79	73		Juanga (PTG)	ST	67	717	1991
2.	Gunduriposi	Keonjhar	40	40		Santhal	ST	60	100	1997
3.	Rangamatia	Keonjhar	37	37		Santal, Ganda	ST	120	60	1985
4.	Krushnapur	Keonjhar	180	146		Bathudi, Juanga, Munda, Sahara, Ganda and Saunti	ST	221	500	1982
5.	Gundurabadi	Nayagarh	29	27		Kandha, Pana	ST	13	24700	1973 – 75
6.	Dengajhari	Nayagarh	31	20		Kandha	ST	525	335	1980
7.	Brahmanimal	Deogarh	80	60		Kandha	ST	44	40	1992
8.	Budhabahal	Deogarh	48	16		Ganda	BC	160	250	1980
9.	Khajuribahal	Deogarh	35	31		Kandha	ST	240	50	1994

¹Kanna Kumar S.: kannakumar_s@yahoo.com,

²Ms. Sweta Mishra: swetamishra1@gmail.com