

**Regenerating India's Last Common Resource  
Making the Conceptual Leap to Equitable Forest Management**

**By:**

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**Introduction:**

The recent changes in the forestry sector in India will be viewed by the Hardin school of thought as an inexorable march towards the tragedy of the commons. The essence of current changes in forest management lies in the attempted shift of control and management of forest lands from centralized forest departments to decentralized people's institutions; from **res publica** to **res communes**. It consists of a hitherto inconceivable partnership between co-equal users of forests in the form of an identifiable community and the custodians of forest lands i.e. the forest departments. Equity amongst users and between the users and the custodians is one cardinal principle of the new arrangement while a peoples institution to operationalize this arrangement is the other essential condition. The new management system is known by various terms, the most popular being the Joint Forest Management or JFM in short. The peoples institutions are known as Forest Protection Committees or FPCs. It will be naive to believe that this new policy shift represents a complete conversion of forest lands into a common property resource (CPR), but the signs are unmistakable. There is however no dearth of doomsday predictions of destruction of forests by Hardiners who have an abiding suspicion of the ability of the community to organize itself at the expense of individual greed for community benefit. There will be criticism from the current western thinkers also, for whom 'equity' is considered only a theoretical construct for ideological arguments but never accepted as a principle for organizing communities to manage their natural resources.

**Context:**

Historically, the colonial usurpation of people's rights and its conversion into doubtful concessions led to a series of protest movements all over India. 'Having disrupted traditional

forms of resource utilization, scientific forestry had to contend with the simmering, occasionally breaking out into open revolt, that accompanied the takeover of the Himalayan forests. In the event, both legislation and silvicultural technique were designed to facilitate social control. Here the evolution of colonial silviculture mirrored the history of German forestry, from which it claimed a direct lineage, where the 'development of scientific silviculture and of positivist criminology' were two sides of the same coin: one studying sustained yield and the other the endemic ('moral' as they would say) obstacles to that yield<sup>1</sup>. Most of the laws enacted during the colonial regime remained unchanged in the post-independence India. The net result was continuing alienation of humans from their forests. The increasing degradation of forests and the resultant intensification of poverty resulted in greater social tension on one hand and ecological disaster on the other. The simmering discontent (amongst foresters because of their inability to manage forests and amongst people because of the destruction of their livelihood) led to two parallel developments in the 1970s in India.

A number of concerned forest officers began to think beyond the moribund system of the forest department and realized that without peoples support it was virtually impossible to protect forests. The efforts of the foresters to elicit community support is best symbolized by the now famous Arabari experiment. In the 1970s and 1980s a few forest officials in the states of West Bengal, Gujarat, and Haryana, began to address this fundamental question. This resulted in the formation of forest protection committees of different kinds in each of the three states, beginning in Arabari in West Bengal in 1972. In each case village forest protection committees (FPCs) (or hill resource management societies, HRMSs in Haryana) were given the responsibility of protecting degraded forest land from illegal cutting, fires, over grazing, and encroachment, and in return were granted access to a range of non-timber forest products. In the Arabari case the state government sanctioned the sharing of the coppice pole wood harvest in regenerated sal, Shorea robusta forests, giving 25 % of the net returns to the village protection committees involved<sup>2</sup>. In Haryana, following the successful experiment in Sukhomajri village, hill resource societies were formed around earthen dams made to store rainwater for irrigation and realized the need to protect the once forested watersheds. Following contour planting of khair, Acacia catechu, trees and grasses including bhabbar Eulaliopsis binata, villagers were granted first option to take out a lease of this grass which is used for rope making and as pulp for paper

intelligent management of  
artisanships

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mills. In some villages regrowth was rapid enough to allow them to take leases and generate income within the first year<sup>3</sup>.

Concurrently forest protection movements developed within forest dependant communities in a number of regions including the famous Chipko movement in the Uttarakhand/Himalayas, and hundreds of tribal forest protection committees of various kinds emerged spontaneously in parts of the states of Bihar and Orissa. These committees formed in different ways in response to increasing shortages of essential forest products. Similarly in a number of places in India village communities started protecting their forests to ward of a total destruction of the valuable resource. There is recorded evidence of these developments from South Bihar, Orissa and Karnataka.

### The Beginnings of Change:

While the JFM represents the first clear movement towards this conceptual change, the decade of social forestry also helped to prepare the ground in many ways. Social forestry programs were aimed at relieving the pressure of growing human and livestock populations on state forests by working with individuals and communities to create alternate sources of fuelwood, fodder and forest products on private and public "wastelands". While fraught with misconceptions in approach and implementation, the social forestry program dramatically increased the level of interaction between forest department staff and local communities. Lessons were learned about the need for real participatory planning, for community involvement and institution building from the planning stage itself. Conceptually, however social forestry rests comfortably in the framework of traditional custodial forest management as practiced by Indian forestry departments for the last century. It continues the long tradition of department initiated and department implemented management. It maintains the sanctity of forest land by shifting the focus to private lands and community common lands, whether owned by Panchayats, or the ubiquitous Revenue department. In one sense it actually extends control of the forest department out of forest lands and on to these other lands, maintaining the barricades around the home territory. JFM, on the other hand is a reversal of the practice of exclusion, it invites communities into forest department lands to share in the responsibilities and benefits of stewardship. It finally recognizes the unavoidable reality that people matter, and that without recognizing their intrinsic role, the forests cannot survive. This realization marks the beginning

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of a changing perception. The process has been initiated. For it to lead to an equitable and sustainable forest management system many steps remain.

The innovative efforts of enlightened foresters, grassroots action by communities to protect their forests and increasing interaction between foresters and people because of the social forestry programs, led to the creation of a lobby within the government at the center appropriately supported by NGOs and academicians that led to the issuance of the JFM notification by the Government of India on 1st June 1990. The notification states that:

"The National Forest Policy, 1988 envisages people's involvement in the development and protection 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 issuance of this notification can be considered as a watershed in the history of forest management in India. This is the beginning of a shift towards managing forests as a common property on an equitable basis through peoples institutions.

It is our intention in this paper to show that given the demographic characteristics and agrarian production relationships in India, the management of forest lands as a common property resource is the only appropriate management choice and in a sense inevitable. Later, we deal with various manifestations of the conceptual shift embodied in the Joint Forest Management System and the kind of challenges and opportunities it offers.

#### Dependence on CPRs:

India continues to be a predominantly agriculture based economy. Approximately 70 percent of its population directly depends on agriculture for sustenance. The composition of agriculturists consist of more than 55.5 million landless agricultural laborers and 66.19 million farm holdings (out of a total of 88.88 million) which are of a size of less than 2 hectares. The relationship of these small farmers and landless agricultural laborers with common lands needs to be understood. Mechanization of agriculture amongst small farm holders is an economically unviable proposition because of capital costs. The major source of energy for these continues to be derived from draught power provided by bullocks. Their ability to maintain a pair of

appropriate  
technology

What is the meaning of vegetative statistics?

bullocks for practicing any agriculture is solely dependent on availability of fodder from common lands. In a recent study<sup>4</sup> it was found that 62.5% of farm holdings in Andhra Pradesh were too small to provide fodder needs (in form of agriculture residue and part cultivation of fodder) for a pair of bullocks. In the Himalayas forests are an integral part of the agroecosystems, as the source of most soil nutrients cycled into agricultural fields. Recent studies in Kumaon indicate that an average of 6 hectares of forest land is needed to sustain one hectare at agricultural land in the mountain<sup>5</sup>. It is quite clear that in the absence of the cushion provided by the common lands the majority of Indian farmers will not be able to even plough their lands.

The case of landless agricultural laborers should be viewed in the context of seasonal availability of labor and hence their dependence on animal husbandry, biomass based occupations, seasonal migration and, in the case of tribal people, extraction of edible items from forests. All the above listed subsidiary occupations (except distress migration) of landless people are dependent on access to, and the health of, the common resources. It will not be an exaggeration to assert that for more than 240 million people living below the poverty line in India the common lands provide the vital life support.

#### Forests: the Last Resort of the Poor:

We have used the term 'common lands' and 'forests' interchangeably. The material reality of common lands in India will show that the interchangeability of these terms is quite justified. The following table shows the extent of area under various types of common lands and their per capita availability for two different periods;

TYPE OF COMMON LAND	1970-71		1987-88	
	area	per capita	area	per capita
Forests	63917000 ha.	0.0117	66858000 ha.	0.078
PPG*	13262000 ha.	0.024	11848000 ha.	0.014
CW**	17500000 ha.	0.032	15626000 ha.	0.018

\* Permanent Pasture and Grazing Lands

## \*\* Culturable Waste

While the trend in per capita availability of common lands shows a decline in all the three categories of lands because of increasing population, it should be noted that except forest land, the absolute area under the other two categories has also declined. Legally 'culturable wastes' owned by the revenue departments are assignable for cultivation. In any case even those which have not yet been assigned have already been encroached (not necessarily by those who need it most). The survival of this land category as a common resource is doubtful. The Permanent Pasture and Grazing Lands, the traditional commons, controlled by village Panchayats also show a similar trend. By enactment of various laws most of the state governments have acquired powers to assign these lands. It also explains the reduction in area under this category of common lands. Forest lands have also been diverted for various purposes and have also been encroached upon. But mainly due to the passage of the Forest conservation Act of 1980 a further significant reduction in their area is unlikely. The forests therefore remain the last hope of the poor in India, considering their dependence on CPR as explained in the previous section.

## JFM: Towards an Equitable Forest Management System:

Having established the relevance of CPRs for the poorer sections of the population and the fact that the forests are the last worthwhile common lands that hold a ray of hope for them, we now attempt to show that the JFM is a good beginning to fulfill that hope. A perusal of the Central Government notification and the subsequent orders issued by the various state governments shows that the JFM concept essentially consists of:

- introduction*
- Right of community to forest usufructs while the forest department remains the custodian of land.
  - Right to usufruct entails the responsibility of protection of forests by community
  - User group formations in the form of Forest Protection Committees who are entrusted with the job of managing the rights and responsibilities according to a set of rules.
  - Amongst the FPC members the sharing of usufructs is equal
  - All FPCs have a forest department representative on the management committee
- ad obligation*

The initiative for setting up an FPC can be taken by the community or the forest department or an NGO. Organizing communities as an institution to manage a common resource

is thus a key feature of the new program of Joint Forest Management. The fact that equitable sharing of usufructs amongst the FPC members is embodied in most government orders on JFM is yet another key feature, which if properly implemented will ensure the interests of the poor and thereby the sustainability of the resource. Ensuring an effective implementation of the concept is a task which provides a number of opportunities and challenges.

### **Challenges and Implications of Joint Forest Management:**

Exciting beginnings have been made in joint forest management. Eleven states have now officially institutionalized JFM through government orders. Local forest protection committees are proliferating, some spontaneously and others with the encouragement and assistance of forest department field staff and NGOs. The map in Figure 1 illustrates the eleven states where JFM regulations are in place and gives a rough count of the number of village level forest protection committees in operation. Unofficial estimates of the total area of forest lands currently under community protection put this at around 1.5 million hectares<sup>6</sup>.

Each state forest department and local forest protection committee is approaching the experiment in different ways. There are however a number of common elements which, together form a loose pattern linking policy, training, field implementation and research.

At the forest department level these elements include: state orders, and regulations, state working groups, training programs, forest protection committee registration procedures, management planning, monitoring and assisting committees, sharing of benefits, and research into ecological and economic issues. NGO groups are taking an active role in documentation, training, research and community level organizing and facilitation.

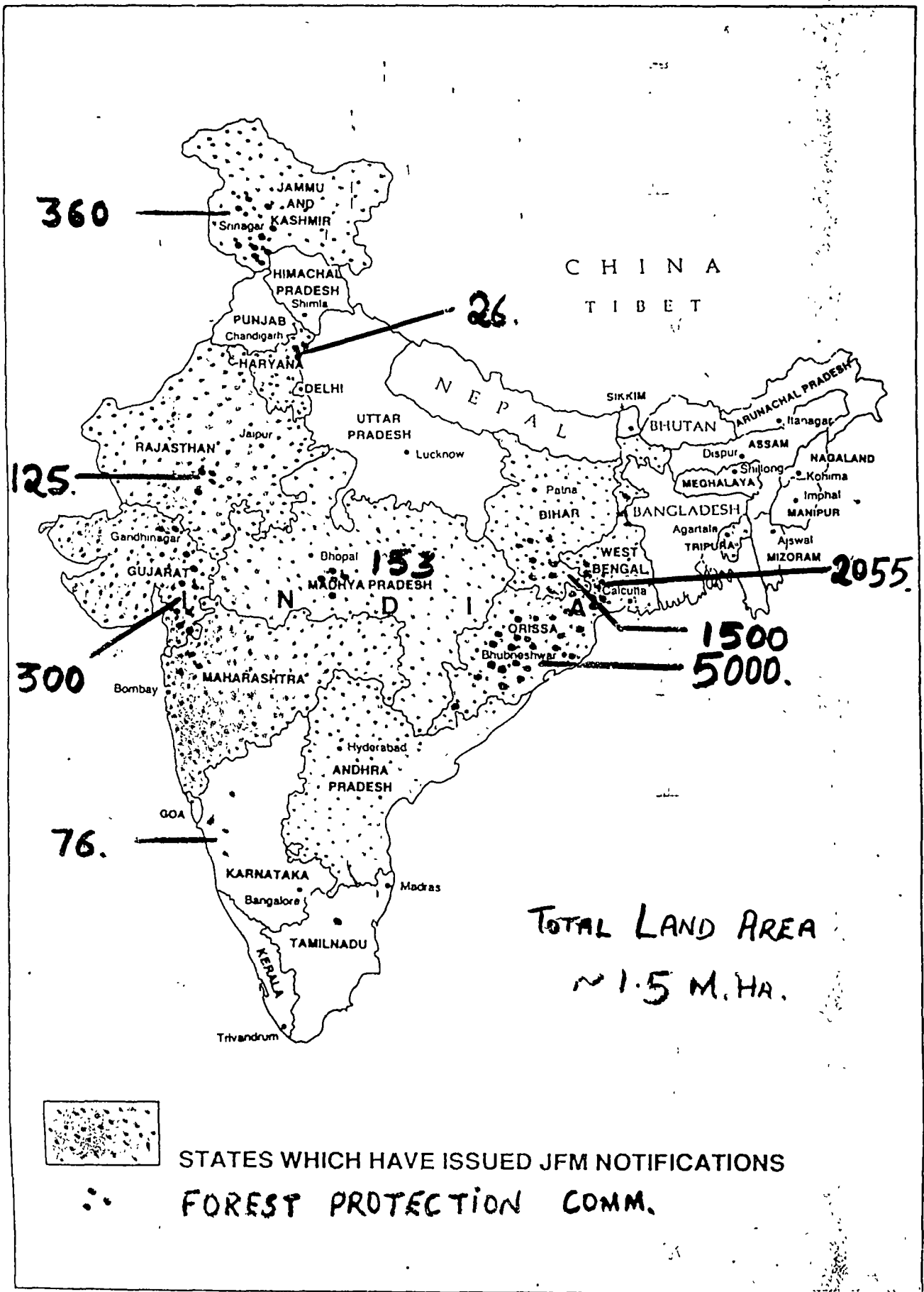
For forest protection committees themselves, important issues include planning and coordinating protection, adopting and implementing regulations for community collection and allocation of fuelwood, non timber forest products, and grazing access, labor for forestry activities, sharing of proceeds from timber or polewood harvests, and managing inter and intra village conflicts.

### **The Legal Framework:**

To achieve an equitable partnership in the management of common resources, transparent enabling legislation is an important prerequisite. Unfortunately complex layers of rights, concessions, powers and duties underly forestry law. Forestry in India is a concurrent subject,



FIGURE 1



which means that there are both national and state level laws and regulations governing its use and control. The Indian Forest Act of 1927, and separate State Forest Acts, based largely on this colonial legislation, provide the general legal basis for the custodial management that has characterized Indian forestry. Aside from the Wildlife Protection Acts, the only forestry act to have been passed since India's independence is the Forest Conservation Act of 1980 which is barely over one page in length. This act exerts central control over the transfer or allocation of forest department lands to anyone for any purpose other than forestry. A series of Government policy statements, the latest in 1988 outline the evolving government perceptions regarding forest administration and management. While providing justification for increasing people's involvement in forestry the 1988 Forest Policy lacks clear guidelines for implementation and is not backed up with new legislation.

It has already been stated that the Joint forest management by state forest departments has been given a legal basis through the national government order of June 1, 1990 (See Appendix 1 for the entire text).

Based on the broad outlines of the national order eleven states have now passed their own orders<sup>7</sup>. These orders represent a dramatic enabling mechanism for initiating systemic change in the management of forests. They are pioneering, and therefore it is not surprising they are not only quite varied but that they still do not go as far as they might in ensuring a completely equitable system of management. Several orders from West Bengal, Haryana and Orissa have been or are currently being revised, illustrating both the fluid nature of the emerging JFM process and the flexibility and willingness to incorporate learning in these state forest departments. The state orders differ significantly from each other in terms of the size of the area, tenurial security, benefit sharing, the nature of village level management institutions, the role of communities in planning and management, the powers and composition of smaller executive committees, and the role of women.

The resolutions clearly state that user groups will have usufruct rights but clearly note that land is not to be allocated or leased. Furthermore some states specify a certain maximum area (fifty hectares in Rajasthan) to be allocated at the initial stage of committee formation. This may unnecessarily restrict the need for flexible site specific boundaries.

In most resolutions the period of tenure for usufruct rights is not clearly mentioned.

subsequent  
preemption

Although the national order and the West Bengal resolution both indicate that joint forest management agreements with participating communities should be made for a ten year period with the option to renew. This takes on significance because state forest departments are currently undertaking JFM programs almost exclusively on degraded forest lands, and the strongest incentive for the departments is the regeneration of productive forests. Whether JFM will be continued once forests attain a higher level of productivity or started in forests which are still relatively productive remains a tender question. Community groups will be less likely to feel secure in their commitment without a clear time frame, which should at the very least correspond with the first rotation of the major timber products. Given the long term nature of forest succession and growth, and the implicit objectives of community empowerment, none of the orders completes the necessary conceptual shift to tenurial security.

The state resolutions differ in terms of the percentage share of timber products to be distributed to the community, although almost all provide for full access to non timber forest products. Some states allocate timber for subsistence use only (Orissa) or specify how income earned from revenue sharing must be invested (Bihar). Gujarat provides for a larger share of timber products to communities who raise their own funds for enrichment planting and afforestation work. Almost all the orders promise a percentage of net earnings, without specifying how and what costs will be deducted from gross earnings first. Already Haryana has decided to shift to the simpler and more equitable concept of a share of gross income. It is implicit in the orders that the harvesting and sale of major products will be controlled by the forest department. In general there is a lack of clarity regarding the relationship of community managers to the market.

The village level institution and the area to be taken as the management unit also varies from state to state. In Haryana and Rajasthan forest protection committees are to register under the Indian Societies Act, while in Orissa the panchayat (lowest elected council, usually consisting of a cluster of small hamlets or in some cases several villages) is the preferred organization to take over forest protection and management. In West Bengal, forest protection committees are simply registered with the forest department. Gujarat currently allows a variety of village level organizations including tree farmers cooperatives to participate. There is a lively legal and ethical debate over these distinctions. One school of thought favors the

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Optimal size for decentralized democratic institutions.

panchayat as the smallest democratically elective representative body to be the legal, democratic institution which should be empowered with JFM. Doubters are concerned that panchayats often consist of a cluster of larger villages while resource management decisions are often made at the level of small hamlets or user groups. Vested political interests often dominate panchayats, which in many states have not had elections for many years, and these may end up controlling FPCs. These questions raise larger issues of the optimal size for decentralized democratic institutions. Many NGO representatives favor smaller hamlet based committees and registration as a society or a cooperative to give them some independence from the control of the forest department as well as potential vested interests. There is general concern that different communities, and women be equitably involved in the process. Several of the state resolutions have been amended to ensure that all households, and both men and women participate in the forest protection committees.

Another area in which state orders limit the conceptual transformation is in the specific instructions regarding the constitution of executive committees. People's representation on executive committees varies from 3 to 11, with most of them under 6, whereas almost all of them include a panchayat representative, and often the revenue inspector, and other village level government functionaries. This raises questions about whether these village level committees are functionally independent of the existing power structure.

There is a lack of clarity in the possible roles community forest management groups would play in terms of protection and conservation, enhancing natural regeneration, or implementing intensive plantation planting. While roles may vary across areas, depending on forest condition and local interests, these options carry with them different labor and management demands with corresponding legal implications which need to be examined separately. Women who are the major users and de facto managers of forest resources are only mentioned in terms of their representation on committees and executive committees. The extent to which legal rather than social changes can actually change the nature of women's participation public decision making remains an important area for further discussion.

The powers of FPCs are not always clearly outlined. A comparison of the six states which do specify the powers of the forest department and the forest protection committee is also instructive. In a majority of states the F.D. can cancel membership or dissolve the FPC. Only

*equality of use*

two out of six states empower FPCs to impose fines, levy punishment and cancel membership. In fact, in only two out of six are FPCs allowed to make their own rule. How equal is the partnership under such restrictions? The shift is incomplete. Table 1 compares 10 of these state orders.

#### **Institutional Attitudes:**

Joint forest management requires a fundamental change of attitude within tradition bound forest department officers and field staff, in normally suspicious NGO groups, and in communities who have been suppressed and marginalized from the decision making process. There are also a whole new set of operating procedures which have to be learned at each level. In order to change attitudes and introduce new concepts and procedures, training and orientation are essential elements of joint forest management. A February 1992 meeting of JFM trainers from the forest departments and NGO groups around the country showed that training, at least of forest department staff, has begun in earnest in several states; that there are a number of effective training methods which seem to help in effecting attitudinal change; that training is an essential first step in the consolidation of a JFM program. Attitudinal change towards working with communities also requires attitudinal change within the forest department's hierarchical semi-military style of functioning. Until senior officer's learn to listen to their juniors they will not be able to listen to villagers.

Along with attitudinal change in forest departments, another element of their training programs consists of methods of identifying and working with community groups, the use of Participatory Rural Appraisal Techniques, and the fundamentals of micro-planning, and technical training in new areas related to non timber forest products. While these efforts are effective at the micro level, the Indira Gandhi National Forest Academy and the Rangers Colleges in a number of states which are responsible for the education and training of the Indian Forest Service, continue to teach a curriculum that has changed little in the last 100 years. Until these institutions modify their curriculum to incorporate the social skills and the changing silvicultural and administrative concepts evolving, new forest officers will continue to have to be re-trained for joint forest management.

So far training has focused on the forest department. The next and arguably more important phase of training must address the practical needs of community forest protection

*indigenous forester*

## SALIENT FEATURES OF JFM RESOLUTIONS

	Orissa	West Bengal	Bihar	Gujarat	Rajasthan	Madhya Pradesh	Tripura	Maharashtra	J & K	Haryana
Date of issue of resolution	14.12.88	12.7.89	8.11.90	13.3.91	16.3.91	10.12.91	20.12.91	16.3.92	19.3.92	
Forest category	Reserve forest	Degraded forest	Degraded (protected) Forest	Degraded forest	Degraded forest	Sensitive to damage and Degraded forest	Degraded forest	Degraded and barren forest and similar rural lands	Degraded forest	
Participants	Adjoining villagers	Economically backward people	1 person from each family	Persons interested in forest development	Willing villagers	Willing villagers	Families with at least one wage earner	Panchayat & FPC consisting of all villagers	1 person from each family of adjoining villages	
Management unit	One forest compartment	Forest Beat	Village	Village	Max 50 ha 1 vill if possible	1 village	Natural reg. 500 ha.; Plantation 300 ha.	Not defined	Not defined	
Executive Committee										
People's representative	3 or less	6 or less	Dependent on forest	Min. 2 women, any other	—	5 or more	5 or less	6 (two women & 2 SC/ST)	11 (two women & 2 SC/ST)	
F.D. Representative	Forester	Beat Officer	Vanpal	—	According to State Govt rules	Rangers	Beat Officer	Forester	Ranger	
Others	Sarpanch, ward member, rev inspector, VLW	BSS* & Panchayat representative	Mukhya, teacher, Sarpanch, pradhan, VAs	Rep of VA/financial institution	—	Kotwar, teacher, Chief, Panchayat, Anlyodaya Committee	—	Sarpanch, Gramsevak Two nominees of VAs	—	
Power of committee										
Punish/mo	—	—	Yes	—	—	No	No	No	No	Yes
Cancel membership	—	—	Yes	—	—	No	No	No	Yes	—
Set rules	—	—	Yes	—	—	No	No	No	No	Yes
Distribute benefits	Yes	No	Yes	—	—	Yes	No	No	Yes	Yes
Power of F.D.										
Cancel membership	—	Yes	—	Yes	—	Yes	Yes	Yes	Yes	—
Dissolve F.P.C.	—	Yes	—	Yes	Issue notice before cancellation	Yes	Yes	Yes	Yes	—
Share of Members										
A. MFP, F.W etc.		Cashew: 25%, Sal seed, kendu leaves on approved tariff, rest free	Dry branches, grass, leaves free, Other produce available at market price	Dry branches and MFP free of cost	Grass & fodder (after 5 years) free MFP (except bamboo) collection according to provisions of mgt. plan	All forest produce & 30% of net income from nationalised MFP	All free of cost-	All MFP except cashew & tendu free of cost	All forest produce	
B Timber	All bonafide needs of timber and fuelwood met free of cost	25% of net income except in certain areas	1/3 share of income deposited as village development fund	If state financed, 25% Otherwise: 80%	60% of net income after deducting all govt expenditure	Entire quantity 30% of net rev, 20% for damage sensitive area	All bonafide needs met & 50% of net surplus revenue	Different methods of distribution in different areas such as block plantation scheme area, nistar area etc.	25% of net revenue from final harvest in cash/kind	to HRMS**, other income to be shared with HRMS

\* BSS, Bon-O-Bhumi Sanskar Sahayee Samiti

\*\* Hill Resource Management Society

committees. These needs may vary from learning simple accounting procedures' to making accountability systems transparent, they may also require technical training programs on forest management, and income generation from the collection, processing and marketing of non-timber forest products for FPC members. However a major effort in extension and training is needed if FPC members are to effectively be empowered and get the maximum potential economic benefit from the forests they are regenerating.

#### **Institutional Strategies:**

Joint forest management is still in its nascent stage. In a few states like West Bengal and Haryana teething problems with implementation are more clear and attempts to structure the administration and management of the program are underway. The challenge that lies ahead in all states, is to expand on this small beginning, to sustain and increase the momentum of JFM programs without sacrificing the innovations and flexibility which have made early pioneers so interesting and effective. This becomes particularly important as more and more donor funding is being directed to joint forest management, which is being seen in some circles as the "next wave of social forestry". Like any experimental program JFM must somehow clarify its objectives and consolidate its implementation without closing off new institutional and management options as they emerge. JFM must make learning-from-experience central to its evolution as a viable land use option. Because it involves so many stake holders including members of local communities, forest departments, NGOs, national policy makers and academic researchers, there is an even greater need for flexibility and creativity in JFM's evolution.

Many issues remain unclear. Technical, economic, institutional, legal and managerial uncertainties underlay the exciting progress that has been made. Forest protection and management places new demands on forest departments and village organizations alike.

A number of states, including those with the longest experience with JFM have formed state level working groups to coordinate their joint forest management. These working groups are chaired by the Principle Chief Conservator of Forests and include his senior staff involved in the program, they also have NGO and academic members who are participating in documentation, research or field level implementation. Working group meetings are held periodically to monitor implementation, review issues rising from the field, discuss future program activities like training workshops, issue effective on-the-spot directives to field officers

and to brainstorm about challenges and solutions. Working groups provide a forum for the forest department to involve NGOs at the decision making level, and to make policy and course corrections in a flexible manner that is well suited to the evolving nature of joint forest management. NGOs often serve as facilitator of the working group, assisting the forest department in documenting emerging issues and in setting meeting agendas. In Haryana, a further innovation is the division level working group, in which the Divisional Forest Officer meets periodically with rangers and other field staff, and NGO representatives to review progress, fine tune the program and prepare agenda items for the state level working group. Working groups keep senior forest officials involved in the details of joint forest management programs and provide a channel for issues arising lower down the departments traditionally rigid chain of command. Good working group minutes help to provide a record of the major developments in each states program.

#### Sharing Benefits and Resolving Conflicts, Community Management Issues:

Where regenerating forests are already beginning to increase in value, conflicts are increasing between contending resource users such as adjoining villagers, migrating herders, or more distant and periodic forest users. As a more lucrative range of non-timber products begins to mature, and the sharing of timber harvests becomes regularized, questions of equity and the distribution of benefits will create new management challenges and conflict resolution skills.

With the exception of Arabari, no joint management forests have yet reached the harvesting stage, or at any rate, sharing of proceeds from major forest produce has not taken place. Even in West Bengal's Arabari sharing was held up by a court case for several years as adjacent villages claimed they should also receive a share. Furthermore, the portion to the FPCs was only 25 % of the net and costs amounted to 52 % of the gross income. Villagers are still unclear about the exact details of the sharing arrangements and many are already wondering whether their costs of protection will be balanced into the equations. Forest departments must carefully work out how the payments will be made, who will monitor the harvests and the sales and how the sharing will take place.

Special emphasis will need to be made to ensure that women and disadvantaged communities have an equitable role in management and decision making. Several states have amended their regulations to ensure greater participation by women, but a great deal more needs

How is harvest occur



to be done. Surprisingly there are cases of all-women's forest protection committees, including one unusual case in Bihar where men have given up and handed the management over to women, in a Muslim village<sup>8</sup>. However much more will need to be done to ensure that the primary users of forest products are equally involved in their management.

Decision making and management will have to shift to new institutional forums, at different levels. Forest protection committee meetings, divisional and state level working group meetings will become the laboratories for an evolving process. Village institutions will have to apportion responsibilities, develop internal rules and practices, distribute benefits, and manage savings and organize marketing and processing enterprises. NGOs will have to deal with more complex intermediary roles as trainers, researchers and policy advisors in addition to community activists and facilitator.

#### **Evolving Flexible Silviculture:**

Equitable forest management calls for a transition to more complex silvicultural techniques in order to meet the diverse needs of economically stratified groups dependent on these resources. It follows that only biological diversity will meet the multiple community needs and the product flows will have to be sustainable and continuous.

Innovative silvicultural systems to maximize benefits for multiple uses, will need to evolve with the input of traditional knowledge, and increased understanding of the ecological and economic role of non timber forest products. As forest management objectives veer towards supplying the needs of local forest dependant communities, the role of non-timber forest products will increasingly dominate forest management and silvicultural decision making in many areas. Non timber forest products will play a vital role in meeting subsistence needs and providing income to forest dependant communities, especially tribals. A major study of NTFPs in West Bengal<sup>9</sup> indicates that up to 17% of tribal household economies were made up of NTFPs. In comparison to a share in polewood harvest from ten year sal coppice rotations (calculated as 25 % of Rs. 16,500 per hectare after 10 years) which works out to Rs. 412 per hectare per year before discounting, the annual returns from NTFPs from a forest after 5 year's protection, have been calculated at a mean value of Rs 2700 per hectare (US\$ 1 = Rs. 28). Furthermore NTFPs are seasonal, providing employment in periods when other labor opportunities may be scarce, are often collected and marketed by women and children, and have important cultural,

religious and aesthetic values as well.

In order to develop a better understanding of potential management prescriptions to favor different NTFP mixes, a research network to examine the ecological and economic impacts of joint forest management has been established. The network is attempting to develop rapid methodologies for assessing vegetation dynamics in different forest types and ecosystems following community protection, and for assessing value, collection pattern, processing, marketing information on NTFPs. While NTFPs are clearly more valuable in sal forests for instance, and some NTFPs like mushrooms require a closed canopy forest with dense shade, a combined silvicultural system may be able to incorporate coppicing of smaller coupes on a rotational basis, while leaving some older growth, and areas of sacred groves to protect biological diversity. Tribal FPC members have an excellent knowledge of the ecological requirements for a number of NTFPs and participatory rural appraisal techniques can effectively be used to facilitate group forest management planning and discussions<sup>10</sup>.

Already research results are pointing to different silvicultural prescriptions. For examples results of recent studies (still unpublished) of bhabbar yields on Haryana's hill resource management societies watershed forests undertaken by the Tata Energy Research Institute and the Haryana forest department have shown that yields of this important non timber forest product begin to decline after 6 years of protection. Shading from khair trees whose growth has been secured through protection, competition from invading weeds and weakening vitality of bhabbar clumps are all contributing to this decline. These results show that the traditional spacing of 1600 trees per hectare is far too close and further research will indicate a much wider spacing to maintain the bhabbar grass which is one of the major incentives for community protection and management.

This may seem like a long list of problems, but the issues are already being confronted on a daily basis by village forest protection committees, foresters and NGO workers who have taken the first step in the devolution of greater authority over forest resources to local communities.

#### **Making the Transition:**

The transition to a sustainable alternative for the management of forest resources involves a series of fundamental conceptual shifts at several levels within central and state forest

means

departments, communities dependent on forest resources, NGOs and academic institutions and the political economy at large. Taken together these changes in approach provide the rough framework of a new paradigm for the management of India's largest remaining common resources- which is part of a larger process of democratization and empowerment. Joint forest management, as one component of this transition requires a shift from centralized management to decentralized management, from a unilateral mode of decision-making to participatory, consensual decision-making processes. It reflects a dramatic change for government agencies from controlling people to facilitating people, from policing to assisting. Punitive rules need to evolve into rules for self abnegation and social control. Within the forest department priorities and objectives have to shift from a revenue orientation to a resource orientation, purely production motives will need to give way to concerns for sustainable services. Perhaps one of the most difficult transitions is the replacement of a project and target mentality with a process orientation. An assumed homogeneity of knowledge, purpose, approach, product or institution must give way to a recognition of, and search for, diversity in all of these. Working in partnership will require basic modifications in traditional channels of communications between the stake holders. In some cases different actors may have to make dramatically opposite adjustments. Forest departments will have to replace rigid, hierarchical operating procedures for flexibility and innovation. On the other hand, many communities will be required to develop a certain degree of formality in procedures and approach in place of traditionally informal systems. Government agencies in general will have to give up some authoritarian powers, which communities may inherit. Both require attitudinal change and a re-alignment of responsibility and restraint.

Joint forest management of India's degraded forest lands offers great hope for the empowerment of local communities and a new direction for India's foresters. This paper has only briefly discussed some of the issues and challenges which confront the actual implementation of these programs. A number of donor agencies are now initiating large support programs for JFM or parallel initiatives in a number of states. Care will need to be taken to ensure that JFM does not just become the next development bandwagon. JFM is process oriented and does not lend itself to becoming a target and product-oriented program. In many areas with good natural regenerative capacity, JFM is not even capital intensive, although funds

which are channeled through decentralized mechanisms to the forest protection committees themselves can enhance rural development programs as a whole and compensate for the incomes which many communities stand to lose from illegal headloading of fuelwood and other survival based forest utilization which may not be currently sustainable. At its best, JFM offers true hope for a lasting solution to deforestation, which ensures equitable participation and benefits from a national resource which also belongs to local forest communities.

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 Government of India  
 Ministry of Environment and Forests  
 Department of Environment, Forests and Wildlife  
 Paryavaran Bhavan, C.G.O. Complex, B-Block

Lodi Road, New Delhi  
 Dated: 1st June, 1990

To

The Forest Secretaries  
 (All States/UTs)

Subject: Involvement of village communities and voluntary agencies for regeneration of degraded forest lands

Sir,

The National Forest Policy, 1988 envisages people's involvement in the development and protection 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.

2. In a D.O. letter No.1/1/88-TMA dated 13th January, 1989 to the Chief Secretary of your State, the need for working out the modalities for giving to the village communities, living close to the forest land, usufructory benefits to ensure their participation in the afforestation programme, was emphasized by Shri K.P. Geethakrishnan, the then secretary (Environment and Forests).

3. Committed voluntary agencies/NGOs, with proven track record, may prove particularly well suited for motivating and organising village communities for protection, afforestation and development of degraded forest land, especially in the vicinity of habitations. The State Forest Departments/Social Forestry Organisations ought to take full advantage of their expertise and experience in this respect for building up meaningful people's participation in protection and development of degraded forest lands. The voluntary agencies/NGOs may be associated as interface between State Forest Departments and the local village communities for revivals, restoration and development of degraded forests in the manner suggested below:

- (i) The programme should be implemented under an arrangement between the Voluntary Agency/NGO, the village community (beneficiaries) and the State Forest Department.
- (ii) No ownership or lease rights over the forest land should be given to the beneficiaries or to the Voluntary Agency/NGO. Nor

should the forest land be assigned in contravention of the provisions contained in the Forest (Conservation) Act, 1980.

- (iii) The beneficiaries should be entitled to a share in usufructs to the extent and subject to the conditions prescribed by the State Government in this behalf. The Voluntary Agency/NGO should not be entitled to usufructory benefits.
- (iv) Access to forest land and usufructory benefits should be only to the beneficiaries who get organised into a village institution, specifically for forest regeneration and protection. This could be the Panchayat or the Cooperative of the village, with no restriction on membership. It could also be a Village Forest Committee. In no case should any access or tree pattas be given to individuals.
- (v) The beneficiaries should be given usufructs like grasses, lops and tops of branches, and minor forest produce. If they successfully protect the forests, they may be given a portion of the proceeds from the sale of trees when they mature. (The Government of West Bengal has issued orders to give 25% of the sale proceeds to the Village Forest Protection Committees. Similar norms may be adopted by other States.)
- (vi) Areas to be selected for the programme should be free from the claims (including existing rights, privileges, concessions) of any person who is not a beneficiary under the scheme. Alternatively, for a given site the selection of beneficiaries should be done in such a way that any one who has a claim to any forest produce from the selected site is not left out without being given full opportunity of joining.
- (vii) The selected site should be worked in accordance with a Working Scheme, duly approved by the State Government. Such scheme may remain in operation for a period of 10 years and revised/renewed after that. The Working Scheme should be prepared in consultation with the beneficiaries. Apart from protection of the site, the said scheme may prescribe requisite operations, e.g. inducement to natural regeneration of existing root stock, seeding, gap filling, and wherever necessary, intensive planting, soil-moisture conservation measures, etc. The Working Scheme should also prescribe other operations eg. fire-protection, weeding, tending, cleaning etc.
- (viii) For raising nurseries, preparing land for planting and protecting the trees after planting, the beneficiaries should be paid by the Forest Department from the funds under the social forestry programme. However, the village community may obtain funds from other Government agencies and sources for undertaking these activities.

- (ix) It should be ensured that there is no grazing at all in the forest land protected by the village community. Permission to cut and carry grass free of cost should be given so that stall feeding is promoted.
- (x) No agriculture should be permitted on the forest land.
- (xi) Along with trees for fuel, fodder and timber, the village community may be permitted to plant such fruit trees as would fit in with the overall scheme of afforestation, such as aonla, Imlī, mango, mahum etc. as well as shrubs, legumes and grasses which would meet local needs, help soil and water conservation, and enrich the degraded soils/land. Even indigenous medicinal plants may be grown according to the requirement and preference of beneficiaries.
- (xii) Cutting of trees should not be permitted before they are ripe for harvesting. The forest department also should not cut the trees on the forest land being protected by the village communities except in the manner prescribed in the Working Scheme. In case of emergency needs, the village communities should be taken into confidence.
- (xiii) The benefit of people's participation should go to the village communities and not to commercial or other interests which may try to derive benefit in their names. The selection of beneficiaries should therefore, be done from only those families which are willing to participate through their personal efforts.
- (xiv) The Forest Department should closely supervise the works. If the beneficiaries and/or the Voluntary Agency/NGO fail or neglect to protect the area from grazing, encroachment or do not perform the operations prescribed in the Working Scheme in a satisfactory manner the usufruct benefits should be within or without paying compensation to anyone for any work that might have been done prior to it. Suitable provisions in the Memorandum of Understanding (MOU) for this purpose should be incorporated.

Yours faithfully,

(MAHESH PRASAD)

Secretary to the Government of India

Copy for information and necessary action to:

1. Principal Chief Conservator of Forests/Chief Conservator of Forests (All States/UTs)
2. Additional Secretary, National Wasteland Development Board, Ministry of Environment and Forests, New Delhi.



3. Chief Conservator of Forests (Central) of all Regional Offices located at: Bhubaneshwar, Bangalore, Bhopal, Shillong, Lucknow, Chandigarh.
4. All DIGPs including N.W.D.B., New Delhi.
5. All officers of the Ministry of Environment and Forests

(K.M. CHADHA)  
Joint Secretary to the Government of India

Copy for information to the:

1. Secretary (Coordination), Cabinet Secretariat, Rashtrapati Bhavan, New Delhi.
2. Secretary, Ministry of Welfare, New Delhi.
3. Secretary, Department of Rural Development, New Delhi.

(K.M. CHADHA)  
Secretary to the Government of India