

**COMMUNITY-BASED FOREST MANAGEMENT IN INDIA:  
THE ISSUE OF TENURIAL SIGNIFICANCE**

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**SUBTHEME:** Land and Resource Tenure Reform and the Commons in an Era of Globalization.

**KEYWORDS:** Secure Tenure, Community-based Forest Management, Forest Policies, Institution.

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## **BACKGROUND**

The policies corresponding to the Community-based forest management systems in India have not yielded significant results. One preeminent cause for this is the lack of an appropriate tenurial arrangement in favour of the forest managing communities. The National and State Governments have responded to the prolonged demands for community rights over forests by way of various policy formulations. However, tenure on forestland still remains the most contentious issue in the field of forest management in India.

An attempt has been made in this paper to analyze the context within which forest tenure is being sought for. In order to do that it is important to examine the local, policy and external environments in their historical as well as current contexts. The community concerns for the state of forest resources and their efforts at conservation, poverty conditions requiring a better tenure, access and livelihood benefits in favour of the community and condition of the resource are important elements for understanding the local environment and assigning forest tenure.

The policy and external environments are also important to understand forest tenure in India. In this context, relevant forest policies of the national and state governments have been discussed with specific reference to the recent Joint Forest Management programme in order to examine the presence or absence of various elements of secure tenure in them. While these policies do not show substantial elements dealing with secure forest tenure, they certainly provide some leads that may help in defining an appropriate tenurial arrangement on forestland. Based on a number of research interactions with the forest managing communities, efforts have been made to present certain elements that may form the rudimentary basis for a secure and significant forest tenure.

## **ANALYSIS OF THE CONTEXT**

### **LOCAL ENVIRONMENT**

During the last two centuries or so the relationship of local communities with forests in India has come about a full circle. Historically forests had remained available to the local communities till the British Administration plunged into a rigorous process of land settlement which marked the beginning of the systematic exclusion of local forest communities from any forest associated business. Local forests were marked, reserved and subsequently plundered for commercial purposes. The establishment of the forest department and the drafting of forest acts and rules in the second half of the 19<sup>th</sup> century formalized “timber and revenue” orientation as the prime objective of forest management which continued even after Independent India drafted its first forest law. The resulting practices of forest management continued right into the 20<sup>th</sup> century, as far as 1960’s, in the form of coup permit to forest contractors.

This entire period was characterized by exploitation of forests for timber, maximization of forest revenue and the centralization of the forest administration, by keeping the local communities perennially excluded. Consequently, within a few decades after Independence vast tracts of forestland were degraded reducing the total good forest cover of the country to less than 10 percent. The pace of degradation continued as the remaining forests were leased

out to forest contractors for exploitation under coup permits during 1950's and 1960's. Forests were seen as a rich and viable source to meet the developmental needs of the country.

Centuries of exclusion disintegrated forest-community ties including the community system and practice of forest management. The mismatch between the growing needs of the communities for forest based requirements and the dwindling forest resources aggravated the pace of forest degradation. Growing poverty in the countryside forced the local people to exploit the nearby forests for critical livelihood support by bringing forests under cultivation, selling small timber and other forest products, and even, in many cases, extracting the remaining rootstocks from forestlands.

**Factors for Forest Degradation**

- Lease of forests by the kings for clear felling purposes
- Coup permit to contractors for cutting forests
- Excessive quarrying activities in the forest
- Timber smuggling – proximity to highways roads
- Developing infrastructure: Laying concrete roads and rail roads
- Sweden cultivation and “saguan taila” cultivation
- Conversion of forests into agricultural land
- Creation of Forest Development Corporation
- Lax vigil by the Forest Department
- Rapid urbanization in forest surrounding areas
- Extraction of rootstock

*Source: Field Studies in Eastern India*

Forest degradation had manifold impacts on the socio-economic life of the communities. The ecological fallout of such degraded surrounding forests negatively affected the local agriculture, animal husbandry practices and completely shattered the forest based livelihood of many. People started travelling to far off forest areas for need fulfillment resulting in conflicts with other communities and harassment by the forest department. In such circumstances many communities gradually turned to their adjacent degraded forests and initiated protection measures perhaps as a last resort to restore back the forests and local livelihoods. Gradually, such local efforts turned the negative impacts of forest degradation into initiating factors for community-based forest management in the country. Local communities joined hands in bringing forestlands under their de facto control. Once protection by a few started, communities were quick to learn from each other and soon large tracts of forestland came under community protection and management. Local villages protected even good forest areas in many parts of the country.

<b>Impacts of Forest Degradation / Initiating Factors for Forest Protection</b>	
▪ Scarcity of essential forest products for need fulfillment	▪ Dependence on other's forests leading to frequent conflicts
▪ No fuelwood – An essential element of village life	▪ Travel to far off forest areas causing harassment by forest department
▪ Complete loss of livelihood, especially of the tribal community	▪ Act of trend setters – initiation of protection by some villages
▪ Effects on agriculture – Short supply of forest leaf litters and forest stream water	▪ Effect on bovine population – shortage of fodder and grazing field
▪ Excessive biotic pressure - grazing	▪ Frequent droughts – decrease in water table
▪ Scant and irregular rainfall	▪ “How do we live without forests?” – Rising question for the villagers
<i>Source : Field Studies in Eastern India</i>	

The forest managing communities developed suitable forest management institutions and defined their membership. Elaborate rules and regulations were designed and operationalized to support the forest protection arrangement. Villages got into long drawn negotiations with other communities to define forest boundaries as well as the users who could be included as members. Many communities from eastern India report that they approached the local forest department to seek permission for initiating protection activities in the close by degraded forest areas. However, their requests were turned down by forest officials who explained to them that the forests belonged to the department only and people did not have any rights to be involved in it, even if these forests were completely degraded. Forced with dire consequences of degradation communities soon created institutions of forest protection and management and gradually took de facto control of such degraded forestlands. Forests which were brought under the de facto control of these local communities included Reserved, Protected and Revenue Forests. In most cases the forest department did not interfere because the lands were so degraded that one would doubt whether they would really regenerate.

Soon community efforts to regenerate degraded forestlands proved successful. Once the pace of degradation was arrested and the process of regeneration stabilized, forest benefits were quick to follow. Forest managing communities in various locations in India have reported that within a few years of successful protection they could derive forest benefits in terms of fuelwood, wood for agricultural implements, house repair and construction materials, forest foods and other non-timber products including fruits and leaves. Two major developments were visible during this time:

**Impact of Forest Protection: Forest Benefits**

- Supply of forest produces for food, house construction, agricultural implements
- Opening of livelihood opportunities for poor and tribals
- Restoration of forest streams in some areas
- Opportunities for grazing and availability of fodder
- Regular supply of fuelwood from cleaning of regenerating forests
- Strengthening of local institutions
- Forest became visible once again
- Forest Department became active
- Threat to Forest Department - looked like it was losing control over the forests

*Source: Field Studies in Eastern India*

One, by their continued involvement in forest protection and with the beginning of benefit flow from forests, the communities created a far greater stake in the forests. Considerable strength was acquired by the forest management institutions. Their rule systems were established, membership formalized, negotiations on boundary and other local rights finalized with the neighbours, appropriation mechanisms for benefits sharing put in place and monitoring, sanctions and conflict management mechanisms evolved. Having done their homework significantly well community forestry groups had realized that in order to sustain their forests and the forest management systems it is essential that the government devolves specific rights concerning forest and its tenure. Towards 1990 thousands of community forestry groups in India had started placing similar claims and the issue of tenurial rights and its significance had gained momentum.

Beside this, visibility of CFM systems and the growing demand for secure forest rights had become major concerns for the state forest departments. For the forest department this was a clear indication that the forests were slowly going out of its control and it would not be possible to reverse the trend if immediate steps were not initiated.

## **POLICY ENVIRONMENT**

Two revolutionary forest policies during the late 1980's provided the base for the planners and administrators to be able to face the local realities in the forestry sector of the country. The National Forest Policy of 1988 and the Central Government Guidelines for Joint Forest Management of 1990 made radical shifts from the previous forest policies, most specifically the National Forest Policy of 1952 which focused on forests for timber and stressing the need of industry and defense, and the recommendations of the National Commission on Agriculture 1976, which had approved commercial forestry to continue on forestland.

### **The National Forest Policy, 1988: *Combining Ecological and Livelihood Concerns***

While creating a stable foundation for sustainable forest management in India the National Forest Policy of 1988 changed the focus of forest management from a highly "timber and revenue orientation" to ensure "environmental stability, maintenance of ecological balance and meet the subsistence requirements of the local people" by strengthening the people-forest link. The Policy states: "The life of tribals and other poor living within and near forest revolves around forests. The rights and concessions enjoyed by them should be fully protected. Their domestic requirements of fuelwood, fodder, minor forest produce, and construction timber should be the first charge on the forest produce (Para 4.3.4.3)."

Advocating a stronger link between the people and the forests the Policy affirms: "Having regard to the symbiotic relationship between the tribal people and forests, a primary task of all agencies responsible for forest management, including the forest development corporations, should be to associate the tribal people closely in the protection, regeneration and development of forests as well as to provide gainful employment to people living in and around the forests. While safeguarding the customary rights and interests of such people, forestry programmes should pay special attention to undertaking integrated area development programmes to meet the needs of the tribal economy in and around the forest areas, including the provision of alternative sources of domestic energy on a subsidized basis, to reduce pressure on the existing forest areas (Para 4.6)".

### **Joint Forest Management: *An Inadequate Approach***

Thus the 1988 National Forest Policy proposed the creation of a people's movement to protect forest resources of the country. Following its footsteps in June 1990 the Central Government issued a circular on Joint Forest Management to operationalize participatory forest management and addressing the community forest protection activities in India. The preamble of the JFM circular states:

"The National Forest Policy, 1988, envisages people's involvement in the development of forests. The requirements of fuelwood, fodder and small timber such as house-building material, of the tribals and other villagers living in and near the forests, are to be treated as first charge on forest produce. The policy document envisages it as one of the essentials of forest management that the forest communities should be motivated to identify themselves with the development and protection of forests from which they derive benefits."

The salient features of the programme suggest by the Government of India resolution are:

- Access to forest lands and usufructory benefits will be given to those villagers who are organized into a village association;
- The beneficiaries are to be given usufructs like grasses, lops and tops of branches, and non-timber forest produce. On successful protection of forests, they are to be given a portion of the proceeds from the sale of trees when they mature;
- Along with trees with fuel, fodder and timber, village community may be permitted to plant fruit trees as well as shrubs, legumes and grasses;
- No grazing in the forestland protected by the village communities is to be allowed. But the villagers can cut and carry grass free of cost to promote stall feeding;
- No ownership or lease rights over the forest land including assignment of the forest land will be given to the beneficiaries;
- In case of failure to protect the area from grazing, encroachment etc., usufructory benefits could be withdrawn;
- The benefits of people's participation should be to the village communities alone and not to commercial or other interests.

In response to the national resolution of 1990, 22 state governments have come up with their respective notifications to operationalize the programme of JFM at state level. Though there are wide variations, Poffenberger and Singh, 1996 have found certain broad similarities in these state JFM resolutions.

- All resolutions provide user groups with usufruct rights only. They clearly note that land is not to be allocated or leased;
- The resolutions generally recommend village level committees as functional management groups;
- Village level groups are to operate under the supervision of forest department officials;
- In most cases the tenurial period for usufruct rights is not mentioned;
- Many resolutions limit community management and benefits to degraded forest land only;
- Some resolutions propose the formulation of joint management plans to coordinate agency and community activities. However, operational guidelines for cooperative planning are unclear, and where procedures are outlined, they tend to reflect forest department interests and concerns.

In spite of such elaborate framework to facilitate participatory forest management the immediate importance is the question: Do these policies support the types of spontaneous community forest management initiatives, based either on traditions or emerging need, which are increasingly present in India, or do they undermine them and erode existing rights? (Poffenberger and Singh, 1996) In the light of this observation let us try to analyze a few critical aspects concerning JFM.

Even though the policy for JFM speaks about the right of local communities in the management and use of forest resources, none of the state resolutions mention it. These resolutions are also silent about aspects of tenure on forestland. Rather, confusion persists regarding restriction of the micro plan period mostly to 5 years duration which is generally considered to be the period of tenure. In the absence of clear tenurial system community forestry, even with the support of JFM, is reeling under great uncertainties. This does not also

help the government to develop an effective partnership with the village communities in the management of the forests. Moreover, this arrangement clearly gives the message of short-term stakes and, as can be readily seen in many states, leads to people planning for short rotation production plantations

Many state resolutions are prescriptive so far as the structure and functioning of the JFM institutions are concerned. They suggest a uniform structure of JFM institutions by substituting the pre-existing-self-initiated traditional forest management arrangements; confining the unit of management to a revenue village or administrative boundary by breaking the historical links between the forest and several user groups; restricting the membership to individuals or households by undermining the value of universal adult membership; creating ex-officio posts in the village JFM institutions to be held by departmental representatives by excluding the community leadership; limiting the tenure of the institution to one or two years or till the end of project period (Tamil Nadu) by risking the continued existence of the institutions. The effectiveness of the Self-Initiated institutions lies in their uniqueness rather than such uniform institutional arrangements. They represent immense variety in approach, methods and institutions that suit their local needs and specific problems. Having uniformity in the structure of the institution might help the forest department in better and simpler monitoring and reporting, but it may ruin the very spirit of these self initiated groups. It is the responsibility of the state to create adequate space for the community institutions to function independently. Flexibility in policy framework to accommodate the existing forest management patterns is important.

Each state JFM resolution provides for benefit sharing arrangement between the government and the village communities which is arbitrary in nature. JFM has largely been initiated on the degraded forest land and putting in a provision for timber or revenue sharing in such a preliminary stage seems to have defeated the purpose of long term forest management for ecological as well as local livelihood needs. Because of the sharing provision, the communities look upon JFM as an encroachment by the Forest Department of forests which have been protected by the village communities even before the advent of JFM. The benefit distribution systems that these village communities have evolved over time largely pertain to the specific need based requirements. In this context, final felling presupposes a one-time harvest and might again leave the land at square one. It has an inherent message of commercial production forestry, which is incompatible with village forests, or with sustained forest cover.

The fact that a massive programme like JFM is based on government orders puts the whole concept of participatory forest management in a disadvantageous position. At a time when management of forests by local people has gained momentum and the positive results of it are clearly visible, the legal aspects need careful and urgent consideration. As perceived by thousands of forest protecting communities, without a policy guard and statutory basis, JFM might remain an experimentation tool in the hands of the forest department and acquire a temporary character soon.

JFM resolutions of various states suffer from several operational shortcomings too. Issues pertaining to boundary demarcation, type of forest area to be included, registration of the forest protection committees, benefit sharing, role of various agencies including forest department and Panchayats etc. have remained problematic in the implementation of JFM. Moreover, JFM suffers much from the procedural maladies. This problem could be addressed at the Department level through internal monitoring mechanisms.

Forests cannot grow in isolation, so is true in case of its management. In order to attempt a suitable policy intervention for effective local management of forests, under the concept of joint management, there is a need to bring corresponding changes in related Acts and Policies. For example, JFM talks about 100% intermediary products to community but, at the same time, several restrictive Minor Forest Produce Acts and Policies, advocating monopoly leases and nationalization of Minor Forest Produce exists. Similarly, while JFM gives primacy to micro plans there are no changes in the corresponding acts upholding the supremacy of the Working Plan.

There have been enormous changes in the forest management scenario of the country over the last few decades. However, it is ironical that the same forest department, without changes and with almost the same orientation, remains the nodal agency still. Several states are currently experiencing the debate for organizational changes in forest department to increase the effectiveness in a completely changed scenario of forest management. This includes both structural as well as attitudinal (approach) suitability. In one of the workshops in Orissa the forest officials emphasized the need for creating mechanisms for organizational learning within the FD.

In spite of its good intentions the JFM approach has not been successful in meeting the expectations raised by the National Forest Policy, 1988. Many questions have been raised regarding the implications of these new pronouncements. Do they mark a historic swing towards greater decentralization and de-bureaucratization of resource management systems, or do they represent an attempt by the government to control local communities' acquisitions of public forests? Are the institutional arrangements, tenurial provisions, production systems, and sharing arrangements outlined in these government orders compatible with the emerging expectations and forest management systems being developed by India's rural villages? (Poffenberger and Singh 1996)

#### **Other Laws on Forests: *Repository of the legacy***

In view of the above discussion comes one important question: Do the existing forest laws in India correspond to this massive change in approach effected by the recent forest policies of 1988 and 1990? The Indian Forest Act, 1927 continues in the present day without any significant changes in its provisions. The act is focused on two broad aspects of forest management covering the classification, declaration and management of forests into Reserved, Protected and Village Forests and the functions of forest department. Forests being in the concurrent list, the states have also come up with State Forest Acts at different periods of time during the pre-1988 Forest Policy which are same as the National Act with minor modifications. The provisions of the Indian Forest Act as well as the State Forest Acts are antithetical to the prescriptions of both the 1988 and 1990 policies. While conservation, livelihood and community involvement are the guiding principles of these two policies, the Forest Acts still represent the concept of reservation, centralized management and people's exclusion. None of the state governments has issued any directive revising its state forest policy after the radical overhaul of Forest Policy by the Government of India in 1988 (Saxena 1996).

Another Central Law, known as the Forest Conservation Act, 1980, was brought in with a view to checking further degradation. This Act imposes restrictions on the de-reservation of forests or use of forestland for non-forest purposes. While this Act was instrumental in checking the pace of forest degradation during the initial years, further amendments have

brought in loopholes by creating certain spaces through which de-reservation and conversion of forestland could be possible with prior approval of the Central Government or appropriate authority. Consequently, in India thousands of hectares of forestland is de-reserved every year even in the presence of a National Act on forest conservation restricting such moves. However, in the name of Forest Conservation Act Governments have often restricted community action concerning management and conservation of forestland. Poffenberger and Singh, 1996 observe that the Forest Conservation Act was passed to emphasize the social and ecological importance of these critical resources. The Act placed controls on logging, while also recognizing the needs of communities. However, it did little to reverse the historic swing towards bureaucratic control. Infact, environmental concerns often imposed further limitations on community rights.

### **EXTERNAL ENVIRONMENT**

One more important aspect in analyzing the context for tenurial security is the external environment which has become active in shaping the national policies and forest management priorities in India. Till the end of the Fourth Five Year plan (1969 -1974) India used its internal resources for development projects including forestry. Massive deforestation leading to crisis of food, fodder and fuel, recommendations of various committees and commissions like the National Commission on Agriculture, 1976, growing international concern for environmental degradation forced the government to look at forest development in a project mode. Several such forestry projects attracted foreign funding on a large scale by exposing the forestry sector to the influences of the external environment. The country has already passed through an active phase of Social Forestry before the advent of the National Forest Policy of 1988 and the 1990 JFM circular. However, results of the social forestry plantations have not been supportive to the growth of the natural forests as well as the demand for more tenurial rights by the forest protecting communities in India. Saxena 1996 observed that the funding availability for forestlands became quite precarious during the Social Forestry phase. As state funds were reserved to meet the matching contributions required for external assistance for projects on non-forest lands, forestlands were starved of funds, with several adverse effects. The neglect of forestland hurt forest dwellers and tribals.

Subsequently, the JFM approach also fell into the trap of project mode. The concept of Participatory Forest Management lured the international funders and large forestry (JFM) projects with external assistance came into existence. Recently, many Indian states have completed the implementation of such forestry projects and the results have been found not very encouraging.

### **Phases of Forest Management and Control**

<b>Absolute State Control to Increasing Community Control of Forests</b>	<b>Renewed State Control to Dual Control by both Community (de facto) and the State (de jure)</b>
<ul style="list-style-type: none"> <li>▪ Degradation: Good forest cover decreased to 10% in 1999</li> </ul>	<ul style="list-style-type: none"> <li>▪ Large scale external funding to the forestry sector</li> </ul>
<ul style="list-style-type: none"> <li>▪ Decreasing interest of the State in depleted forests leading to lax vigil and regulation</li> </ul>	<ul style="list-style-type: none"> <li>▪ A financially and administratively active forest department</li> </ul>
<ul style="list-style-type: none"> <li>▪ Generation of forest revenue was no more possible</li> </ul>	<ul style="list-style-type: none"> <li>▪ Concept of natural forests undermined and promotion of plantation and farm</li> </ul>

	forestry
<ul style="list-style-type: none"> <li>▪ Financially and administratively weak forest department</li> </ul>	<ul style="list-style-type: none"> <li>▪ Instances of official involvement of communities in plantation forestry activities</li> </ul>
<ul style="list-style-type: none"> <li>▪ Precarious situation so far as forestry requirements of local communities were concerned</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increasing community control over degraded forests through protection and management</li> </ul>
<ul style="list-style-type: none"> <li>▪ Increasing instances of community protection and control of forests</li> </ul>	<ul style="list-style-type: none"> <li>▪ Concept of participatory forest management introduced by the government</li> </ul>

Project appraisal reports and independent studies have shown that the forest managing rural communities in India have been marginalized further as a direct result of these large forestry projects. As shown in the table above the forest department which had weakened with the degradation of forests leading to loss of its interest in the depleted forests, suddenly grew financially and administratively stronger with the inflow of huge external funds. While Social Forestry had focused primarily on the non-forest lands, these externally supported Forestry Projects even targeted forestlands for commercial plantations by reducing the existing community efforts in conservation to a mere token.

In the externally supported forestry projects, despite the stated goals of local participation and social development, many local people were excluded from the decision-making and tribal people suffered adverse impacts to their welfare. There were complaints from these groups that they had only learned of the project once implementation began. The new village committees have failed to facilitate local participation in forest management and do not address the concerns of the indigenous families who have got major livelihood dependence on forests. This was contradictory to the objective of involving the local community in forest protection, regeneration of degraded forests and developing alternative income generation resources. These projects often lacked baseline studies of indigenous rights and access to forest resources and most of them have failed in securing customary resource rights and instead accepted the existing national legislation and local regulations that curtail indigenous rights. Many have also criticized the projects for favouring business and state agencies and discriminating against forest dwellers. Despite directives regarding security of land tenure, no steps had been taken in this regard. As a result, the projects have intensified the conflict between the communities and the State bureaucracy instead of working towards ensuring the survival of both forests and the forest dependent.

The developments in the forestry sector of the neighbouring Kingdom of Nepal have much to offer for our policy makers. Nepal has brought in favourable forest legislation and its government has taken a bold decision to devolve some forestlands to forest user groups in village communities, as per their size and need, in perpetuity. While this experience of Nepal motivates the forest communities of India in their efforts for secure tenure, our forest policies have much more to gain from it.

**Analysis of the Context**

	<b>Historical context</b>	<b>Current context</b>
<b>LOCAL ENVIRONMENT</b>		
<b>Social character of community</b>	<ul style="list-style-type: none"> <li>▪ Homogeneous community</li> <li>▪ Cohesive social units</li> </ul>	<ul style="list-style-type: none"> <li>▪ Heterogeneous composition of community</li> <li>▪ Heterogeneity in community life</li> </ul>
<b>Livelihood concerns</b>	<ul style="list-style-type: none"> <li>▪ Forests as spontaneous source of livelihood</li> <li>▪ Forests intrinsically linked to economic life of people</li> </ul>	<ul style="list-style-type: none"> <li>▪ Growing poverty and dwindling livelihood conditions</li> <li>▪ Forest-livelihood link is broken</li> </ul>
<b>Resource condition</b>	<ul style="list-style-type: none"> <li>▪ Significant forest</li> </ul>	<ul style="list-style-type: none"> <li>▪ Insignificant forest: State of extreme degradation</li> </ul>
<b>Nature of local confidence</b>	<ul style="list-style-type: none"> <li>▪ Forest is a State property / national resource</li> </ul>	<ul style="list-style-type: none"> <li>▪ Forest is a local resource</li> </ul>
<b>Status of community access to forest</b>	<ul style="list-style-type: none"> <li>▪ Highly regulated by the State. But rights and privileges were granted</li> </ul>	<ul style="list-style-type: none"> <li>▪ State regulation continues</li> <li>▪ Increasing instances of de facto management by village communities</li> </ul>
<b>POLICY ENVIRONMENT</b>		
<b>Nature of government</b>	<ul style="list-style-type: none"> <li>▪ Princely states ruled by kings</li> <li>▪ Pre-Independence British administration</li> </ul>	<ul style="list-style-type: none"> <li>▪ Democratic governance</li> <li>▪ Welfare State</li> </ul>
<b>Classification of forests</b>	<ul style="list-style-type: none"> <li>▪ King's forests, Private Zamindars Forests</li> <li>▪ Reserved Forests, Protected Forests, Village Forests</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reserved Forests, Protected Forests, Village Forests continues</li> <li>▪ Plantation Forests</li> <li>▪ Community Forests including JFM Forests</li> </ul>
<b>Who owns the forests?</b>	<ul style="list-style-type: none"> <li>▪ King or Zamindars or officials appointed by the King</li> <li>▪ Police Department, Revenue Department and Forest Department (subsequently)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Forest Department</li> <li>▪ Revenue Department</li> </ul>
<b>Nature of forest laws and policy</b>	<ul style="list-style-type: none"> <li>▪ Forest Settlements</li> <li>▪ Indian Forest Act 1865</li> <li>▪ Forests in the Central List</li> </ul>	<ul style="list-style-type: none"> <li>▪ Forests in Concurrent List</li> <li>▪ Indian Forest Act 1927, Forest Conservation Act 1980, National Forest Policy 1988, State Forest Acts</li> </ul>
<b>Objectives of Forest Laws and Policies</b>	<ul style="list-style-type: none"> <li>▪ Centralization of forest administration</li> <li>▪ Scientific management of forests: Forestry to produce sustained yield of commercial wood</li> </ul>	<ul style="list-style-type: none"> <li>▪ Peoples' participation combined with centralized forest administration</li> <li>▪ Environmental concerns</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Timber and revenue orientation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Livelihood concerns</li> <li>▪ Local management of forests</li> </ul>
<b>EXTERNAL ENVIRONMENT</b>		
<b>Resource for Forest Development</b>	<ul style="list-style-type: none"> <li>▪ Internal resources</li> </ul>	<ul style="list-style-type: none"> <li>▪ International funding on a large scale</li> </ul>
<b>Status of Community Forestry in neighbouring countries</b>	<ul style="list-style-type: none"> <li>▪ Centralized forest administration: Not much to learn</li> </ul>	<ul style="list-style-type: none"> <li>▪ Examples set by Nepal in user group based Community Forestry</li> </ul>

## **STATUS OF COMMUNITY OWNED / MANAGED FORESTS: LESSONS FOR TENURIAL SECURITY**

### **VAN PANCHAYATS IN THE KUMAON HIMALAYAS**

The Van Panchayats are enduring Village Forest institutions in the Kumaon Himalayas, recognized under a specific State Act and surviving for a century now. The origin of Van Panchayats can be traced to the numerous land, village and forest settlements carried out during the British thereby restricting the unlimited rights of people over forests and creating formal institutional control over the local forests. Within a span of seven years (during 1911 – 1917) all the ‘*benap*’<sup>2</sup> lands, which had already been declared as Protected Forests by 1897, were acclaimed as Reserved Forests resulting in massive curtailment of peoples’ rights. This also saw the strongest ever resistance from the people to reclaim their rights and concessions forcing the government to constitute a Forest Grievances Committee which recommended the creation of Van Panchayats for the management of forests. The lesser Reserved Forests were dereserved as class I forest and transferred to the Revenue Department for declaration of Van Panchayats. Forest Panchayat Rules were brought in during 1931, which continues in the present day with amendments in 1976.

One-third of the villagers, through a resolution of the Gram Sabha (Village Council), can propose the formation of a Van Panchayat. Inquiries are made to ascertain the willingness of villagers to form Van Panchayat, the rights of villagers and the neighbouring villages and other objections. The Van Panchayat Committee is formed through elections where any one having a right to vote can participate. The boundary of the Van Panchayat is determined by survey and preparing a map of the forest area. The rights and ownership of the members of the Van Panchayat are recorded in a book known as “*Khasra*”. Thus, the “*Khasra*” defines the forest as well as the members included under a specific Van Panchayat.

The Van Panchayat lands are located within the revenue boundary of the villages and all residents and others who possess rights in the forest can be right holders in the Van Panchayat institution. Van Panchayats are free to make their own rules and regulations to protect and manage the forest, grazing, grass and fuelwood collection, ensure equitable distribution of forest produces to the right holders, prevent encroachment and incident of fire in Van Panchayat land, etc. It has the right to form its own byelaws of such rules. The Panchayat Rules stipulate the following powers for the Van Panchayat members, which is given below. This includes both the rules which are in operation now and rules which have been modified or repealed in the 1976 amendments.

#### **Rights and Responsibilities of the Van Panchayat**

- Panchayat forestland cannot be sold, mortgaged or subdivided.
- The products and proceeds from the sale of products of the Panchayat forest are to be used for the benefit of the community.
- The Panchayat is to prevent villagers from cultivating the Panchayat forestland.
- The Panchayat is to demarcate the forest area.
- The Panchayat is to maintain minutes of meetings and records of accounts and make decisions on regular meetings.

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<sup>2</sup> ‘*Benap*’ lands were created during the land settlement of 1872, which included all lands other than private and cultivated lands, categorized as ‘*nap*’ land.

### **Rights and Powers of the Van Panchayat**

- Rights and powers of the Panchayat are similar to those of forest officials.
- Rule breakers are fined. (1931)
- The Panchayat can file court cases against rule breakers. (1931)
- Fees may be levied from users for fodder, grazing, fuelwood and other forest materials.
- Grazing in the Panchayat forest can be regulated, and animals that are found in the forest in contravention of rules may be impounded.
- Cutting instruments used in contravention of Panchayat ruled may be confiscated.
- Users who break rules regularly may have their rights restricted or suspended.
- Guards may be appointed by the Van Panchayat to monitor and enforce rules. (1931)

### **Rule Enforcement**

- All fines imposed by the Panchayat are treated as government dues and recoverable using similar procedures. (1931)

### **Allocation of Income**

- All income from the sale of forest products is allocated to rightholders as assigned to the Van Panchayat.
- Income from the sale of forest products (such as timber, resin, minor forest produce) to non-rightholders was assigned to the Van Panchayat. (1931)

### **Elections**

- Panchayat officials are elected for five years and the members have rights to elect the members.

The Van Panchayats have undergone considerable retrogression after the amendments in 1976 after which approvals and permissions from the Revenue as well as the Forest Department are required for every activity by the Van Panchayats. The powers of the councils, especially their enforcement authority, suffered a substantial decline in 1976. The overall framework of rules within which they could operate became far stricter (Agrawal 2000). The chances of further degeneration of these Village Forest Institutions loom large after the recently revised Van Panchayat Rules 2001 which negates the very existence of these institutions by making a forester the member secretary-cum-joint account holder in it and bringing them under the fold of Joint Forest Management. This is not only an attempt at modifying the basic structure and nature of the Van Panchayat institutions, in practice, it might mean a final blow bringing an end to the century old tradition of Van Panchayats in this country.

### **GRAMYA JUNGLES IN ORISSA**

“Gramya jungle” is a form of village forest created under the Survey and Settlement Act 1962 of Orissa state and managed by the village as per the provisions of the Survey and Settlement Rules 1962 (amended upto 1966). Under this act and rules, it was recognized that a village and its inhabitants need land to be used for different purposes in their day to day life. While attempting to draw up a land use pattern of a village, the Survey and Settlement Rules provide for reservation of government land for specific purposes in rural areas which includes grazing land, village forest, cremation ground, future developmental needs and common use of a village including homestead land. The rules specify that in every surveyed village 10% of the effect area of the village shall be reserved for the purposes of “Gramya

Jungle” (village forest) and for communal and developmental purposes including homestead for future (rule 3a). In the unsurveyed villages, double the area reserved for pasturage, which is fixed at 1 acre for every inhabitant, shall be reserved for the same purpose (rule 3b).

The Gramya Jungle lands are located inside the village boundary and recorded in the rights of records (RoR) of the village. The rules authorize the village institution to manage these jungle lands as per the norms of the village. The rules specify that “lands recorded as “Gramya Jungle” will be available for use only as village forest (rule 10b)”. The village has complete rights over the produces from these jungle lands which are apportioned among the villagers as per rules of the village institution. It has also the rights to make provisions for protection and management of the Gramya Jungle. Every villager has rights to participate in the management of Gramya Jungles and system of rule making and enforcement. The legal ownership of the Gramya Jungle lands rests with the revenue department.

With the imposition of extreme restrictions by the government on forest areas outside village boundaries, the Gramya Jungles have been used profusely by the villagers over the years. Once these lands were depleted people shifted their focus to the outside forest areas that were also fast degrading. However, most communities have now initiated re-protection of these lands through the village institution.

The institution of Gramya Jungle has also been affected by some of the recent policy changes. The forest conservation act 1980 brought these forests, though belonging to the revenue category and included in the village boundary, under its purview since it is suffixed by the word “jungle”. It required that the management of these lands be transferred to the forest department while the legal ownership remains with the revenue department. Once these lands come under the management of the forest department the village institutions are replaced with Van Samrakshyan Samity (VSS) under JFM and the entire management focus changes as per the rules made by the government. While the village community loses control over these inside forest areas, once recognized under state laws, they are virtually left with no forests which they could manage independently for the basic requirements of fuelwood, grazing, small timber etc. Once under JFM a large part of the produce would have to be shared with the department.

It is considered a reverse trend in the process of transfer of tenurial rights over forestlands to the village communities. From a situation of independent management control by existing village institutions, Gramya Jungles are being brought under the influence of an alien institution like Van Samrakshyan Samity under JFM. This would mean a move to bring the Gramya Jungles from the legally recognized control of the village communities to a more restrictive control of the forest department.

There are several community management systems, like the Mundari Khuntkatti in Chotanagpur, Community Forest Management in Orissa, Sacred Groves and Village Forests in many parts of the country, prevalent in India which are gradually getting marginalized due to unfavourable policy implementation. However, do these traditional systems, in their historical as well as in the present incarnation, signify some kind of a better and secure tenurial arrangement on forestlands in favour of the local forest users and whether a few lessons could be taken from it for our current analysis?

## **RUDIMENTARY BASIS FOR SECURE FOREST TENURE**

### **1. TANGIBLE FOREST BOUNDARY**

*Boundary of the forest area must be properly demarcated and made discernible prior to assignment of tenure.*

A properly demarcated forest confers the finest sense of security to the forest community. Tenurial confusions emerge due to lack of clear sense of physical limits of a particular resource leading to unperceivable notions about its boundary. Forest communities have entered into vicious conflicts, both among themselves as well as with the Forest Department, in situations where the forests have been left with improper demarcation. It is foremost in the course of achieving tenure that the forest be demarcated judiciously, which in itself forms a strong foundation for tenurial security. This is true both in case of private and common property resource regimes as in the process of their acquisition considerable emphasis is laid on making it tangible by way of appropriate demarcation and boundary.

A well demarcated forest area does not automatically entail a physical boundary around the resource. Experiences in community forestry indicate that instead of encircling the forest with physical barriers it is the manner in which the process of forest demarcation is achieved holds importance. This may include an exercise of forest area specification after estimating the historical and current relationships and interactions of the forest community vis-à-vis the forest resource. Forest area specification would not only establish the physical limits of the resource; it would also quantify the area for future reference and record.

A tangible forest boundary gives a clear sense to the forest community to distinguish their forest areas as against others. It allows the forest community to set its limits in terms of physical area within which they can make arrangements for protection, management and use. The neighbours or outsiders are able to see clearly that the specific forest area is demarcated and, hence they need to restrict their interference and free access habits. While in community forestry this is generally seen as mutual respect, it also brings in an essential element of local recognition to the boundaries of forest communities.

In a recently concluded study on conflicts in community forestry, Nayak and Singh (2002) observe that several forest managing communities in eastern India are faced with the single problem of multiple boundary conflicts from the beginning of forest protection. The Joint Forest Management complicated matters further by restricting the unit of forest area to certain hectares. Thus, what flows in practice is division of forest areas into mathematically equal units before allotment to JFM institutions. This grossly underestimates the historical factors influencing people-forest relationship and creates a vicious trap for the village communities to descend into endless conflicts. In contrast, most successful traditional forest management groups have been able to overcome this problem by defining the forest boundary through a process of long drawn negotiations with all other probable users finally either including or excluding them. What emerges from these local negotiations is a tangible forest boundary and those who identify themselves with this resource constitute a user unit.

## 2. APPROPRIATE AND ACCEPTABLE USER UNIT

*Members who would form the forest management unit and in whose favour the tenurial rights shall be settled must be identified to constitute an appropriate and acceptable user unit.*

As like the boundary of the forest resource, the user unit in whose favour the forest would be specified needs to be ascertained. In her famous work *Governing the Commons*, Elinor Ostrum writes: “Defining the boundaries of the CPR and specifying those authorized to use it can be thought of as a first step in organizing for collective action. Individuals or households who have rights to withdraw resource units from the CPR must be clearly defined, as must the boundaries of the CPR itself. So long as the boundaries of the resource and/or the specification of individuals who can use the resource remain uncertain, no one knows what is being managed or for whom.” Since the work of Ciriacy-Wantrup and Bishop (1975), the presence of boundaries concerning who is allowed to appropriate from the CPR has been used as the single defining characteristic of “common-property” in situations as contrasted to “open-access” institutions. The impression is sometimes given that this is all that is necessary to achieve successful regulation.

### Basis for collaboration: Rational for user unit formation

Lunisahi – Mardhakot - Dengajhari (Three villages jointly)	Dhani Panch Mouza (Five village jointly)	Juniani - Sanasahajbahal Rajamunda - Badasahajbahal (Users from four villages jointly)
<p><b>Cultural links:</b> Three villages commonly observe “<i>Kartika Purnima</i>” (local festival) and “<i>Mela</i>” (fair) near the temple situated at the hub of the three villages.</p> <p><b>Favourable geographical location:</b> The forest area starts with the boundary of Lunisahi and ends with Dengajhari boundary. Mardhakot is situated in between.</p> <p><b>Mardhakot village has no forest</b> in or near its own boundary. The inhabitants are landless and extremely forest dependant. For Dengajhari and Lunisahi villages, excluding Mardhakot would have meant taking the daily trouble of containing their pressure on the forest.</p> <p><b>A common Middle English School</b> stands as a symbol of their unity since 1945.</p>	<p>The five villages have <b>traditional socio-cultural ties</b>. They commonly observe “<i>Pani Jantala</i>”, a local festival once in three years to satiate rain God, in the forest which was later brought under common protection.</p> <p><b>Common village school</b> initiated by the five villages.</p> <p><b>A joint committee</b> of all the villages, to coordinate common festivals and the school, existed prior to forest protection.</p> <p>All villages situated in <b>close proximity to the forest</b>.</p>	<p><b>No formal historical links between the groups:</b> 33 families of Juniani, 33 families of Badasahajbahal, 34 families of Sanasahajbahal and 5 families of Rajamunda villages.</p> <p><b>33 forest dependent families</b> of Juniani initiated forest protection. Other villagers did not join because they were either doing business or service and, hence, no contacts with forest.</p> <p><b>Strategic alliance:</b> 33 families of Badasahajbahal and 34 families of Sanasahajbahal were included in the protection arrangement after prolonged negotiations because these families were major destroyers of the</p>

<p><b>Protection by all nearby villages</b> had already started when these three villages started protection.</p> <p><b>High pressure on the forest:</b> The pressure on forest was high and it would not have been possible for one single village to protect it alone.</p>	<p><b>A combination of small and big villages:</b> The forest is situated along the boundary of the small villages and the big villages joined in to form a strong group.</p> <p>All the villages are in <b>the same Gram Panchayat</b></p>	<p>forests and poised threat to the forest under protection.</p> <p>The forest was situated at a distance of 2.5 miles from these villages which created problem in regular protection. 5 families from a village at 3 miles distance were included as their agricultural field was close to the protected forest. Their presence in the agricultural field served the purpose of forest protection.</p>
<p><b>Source:</b> <i>Field Studies in Ranpur and Bonai Forest Region of Orissa, India</i></p>		

In a series of studies it has been observed that the forest communities in India have formed varying levels of units by overcoming several complexities. While moving away from accepting the rigid administrative boundaries as units of resource management, most forest communities have formed user units based on socio-cultural, historical, livelihood and geographical determinants. These are essential in defining the user limits since the motive is establishing clear tenurial rights in favour of individuals who are members of the user unit.

A user unit clearly defines “who the forest is primarily for” or “who the users are”? A well demarcated forest in isolation is not of much use as long as an equally defined user unit takes over the responsibilities of the resource. In fact, both can act as determinants for each other in different situations. Forest managing communities in India have often defined themselves before they have actually brought a forest patch under their control. The purpose is not necessarily to match the extent of forest with the size of the membership; rather the spread as well as the relationship of each member of the user unit defines the total forest area to be brought under user control. While this is not a generalized situation in community-based forest management (CFM), definition of both the boundary of the forest resource and the boundary of the user unit follow different patterns in differing contexts. However, the boundary of the forest as well as the user unit should remain complementary to each other in any given situation.

In spite of best efforts to include all during the formation of user groups there would always be a few “late comers”. An appropriate user unit would mean one that has not closed its doors immediately after formation and leaves the scope for a set of “late comers” to join the user unit subsequently. However, the user unit has rights to negotiate and establish that the “late comers” and their claims are genuine before they are formally included. Similarly, there may be a few members who might decide to withdraw from one user unit to join some more convenient user unit. In this context a perfect tenure would mean a set of rights that allows the user units to define and redefine themselves as and when the purpose becomes critical. This is crucial, as such a process would help the user units to gradually consolidate and formalize over a period of time.

In the move towards a clear and secure forest tenure one important step is to combine both the clearly defined forest resource and the user unit. Legally designating the forest to a user

unit is one definite recommendation that every forest managing community has raised time and again.

### **3. FOREST WITHIN THE PHYSICAL LIMITS OF THE USER UNIT / HABITATION**

*Forest area should preferably be included within the physical boundary of the user unit, or must be given a status equivalent to it.*

Including the defined forest within the physical limits of the user unit is one of the safest possible means to establish tenurial security in favour of the members of that particular unit. However, one realizes this would not be possible in many situations and would depend on the specific location of the forest vis-à-vis the user unit. It is useful to consider four separate situations to understand this further.

One, inclusion of forest area within the physical limit of the user unit is very much real in case of forests already situated within the physical boundary of habitations. In India the Revenue / Village Forests<sup>3</sup> are located within the administrative / revenue boundary of specific habitations and the village communities have far greater rights in these forests as compared to Reserved Forests<sup>4</sup>. In most of the cases the existing village institution is lawfully authorized to exercise management control over these revenue forests situated within village boundary. Their location within the physical limits of the village gives them a distinct identity. Such revenue forestlands are mostly free from inter-community conflicts, specifically concerning boundary and use. Most forest communities feel that in their drive for secure ownership rights this is one of the most desirable situations so far as physical location of the forest area is concerned.

Two, there are forest areas which are not situated within the habitation administrative boundary but are coterminous with it. Many Reserved Forests and Protected Forests<sup>5</sup> in India are located parallel to the administrative boundary of the habitation. To include these forests into the administrative boundary of the habitation it would require an extension in the existing habitation boundary as well as change in the legal status of the forest. The forest legislation in India provides certain provisions under which such a change could be effected. The change in legal status would mean declaring such forest areas as “Village Forests” which the Government may constitute by notification for the benefit of any village community or a group of village communities (Section 30 of Forest Act).

Three, there are forests which are neither situated within the habitation boundary nor are they coterminous with it. These forests are located away from the boundary of the user unit / habitation. These distant forests are mostly Reserved Forests and Protected Forests. In India, forest communities have either been traditionally depending and using most of these forests (though considered illegal by the Forest Department) or have brought them under some kind of a community protection and management control. It is not physically possible to include these distant forests into the boundaries of the user units. For these forests to be assigned to a specific user unit the demarcated forest could be given a status equivalent to “within-user unit-physical boundary”. Let us examine a little further as to what could this “equivalent status” mean? It would not mean a completely different set of protection, management and

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<sup>3</sup> Revenue / Village Forests constitute a fuzziier category. These are forests under management of representative village bodies, but the nature of these bodies and the kind of control they have vary.

<sup>4</sup> Reserve Forests are those for which all rights are recorded and settled by the state. They represent the highest degree of state control the state grants privileges but not rights to people.

<sup>5</sup> Protected Forests represent a lesser degree of state control, whereby rights are recorded but not yet settled.

use rights as compared to similar rights in forest areas within physical boundary. This would not also mean a different way of boundary demarcation. In most cases it was found that, once a forest area is taken up by a community group for management and so far as its demarcation is in consonance with the traditionally existing user interactions with the particular forest, there is a spontaneous recognition accorded by neighbours. However, in case of distant forests it would definitely mean a different arrangement of forest protection keeping in view the local pressures and other prevailing threats on the forest. Many communities in eastern and central India have entered into increased collaboration with some other user units in their efforts to protect the distant forest areas. One definite way of dealing with the tenurial security of distant forests by giving them a status equivalent to “within-user unit-physical boundary” is to legally convert these forests into Village Forests, wherever feasible.

Four, this is found where multiple user groups from different habitations form one user unit, but the forest is located either within the boundary of one habitation or coterminous with it. In such cases the forest area must be specified to the entire membership of the user unit and given a status equivalent to “within-user unit-physical boundary”.

Community sense of tenurial security is highest in case of such forests which are located within the physical limits or in close proximity to it. It is largely observed that forest communities prefer protecting Revenue Forests located within their boundaries. Even in cases where they are protecting forest areas outside their boundaries, like Reserved Forests and Protected Forests, they prefer to start with Revenue Forest protection and gradually extend their efforts to the forest areas outside their physical boundaries. Villagers in Bonai region of eastern India are currently protecting both inside and outside forest area, but a majority of them have a history of starting with Revenue Forest protection before adding up forests outside the village boundary. There are many factors responsible for this trend in forest protection in India which include, extent of Government control over forests, proximity of the resource to the habitation, traditional and historical access and user rights, etc. In most of the cases examined, communities are either protecting forests that are within habitation boundary or coterminous with it, or they have extended the protection arrangement to distant forest areas, mostly Reserved Forests and Protected Forests, having initially started protection of the within boundary or adjacent forest areas. It definitely adds up to the confidence of the forest community and leads to spontaneous protection if the forest is within the physical boundary of the habitation / user unit.

Since most cases have followed this trend, it is perhaps useful to examine a few reasons behind this. Analysis of case studies shows that physical resources within the administrative boundary, including forests, are noted in the Record of Rights (RoR) of the habitation. This in itself establishes a clear set of rights of the members of the habitation over such resources including clear tenure in favour of the members. Further, administrative boundaries as well as the resources within it have got a typical and spontaneous recognition by the Government and the neighborhood.

#### **4. LOCAL INSTITUTION**

*Members of the user unit have rights to craft their own local institution.*

A strong local institution is one of the very essential basis for clear tenurial security. It acts as an instrument which binds both the resource as well as the people together. A tangible forest resource and a properly defined user unit can be operationally linked through an appropriate local institution. The local institution takes care of the management needs of the forest

through appropriate silvicultural measures, maintains its ecological health on a perpetual basis and brings in necessary social regulations to regulate excess interference in the forest. Similarly, the institution provides a platform to the members of the user unit to come together to exercise their rights as a collective / community rather than individuals. It formulates norms and rules to regulate the behaviour of the members so that the management of the forest resources is based on concurrence and consensus. Presence of a strong local institution makes the user unit tangible.

For security of tenure it is desirable that the forests are placed under the management control of the local institution and it be authorized to exercise and regulate the tenurial rights assigned to a particular user unit. In the absence of such an institution, formation of a local institution of the members of the user unit remains a pre-determinant factor in the assignment of forest tenure. While tenure would form a set of rights concerning forest management and use, the institution deals with setting in mechanisms to operationalize such rights. The local institution regulates the tenurial rights and saves them from becoming a static onetime imposition.

Community forestry in India has often raised questions regarding the level, nature and the type of local institutions that could be assigned with forest management and control. The principle that is crucial in the formation of the local institution is that the user unit and the unit of the local institution should be mutually inclusive. Experiences in community forestry in India have shown that the unit of local institution could be at varying levels. The current forest management groups are formed at the level of hamlet, village, habitation, Panchayat, cluster of hamlets/habitations/villages depending upon various historical, socio-economic relationship and geographical and strategic factors. The local institution remains most successful as long as it is not rigidly closed to the diversity of users that may form part of it. In contrast, most JFM resolutions in India have confined the level of forest management institutions to revenue village as a unit leading to complicated boundary claims.

The local institution needs to be based on the principle of inclusion rather than exclusion. The nature of organization is democratic and based on de facto membership wherein all adults in the user unit are automatically members in the institution. Such an institution also needs to take care of the traditional and historical users dependent on the same forest resource. It is desirable that the local institution is formed purely on the basis of membership and does not entertain any outside representation such as creation of ex-officio posts or departmental membership, etc. Similar observations have been made in the government sponsored JFM programme which makes a forest department staff the ex-officio secretary of the forest management institution. The results are quite obvious as people stop identifying with the institution and, instead continue with their traditional village institution. Many Indian JFM villages have established parallel institutions as an alternative to JFM institutions.

## **5. INDEPENDENT RULE MAKING SYSTEM**

*Members of the user unit and the local institution have rights to participate in rule making to govern themselves, the forest resources as well as the outsiders. Members are also responsible for modification and enforcement of the rules.*

Simply closing the boundaries is not enough. It is still possible for a limited number of appropriators to increase the quantity of resource units they harvest so that they either dissipate all potential rents or totally destroy the resource (Clark 1980). Consequently, in

addition to closing the boundaries, some rules limiting appropriation and/or mandating provision is needed. (Ostrum 1990)

Clear tenure should entail a choice of rules and norms by the members of the local institution for protection, management and use of the forest resource. In a system of forest management by user units and their institutions forests are often looked upon as local resources which are managed primarily for need fulfillment, while the larger ecological benefits result automatically. Local forest management systems operate in a diversity of contexts which may differ from one user unit to the other. In other words, even though there could be broad similarities, each user unit functions in its own specific context within which they craft the local forest management institution and the governance rules. In the CFM villages of Orissa that are located in fairly close proximity to each other, the forest and institution management rules of each village differ substantially. Crafting rules to apportion benefits and costs has to take into account many of the unique features of each system (Ostrum 1992). A secure tenure system should facilitate the rule making mechanisms at the local institution level without any outside encumbrance. But if external government officials presume that only they have the authority to set the rules, then it will be very difficult for local appropriators to sustain a rule-governed CPR over the long run (Ostrum 1990). Tenurial security would mean establishment of an independent rule making system at the level of the local institution.

In an independent rule making system every member of the local institution has rights to participate in rule making to govern oneself, govern the forest resource, the fellow members and the outsiders. The local rule making system would function both at the collective choice and the operational choice level. CFM villages in Orissa, Van Panchayats in the Kumaon hills of Uttaranchal, the Sacred Groves institutions in Maharashtra, Mundari Khuntkati villages in Chotanagpur region have evolved systems of documenting local rules governing the resource. Villages in Dhenkanal and Angul region of Orissa have developed specific byelaws as a system of recording rules governing forest management. The byelaws state the broad principles of management and other specific rules which are subject to revision and amendment by members.

It has already been discussed that in an independent rule making system there is genuine possibility of the institutional as well as the forest management rules and norms being framed in the right context after adequate examination of the local circumstances. The process of rule making would encompass village, resource and people reality. This fact is reflected in the practices followed by villages involved in forest management. Forest communities in western Orissa intensify protection measures during summer months in order to prevent incidents of forest fire while communities in the coastal belt impose a total ban on entry into the forest during the same period. The decisions are taken based on the availability of human power, distance of forest from village, type of species etc. Certain communities have rules allowing free grazing in the forest throughout the year while the practice of seasonal grazing, i.e., restrictions during rainy season to facilitate regeneration, is allowed in other communities. Villages in Tangi-Ranpur region undertake forest cleaning operations twice a year, i.e., before rainy seasons and after harvesting of paddy, to meet fuelwood requirements during rains and for parboiling respectively. This diversity in community practices is governed by village level rules. In contrast, government rules governing plantation forests have put in standardized practices of management.

Every member of the local institution contributes to the rule making process. Since framing of rules follow a dialectical process it would allow the rules and norms to evolve rather than

getting rigidly fixed or externally ordained. The members have also rights to change or modify rules framed by them. Communities who start with protection of degraded forests impose a total ban on entry into the forest during the initial years. However, with sufficient regeneration after a few years the members modify the existing rules and bring in a new set of access and use rules. Dhani villages started protection in 1987 with a set of strict rules prohibiting entry into the forest, but “owing to growing resentment especially by the forest dependant sections against the continuation of the same rules, the committee realized the need to allow regulated product flow from the forest by framing rules pertaining to access and use (Singh and Nayak 2002). Most individuals affected by the operational rules can participate in modifying the operational rules. CPR institutions that use this principle are better able to tailor their rules to local circumstances, because the individuals who directly interact with one another and with the physical world can modify the rules over time so as to better fit them to the specific characteristics of their setting (Ostrum 1990).

**Levels of rules in a local forest management institution**

<b>Rules pertaining to management of institution</b>	<b>Rules pertaining to protection and Management</b>	<b>Rules pertaining to access and use 1991</b>
Ten member Executive Committee to supervise forest protection (1987)	Strong actions against any members engaging in destruction of the forest. Excess cases to be referred to FD for forest case.	Annual cleaning and thinning operations before rainy season to ensure steady supply of fuelwood to the villagers. In cleaning operations, felling of green trees for fuelwood is not allowed. Only shrubs of miscellaneous species and dead/fallen trees and branches are allowed to be extracted. The cleaning material is to be shared equally among all the households of the five villages.
Annual accounts of institution to be placed before the General Assembly. (1987)	No body is allowed into forest with axes or any sharp implement.	The members as well as the neighbouring villages are allowed to collect dry and fallen twigs and branches, leaves, fruits, climbers, berries, tubers, etc. free of cost. For this they are not required to obtain permission from the committee.
A 8 member Advisory Committee to guide the Executive Committee (1992)	All the members to support the Watch person whenever required	The forest dependents such as the tribals and Harijans are allowed to collect dry fallen, twigs and branches and leaves for selling. They are also allowed to collect fuelwood for sale to earn their livelihood.
14 member Executive Committee to meet every fortnight (1993)	The watch person shall report to the Secretary before going on for patrolling.	The members can take poles for house construction with permission from the committee. They would have to pay a nominal price fixed by the committee for this purpose.
Three consecutive absents by any member amounts to dismissal (1993)	If a Watcher takes any bribe then he shall lose his job as well as the last salary.	The members are also allowed to take 100 bamboo at Rs 30/- for their own needs. However, bamboo thus obtained cannot be sold or bartered outside.
Rs 5 fine for members leaving the meeting before it ends (1993)	Any produce, which is found within the boundary of the protected area, shall be kept under the custody of the Committee till the members take a decision on that.	The members have right to take wood for cremation
Rs 1 fine for members who do not attend a meeting without prior information (1993)	Forest produce for bonafide needs could be taken from the forest after taking permission of the committee.	
An Audit Committee to audit the accounts of the institution (1994)	Grazing is not allowed in the forest during the rainy season (July- September) to facilitate regeneration.	

<p>21 member Executive Committee with women members (1995)</p> <p>A Squad Party to keep vigil on poaching of wild animals in the protected forest (1995)</p>	<p>People are restricted to enter into forest during summer (March – June) as a precaution against fire.</p> <p>Hunting is prohibited in the forest.</p>	<p>purpose free of cost and without any prior permission of the committee.</p> <p>The neighbouring villages (non-members) can get bamboo and timber from the forest with permission of the committee and paying an amount fixed for the purpose. Special concession is made when the material is to be used for community festivals, if that village does not have forest and in case of need for house repairing after instances of fire or natural calamities.</p>
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*Source: Singh and Nayak, 1999*



Independent rule making would also include enforcement of the rules by the local institution and its members. This also means ruling out of any external enforcement. The presence of effective operational rules, however, does not account for users following them. Nor does the fact that the users themselves designed and initially agreed to the operational rules adequately explain generations of compliance by individuals who were not originally involved in the initial agreement; this is not even an adequate explanation for the continued commitment of those who were part of the initial agreement. Agreeing to follow rules *ex ante* is an easy commitment to make. Actually following rules *ex post*, when strong temptations not to do so are present, is the significant accomplishment (Ostrum 1992). In such situations, the chances of success are higher if the internal mechanism of rule enforcement by the user institution is active as compared to external rule making or enforcement. Thus, external enforcement cannot be used to explain high levels of compliance. (Ostrum 1990)

## **6. NO FORCEFUL SHARING OF FOREST BENEFITS**

*Benefits occurring from the defined forest area must be placed at the disposal of the members of the user unit.*

The growing intensity of community-based forest management in India is primarily due to large-scale degradation of forests and the resultant scarcity of the forest-based resources required by the user communities. Many communities have reported that they had to start visiting far off forest areas, about 10-12 miles in many cases, to be able to gather basic forest produces for agricultural implements, house repair and construction, food items and wood for fuel once their nearby forests were degraded. More than the hardship, it brought them harassment by the forest department and they had to bribe the local FD staff to get out of that situation. Their repeated visits to certain distant forest areas created apprehensions in the minds of the local communities that these groups may develop a new user relationship with their forests upon which they are primarily dependent and this developing user relation may not be completely refuted in future. So they opposed these visits by the distant communities and restricted their forests from getting accessed by them. There was perhaps nothing left to turn to except for those degraded forest patches, fortunately with some rootstocks. In situations where the villagers did not even have wood to cremate their dead relatives, hundreds of communities gradually started looking back into those degraded patches and initiated protection for need fulfillment.

While need fulfillment remains a significant motivation for communities to self-initiate protection of adjoining forests, any arrangement that does not adequately address this is bound to fail miserably. The State sponsored Joint Forest Management programme has received a major set back in India because it aimed at taking out greater portions of the benefits from the forest areas placed under community protection. Forest communities in India see this as a system of “share cropping” wherein a significant share of the produce goes to the owner of the land, the forest department in this case. This is perceived as a threat to tenurial security and would remain so as long as the attitude and practice of “share cropping” continues in managing India’s forests.

It has been noticed that local arrangements of sharing forest benefits are possible at intra as well as inter community levels. Studies have shown that five villages near Dhani forests of Orissa have evolved specific rules which allow outsiders to derive certain forest produces from its protected forest. It is a general practice across forest managing communities in the country to allow free wood and other forest products to outside villages during natural calamities, village fire, death and religious functions. Many of these community-based forest

management systems have evolved into a state of maturity where their mechanisms of benefit sharing include certain concerns for neighbouring communities. While this is a positive trend, any move towards ensuring community tenure over forests needs to discount apportionment of benefits by the Government. Secure tenure would mean user rights to avail cent percent benefits accruing from the forest under their management and control. Decision regarding any sharing of forest benefits is a prerogative of the members of the user unit and the local institution.

## **7. MONITORING AND SANCTION**

*Users who make and enforce rules must have rights to monitor the processes of resource growth, evolution of the institution and behaviour of the members by bringing in necessary sanctions for regulation.*

We have already discussed that the users frame rules to govern the local institution and the forest resource. It has also been discussed how the users themselves participate in rule enforcement. In a rule-governed forest management system monitoring and sanctions are important tools that help ensure a right balance between the rules and their enforcement. They act as mechanisms to judge the resource condition and regulate the behaviour of the members to reduce the risk of further degradation of the forest. A balanced monitoring mechanism could examine the actual potential of the forest as against the needs of the members and regulate the flow of produce in a manner that it neither affects the health of the forest nor the genuine needs of the users. In a system of secure forest tenure the users themselves undertake monitoring and sanctioning and intervention by external authorities is considered detrimental to the process.

Monitoring and sanction mechanisms help maintain the complementarity between the growth of the resource and evolution of the user institution. In the community managed forests of India this complementary relation between the forest resource and the local institution is often visible from the day one of protection. Most communities initiate protection of forest at a stage when the condition of the resource is highly degraded and the needs of the people are at its highest too. While one would tend to conclude that it is not a congenial environment to craft an user institution around a resource which is highly degraded, a close look at the circumstances which led to the origin of community-based forest management in India disapproves this. It is evident from the examination of a number of CFM cases that the forest management institutions use the degraded forest resources as their base of origin. In the initial few years when the forest is still degraded and in a state of regenerating, it is the community monitoring and sanction rules which achieve strict protection of forests by controlling the need seeking behaviour of the members as well as the outsiders. The diagram shows that while the nature and focus of rules change at every stage of resource growth, the monitoring and sanction rules maintain continuity through all such stages and are instrumental in shaping the user institution.

<p><b>Stage 5</b></p> <p>Established forest with good crown cover and return of biodiversity</p>	<ul style="list-style-type: none"> <li>▪ Forest management rules</li> <li>▪ Rules pertaining to access and use</li> <li>▪ Conflict management rules</li> <li>▪ Boundary rules</li> <li>▪ Monitoring and sanction rules</li> </ul>
<p><b>Stage 4</b></p> <p>Establishment of species and good resource condition</p>	<ul style="list-style-type: none"> <li>▪ Forest management rules</li> <li>▪ Rules pertaining to access and use</li> <li>▪ Conflict management rules</li> <li>▪ Monitoring and sanction rules</li> </ul>
<p><b>Stage 3</b></p> <p>Stabilization of degradation and establishment of ground cover</p>	<ul style="list-style-type: none"> <li>▪ Forest management rules</li> <li>▪ Protection rules</li> <li>▪ Monitoring and sanction rules</li> </ul>
<p><b>Stage 2</b></p> <p>Regenerating</p>	<ul style="list-style-type: none"> <li>▪ Protection rules</li> <li>▪ Monitoring and sanction rules</li> </ul>
<p><b>Stage 1</b></p> <p>Highly degraded</p>	<ul style="list-style-type: none"> <li>▪ Boundary rules</li> <li>▪ Protection rules</li> <li>▪ Monitoring and sanction rules</li> </ul>
<p><b>RESOURCE CONDITION</b></p>	<p><b>EVOLUTION OF USER INSTITUTION</b></p>
<p align="center"><b>Community Monitoring and Sanction Mechanisms at Different Stages of Resource Growth and Evolution of User Institution</b></p>	

## 8. CONFLICT MANAGEMENT

*Users must have access to evolve mechanisms to resolve differences among themselves as well as with other user units and the government.*

A certain degree of conflict is inevitable in any forest management system. Conflicts as part of the process of social change could be seen as a positive element so long as it does not completely disintegrate the institutional arrangement and become a factor for resource destruction. Conflict situations provide an opportunity for change, but are also a threat to the existing management arrangement. Sustainability of community institutions and the resource management system depend to a large extent on the resilience and capacities to deal with conflicts as well as their ability to adapt to the post-conflict situation (Nayak and Singh 2002).

While conflicts threaten to break down institutions and arrangements relating to resource management, they also provide an opportunity for improving management systems and overcoming the problems that led to these conflicts. For e.g., in the case of Kulasara and Kesiyapalli villages the collective forest protection by seven villages broke down after a

conflict and independent protection by two villages jointly was initiated. Thus, in most cases new institutions are evolved to cope with the situation during post conflict period.

Conflict management mechanisms are embedded in the structural as well as normative arrangements of the user institutions. Although the presence of conflict-resolution mechanisms does not guarantee that appropriators will be able to maintain enduring institutions, it is difficult to imagine how any complex system of rules could be maintained over time without such mechanisms (Ostrum 1990). Dhani villages in Orissa have created layers of structures within the user institution to allow any conflicting issue to pass through a series of negotiations without resulting in an open conflict. Though the sequence may vary depending upon the intensity of the conflict, Dhani villagers bring their forest related conflicts to one or more of these smaller institutions, such as, executive council, general council, advisory committee, special committees, squad party, etc. Within such elaborate system of conflict management and carefully crafted regulatory norms, community forestry establishes a strong foundation for the users to acquire and exercise a clear set of tenurial rights over forests under protection.

If individuals are going to follow rules over a long period of time, there must be some mechanism for discussing and resolving what constitutes an infraction (Ostrum 1990). With a clear and strong tenure, user units and their local institutions can play a significant role in conflict management with its orientation for bringing the protagonists to the forefront. It considers local preferences, recognizes multi-sectoral objectives, identifies the cultural context, includes indigenous knowledge and brings together the different interests through an integrated approach.

## **9. CREATING FORUMS FOR COLLABORATION**

*Users and their institutions are free to collaborate with similar institutions on issues of strategic importance.*

Establishing clear and secure forest tenure through a set of principles relating to resource boundary, user unit, local institutions and other operational mechanisms should not mean creating a closed system of forest management. The local institution of one user unit is just a small component of a larger system comprising many such defined forest areas, user institutions, governance rules and mechanisms for management and monitoring. In order to ensure that the local institution does not evolve into creating isolated islands of forest areas, the users need to open up channels of communication with similar groups. Forest user groups need to collaborate on strategic matters with each other. The level at which this collaboration happens would vary based on the immediate factor for collaboration.

Forest management groups organize forums for collaboration at different levels. First, there are several users from different habitations who, based on their historical dependence on a common forest patch, may collaborate to form one user unit. Two, a number of user units may form a second level of collaboration either because all of them are located around a larger contiguous forest area or because they are constituents of an administrative body like the Panchayat or because of certain cultural links. The second level of collaboration is basically a forum to deal with protection and boundary related issues. The approach ensures that the collaborators regulate the behavior of their respective members on behalf of other collaborators thereby reducing threats to the forest area as a whole.

<b>Level 5 State</b>	<ul style="list-style-type: none"> <li>▪ Advocate favourable policy changes</li> <li>▪ Take up issues of critical importance concerning forest management and user institution</li> </ul>
<b>Level 4 Forest Division / District</b>	<ul style="list-style-type: none"> <li>▪ Take up issues with district / divisional administration</li> <li>▪ Issues of forest management and community right</li> </ul>
<b>Level 3 Forest Range / Taluka</b>	<ul style="list-style-type: none"> <li>▪ Conflict management</li> <li>▪ Resolving issues with local FD</li> <li>▪ Other issues of common interest</li> </ul>
<b>Level 2 User Units around a common forest area or Panchayat</b>	<ul style="list-style-type: none"> <li>▪ Protection and Boundary related issues</li> <li>▪ Occasional need fulfillment</li> <li>▪ Regulating behaviour of members through peer pressure at a larger level</li> </ul>
<b>Level 1 Different Users at a User Unit</b>	<ul style="list-style-type: none"> <li>▪ To formalize their historical and traditional dependence on the common forest resource</li> <li>▪ Formation of user unit and crafting of local institution</li> </ul>
<b>LEVELS OF COLLABORATION</b>	<b>NATURE OF COLLABORATION</b>
<b>Forums of Collaboration Between Forest User Institutions</b>	

Third, interaction between the user units at a larger level, mostly based at the forest range or Taluka levels, involving collaboration on conflict resolution, pending issues with the local forest department and dealing with issues of common interest. Fourth, at a division or district level user institutions may formalize their collaboration to take up various issues with the district administration. At a fifth level, the representative of all the user units may collaborate at the state level to advocate policy changes in their favour and to deal with other issues of critical importance concerning forest management by user institutions.

By participating in several levels of forums of collaboration the users achieve greater balance in power equations amongst themselves. Monitoring becomes easy and more frequent while the cost of monitoring remains low. Increased collaboration strengthens the element of mutual respect and recognition between user units towards each other's forest area, local institution and governance rules. Members behave responsibly knowing well that any infraction on their part may expose one to these several layers of authority.

## **10. CLEAR SET OF RIGHTS**

*Users must have a clear set of rights to enable them to protect, manage and use the forest on a sustained basis.*

Secure tenure brings in long-term assurances to the forest users that the resource is available to be managed and used over generations. The projection of the assurances are generally in the form of rights which the users find crucial at different stages of their dealing with the forest resources as well as controlling the interface of the members with it. We have already discussed how user rights to 1) define a tangible forest area, 2) constitute an appropriate and acceptable user unit, 3) craft local institution, 4) independent rule making, 5) forest benefits, 6) monitor and sanction, 7) management of conflict and 8) collaborate are key elements in establishing secure forest tenure. It is not only genuine assignment of such rights to the user community which holds the key to achieving clear and secure tenure. It is equally important to see that there is enough positive environment for the users to exercise these rights. While this is one key element in the actual realization of tenurial security, its absence could be detrimental to the live processes of community forestry.

## **11. APPROPRIATE STATE LAWS ASSIGNING AND RECOGNIZING TENURIAL RIGHTS**

*Tenurial rights of the members of user unit to manage the local institution as well as the forest resource must be recognized by the State.*

Legal recognition by the State forms the crux of the whole issue of forest tenure. In the definition of forest laws in India the State is the legal owner of the forests and all of it only belongs to the State. All through the history, starting from the period of Kings and the Princely States<sup>6</sup> to the British administration and the post Independence, forest administration has remained centralized in the hands of the State. Though the Government has initiated moves to decentralize forest administration in the country, the legacy of centralized forest régime seems difficult to break. In contrast, the forest neighbouring village communities have gradually set precedence by taking de facto control of many forests in India by way of simple protection and management. We have discussed in the preceding paragraphs how forest communities in India have crafted arrangements involving specific forest areas, local institutions and governance rules. This has established a larger stake of these communities in the forests.

However, the threat remains as long as the forest administration continues to be centralized and the de facto control of forests by local communities is devoid of State recognition. The centralized approach to forest management has the potential to “upset centuries of traditional patterns of resource control and the village governance structure over resource use” (Bromley and Chapagain 1984). Elinor Ostrum has made a similar observation in her analysis of irrigation systems where she found “many water user groups organize in a de facto manner but are not recognized by the national governments as legitimate forms of organization (Ostrum 1992).

India is actually facing a reverse trend on the issue of recognition to the de facto forest management systems of communities. In the shadow of participatory forest management, centralization remains as an all pervasive force. When there is a need to legitimize the existing traditional forest management groups, the State sponsored joint forest management

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<sup>6</sup> Princely States were feudatory kingdoms which had semi-independent status during the British periods.

has become an instrument for co-option of the same groups. Over the last decade, hundreds of such local groups have been converted into JFM committees with alien structures and rules of forest management imposed on them.

To bring in a regime of secure forest tenure in favour of local communities, the State laws must create conducive environment for devolution of rights and setting in place a decentralized forest management system. This would mean changing the existing laws governing forests and enacting new legislation that recognizes community tenure over forests as the cornerstone of decentralized and sustainable forest management in India.

## **THE ISSUE OF TENURIAL SIGNIFICANCE**

Tenurial significance holds the key to devolution of forest management authority to the local communities and a truly decentralized forest administration in India. The community efforts at conservation of forest resources through deliberately crafted institutions and local rules of governance have been able to push for certain policy changes at the level of both National and State Governments. Even though such policy pronouncements do not hold absolute relevance to the current realities of community-based forest management, they have certainly added new dimensions to the entire debate on forest rights and ownership in India. Now there is a clear possibility of taking out certain positive elements from these prevalent forest policies and laws to work further on the favourable trends in the direction of significant tenurial arrangement in favour of local communities on forestland

The pace of forest regeneration is many times slower than the pace of degradation. In such circumstances, regenerating degraded forestland would mean long term planning and association of the forest managing communities with their respective forest areas. In the absence of forest-community relationships of this nature there is every possibility of forestry being looked upon as a short-term activity. The present policies concerning participatory forest management in India does not conform to this essential forest-community relationship. In this context, there is a need to take a more emphatic and long term view in assigning tenurial rights, which should be clearly reflected in the policy for forest management. It is only if this long term view is taken, “will village communities plan for, and have time enough for their village forest to build a succession of species, that yields a multitiered stand of trees, shrubs and grasses, of endemic species, and its complement of fauna and flora, that will not only meet their diverse needs, but also conserve our ecosystems, and life support systems for future generations (FES)”

While significant tenure has the potential to lead forest management to success, any insecurity concerning tenure would be deleterious to the social, institutional and ecological processes involving forest management. Social capital, comprising community confidence, mutuality, trust, institutional environment, social networks, leadership pattern, and community collectivity, remains low in uncertain situations emerging out of tenurial insecurities. This obviously leads to intra as well as inter community conflicts, thus reducing mutual respect and recognition between communities. The evolution of the resource managing local institution distorts and it acquires a temporary character. In the absence of long term assurances that the forest would be available to the village communities over longer period of time, the institution of rule making becomes a stop gap arrangement. Many community forestry groups in India have established stable protection rules while most of these groups face situations of conflict due to lack of perspective on framing rules pertaining

to access and use of forest benefits. Uncertainties in tenure also lead to building up an anti-state passion in the communities.

Significant tenure is one most essential factor that eventually steers the process of community-based forest management to success. A stable and secure tenurial system would involuntarily result in meaningfully contributing to the resource management institution, livelihoods of the resource managing community, add to their confidence by imbibing the value of conservation and maintenance, and result in ecosystem improvement. The root, however, from where it would emanate is a sense of genuine ownership of communities over the forest. An arrangement of tenure and assignment of rights over forest need to follow a more resilient and pragmatic approach with specific focus on the ground reality.

#### REFERENCES

1. Ostrom, E. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge University Press.
2. Ostrum, E. 1992. *Crafting Institutions for Self-Governing Irrigation Systems*. Institute of Contemporary Studies Press, San Francisco, California.
3. Gibson, Clark C., McKean, Margaret A., and Ostrum, E. edited 2000. *People and Forests: Communities, Institutions, and Governance*. The MIT Press, Cambridge, London.
4. Agrawal, Arun. 2000. *Small is Beautiful, but Is Larger Better? Forest-Management Institutions in the Kumaon Himalaya, India*.
5. Bruce, J. W. 1989. *Rapid Appraisal of Trees and Land Tenure*. Community Forestry Note 5. Rome: FAO.
6. Bromley, Daniel W. 1991/92. Property Rights as Authority Systems: The Role of Rules in Resource Management. *Journal of Business of Administration* 20 (1 & 2): 453-70.
7. Chambers, Robert., Saxena, N. C., and Shah, Tushaar. 1989. *To the Hands of the Poor: Water and Trees*. Oxford & IBH Publishing Co. India
8. Saxena, N. C. 1996. *The Saga of Participatory Forest Management in India*. CIFOR Special Publication, Indonesia.
9. Poffenberger, Mark. and McGean, Betsy. 1996. *Village Voices, Forest Choices: Joint Forest Management in India*. Oxford University Press, Delhi
10. Ballabh, V. and Singh, K. 1988. *Van (Forest) Panchayats in Uttar Pradesh Hills: A Critical Analysis*. Research Paper, Institute of Rural Management, Anand, India
11. Nayak, Prateep, K. and Singh, Neera, M. 1999. *Managing Conflicts in Community Forestry: Experiences from Community Forest Management in Orissa*. Ford Foundation, India. (Unpublished Report)
12. Singh, Neera, M. and Nayak, Prateep, K. 2002. *Adaptive Community Forest Management: A Case of Dhani Panch Mouza Surakshya Samity, Orissa*. Ford Foundation, India. (Unpublished Report)
13. Mohanty, Pritichhanda. 1999. *Problems in Implementation of Joint Forest Management: A comparative Study in Western and Eastern Regions of Orissa*. M.Phil thesis. Indian Institute of Forest Management, Bhopal.
14. Sarin, Madhu. 1996. *From Conflict to Collaboration: Institutional Issues in Community Management*. In Poffenberger, Mark. and McGean, Betsy. Edited *Village Voices, Forest Choices: Joint Forest Management in India*. Oxford University Press, Delhi.
15. Poffenberger, Mark. and Singh, Chhatrapati. 1996. *Communities and the State: Re-establishing the Balance in Indian Forest Policy*. In Poffenberger, Mark. and McGean, Betsy. Edited *Village Voices, Forest Choices: Joint Forest Management in India*. Oxford University Press, Delhi.

16. Nayak, Prateep, Kumar, Rao, Giri, Y and Singh, Neera, M. (1996) "Community Forest Management: A Case from Orissa - India's Emerging Experiences with Joint Forest Management", Vasundhara, Orissa, India. *A Case Study for IUCN Publication*.
17. Singh, Neera, M. and Nayak, Prateep, K. "Dhani Paanch Mouza Jungle Surakshya Samity - A case of Community Forest Management in Orissa". *A Case Study for World Resources 2000*.
18. Upadhyay, C. B. 7<sup>th</sup> Edition 1990. Forest Laws: Central and States. Hind Publishing House, Allahabad, India