



LIVELIHOOD SUPPORT OF JOINT FOREST MANAGEMENT (JFM) IN RURAL INDIA

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ABSTRACT

The total forest cover of the country is believed to be 69.09 million hectares which constitutes about 21.02 % of the total geographical area of the country. 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 at present. There are at least 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. As per 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. 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 have participated/adopted one or the other form of JFM covering an area of about 22 million hectares in 28 states. The Joint Forest Management program in India is one of the largest co-management efforts in natural resource conservation in the world apart from providing livelihoods to forest dependent populations. Joint forest management provides crucial subsistence needs of housing materials, food, medicine, fuel-wood, small timber and non timber forest products. It is also argued that the rural population in forest fringe areas is reliant on forest resources for their livelihoods as well as a way of life both socially and culturally. In every case, joint forests management offer vast potential for poverty alleviation among the forest-dependent poor. The importance of forest resources among fringe communities for sustenance has become substantial. The evolving concept of community forest management has naturally brought to the fore various interrelated issues concerning forest management.

KEY WORDS: Joint Forest Management, livelihood , Rural India



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INTRODUCTION

Forests in India

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).

Joint Forest Management

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. Some 259,000 ha of Sal forests were planted in the Western Circle of the state with the involvement of local people under the institution of joint forest management (Singh 1994). Throughout the 1980s there was a strong wind of forest conservation initiated by the forest conservation act. In West Bengal and in some progressive states, the respective Governments pursued the experimental design of allocating a specific area of forest together with participatory management responsibilities to local communities while pledging a share in the forest revenues and access to non timber forest products (NTFPs).

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). 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). Evidence on the success of JFM based on the yields of timber and non-timber forest produce and its benefit sharing have shown mixed results (Khare *et. al.* 2000; Bulte and Engel 2006). The impact of JFM has been argued to differ due to the degree of specific rights and benefits that forest

department has allowed to the local communities (Ballabh et. al. 2002).

Main Features of JFM

- The ownership of the forest lies with the government.
- The participating communities are involved in the protection of these forests

- In return for the protection, certain infrastructural and benefit sharing rights are accorded to these communities
- The system of community participation is institutionalised in the form of Joint Forest Management Committees (JFMCs.)

Table 1
Important Features of Policy Directives on Joint Forest Management (JFM)

Policy Directives	Main Features
The Circular (first) Concerning JFM, 1990	<ul style="list-style-type: none"> - Involvement of village communities and NGOs in regeneration of degraded forests - Benefits of people's participation should go to the village communities
JFM Cell Creation Notification, 1998	<ul style="list-style-type: none"> - Cell created for monitoring impact of JFM being carried out by state governments
Standing Committee Notification, 1988	<ul style="list-style-type: none"> - Advise on all operational aspects of JFM for expansion of JFM to non forest areas
Terms of Reference Notification, 1999	<ul style="list-style-type: none"> - Sharing of experiences of JFM implementation as each state has passed its own resolution on JFM - Monitoring of JFM programmes
Notification for JFM Network, 2000	<ul style="list-style-type: none"> - Creation of JFM Network at the national level to act as regular mechanism for consultation between various agencies involved in JFM - Representatives from all the stakeholders
Guidelines for Strengthening JFM, 2000, 2002	<ul style="list-style-type: none"> - Present latest JFM policy directives and broad framework for implementation of JFM - Measures such as legal support for JFM Committees, promotion of women's participation and conflict resolution - Memorandum of Understanding between forest department and JFM Committees outlining short- and long-term roles and responsibilities and pattern of sharing - Capacity building for management of non-timber forest products for providing remunerative prices for users
Operational Guidelines for Tenth Five Year Plan, 2002-2007	<ul style="list-style-type: none"> -Formulation of National Afforestation Programme to encourage participatory approach to sustainable forest development - Implementation of centrally sponsored afforestation schemes via a two-tier system consisting of Forest Development Agencies and JFM Committees -Transfer of funds to JFM Committees through Forest Development Agencies

JFM involves sharing of responsibilities and rights of local communities and forest department (FD) as primary stakeholders in forest management system. It is also supposed to invoke active participation of local people and application of their traditional wisdom and knowledge in countering ecological and economic vulnerabilities in the form of soil erosion, drought condition, loss of soil productivity and scarcity of timber, fuel wood and NTFPs like food, fodder, plant leaves etc.

Joint Forest Management - A National Perspective

The forest cover and area under JFM is shown in Table 2, which represents that Jharkhand has highest percentage (72.94) of forest under JFM followed by Bihar (71.42) and Madhya Pradesh 70.62, but Madhya Pradesh has highest area under JFM. 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 2
Statewise forest cover and area under JFM in India.

S.NO	State	Recorded Forest Area (ha)	Area under JFM (ha)	Forest covered by JFM (%)
1	Jharkhand	2360500	1721700	72.94
2	Bihar	647300	462333	71.42
3	Madhya Pradesh	9468900	6687390	70.62
4	Punjab	305800	178333	58.32
5	Chhattisgarh	5977200	3319000	55.53
6	West Bengal	1187900	646084	54.39
7	Maharashtra	6193900	2403344	38.80
8	Tripura	629400	241138	38.31
9	Tamil Nadu	2287700	756446	33.07
10	Haryana	155900	41188	26.42
11	Rajasthan	3263900	858614	26.31
12	Andhra Pradesh	6381400	1519000	23.80
13	Gujarat	1892700	414151	21.88
14	Karnataka	3828400	808020	21.11
15	Orissa	5813600	1148676	19.76
16	Kerala	1126500	107404	18.41
17	Uttarakhand	3465100	564221	16.28
18	Sikkim	584100	88518	15.15
19	Uttar Pradesh	1658300	183393	11.06
20	Manipur	1741800	166767	9.57
21	Goa	122400	10000	8.17
22	Himachal Pradesh	3703300	205056	5.54
23	Nagaland	922200	42929	4.66
24	Mizoram	1671700	55990	3.33
25	Assam	2683200	52499	1.96
26	Arunachal Pradesh	5154000	100377	1.95
27	Jammu and Kashmir	2023000	38736	1.91
28	Meghalaya	949600	17245	1.82
29	Andaman and Nicobar Islands	717100	262	0.04

Source: ICFRE, 2011

Livelihood impacts of Joint Forest Management on Rural Areas

Poverty reduction and sustainable livelihood are the two main issues in JFM. The poverty reduction means to achieve the sustainable livelihood which is required to develop continue employment and income generation innovation for new economic choice, capacity building for livelihood goals and strategies. This will be followed by implementing with the outcome of equitable benefit sharing and personal and community empowerment.

- Joint Forest Management Committees (JFMCs) have full rights over all the non-timber forest products (NTFPs) except the nationalized Minor Forest Produce, that is, Tendu (*Diospyros melanoxylon*) leaves, Sal (*Shorea robusta*) seeds, Cashew (*Anacardium occidentale*) and others.

- In Andhra Pradesh, 50 percent of the net proceeds from the sale of Tendu leaves are shared with JFMCs.
- In the states of Madhya Pradesh and Chhattisgarh, 100 percent of net profit goes to the collectors of NTFPs.
- The underlying strategy of JFM in India is to empower local populations in their livelihood practices through self-sustaining local environmental governance and achieve the goals of national forest policy of 33percent forest cover, (Sarker and Das, 2008).

Livelihood Issues

In parts of West Bengal, communities derive as much as 17% of their annual household income from NTFP collection and sale, (Malhotra *et al.*, 1991).The potential NTFPs of the forests in South West Bengal are Sal leaves, Mushrooms, various medicinal plants and tendu leaves etc.

Among these green Sal leaves are most important and many poor villagers depend upon this for their daily subsistence, (Prasad and Bhatnagar, 1993). Throughout India, collection of tendu leaf generates part time employment for 7.5 million people - a majority of them tribal women. The importance of NTFPs for the very poor tribal households has been well documented by other studies as well (Hedge *et al.*, 1996; Godoy *et al.*, 1995). In Andhra Pradesh, the poor obtain 84% of their fuel supplies from common property resources, and are employed for 139 days to collect products from common property resources (Jodha, 1992). It is found from the study conducted by (Mishra *et al.*, 2005) that the average income

from NTFPs in the region of Midnapore district of West Bengal is Rs. 550/- per household per year. There is a large diversity of yearly income from NTFPs. In Ranibandh-Kamalapore region of Bankura district of West Bengal, income from NTFPs is above Rs. 8 lakhs for the whole year and in Vedula in the same district it is as low as Rs. 3500. Throughout India, collection of tendu leaf generates part time employment for 7.5 million people a majority of them tribal women (Arnold, 1995). According to study in Uttar Pradesh, women derive a greater proportion of their income from forests and common lands; poor women derive 45% of their income from forests and common lands as opposed to 13% for men, (FAO and SIDA, 1991).

Table 3
Average employment opportunities generated by JFM in different States of India

S. No	State	No. of JFM Committee	Total no of families involved in JFM	Annual Employment Generated in lakh mandays
1	Andhra Pradesh	7718	1438000	100.00
2	Arunachal Pradesh	1013	33048	2.64
3	Assam	1184	52499	4.88
4	Bihar	682	211674	4.72
5	Chhattisgarh	7887	1117000	70.70
6	Gujarat	2195	417032	182.76
7	Haryana	2487	66036	7.05
8	Himachal Pradesh	1023	263024	2.70
9	Jharkhand	9926	429796	8.60
10	Karnataka	3848	272805	74.90
11	Kerala	576	78501	4.00
12	Maharashtra	12665	2709000	91.37
13	Manipur	665	24102	6.43
14	Meghalaya	285	39210	16.04
15	Nagaland	951	159587	2.60
16	Punjab	1224	91850	8.00
17	Rajasthan	5316	571051	51.35
18	Tamil Nadu	3487	482269	16.99
19	Tripura	920	79445	39.00
20	Uttar Pradesh	3426	706050	17.23
21	West Bengal	4386	505149	38.46
	Total	71864	9747128	749.72

Source: ICFRE, 2011

The key areas which need attention are

- Income generation activities for landless and women.
- Food security through grain banks especially in forest fringe villages which suffer from crop failure due to low irrigation potential and difficult terrain.
- Grazing and livestock management of non conventional energy
- Support to the agriculture by providing irrigation facilities.

Table 4
Showing the average benefits assessed to the JFMCs from different forest resources

S. no	States	No. of JFM Committee	Total no. of Families involves	Benefits in Rs. Lakhs				
				Fuel wood	Fodder	NTFPs	Others	Total
1	Andhra	7718	1438000	1022.61	217.90	700.53	897.37	2831.41
2	Arunachal Pradesh	1013	706050	1883.56	9198.00	117.90	44.25	11243.71
3	Chhattisgarh	7887	79445	14400.00	24000	93050.	800.00	132250
4	Haryana	2487	571051	94.60	78.48	20.98	0.27	194.33
5	Jharkhand	9926	91850	8580.00	NA	3124.00	NA	11704
6	Karnataka	3848	159587	1628.58	NA	NA	1515.42	3144
7	Madhya Pradesh	15228	1700000	NA	NA	NA	2841.91	2841.91
8	Maharashtra	12665	2709000	919.63	117.63	25.48	2.92	1065.66
9	Meghalaya	285	78501	68.75	24.62	7.82	6.00	107.19
10	Nagaland	951	272805	675.00	0.00	20	0.00	695
11	Punjab	1224	429796	25.00	20.00	40	5.00	90
12	Rajasthan	5316	66036	NA	488.46	75.26	129.75	693.47
13	Tripura	920	1117000	4472.00	762.00	483.00	170.00	5887
14	Uttar Pradesh	3426	1438000	1152.02	791.18	50.33	53.22	2046.75
15	West Bengal	4386	33048	10000.00	3000.00	5000	0.00	18000
Total		77262.00	9918027.00	44921.75	38698.27	102715.30	6466.11	192801.43

Source: ICFRE, 2011

CONCLUSION

The JFM in India needs to be appreciated and analyzed from a wider philosophical perspective. Such as availability of livelihood products that motivates people to protect their forests, it should, be linked to the livelihood needs of people. Immediate economic benefit on sustainable basis would be an important determinant of its effectiveness. JFM initiatives are becoming acceptable at various levels of governance in India, and all forests will

eventually be managed under the principles of participatory forestry to empower and help poverty alleviation by ensuring the livelihood security of the forest-dependent people.

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