

Joint Forest Management: A Decade and Beyond

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Introduction

Forestry is the second major land use in India after agriculture. Around 23 % of the country's area (76.52 million hectares) is officially classified as forest land. Almost the entire forest area (97 %) is owned and managed by the government.

Not all the legally classified forest lands, however, carry forests. Nearly 17 % of forest lands are virtually devoid of tree cover (crown cover below 10 %) and another 33 % have degraded open forest (crown cover 10 – 40 %). Less than half the forest lands have reasonably dense forest (crown cover above 40 %) (FSI 1999).²

Table 1: Status of forests in India

Category	Area (million hectares)	Percentage of total geographical area	Percentage of forest area
Total geographical area	328.73	100.00	-
Legally classified forest	76.53	23.28	100.00
Actual forest cover ^a	63.73	19.39	83.27
Open forest ^b	25.51	7.76	33.33
Dense forest ^c	37.73	11.48	49.30
Mangroves	0.49	0.15	0.64

Source: FSI 1999

a Forest having at least 10 % crown cover

b Forest with crown cover between 10 and 40 %

c Forest with over 40 % crown cover

Strategies to arrest and reverse the forest degradation process have been at the core of India's forest policy for the past quarter century. It has also been acknowledged that direct or indirect involvement of the local communities is necessary to address this issue.

Local, especially forest fringe, communities are one of the most important stakeholders in India's forests by virtue of their acute dependence on this resource. India is primarily a rural country with about three-fourths of its population residing in its approximately 6,00,000 villages. Out of these, an estimated 1,70,000 villages with a total population of 147 million are located in the vicinity of forests (FSI 1999).

A vast majority of the Indian population depends on forests for meeting basic needs of fuelwood, fodder, small timber for agricultural implements and house construction and even food and medicines in the form of Non-Timber Forest Products (NTFPs). Sale of fuelwood and NTFPs also generate vital cash income for many poor households. The dependence is greatest among the poor.

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² In reality, the condition of forest lands is likely to be worse than these figures indicate as some of the forest cover recorded is probably outside the notified forest lands.

The level of dependence and its impact on the forests is best illustrated through two most critical subsistence products - fuelwood and fodder.

According to India's submission at the Rio conference in 1992, 70 % of rural and 50 % of urban people use fuelwood for cooking purposes. Fuelwood is by far the most important product extracted from India's forests. Of the total demand for wood in the country, it is estimated that over 80 % of the demand is just for fuelwood. Though estimates for its demand vary, most studies place it between 210-233 million metric tonnes for the year 2001. The annual allowable cut of fuelwood from government forests is about 44 million metric tonnes and from private forests and plantations about 35 million metric tonnes. Thus, the total sustainable cut of fuelwood is 79 million metric tonnes, leaving a gap of some 131-154 million metric tonnes. In other words, at least around 131 million metric tonnes of fuelwood is being obtained unsustainably in the country (Saigal, Arora and Rizvi 2001).

India has the world's largest livestock population out of which about 25 %, i.e. over 100 million, graze on forest lands that have an estimated capacity to support only 31 million (The World Conservation Union 1991; Dwivedi 1993 in Saigal, Arora and Rizvi 2001).

The initial strategy to combat forest degradation and to increase productivity was the one suggested by the National Commission on Agriculture (NCA), which submitted its report in 1976. Under this strategy, the government forest lands were managed for production of commercially important products such as timber. Simultaneously, a massive social forestry programme was launched that aimed at easing the pressure of rural population on government forests by growing fuelwood, fodder and small-timber for local communities' needs outside the forests on village commons and private farmlands. Ambitious projects were launched in different states with assistance from international funding agencies. A massive tree planting effort was mounted which continues even till today and is one of the largest country programmes in the world. The magnitude of the programme can be gauged from the area coverage achieved. Between 1980-81 and 1994-95, 16.57 million hectares were planted and since then the programme has continued at over one million hectares per annum bringing the total area planted to over 20 million hectares.³

However, social forestry failed to achieve its primary objective of easing pressure on government forests. The local communities continued to depend on forests for their needs and the Forest Department was unable to control continuing forest degradation. There was also an increase in the number of conflicts between the communities and the Forest Department. A new forest policy was issued in 1988 that completely reversed the objectives of forest management. The new policy stressed on management of forests for conservation and meeting local communities' needs and made commercial exploitation and revenue generation secondary objectives.

³ Information obtained from an unpublished note of the Ministry of Environment and Forests, India. The number of seedlings distributed is divided by 2000 to compute one hectare of land covered by plantation.

A new strategy, called Joint Forest Management or JFM, was adopted to protect and regenerate degraded forests. It arose out of a realisation that active and willing participation of the forest fringe communities is necessary for any forest regeneration programme to succeed. There was also awareness that village communities would have little incentive to participate unless they benefit directly and have sufficient authority to be effective.

Under JFM, the Forest Department and the village community enter into an agreement to jointly protect and manage forest land adjoining villages and to share responsibilities and benefits. The village community is represented through a body specifically formed for the purpose.⁴

The villagers get a greater access to a number of NTFPs and a share in timber revenue in return for increased responsibility for its protection from fire, grazing and illicit harvesting. The details vary from state to state as each state has issued its own JFM resolution.

The essential difference between social forestry and JFM is that while the former sought to keep people out of forests, the latter seeks to involve them in the management of *forest* lands. JFM also emphasises *joint* management by the community and the Forest Department.

Current Status

Over the past decade, the JFM programme has spread in the country and over 18 percent of the country's forest land has been brought under JFM. In absolute terms, the area under JFM is now more than 14 million hectares and 62,890 JFM groups are involved. The progress of the JFM programme in different states as on June 1, 2001 is given in Table 2.

Table 2: Status of JFM in India (as on June 1, 2001)

S. No.	State	No. of JFM Committees	Area under JFM (ha.)
1	Andhra Pradesh	7,606	16,79,084.00
2	Arunachal Pradesh	13	5,810.00
3	Assam	245	6,970.00
4	Bihar	296	5,04,602.50
5	Chattisgarh	6,412	33,91,305.31
6	Goa	26	13,000.00
7	Gujarat	1,237	1,38,015.19
8	Haryana	471	65,852.42
9	Himachal Pradesh	914	1,11,247.20
10	Jammu & Kashmir	1,895	79,546.00
11	Jharkhand	1,379	4,30,463.00

⁴ These are known by different names in different States (e.g. Vana Samaraksha Samitis in Andhra Pradesh and Hill Resource Management Societies in Haryana) but most commonly referred to as Forest Protection Committees or FPCs.

12	Karnataka	2,620	1,85,000.00
13	Kerala	32	4,994.70
14	Madhya Pradesh	9,203	41,25,837.00
15	Maharashtra	2,153	6,86,688.00
16	Manipur	58	10,500.00
17	Mizoram	129	12,740.00
18	Nagaland	55	1,50,000.00
19	Orissa	12,317	7,83,467.00
20	Punjab	188	97,193.40
21	Rajasthan	3,042	3,09,336.00
22	Sikkim	158	600.00
23	Tamil Nadu	799	2,99,389.00
24	Tripura	160	23,476.79
25	Uttar Pradesh	502	45,025.44
26	Uttanchal	7,435	6,06,608.00
27	West Bengal	3,545	4,88,095.00
	Total	62,890	1,42,54,845.95

Source: Ministry of Environment and Forests

Impacts

The JFM programme has led to several positive impacts. The major ones, as discerned from available literature and field travel, are briefly discussed in this section.

Change in attitude and relationship - One of the most significant impacts of the JFM programme has been the change in attitudes of local communities and forest officials towards each other and forests. This has been mentioned as one of the key achievements in the End-of-Project Review Report of the DFID supported JFM project in Kullu and Mandi districts of Himachal Pradesh. In Andhra Pradesh, it is reported that there is a sea change in the relationship between local communities and Forest Department's field officials (Rangachari and Mukherjee 2000). A case study of Buldhana Division in Maharashtra mentions about an incident in Botha FPC, where FPC members even postponed a wedding in the village in order to fight a forest fire. This was unthinkable in the pre-JFM days (Jha 2001a). In several FPCs, traditional forest protection practices have been revived e.g. *kesar chhanta* (sacred groves) in Rajasthan (Ghose 2001). The large number of training and orientation exercises carried out in different states (especially where JFM is/was supported under an externally assisted project) have also helped in the process. The magnitude of the effort can be gauged from the statistics available from a few states. In Andhra Pradesh, for instance 20,987 trainings were conducted at the field level (Mukherjee 2001). Similarly, in Maharashtra, 100 training sessions, 20 study tours, 40 Division level workshops and 200 village level workshops were organised. It is estimated that over 15,000 persons have received training (Jha 2001b).

Improvement in the condition of forest - There is evidence from several location specific scientific studies and other more general studies on JFM that the programme has resulted in the improvement in the condition of the forests. It has been reported that the incidents of illicit felling declined sharply in Buldhana Division after the JFM

programme was initiated in 1996-97 (Jha 2001a). In Rajasthan, it has been reported that unlike in the past, people did not resort to tree felling even during drought period in areas where JFM programme has been started (Ghose 2001). A study carried out by the Andhra Pradesh Forest Department indicated that between 1996 and 1999, while dense and open forest has increased by 18 % and 22 % respectively, scrub and other forests has reduced by 18 % (Mukherjee 2001). Another study carried out in Sabarkantha District and Vyara Division of Gujarat has indicated significant improvement in forest cover after the initiation of JFM. The area under dense forest has increased in 8 out of 10 villages studied in the Sabarkantha district, with the net increase being around 25 %. In Vyara Division, two compartments studied showed around 207 % increase in the dense forest cover (Khanna and Prasad 2001).

Reduction in encroachment - In several areas, introduction of JFM has resulted in reduction in area under encroachment and fall in the rate of fresh encroachment. For instance, in Andhra Pradesh, nearly 12 % of the encroached land (38,158 hectares) has reportedly been vacated after the initiation of the JFM programme (Mukherjee 2001). Similar reduction in encroachment has also been reported from Maharashtra (Jha 2001a).

Increase in income - Implementation of JFM programme has resulted in increase in the income of participating communities at several places. Several externally assisted projects laid emphasis on employment generation and creation of productive community assets as part of the entry point or development activities. For instance, it is estimated that over 4 crore person days of work was created through JFM related activities during the six years (1994-2000) Andhra Pradesh Forestry Project was operational (Mukherjee 2001). In Maharashtra, a sum of Rs. 9.73 lacs has been spent on the microplan of each FPC constituted under the World Bank assisted project (Jha 2001). A significant proportion of this is wage component, which mainly goes to the FPC members. In Harda Division of Madhya Pradesh, a sum of Rs.4.08 crores was spent on 145 villages in forest fringe areas to provide for irrigation facilities (81 stopdams, 51 lift irrigation) benefitting 818 families. An internal assessment of works done shows that the construction of water harvesting structures alone led to an enhancement in per hectare crop yield from 2 to 5 times (2.4 times on an average) in parts of Harda Division (Dubey, 2001). In Gujarat, income of several villages has gone up after the introduction of JFM. For example, income from milk has increased from Rs. 1 lakh per month to Rs. 3 lakh per month in Balethi village in Rajpipla (West) Division. In Nisana village (Vyara Division), milk production has increased from 40,000 to 2 lakh litres per year (Khanna and Prasad 2001).

In a few states such as West Bengal, FPCs have started earning income through intermediate and final harvests. In south West Bengal, although the sharing percentage is one of the lowest in the country (25 %), it is estimated that each FPC has received about Rs. 70,000 on an average. It comes to around Rs. 700 per household assuming 100 households per FPC. In addition, each household earns on an average Rs. 900 from wage income from felling operations. Thus, every 2-3 years (when felling takes place), each household earns Rs. 1700 as cash income (Palit 2001). However, income from NTFPs is substantially greater. For instance, in Joyalbhanga FPC in Midnapore, West Bengal, while the total cash income per household after two fellings was around Rs. 5700, each

woman is able to earn between Rs. 4500 to 6000 annually through sale of sal leaf plates (Ecotech Services 2000).

Involvement of NGOs - The JFM programme has led to considerably greater involvement of NGOs in the forestry sector although there is significant variation from state to state. While there is very limited NGO participation in states like Himachal Pradesh and West Bengal, over 250 NGOs are involved in the JFM programme in Andhra Pradesh. In some states, such as Madhya Pradesh and Uttar Pradesh⁵, Forest Department officials and NGOs have worked together at the field level in the form of Spear Head Teams.

Key Issues

While the above account focuses on the positive impacts, there are a number of issues that need attention before the JFM programme can be institutionalised in the country. Some of the major ones are discussed in the section.

Conflicts - At several places, JFM has resulted in increased inter and intra-community conflicts, which often result in physical violence. Intra-community conflicts mainly emanate from inequitable distribution of costs and benefits of JFM among different subgroups (class, caste, gender etc.) within the community. It is reported that in Katkut village in Khargone district, marginalised tribal groups were denied access to the forests by the village elite that controlled the FPC. These issues related to access to forests ultimately led to a violent confrontation between the tribal activists and local administration. Four people died in police firing on 2nd April, 2001 (PUDR 2001). There are reports of *begari* and other conflicts from the famous Harda Division also (Diwan Sarin and Sundar 2001).

Inter-community conflicts over boundaries and access rights have increased as traditional (and even formal) access rights of different groups have not been taken into account while initiating JFM. There is often a conflict between nomadic graziers and settled community wherever forest patches that fall within the traditional migration routes have been "closed" under JFM by the settled community. Several conflicts of this nature have been reported from Jammu and Kashmir, Himachal Pradesh and Rajasthan. In one FPC (Sandni, Pratapgarh *Tehsil*, Chittorgarh, Rajasthan) this kind of conflict resulted in physical fight between both groups in which several people sustained serious injuries. Other common conflict is over boundary demarcation and access rights between neighbouring villages. Numerous such conflicts have been reported from the Girva *Tehsil* of Udaipur District in Rajasthan. A study carried out in four districts of north coastal Andhra Pradesh found that there were boundary conflicts in almost all the FPCs as the traditional boundaries were not respected while demarcating forest areas of different FPCs. In one FPC (RK Nagar, Araku *Mandal*, Visakhapatnam District), the plantation raised by the FPC was burnt down due to conflicts between neighbouring villages (Samatha and CRYNet 2001). In case of another FPC in West Bengal (Joyalbhanga, Jhargram Range, Midnapore (West) Forest Division), it was found that the FPC had

⁵ Now including Chattisgarh and Uttaranchal.

conflicts with all its neighbouring villages - Dhadki Danga, Sirsi and Vouda. The conflict with Dhadki Danga took a serious turn when the FPC members were attacked by Dhadki Danga people and three persons had to be hospitalised (Ecotech Services 2000).

So far, there have been limited attempts to address these issues. For example, in Jammu and Kashmir, the earlier JFM notification of 1992 has been amended (SRO 17 dated 12th January, 1999) and one representative of nomads has been included in the Executive Committee of the FPC but conflicts still continue (Gera 2001). The new guidelines issued by the Ministry of Environment and Forest (MoEF) take cognisance of these problems and suggest formation of multi-stakeholder working groups. While such groups already exist in some states, their performance is far from satisfactory.

Transparency - There is an urgent need to increase transparency at the field level, especially in areas where large amounts of funds are being provided for JFM through special projects. The need for transparency has been highlighted through recent firing incident in Dewas and Jan Sunwai (public hearing) in Harda mentioned above. This issue has also been raised strongly in the Samatha and CRYNet report, which reports instances of corruption and wasteful expenditure under the JFM programme (Samatha and CRYNet 2001). Some innovative mechanisms to promote transparency such as writing of expenditure and microplan details on village walls have been reported from Uttar Pradesh (Shukla 2001).

Traditional/existing institutions - It is now a well known fact that there are thousands of community groups in the country that are protecting/managing forests in the vicinity of these villages on their own without any outside support. Such groups are mainly concentrated in Orissa and Jharkhand. The issue of recognising these groups (without destroying them by making them conform to a rigid framework) hasn't been resolved as yet. In some cases, formalisation of existing self-initiated groups has led to severe problems. A case in the point is Sovva FPC in north coastal Andhra Pradesh, which became dysfunctional due to conflicts after it was formally registered and reorganised by the Forest Department (Samatha and CRYNet 2001). The new JFM guidelines issued by the MoEF in 2000 do emphasise on the need for "identifying, recognising and registering" these groups but do not offer any practical tips as to how to go about it.

Apart from self-initiated groups, JFM is also being extended to existing formal institutions such as *Van Panchayats* in Uttaranchal. Out of 1217 FPCs constituted so far under the World Bank assisted forestry project, 60 % (729) are converted from existing *Van Panchayats* (Pai 2001). This has resulted in considerable confusion at the field level and many have questioned the wisdom of such a move.

The situation in north-eastern states is quite different from rest of the country. In the seven north-eastern states, only about 45 % of the recorded forest area is under government control and rest is controlled by different community institutions (NERFRP 2001, in Yadav 2001). Due to this reason, JFM in these states is quite different from rest of the country. In fact, in several states Forest Department will get a share in income from forests under JFM where earlier it may not have got any share at all. As JFM is relatively

new in the region (Out of five states that have adopted JFM, four issued enabling orders only in 1997 and 1998⁶), there is a need to carefully follow the JFM process and use feedback to fine tune the programme to suit region's unique characteristics. The importance of north-east in the country's forestry sector can be gauged from the fact that although the region has only 8 % of the country's geographical area, it accounts for 26 % of the forest over and 30.7 % of the growing stock (Yadav 2001).

JFM in dense forests and protected areas - In most states JFM is restricted to degraded forests, notable exception being Madhya Pradesh (and now also Chattisgarh). In fact, in some states such as Karnataka, JFM is practiced only in areas having crown cover less than 25%, excluding most forest areas from its ambit. Although the new guidelines issued by the MoEF mention that JFM should be extended to good forest areas, these also put a limit of 100 hectares on area and 20 % on share in revenue from final harvest. Although many people have argued that one need not wait for forests to be degraded before starting JFM, there isn't much progress on this front.

JFM is not applicable to protected areas. Instead, an ecodevelopment scheme was launched in 1991-92, with World Bank assistance, around seven selected national parks. Under ecodevelopment, the aim is to provide improved subsistence strategies to the local people through improving productivity and utilisation of their lands and other resources and enhancing their income. The hope is that this would help in reducing the dependence of these communities on the protected areas. Unlike JFM, the objective of ecodevelopment is not the involvement of the fringe communities in the management of protected areas but is limited to enlisting their cooperation for conservation of protected areas through provision of certain economic incentives.

The current law governing protected areas *viz.* the Wildlife (Protection) Act, 1972, does not offer any space for local communities' participation in the management of protected areas. Although efforts are on to amend it and introduce new categories of protected areas such as "community reserves",⁷ the proposed amendments do not tackle the issue of involving the village communities in the protection and management of existing protected areas. The process of declaring an area as protected is still arbitrary and there is a need for greater transparency and participation in settling of rights (Pathak and Kothari 1998).

Project related issues - In most states, JFM activities are being financed through externally assisted projects. While this has facilitated the extension of JFM programme in the country, it has also created some problems. The JFM is either mainly restricted to the project areas or if it is extended to other areas, there is often considerable disparity in the resources available for the FPCs in project and non project areas. For example, while a

⁶ Tripura was the first state in the region to start JFM. It issued its enabling order in 1991.

⁷ A draft amendment to this law seeks to introduce two new categories of protected areas, *viz.*, "conservation reserves" to provide buffers or corridors to existing protected areas, and "community reserves" declared on the recommendation of a community or individuals seeking legal sanction and recognition to areas that they wish to protect. In both cases, local communities are to be represented on advisory committees for management.

sum of approximately Rs. 43 crores was spent on a DFID⁸ supported project that covered around 150 FPCs in two districts, the total sanctioned amount for the rest of 364 FPCs constituted outside the project was only Rs. 5 crores.

The other major issue is sustainability of the programme after the close of the project and stoppage of funding. This is a major issue in all states where JFM has been supported through specific time bound projects. The strategy that productive assets created during the project period would be able to sustain JFM after the project is over does not seem to have worked very well. For example, a number of productive assets in FPCs were created under the West Bengal Forestry Project but many became inoperative after the completion of the project. Two earthen dams built under the project in village Kamardanga (Matgoda Range, Bankura (South) Forest Division) were found to be in a state of disrepair during a study in 1999. Similarly an earthen dam built in Joyalbhangra FPC (Jhargram Range, Midnapore (West) Forest Division) was also found broken during the same study (Ecotech Services 2000).

NTFP related policies - There is enough evidence to show that regular flow of NTFPs is more valuable to the communities than share in timber, which is usually available after a long wait (often more than ten years). It is often NTFP flows (along with additional employment opportunities) that retain the interest of the community in the JFM programme. Most of the commercially valuable NTFPs are not shared with the communities even under JFM e.g. *tendu* leaves (*Diospyros melanoxylon*) and gum in Rajasthan; resin in Jammu and Kashmir, Himachal Pradesh and Uttaranchal; and *sal* seeds and *tendu* leaves in West Bengal. There are also a number of restrictions on value addition and marketing. The potential of enhancing the income of the FPCs through these NTFPs can be seen from the case of Andhra Pradesh, which decided to share 50 % of the net revenue from *tendu* leaves with the FPC (G.O. Ms No. 66 dated 4th May 1999). After this order 1,444 FPCs have received Rs. 4.97 crores as their share in the income. It has been reported that after this order 247 FPCs in Khammam district and 59 FPCs in Adilabad district have adequate income to sustain the JFM programme in the future (Mukherjee 2001).

Adaptive silviculture - JFM reflects a fundamental change in the objectives of forest management. Under JFM, diverse needs of the community members for different products and services have to be managed from a relatively small area. There is increased emphasis on NTFPs. There is currently very limited understanding of management options for managing a forest patch for multiple (and often competing) needs. Very little is known about species that have limited commercial value but provide important subsistence products for the communities. There is a need for concerted research to develop viable management models for JFM. So far, very little work has been done. Only Andhra Pradesh has reported some progress (Mukherjee 1991). Apart from research some of the existing policies and procedures may also need to be modified. For instance, grass is an important product from JFM areas in many states. However, in many states the community is not allowed to maintain grass yield by manipulating tree cover even if grass is the main incentive for the community to participate in JFM. In Jammu and

⁸ Department for International Development, United Kingdom.

Kashmir, regenerating conifer trees get preference over planted fodder trees even in JFM areas (Gera 2001). There is a need to reorient the microplans to reflect these new management objectives. As per the new JFM guidelines, the Working Plans should include a JFM Overlapping Circle to accommodate microplans. While attempts have been started in some states, much more needs to be done on this front.

Marketing - Marketing is emerging as one of the most critical areas in JFM. There are problems in both the pioneering states - West Bengal and Haryana - on this front. In West Bengal, regular harvesting started in 1995-96 but only a small area could be harvested as there was limited market for the products coming out of JFM forests *viz.* cogging sleepers, poles and posts. In 1996-97, only 4673 hectares of JFM forests could be harvested, which was less than a fifth of the potential harvestable area (Guhathakurta and Roy 2000, in Saigal, Arora and Rizvi 2001). This was because the supply of produce from these forests before the advent of JFM had declined to such an extent that potential buyers were forced to make alternate arrangements. In 1987-88, the annual coupe area was only 181 hectares (Palit 2001). Due to glut of poles in the market, their price has fallen. The price of sal poles (51-60 cms. Girth) fell from Rs. 166 in 1992 to Rs. 140 in 1998; during the same period price of eucalyptus poles of similar girth fell from Rs. 110 to Rs. 85 (TERI 1999, in Saigal, Arora and Rizvi 2001).

In Haryana, the main produce from JFM areas is *bhabbar* grass (*Eulaliopsis binata*). The price of *bhabbar* has registered a sharp decline in recent years. Several FPCs in Yamuna Nagar haven't been able to auction their produce as Ballarpur Industries Limited - the largest buyer - has changed the technology of its plant and doesn't need *bhabbar* in large quantities any longer. Withdrawal of excise concessions on *bhabbar* have made it further unattractive to the company (Saigal, Arora and Rizvi 2001).

There is an urgent need to re-examine the assumption that there is large unsatisfied demand to all forest produce and thus all the produce can be sold. While deciding the product mix from the JFM forests, marketing angle needs to be kept in mind.

Involvement of corporate sector - The involvement of corporate sector in JFM is a contentious issue. While some companies are assisting in the JFM programme (e.g. Tata Electric Company, IPCL and Uttam Steel Limited in Maharashtra and TVS-Suzuki in Tamil Nadu), their involvement has so far been marginal and mainly in the nature of charity or public relations exercise (e.g. Tata Electric company has built some WCs in FPCs while Uttam Steel Limited has provided a steel pipe to Khalapur FPC in Raigarh district). The only state where the involvement of corporate sector has been sought on a meaningful scale in order to sustain the JFM programme is Andhra Pradesh. A government order (G.O. Ms No. 112) was issued on 22nd September 2000, which permitted companies to enter into tripartite agreement with FPCs and the State Government. However, this failed to take off at the field level due to opposition by NGOs. Considering the importance of finding markets for the surplus produce coming out of JFM areas, there is a need to look for ways of involving companies, which can provide market for such produce. After building in enough safeguards to prevent misuse of the system, corporate involvement should be tried on pilot basis.

Legal issues - One of the biggest issues facing the JFM programme is lack of firm legal basis for it. Except a handful of states (such as Jammu and Kashmir, Uttar Pradesh, Rajasthan and Himachal Pradesh- Andhra Pradesh is likely to follow suit soon), JFM programme is based on administrative orders than can be withdrawn or changed at any time. The FPC is also merely registered (as against registration as a Society, Trust etc.) with the Forest Department in most states, which has no legal standing.

The lack of adequate legal cover for JFM creates several problems. For instance, in south West Bengal, where most of the area is under JFM, the Working Plans (which are legal documents) were revised recently. However, these Working Plans have been written in standard format and JFM has not found a focused place either in the general or specific objectives of management. In fact, a part of forest area being protected by several FPCs has been included in "Conservation Working Circle" without any discussion with them. This means that there will be no felling and thus sharing of produce from these areas (Ecotech Services 2000). It is reported that an elephant sanctuary (named Mayurjharna) may be constituted in this area (Banerjee 2001). The Samatha-CRYNet study documents some instances where important decisions pertaining to the forest patch being protected by the FPC have been taken without consulting it. For example, one FPC (Damara) was not consulted before the area being protected by it was allotted to a private company for quarrying. It is feared that several others FPCs will face the same fate in Araku *Mandal* of Visakhapatnam district, where several proposals for bauxite mining are pending (Samatha and CRYNet 2001).

There is also a need to amend existing Acts and Rules that are in conflict with the new JFM approach. The following is an illustrative list of Acts and Rules from Himachal Pradesh that need to be amended:

Punjab Village Common Lands (Regulation) Act, 1961
Himachal Pradesh (Sale of Timber) Act, 1968
Himachal Pradesh Village Common Lands (Vesting and Utilisation) Act 1974
Forest Produce Transit Rules, 1978
Land Preservation Act, 1978
Himachal Pradesh Resin and Resin Products (Regulation of Trade) Act, 1981
Forest Produce (Regulation of Trade) Act, 1982
Forest (Conservation) Act, 1980
(Gupta 2001)

Links with *panchayats* - One of the key challenges facing JFM today is its link with the *Panchayati Raj Institutions* (PRIs). The PRIs have got a constitutional mandate after the passage of the Constitution (Seventy-third) Amendment Act, 1992. While there are 62,890 FPCs in the country, there are 2.34 lakh PRIs that are run by 2.92 million elected representatives (NIRD 1997). As the objectives of the two institutions (FPCs and PRIs) overlap, there is a need to develop linkages between the two. Article 243G of the Constitution deals with endowment of powers and authority to *panchayats* to enable them to function as institutions of self-government with specific responsibilities for planning

and implementation of economic development and social justice programmes. Schedule XI of the Constitution lists 29 subjects with respect to whom *panchayats* are to prepare and implement plans for economic development and social justice for the area under their jurisdiction. In addition, the *Panchayats (Extension to the Scheduled Areas) Act, 1996* makes it mandatory for the state governments to ensure that the PRIs at the appropriate level and the *Gram Sabha* are *inter alia* endowed with the ownership of minor forest produce. Hence, PRIs are to function not as mere implementers of centrally determined development schemes but to be actively involved in the local level planning process. The list of 29 subjects that have to be dealt with by PRIs (Schedule XI of the Constitution) overlaps considerably with the functions of the FPCs.⁹

Apart from the legal aspects, there are other pressing reasons for the development of these linkages. JFM is rarely successful if the overall development of the community is not kept in mind. PRIs are best placed for this as they have a broader perspective as well as access to rural development funds. This kind of linkage can provide a long-term solution to funding problems for JFM.

The benefits of such a linkage are already visible in some states. Andhra Pradesh was able to extend JFM outside the World Bank project areas using the funds available under the Employment Assurance Scheme of the Rural Development Department (Mukherjee 2001). Funds flowing through *panchayats* have played an important role in sustaining the JFM programme after the completion of the World Bank supported West Bengal Forestry Project in 1997 (Palit 2001).

While there are certain apprehensions regarding development of such linkages (such as politicisation of FPCs and mismatch in PRI and FPC areas), there is an urgent need to explore ways to overcome these as it is not possible for JFM to succeed in the long run unless position of FPCs vis-à-vis PRIs is clear.

The Way Ahead

JFM has come a long way since its beginning a decade ago. The area under JFM is now almost equal to the area under protected area system.¹⁰ After going through the initial pilot and scale-up phases, it is now entering the crucial institutionalisation phase. After a decade of implementation, it is the time to review the experience and then plan ahead.

First of all, there is a need to put in place a monitoring and evaluation system to assess the ecological, social and economic impact of the programme. Some progress in this direction has been made after the establishment of the JFM Monitoring Cell in the MoEF after extending the scope of the existing Forest Fire Division. A JFM monitoring format

⁹ The overlapping areas are: social forestry and farm forestry; minor forest produce; fuel and fodder; welfare of the weaker sections, and in particular, of the SCs and STs; and land improvement, implementation of land reforms, land consolidation and soil conservation. A Government of Himachal Pradesh order in 1997 entrusted supervision and monitoring responsibilities of 15 departments, including Forest Department, to *panchayats* (Gupta 2001).

¹⁰ There are 87 national parks and 485 wildlife sanctuaries in the country with a total area of 15.60 million hectares.

has been developed and sent to all the State Forest Departments. There is a need to develop a macro perspective. For instance, while there is no doubt that JFM has contributed towards forest regeneration, the overall forest area in the country hasn't registered any significant increase since 1987, when Forest Survey of India produced its first "State of Forest Report" (see Table 3). The reasons for this need to be analysed.

Table 3: Forest cover estimates by the Forest Survey of India (1987-1999)

Year	Forest cover as a percent of geographical area
1987	19.49
1989	19.43
1991	19.45
1993	19.45
1995	19.43
1997	19.27
1999	19.39

A JFM Network has been created in February 2000 to discuss key issues facing JFM. This forum needs to address the issues listed in the earlier section.

Innovative mechanisms to mechanisms to strengthen the programme are being tried in different states. For example, Andhra Pradesh has taken a loan from NABARD to support FPCs after the completion of the World Bank assisted project.¹¹ Corporate support and involvement is also being attempted. 50 % share in *tendu* revenue and case compounding fee has also been offered to enhance the income of the FPC. In Madhya Pradesh and Uttar Pradesh, NGO involvement has been promoted through the concept of joint teams for microplanning. In Rajasthan, a separate women's subcommittee has been constituted so that women's views find a place in FPC's decisions. Significant attempts for forging linkages between FPCs and PRIs have been made in West Bengal and Uttar Pradesh. In some states, common funds have been built up to sustain the FPCs after the completion of the project. Common funds to the tune of Rs. 1.879 crores have accumulated in 1,217 FPCs constituted under the World Bank assisted project in Uttaranchal (Pai 2001). In Uttar Pradesh, FPC has been made a deemed forest officer with wide ranging powers (Shukla 2001). In some states, such as Uttar Pradesh and Uttaranchal, funds are directly released to the FPCs for executing the JFM related works. Similar provision has been made under *Sanjhi Van Yojana* in Himachal Pradesh and *Janta Van Yojana* in Rajasthan. There is a need to promote interstate learning on these issues.

In recent months, Clean Development Mechanism or CDM activities have also been cited as a potential source of funding for JFM (Ravindranath 2001). If JFM is found to be an eligible activity under Article 12 of Kyoto protocol, new funding can become available. The Central Government is also working on a central JFM scheme. This scheme is proposed to be implemented through newly created Forest Development Agencies, which are federations of FPCs.

¹¹ The Government of Andhra Pradesh has taken a loan of Rs. 47.13 crores from NABARD to support 918 FPCs.

While this scheme would reduce the dependence on external funding sources and help help in integrating JFM into the regular working of the Forest Departments, the future direction that JFM takes in this country will very much depend on the way this scheme is implemented in the field.

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