

Joint Forest Management Programme in India and Community participation

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Abstract:

Forest conservation priorities cannot be determined in isolation from local people and broader patterns of natural resource use, and this must be complimented by policies promoting sustainable and equitable development of the natural resource base as a whole. In acknowledging this factor, the Ministry of Environment and Forests, Government of India issued policy guidelines for the involvement of village communities and voluntary agencies in the regeneration of degraded forest lands on 1 June 1990 under the Joint Forest Management (JFM) programme. The effective and meaningful involvement of local communities has been attempted under the Joint Forest Management System in India by linking socio-economic incentives and forest development. JFM, then, appears to be a workable system not only in providing for subsistence needs, but also potentially providing income-generating opportunities, and of course aiding in the regeneration of forests. In this context the present paper tries to review the process of JFM and factors promoting community participation for forest management under the regime of JFM in India.

Key Words: Community participation, Joint Forest Management, Forest, Natural Resource Management, India

Introduction:

The increasing depletion of India's forest resources has brought into sharp focus the inherent inadequacy of traditional state owned and run systems of forest management in sustaining the forest resource base against the growing human and livestock population pressures, industrialisation, urbanisation and overall economic development. The crisis in Indian forestry relating to high rates of deforestation, and unregulated and unsustainable use of forest produce in the past, can be attributed to the twin processes of erosion of customary resource management regimes and the acquisitive tendencies of the state in the period following independence. The effective and meaningful involvement of local communities has been attempted under the Joint

Forest Management System in India by linking socio-economic incentives and forest development. Apart from developmental pressures, the dependence of forest user groups is a crucial factor in the state of India's forests. Forest conservation priorities cannot be determined in isolation from local people and broader patterns of natural resource use, and this must be complimented by policies promoting sustainable and equitable development of the natural resource base as a whole. In acknowledging this factor, the Ministry of Environment and Forests, Government of India issued policy guidelines for the involvement of village communities and voluntary agencies in the regeneration of degraded forest lands on 1 June 1990 under the Joint Forest Management (JFM) programme.

What is Joint Forest Management?

Joint Forest Management (JFM) is a concept of developing partnerships between fringe forest user groups and the Forest Department (FD) on the basis of mutual trust and jointly defined roles and responsibilities with regard to forest protection and development. In JFM, the user (local communities) and the owner (Government) manage the resource and share the cost equally, however it is difficult to generalize the JFM concept and approach in the light of variations across the nation with respect to geography, resource base, socio-economic status, cultural diversity and pressures on forests.

While the primary objective of the JFM programme continues to be rehabilitation of degraded forestlands with peoples organisations (Village Forest Committees - VFCs), in the course of evolution, approaches like village resource development, micro watershed development have got integrated into JFM as most State governments are attempting to improve the socio-economic status of forestdependant communities in order to reduce pressure on forests. Several approaches initiated to conserve forests without involving the local communities have not met with reasonable success. Thus, it is increasingly recognized that involvement of people in forest management, apart from contributing to regeneration of degraded forest, and helping in cost-effective conservation, also meets community's subsistence needs. To push such efforts, a decentralized and participatory forest management program called joint forest management (JFM) is being promoted in India since 1990. The JFM provisions, under the JFM guidelines of 1990, are expected to promote peoples' involvement, collective decision-making, social fencing, empowerment of the village community, sharing of authority, focus on non timber forest products (NTFP) and sustained harvest of usufructs. It is estimated that nearly 200,000 villages are found around the forests (Forest Survey of

India, 1999). Efforts at involving local people in management of forest resource have produced encouraging results with respect to conservation and regeneration in states such as West Bengal and Haryana.

History of Joint Forest Management (JFM) in India

India's national forest policy of 1988 was a landmark policy for local people's rights over forest resources. The policy recognized people's participation in using and protecting forests and suggested the forest communities should develop and conserve forests together with the state forest departments. This reform in forest policy has begun to transform how forests are protected and used in India. Communities that were historically perceived to be encroachers and illegal users of forests by the state were invited to partner with the state in protecting forests. Following national implementation guidelines in 1990, various state governments began implementing their own Joint Forest Management strategies. The National Joint Forest Management Policy came out after the successful experience of Arbari hills in Midnapore district of West Bengal during the early 1970s where local communities formed forest protection committees to conserve their forest resources at a very early stage.

The concept of joint forest management was discovered accidentally by the innovative Divisional Forest Officer of Midnapore District, West Bengal, A.K. Banerjee, in 1972. In response to the continued grazing of cattle by local villagers in an area of new plantation, thereby jeopardising the crop, Banerjee asked the locals to refrain grazing in the plot, in return for a share of the final timber harvest. The strategy was found to work, to the benefit of the Forest Department, and the local community alike. It was therefore 'discovered' possible to devolve responsibility for protection of forest land to people, providing they had a stake in it. Banerjee also launched a 'Socio-Economic Project' in the same Arabari Block, where eleven villages became engaged in protecting areas of sal coppice, in return for subsistence NTFP's, preferential employment, and a 25% share in the profits from sale of short rotation sal poles. 618 families initially participated, in protecting 1272 ha of forest. (Malhotra and Deb, 1998). The success of JFM spread quickly throughout the state, and by July 1990, 1611 Forest Protection Committees had been formed, protecting 195,000 ha of forest lands in the three southwest districts of West Bengal; Bankura, Midnapore and Purulia - 47% of the total forest land (Malhotra and Deb).

Consequently, the 'Arabari model' has been the broad template for JFM in other areas. Although each state participating in JFM might have particular differences regarding its organisation, the principles and aims of JFM are similar. West Bengal became the first state to adopt the JFM in 1990. Since 1990 JFM guidelines from the Centre, all the states have resolved to implement JFM making it one of the largest community based natural resource management programme in the world (Kumar,2002).

Significance of Forest for Rural Community and State wise forest under JFM:

Forests in India form the second largest land use after agriculture (Afreen *et. al.*2011). According to the report (MoEF, 2010), the total forest cover of the country is 69.09 Mha—about 21.02 % of the total geographical area. Of the total forest area, 8.34 Mha is very dense while almost half of it (31.9 Mha) is moderately dense and the rest being open forests and mangroves. The report further claims that there has been an increase of 3.13 Mha of forest cover in the country since 1997, i.e., from 65.96 Mha to 69.09 Mha. There are close to 200,000 villages that live inside or on the fringes of forest and an estimated 275 million people significantly depend on forests for their sustenance and livelihood (World Bank 2006). People living in these forest fringe villages depend upon forest for a variety of goods and services. These includes collection of edible fruits, flowers, tubers, roots and leaves for food and medicines; firewood for cooking (some also sale in the market); materials for agricultural implements, house construction and fencing; fodder (grass and leaves) for livestock and grazing of livestock in forest; and collection of a range of marketable non-timber forest products. Therefore, with such a huge population and extensive dependence pattern, any over exploitation and unsustainable harvest practice can potentially degrade forest. Moreover, a significant percentage of the country's underprivileged population happened to be living in its forested regions (Saha and Guru, 2003). It has been estimated that more than 40 per cent of the poor of the country are living in these forest fringe villages (MoEF,2006).

The forest cover and area under JFM is shown in Table-1, which reveals that Jharkhand has highest percentage (72.94) of forest under JFM followed by Bihar (71.42) and Madhya Pradesh 70.62 percent. All 28 State Governments and Andaman and Nicobar Islands have adopted JFM by July 2005. There are 84632 JFM Committees covering 28 States in India. The area co-managed by these committees is more than 17 million ha. About 83, 84,788 families are involved in the JFM process.

Table-1 State wise percentage of Forest area under JFM in India

Sl.	State	% of total forest area under JFM	Sl.	State	% of total forest area under JFM
1	Jharkhand	72.94	16	Kerala	18.41
2	Bihar	71.42	17	Uttarakhand	16.28
3	Madhyapradesh	70.62	18	Sikkim	15.15
4	Punjab	58.32	19	Uttarpradesh	11.06
5	Chhatisgarh	55.53	20	Manipur	9.57
6	West Bengal	54.39	21	Goa	8.17
7	Maharashtra	38.80	22	Himachal pradesh	5.54
8	Tripura	38.31	23	Nagaland	4.66
9	Tamilnadu	33.07	24	Mizoram	3.33
10	Haryana	26.42	25	Assam	1.96
11	Rajasthan	26.31	26	Arunachal	1.95
12	Andhrapradesh	23.80	27	Jammu & Kashmir	1.91
13	Gujrat	21.88	28	Meghalaya	1.82
14	Karnatak	21.11	29	Andaman & Nicobar Island	0.04
15	Orissa	19.76			

Source: ICFRE, 2011

The impact of Joint Forest Management (JFM):

There are several indicators of the positive impact that Joint Forest Management has had on forest conditions. In many states, forests under this form of management are regenerating with remarkable vigor and diversity. Local community institutions are protecting their forests far more effectively than the state forest departments could. West Bengal has the largest programme with over 2300 registered forest protection committees (FPCs) protecting approximately 320 000 ha of public forest land. Remote sensing satellite data are beginning to show an improvement in both the quality and area under forests in southwestern Bengal, and the FPCs of this state have collectively received an international award for their contribution to forest regeneration. Studies in Gujarat, Haryana, Madhya Pradesh and West Bengal have also recorded improvements in the productivity and diversity of vegetation and increased returns of income to members of community institutions from non-timber forest products (NTFPs).

Thus, the programme has undoubtedly made a good beginning in improving the condition of degraded forests and, to some extent, benefited those dependent on them for their livelihood and subsistence needs. However, for Joint Forest Management to attain long-term sustainability and become a viable long-term option, it is important not to lose sight of the complexity and diversity of local people's dependency on forests. The challenge is to move beyond community forest protection to develop options for the sustainable satisfaction of essential needs for forest protected by local people.

Regenerating forests are therefore relatively species rich, and can contribute significantly to household incomes. Malhotra et al (1998) discovered that across the twelve FPC's studied, non-timber forest produce contributed to 12.8% of the total family income in caste households, while the percentage was higher in tribal households, at 22%. Interesting also was the calculations from Malhotra et al, regarding the income generating potential of NTFP's over the long term, compared with income generated from harvested poles. Based on data gathered from south west Bengal, calculations showed that income generated from NTFP's was three times higher than the income derived from the harvesting of sal poles, on the basis of a 10 year rotation, at Rs.20,852 (£302) and Rs.6974 (£101) respectively.

Fuel wood is the most important commodity that people access from forest areas. However, the estimated available quantities of dry twigs and fallen wood are far below the actual quantities removed. With JFM, there has been an increase in the availability of fuelwood to villagers in South West Bengal, Haryana, Andhra Pradesh among other states. However in Orissa and adjoining sal areas of West Bengal, fuelwood is supplemented with dry leaves (December to May). Most cultural and intermediate operations like bush cutting, culling, thinning, etc. undertaken by the FD also provide fuelwood to people. There have been attempts by the FD to raise fuelwood plantations as in West Bengal and also distribute improved chullahs, biogas plants etc. as in AP to a limited extent. However, there is immense scope and also necessity to integrate rural energy component with JFM programme.

Community Participation in JFM : Some achievements

Joint Forest Management is a concept of developing partnerships between fringe forest user groups and the FD (forest department) on the basis of mutual trust and jointly defined roles and responsibilities with regard to forest protection and development. Under the JFM programme, the user (local communities) and the owner (government) manage the resource and share the cost equally. The effective and meaningful involvement of local communities in evolving sustainable forest management systems is now being looked upon as a significant approach to address the longstanding problems of deforestation and land degradation in India. The linking of socio-economic incentives and forest development has been singularly instrumental in eliciting community participation. The institutional involvement in various forest protection and developmental activities has made promising impacts on the biophysical and socio-economic environment of the JFM areas. The idea is to bring 33% of the forest cover in India within this joint forest programme by the year 2020. By the end of 2006, close to 100,000 communities were practicing/adopting one or the other form of JFM covering an area of about 22 million hectares in 28 states, (Saxena, 2012).

Another important activity where community participation is crucial is fire management in forests. In Madhya Pradesh and Andhra Pradesh, VFCs are involved in creating and maintaining fire lines by cleaning them regularly and in putting out forest fires, which has resulted in good regeneration in hitherto vulnerable areas. The FD has organised training programmes in different states to impart advanced fire-fighting skills to FD field staff and VFC members. Forest protection has been provided by communities through patrolling on a rotational basis or having a paid watcher against grazing, fires, illicit felling, etc. The effect of increasing years of protection is reflected in positive trend with respect to various forest and ecological parameters such as grass productivity, tree count, basal area, and regeneration of trees and shrubs. There have also been umpteen examples of VFC members fighting organised gangs of timber smugglers at great risk in many states including Andhra Pradesh, Madhya Pradesh, Orissa and West Bengal. However, system of reward to VFCs from such efforts are yet to be worked out and implemented in many states. Another crucial achievement of community involvement has been the reclaiming of encroached lands under cultivation in a peaceful manner in many states like Andhra Pradesh, Madhya Pradesh and Orissa.

Government Policy promoting JFM :

The 1988 Forest Policy brought about a radical change in the priorities for the forest sector. For the first time, environmental stability and meeting the subsistence requirements of local people were given greater prominence than industrial use and generation of government revenue. The policy document included specific reference to meeting the domestic requirements of 'tribal and other poor living within and near forest'. The government's initiative in 1990 in issuing a Circular making it possible for forest departments to involve people in the management of forests, facilitated implementation of the 1988 policy.

1.JFM and income generation activities:

In order to reduce pressure on forests, interventions for increasing the current income levels of forest user communities have been attempted through creating opportunities for wage employment, providing agricultural implements, developing irrigation infrastructure, undertaking dairy development, capacity-building, etc. Investments in providing different agricultural inputs and irrigation infrastructure have successfully increased agricultural productivity especially in Andhra Pradesh, Madhya Pradesh, and Haryana. However, training programmes by themselves have failed to create any significant impact on the economic status of the people in Andhra Pradesh owing to the low skill levels, inadequate capital, etc. In West Bengal, while piggery is the most successful project, it is limited to the ST community owing to social taboos. The challenge for the JFM implementers lies in designing and introducing employment generation schemes in consonance with the socio-economic and other conditions of the area to elevate the status of the poor within a specified time frame.

2.Role of rural development in JFM

While the initial aim of JFM was the provision of forest usufructs, today the emphasis is shifting to a facilitation of overall village development. The emphasis on village development needs to become a common feature in all states and should include programmes to increase agricultural productivity, soil and water conservation measures, introduction of school and community buildings, inputs of seeds, fertilizers, planting of trees on agricultural bunds and homesteads, establishment of fuelwood and fodder plantations, etc.

3. Norms for Participation and equity in JFM institutions

A lack of equity has been observed in JFM areas especially in multi-village and -hamlet protection committees. This can be avoided by bringing about changes in government resolutions that ensure representation of all hamlets of a village or all villages of the protection committee, castes, gender, etc. In multi-village and hamlet committees the sharing of responsibilities on a rotational basis would improve access to equal opportunities.

Therefore, the resolutions specify that priority in all wage labour and employment activities be given to the landless, marginal farmers, those below the poverty line, SC (Scheduled Caste) and ST (Scheduled Tribe), etc. The executive committees and the general body must ensure that women, landless and those below the poverty line have a representation in the JFM institutions. Equity in benefit-sharing needs to shift from the current focus on forest usufructs to the other benefits derived from this programme -wage labour, development and income generating programmes, etc.

Conclusion:

Joint forest management has created new challenges for rural communities and the FD alike, not least in the need for a change in traditional perceptions and new ways of working. The formulation of norms and procedures regulating resource use based on equity between all members. Generally, joint forest management should be pursued most intensively in areas with high tribal and forest concentrations. In such regions, already many communities are interested in acquiring formal authority as forest managers. In targeting specific areas for information campaigns by the Forest Department or NGOs, outside facilitators should seek communities with heavy forest dependencies, interest in acquiring forest management responsibilities, and the presence of motivated forestry field staff, NGOs, and local colleges or universities that could assist the expansion of JFM programs. Priority should also be given to forest areas with good ecological potential for rapid regeneration, characterized by high densities of coppice, root stock and multiple species with valuable subsistence and marketable products.

The issues of sustainable natural resource assumes greater importance, it is becoming clear that sustainability is clearly linked to the participation of communities living close association with these natural resources. JFM&CFM have acquired more achievement in protecting forest. The role

of Govt.& NGO is significant in encouraging forest management. JFM, then, appears to be a workable system not only in providing for subsistence needs, but also potentially providing income-generating opportunities, and of course aiding in the regeneration of forests. However, it seems that villagers who are dependent on the forest for their livelihoods would first like to be assured of a continued source of income for their daily subsistence. People who have little or no dependence on the forest may look for indirect benefits like their recognition by others. Or they may protect the forest because it appeals to their genuine concern for the environment. There are also cases where people have sacrificed their immediate tangible benefits (which were important for them at that point in time) for the long term and intangible benefits, if they were assured of getting these.

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