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Joint Forest Management in India: The Management Change Process

Abstract

This paper first addresses the processes and circumstances that led to the evolution of joint forest management in India, and then reviews and analyses the emerging policy issues confronting joint forest management. In so doing, it describes the 'learning curve' achieved in the development of joint forest management in India, which has ushered in a 'management change' in the Indian forestry sector.

I n the late 1970s professional foresters in the tropics realised that they could not manage forests sustainably under the principle of conventional or industrial forestry whose main emphasis was on the generation of economic benefits through timber production. Under such a mode of forestry, the village communities were considered to be obstacles to forest management[1]. Social forestry, first implemented in developing countries such as India and the Philippines, involving village communities in tree plantation programmes on public and private lands, was recognised as an important norm for successful and sustainable forest management, even though industrial forestry was the dominant practice. Scientists and non-governmental organisations (NGOs) came to prefer the term 'community forestry' to 'social forestry' because social forestry, created as a conciliatory measure, often adopted a top-down approach in project implementation[2] and therefore developed ambivalent connotations. 'Community forestry' was defined first by the Food and Agricultural Organisation[3] as 'any situation that intimately involves local people in forest activity'.

Over the years community forestry has diversified adapting to local contexts and changing circumstances, conceptualised as Joint Forest Management (JFM) in India, community forestry in Nepal, and village

forestry in Lao People's Democratic Republic. The differences are rooted in socio-economic, cultural, and political characteristics and forestry conditions, more noticeably in the key stakeholders, legal land status, property rights regimes, and institutional arrangements. Broadly the term 'participatory forestry management' is used to connote collective action-based forest management. Ideally participatory forestry management implies people's participation in every domain of forest policy to achieve sustainable forest management[4] (Exhibit 1). On the other hand, social forestry is still used to connote a range of comprehensive participatory forestry activities, as in Bangladesh, Indonesia, and Sri Lanka.
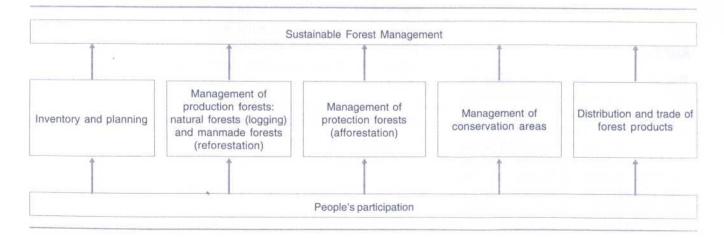
JFM in India is based on 'co-management' and a 'give-and-take' relationship between the two major stakeholders—village communities and the forest department, and mediated in most cases by an NGO. The forest department sets the objectives of forest management under the JFM programme while the management responsibilities and benefits from the forest are expected to be shared by the village communities and the forest department. Functional groups of village communities known by different names such as Joint Forest Management Committees, Hill Resource Management Societies, and Village Resource Management Committees undertake JFM on state-owned secondary forest and degraded land.

JFM is a departure from the earlier forest policies practised in India, whereby the forest department managed forests primarily to generate the maximum possible revenue for the State, while excluding village communities from the management process. However, the management change that has brought people-oriented forest policies to the fore is not a new phenomenon. It is the outcome of several factors including the inability of the forest department to prevent degradation of forest resources or arrest decline in forest cover, as well as the policy failure to accommodate traditional forest use patterns and age-old relationships between forest-dependent communities and forests. This paper first explores the evolution of JFM in India from a policy point of view by analysing past and present forest polices that facilitated this change. It analyses the emerging policy issues confronting the JFM programmes. This is followed by concluding remarks.

Forest Policies under Colonial Rule: State versus Communities

Many of the forests in India have, at different points in the nation's history, been managed under sets of rules and regulations developed by different communities. However, given the diversity of culture, forest types and administrative systems found in different parts of the country, it is difficult to generalise historical forest management practices in India. Forests were generally managed under a common property regime and documentation regarding forest management regimes under the British administration is available. The British administration directed its forest policy towards commercial interests and agricultural development, which was a major source of revenue. These motives were explicitly documented in the Indian Forest Acts of 1865, 1878, and 1927 and the National Forest Policy of 1894

Exhibit 1 Participatory Forest Management: People's Participation in Every Domain of Forest Policy

Sustainable Forest Management

Inventory and planning | Management of production forests: natural forests (logging) and manmade forests (reforestation) | Management of protection forests (afforestation) | Management of conservation areas | Distribution and trade of forest products

People's participation

during the colonial era. These legal and policy instruments radically changed the forests from common property into state property. It was the beginning of the era when the sole motivation of forest administration was the promotion of State interests. Perhaps, it was also the beginning of the alienation of village communities from the forests.

The 1865 Act empowered the government to declare forests as government land (reserved forests). However, the government found the 1865 Act inadequate as the prevalence of customary rights came in the way of imposition of State control over forests[5]. It was replaced by a more comprehensive piece of the legislation, the 1878 Act, enabling the government's sole right over valuable forests. Later, the National Forest Policy of 1894, the first formal forest policy in India was issued reiterating the government's intentions. This policy stipulated that 'forests which are the reservoirs of valuable timbers should be managed on commercial lines as a source of revenue to the States' and that 'wherever an effective demand for culturable land exists and can only be supplied [by a] forest area, the land should ordinarily be relinquished without hesitation…'[6].

As a result, the British administration divided the forests into four classes for management purposes. The first class of forests was generally situated on hill slopes and was deemed essential for the protection of cultivated plains from damage caused by landslides and hill torrents. The second class included vast reserves of valuable timber trees. People's requirements were to be met by the third class of forests—'minor forests' that yielded only inferior timber, fuelwood, or fodder, and by the fourth class—'pastures and grazing grounds' to which certain restrictions were applied. In general, the policy dictated the constitution and preservation of forests and, to a greater or lesser degree, the regulation of users' rights and the restriction of their privileges. It further suggested that 'the cardinal principle to be observed is that the rights and privileges of individuals … be limited'[7].

Likewise, the implementation of the Indian Forest Act of 1927, which succeeded the 1878 Act, also had an impact on forest-dependent communities. The 1927 Act embodied all the major provisions of the 1878 Act and its amendments and further consolidated the law relating to forests, the transit of forest produce and the duty that could be levied on timber and other forest produce. The 1927 Act included a provision for the conditional transfer of a reserved forest to a village community, which would be called 'village forest'. In sum, this led to the tightening of the State's grip over forests by depriving communities of many of their traditional rights as 'people's rights [to use forests] were extinguished and replaced by privileges'[8]. This ultimately led to greater dissociation of communities from forests and turned forests into open access regions as the State lacked the wherewithal to guard entire forest patches on a continuous basis[9]. It is argued that the 1927 Act recognised different categories of forests depending upon the needs and capacities of the forest dependent populations (i e, there was an appreciation of people's role in the forest management) but this was overshadowed by the State's priorities for revenue generation in the post-independence era[10].

The Indian states adopted the 1927 Act after independence in 1947. Subsequently the Act was modified through several amendments and furthermore, the Indian states promulgated their own Forest Acts. In the post-independence era 'forest offenses [as outlined in the 1927 Act] were recategorised and harsher punishments were provided'[11]. Attempts to curtail local forest use by affecting changes to this Act continued until the early 1980s even as people's groups and NGOs resisted government-imposed measures. Despite the restrictions on forest use, the people continued to find access to forests. Even under colonial rule, in some cases, people actively opposed the state take over and demonstrated against curtailment of public rights. Two such cases of resistance by people in the State of West Bengal[12] and Uttaranchal[13] (earlier called Uttar Pradesh Hills) cases had a remarkable impact on the Indian Forestry sector in the years that followed.

Genesis of Joint Forest Management

Continuous deforestation and degradation of forests leading to a decline in forest cover have long been sources of concern for policy makers in India. The need of the hour and policy failure backlash induced the emergence of a new institution and the rationale for the JFM model within the Indian forestry sector. This section discusses why the government commenced JFM in India.

Misdirected Forest Policies

The Indian government enacted the first post-independence National Forest Policy in 1952. As an attempt to revise rather than entirely reconstruct the preceding forest policy, the 1952 Policy did not alter the fundamental principles which underpinned the 1894 Policy. In the context of

post-independence reconstruction, the 1952 Policy was required to accommodate and endorse the heavy demand on forests as a number of industrial expansion and river valley and communications development schemes commenced. Forest-based industries benefited the most from forests in the post-independence era in the form of subsidised raw material. Such policy decisions in turn had an effect on forest-dependent communities and led to several people's movements against State policy.

With regard to people's involvement in forestry, the 1952 Policy laid down that 'it would be the duty of the forester to awaken the interest of the people in the development, extension and establishment of tree-lands wherever possible, and to make them tree minded' [14]. However, the policy did not provide any strategic appraisal of how to bring about public participation in forest management. Rather, the government continued with British forest policies even after independence.

Three reasons have been identified for deforestation and degradation of forests in India: defective forest policy, faulty policy implementation, and poverty[15].

Misdirected policies to curb deforestation, led to the introduction of laws regulating the felling and marketing of trees on private lands. This had the opposite effect as farmers planted fewer trees on private lands fearing that they would not be able to sell the timber. Nonetheless, the demand for wood remained strong and the prices for timber high. Therefore, pressure on government forests with relatively open access increased to meet the demand. Consequently, India's forests suffered further depletion.

The State issued misdirected forest policies that failed to account for the fact that poor people have historically depended on forests for their needs and have few alternatives. Also, the stakeholders—village communities and the forest department—were dealing with forests in isolation and from different perspectives. This resulted in the implementation of forest policy initiatives as a means to overcome the problem, perhaps without analysing the relationship between cause and effect. The outcome was an increasingly indifferent attitude among people towards the forests and the forest department.

Specifically, it was not possible for the forest department, even armed with strict forest protection laws, to safeguard a large component of forests from the large number of local users, given the small number of forestry personnel throughout the country. There are around 200,000 villages

with a total population of 350 million people on the fringes of India's forests[16]. The inference is that the State can effectively protect forests only by soliciting people's participation in forest management. Conversely, village communities as forest users should shoulder the responsibility for protecting and managing their forests with the forest department. Under such an arrangement the local community could harvest products from their forests in a sustainable manner and with a sense of ownership. Ideally this forest management model should have been in place, bearing in mind the continued significance of forests in village economies.

The Arabari and Sukhomajri Experiments in JFM

A group of forest department personnel realised the importance of peoples' participation in regenerating degraded sal forests in the Arabari Range of the Midnapur district in West Bengal in the 1970s. This forest rejuvenation strategy started as an experiment and was replicated on a large scale first in this state and then in other parts of country. The West Bengal Forest Department issued the first government order in 1989 to involve village communities in forest protection with provisions to give people 25% of the revenue from timber harvested from protected forests. This successful experiment led to the development of a new forest management strategy known as 'Joint Forest Management' (JFM). The village communities involved in managing nearby government forests under JFM became known as JFM Committees or Forest Protection Committees. This is India's first recorded case of 'co-management' of forests by the forest department and village communities[17]. The JFM Committees formed in Arabari have also emerged out of a persistent conflict between the people and the government for control over forest resources.

Another successful experiment, which began in 1975 in Sukhomajri, a village in the state of Haryana, also helped JFM conceptualisation. This experiment was initiated as an integrated watershed development programme by the Central Soil and Water Conservation Research and Training Institute (CSWCRTI). The emphasis was on rainwater harvesting to enhance irrigation of cultivated land in Sukhomajri, which faced a severe soil erosion problem. Forestry became an integral part of the experiment, as various tree species were planted to protect the watershed, along with building water-harvesting structures for collecting rainwater. An unwritten agreement

between a CSWCRTI team and the villagers came into being for protecting the catchment of water-harvesting structures from grazing and illicit cutting in the area[18]. This was achieved by instituting a Water Users' Association' subsequently renamed Hill Resource Management Society. Built upon this successful participatory model, watershed management is now an integral part of the ongoing JFM programme under the ambit of micro-level planning. Parallels can be drawn between the evolution of forest and other natural resource management practices involving communities at the grass roots in India.

Successful policies initiated for reforestation/afforestation activities at the micro-level have led to subsequent formulation and implementation of new polices for forest management for the entire country. At present, there are more than 84,000 JFM Committees spread over 27 states, managing about 17 million hectares (ha) of forests. There are also numerous Self-Initiated Forest Protection Groups (SIFPGs) protecting and managing state-owned forests in India on the principle of participatory forestry, in the states of Orissa, Bihar, Gujarat, Rajasthan, Karnataka, Madhya Pradesh, and Andhra Pradesh. The SIFPGs came up 'parallel to and often preceding state initiatives' in the implementation of JFM[19].

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The other factors leading to the evolution of JFM are discussed in the following sections.

Failure to Promote Social Forestry

One of the first initiatives to enhance forest cover at a time when forests were declining was made by the National Commission on Agriculture (NCA) in 1976. The NCA was set up in 1970 by the government to examine comprehensively the progress of agriculture, including forestry, and to make recommendations for its improvement and modernisation. In the case of forestry, the NCA investigated and reported that farm forestry should be accepted as an important factor affecting agricultural progress and as a source of raw material for industry[20].

Nonetheless, the NCA placed emphasis on meeting the requirements of forest-based industries, and held that the production of industrial wood would have to be the raison d'être for the existence of forests[21].

Subsequently, the government launched a 'social forestry' programme, including 'farm forestry' on private lands, and established 'community self-help woodlots' on community lands on a large scale during the 1970s and 1980s to reduce pressure on government owned forests and also to incorporate people into the afforestation programme. However, social forestry programmes were not successful, as they did not provide enough benefits to the people[22]. The emphasis of this programme was more on farm forestry than establishment of community woodlots, where community woodlots were aimed at meeting the requirements of rural communities. For example, whilst the World Bank-assisted social forestry programme in Uttar Pradesh overshot its farm forestry targets, establishment of community self-help woodlots achieved only 11% of the target[23]. The farm forestry programme too was successful 'only in the commercialized and monetized regions of India, and made little impact on the vast subsistence regions' and furthermore 'even in regions where it was successful in the early 1980s, it could not be sustained after 1986'[24]. By and large the State failed to involve people in the social forestry programme despite huge investments[25]; somewhat similar failures in implementation of social forestry programmes since the late 1970s were also experienced in other tropical countries with centralised forest management, such as Indonesia and the Philippines.

However, the social forestry programme provided an opportunity for forest department personnel to enter into a dialogue with village communities, thereby laying the foundations for JFM in India. There were also sound economic reasons for initiating JFM in India. As the emphasis shifted away from imposing punitive measures as a component of the State's prerogatives over forest issues, the costs of monitoring and enforcement were reduced and the role of State Forest Departments in

excluding people from forests was eased[26]. It has been argued that JFM is a means of ensuring protection of forests at low cost[27].

Facilitative Role of NGOs

NGOs are facilitating village communities as well as the forest department in the formation of JFM Committees and have been instrumental in articulating the needs of forest-dependent communities to the state. NGOs have also developed their own participatory forestry models based on the JFM policy directives of the government.

During the inception of JFM in India, the forest department was skeptical of NGO involvement in assisting village communities in undertaking community forestry programmes[28]. Over the last decade, however, the state of affairs has changed in favour of NGOs, which may be mainly attributed to the change in the mindset of forest department personnel towards forest management. Now substantial rural developmental funds earmarked by the government are routed through NGOs for JFM programmes. Additionally, pressure on the forest department from external aid agencies to involve NGOs in JFM programmes and to restructure the forest department accordingly, as a condition for aid in India, has also resulted in overcoming the problem between NGOs and the forest department[29]. Now NGOs are a major stakeholder in forest policy formulation in the country.

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Policy Change: Creating a People's Movement

The movement for the adoption of JFM in the forests of India gained momentum and was formally institutionalised once people's participation in forest protection and management was incorporated into the new National Forest Policy of 1988, the second forest policy after independence.

The paradigm shift in the forest policies and legislations was noticed in the 1970s and 1980s, with the passage of the Forest (Conservation) Act 1980[30], which made the central government's approval mandatory for conversion of forest land for non-forest purposes and highlighted the primacy of forest conservation over other requirements. In fact, before the 1980 Act, central control over forest lands was strengthened by transferring forestry from the State List to the Concurrent List by the 42nd Amendment of the Indian Constitution in 1976. The initiative for the formulation of the 1988 Policy was an outcome of social and political dynamics spread over 10–15 years and primarily led by the late Prime Minister, Mrs Indira Gandhi in the 1970s[31].

During the 1970s and 1980s, the concerns for forest conservation were highlighted when misdirected forest policies of the pre- and post-independence period led to several people's movements against the State. The Chipko Movement which began in the State of Uttaranchal in 1973, later spreading in an organised manner to other states, saw people protesting against the logging of trees for industrial use[32]. The people's movement achieved a major victory in 1980 when the State placed a 15-year ban on tree felling in the Himalayan forests. This movement against State policy was highlighted by the media and led to increasingly conservation-oriented management and utilisation of forests. In another case, people protested against the replacement of native sal forests with teak plantations by the Forest Development Corporation in Bihar in 1977[33]. This movement, termed 'tree war', met with stiff resistance from the state administration.

The international developments in the field of the environmental protection commencing with the Stockholm Summit on Human Environment in 1972 was also one of the factors for the central government-supported forest conservation initiatives[34]. These initiatives were coupled with considerable international funding for the forestry sector in India[35].

The 1988 Policy has in the last two decades changed the face of the Indian forestry sector. It is both conservation- and production-oriented. The basic objective of this policy is maintenance of environmental stability through preservation of forests as a natural heritage. It also places

emphasis on substantially increasing forest/tree cover and the productivity of forests to meet national needs. However, the distinctive feature of this new policy was the creation of 'a massive people's movement with the involvement of women, for achieving ... the objectives and to minimise pressure on existing forests' [36]. This is a complete departure from the previous 1952 Policy as it envisages people's participation in the development and protection of forests. The 1988 Policy is a harbinger of management change i e, from government-managed to people-managed forests.

Policy Directives vis-à-vis Joint Forest Management Intensity

As a follow up to the 1998 Policy, the Ministry of Environment and Forests has issued policy directives on JFM from time to time, reflecting the government resolve to create a people's movement and encourage participation in the management of forests, also keeping in view the changes in JFM intensity. The JFM intensity can be defined in terms of the gradually increasing area under JFM, the number of JFM Committees, the stakeholders including the NGOs and also the increasing number of challenges and issues confronted.

This section summarises the policy directives drawn from the Government of India's orders, notifications and guidelines on JFM (Exhibit 2) (these policy directives are distinct from the forestry legal system in India which is designed around The Indian Forest Act, 1927). The frequency of these policy directives in recent years suggests a learning curve achieved in the development of JFM in India.

First Circular on JFM and State Resolutions

The first policy directive to support the 1988 Policy was a JFM Circular issued by the central government in June 1990 for the involvement of village communities and voluntary agencies in the regeneration of degraded forests.

Exhibit 2 Important Features of Policy Directives on Joint Forest Management (JFM)

Policy Directive	Main Features
The Circular (first) Concerning JFM, 1990	– 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	– Cell created for monitoring impact of JFM being carried out by state governments
Standing Committee Notification, 1988	– Advise on all operational aspects of JFM for expansion of JFM to non-forest areas
Terms of Reference Notification, 1999	– 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	– 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	– 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 of usufructs – Capacity building for management of non-timber forest products for providing remunerative prices for users
Operational Guidelines for Tenth Five Year Plan, 2002–2007	– 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

This Circular provided the background and methods for JFM implementation by the State Forest Departments with the involvement of village communities. It also envisaged participation of voluntary organisations/NGOs with a proven track record in JFM to facilitate participation of village communities in the development and protection of forests with an emphasis on regenerating degraded forests. Further, the Circular highlighted management concerns such as ownership or lease rights over forests, membership of JFM Committees, usufruct rights of beneficiaries, and management and supervision of afforestation and protection activities. Consequently, state governments passed their own resolutions on JFM. These resolutions varied from state to state depending on socio-economic, political and geographical configurations as well as each state's cultural characteristics.

Monitoring Cell and Expansion of JFM to Non-forest Areas

The government created a 'JFM Monitoring Cell' in 1998 with the objective of monitoring the impact of JFM. Furthermore, the government constituted a 'Standing Committee on JFM' in 1998 to review the implementation of JFM programmes as well as existing JFM arrangements in the country. This committee comprised scientists, senior Indian Forest Service Officers, and officials of funding agencies and other organisations engaged in JFM activities. The main objective of the committee was to advise the government on the operational aspects of JFM, including institutional arrangements. The committee was also expected to discuss the strategies to expand JFM in non-forest areas. In India, besides the forest land owned and managed by the State Forest Departments, there is a large area (around 76 million ha) of non-agricultural or non-forest land. Though these uncultivated lands are highly degraded, they hold potential for expansion of JFM in the country.

Sharing of Experiences and Creating a JFM Network

Given that each state in India has passed its own JFM resolution, it is vital that experiences of its implementation, both successes and failures, be shared and that ways and means are found to share experiences among the states. With this in view, the government established a committee comprising senior forest officers from six states and a member of the JFM Monitoring Cell in 1999. This committee was also given the responsibility of preparing formats for monitoring JFM programmes and identifying JFM programme items for systematic funding, with due regard to long-term sustainability. To give added impetus to JFM in India, the government instituted a 'JFM Network' at the national level in 2000. The JFM Network acts as a regular mechanism for consultation between various agencies engaged in JFM work. It also obtains constant feedback from various stakeholders on the JFM programme for policy formulation and suitable directions to states. This network has representatives from the Ministry of Environment and Forests, NGOs, and funding agencies.

Issuing Guidelines for Strengthening JFM

Almost a decade after the first notification on JFM, the government developed guidelines in 2000 for strengthening the JFM programme, representing the latest JFM policy directives, and presenting a structured and broad framework for JFM implementation in India. The guidelines set forth a number of measures for strengthening JFM, including increased legal support for JFM Committees; promotion of women's participation in JFM programmes; extension of JFM into good forest areas; preparation of microplans in JFM areas; conflict resolution; and official recognition of SIFPGs. The guidelines also stipulated returning a minimum of 25% of the revenue earned by products harvested by village communities into meeting the conservation and development needs of the forests. These suggestions have been developed on the basis of the experiences in JFM implementation in various parts of the country.

Another set of guidelines for strengthening the JFM programme issued in 2002 focus on three issues: Memorandum of Understanding between the forest department and the JFM Committees, relationship between village panchayats (village councils) and JFM Committees, and capacity building for management of non-timber forest products. These measures also reflect the State's intention to monitor JFM Committees.

JFM in Afforestation Schemes

Given the government's emphasis on JFM, investments in afforestation under the Five Year Plans are being revamped in order to factor in people's participation in project formulation and implementation. The Ministry of Environment and Forests issued new operational guidelines

under the tenth Five Year Plan to encourage a participatory approach to sustainable development of forests. The National Afforestation Programme has been formulated by merging four centrally sponsored afforestation schemes of the Ninth Five Year Plan.

One of the major features of these guidelines is that all the new centrally sponsored afforestation schemes will be implemented via a two-tier system consisting of Forest Development Agencies (FDAs) and JFM Committees to allow greater participation of the community in planning and implementation. FDAs are new institutional organisations registered under the Societies Registration Act and operational at territorial/wildlife forest division level. FDAs will work in tandem with JFM Committees under the terms of a Memorandum of Understanding. On the one hand, FDAs strengthen the role of existing JFM Committees by addressing the socio-economic needs of the people, (e g, by taking initiatives for value addition and marketing of forest produce, formulation of guidelines for utilisation and sharing of usufruct and employment generation opportunities) and on the other, they create new JFM Committees. The government is also transferring funds to JFM Committees under the National Afforestation Programme through the FDAs. In short, the purpose of the National Afforestation Programme is to make JFM a central and integral part of all afforestation projects in the country.

The interrelations between these policy directives have impacted the trajectory of the development of JFM and many states have come up with revised JFM orders. The 'first resolution on JFM' has been consolidated by issuing new 'guidelines for strengthening JFM' in 2000 and then again in 2002, and the inputs for this policy change were provided by the 'JFM Monitoring Cell' and 'JFM Network', facilitating a dialogue among various stakeholders. While the new 'guidelines for strengthening JFM' facilitated revision of state resolutions on JFM, the policy changes on JFM take place within the purview of the 1988 Policy.

> Equity in participation in the JFM context refers to the participation of all stakeholders with an emphasis on under-privileged societal elements. The government is specifically targeting such people inhabiting forests and adjoining areas under the JFM and other afforestation programmes as they have fewer alternative opportunities for employment and income generation.

Emerging Policy Issues

The emergence of new policy directives from time to time implies that JFM is still evolving. There are a number of policy issues which affect either sustainability of existing JFM programmes or decelerate the pace of their implementation. The inception of the JFM programme in India was a daunting task for the forest department, NGOs, and other stakeholders. The state governments issued their own JFM resolutions to set their implementation guidelines. However, it was not possible to visualise at the outset the range of problems that would be confronted in each situation and at the different stages of JFM implementation.

In India, though more than 84,000 JFM Committees have been established, the figures do not reflect the success rate and, more importantly, the sustainability of these grass roots organisations. This remains the major 'teething' problem for JFM programme in India. The government has admitted that measures to sustain programmes beyond the project period have not yet been conceptualised[37]. For example, out of the total 362 tree growers' cooperatives organised by the National Tree Growers' Co-operative Federation Limited (now Foundation for Ecological Security) during 1998–1996, only 79% were actually functional, the rest being either non-functional or defunct[38].

So what are the factors that directly or indirectly hamper the progress and sustainability of JFM programmes? The following sections summarise important policy issues.

Equity in Participation

'Equity in participation' in the JFM context refers to the participation of all stakeholders/users with an emphasis on marginalised/under-privileged societal elements (such as the landless labour force, marginal and small-scale farmers, scheduled castes, tribal groups, and women). The government is specifically targeting such people inhabiting forests and adjoining areas under the JFM

programme and other afforestation programmes as they have fewer alternative opportunities for employment and income generation. One of the objectives of the JFM programme is to create employment for the under-privileged sections of society, with around 60% of the expenditure incurred in JFM being wages. A substantial proportion of the financial allocation of various rural developmental programmes in India is kept aside for afforestation schemes.

It is primarily the marginalised sections of society that are involved in plantation and protection activities in JFM. However, their involvement in determining forest management priorities is to be ascertained. An extensive study on the participation process in 55 JFM Committees in Andhra Pradesh found that JFM is successful in achieving the representation of marginalised sections in executive committees and attendance of meetings but not in actually influencing the decisions taken in the meetings[39]. It further revealed that it is the older people and households belonging to larger caste groups who are more likely to influence the decisions.

Further, political control in forest management remains vested in men. The government resolutions on JFM in India advocate active participation by women in the decision-making process and in determining forest management priorities. The 1988 Policy specifically refers to the creation of 'a massive people's movement with the involvement of women'—'the only non-bracketed mention of women' in the policy[40]. However, this policy objective is far from being accomplished. For example, in West Bengal, a woman automatically becomes a member of the JFM Committee by virtue of her husband being a member, but even then the husband is regarded as the primary member[41]. While women may be excluded from decision-making, they may be drawn into 'activity-specific participation', especially forest protection[42]. There are few cases of women's participation in all-women committees in India's hill areas[43].

Women's participation in JFM has been high on the government's agenda for more than a decade but still remains to be tackled[44]. Similarly, a fundamental problem exists with women's representation in other rural developmental activities under the ambit of the village panchayat. The government has issued new guidelines for ensuring meaningful participation of women in JFM, Nevertheless, it is difficult to speculate when the much needed and veritable participation of women in JFM in India will be ensured.

Equity in Benefit Sharing

Equity in the sharing of benefits derived from protected forests managed under the JFM programme is as important as equal participation in the JFM programme itself. Prior to the JFM programme implementation, village communities accessed forest products under different rights and regimes provided under various agreements. But with JFM implementation, community access to forest products was restricted as a prerequisite for the rejuvenation of degraded forests. Village communities waited patiently to harvest forest products from protected areas. After more than a decade and half since the introduction of JFM in India, however, the stalled distribution of benefits from plantations, rejuvenated forest areas and the inadequate remuneration to village communities has begun to spark signs of restiveness amongst users[45]. Such a problem arises due to the high value of a resource (forest) which leads to reluctance on the part of the State (nominal dominant partner-forest department) to share power and benefits[46].

In fact the 'regenerated forests themselves have created valuable assets that are sources of conflicts among communities, conflicts that threaten the long term sustainability of JFM' [47]. Two sets of problems can be discerned: that relating to distribution of benefits among the users themselves, and those relating to the distribution of benefits between the users/village community and the forest department. There were apprehensions at the lack of procedure for allocating benefits at the time when JFM programmes were first established[48]. That is, the current problems regarding benefit-sharing constitute a

> Equity in the sharing of benefits is as important as equal participation in the JFM programme. Two sets of problems can be discerned: that relating to distribution of benefits among the users themselves, and the other relating to the distribution of benefits between the users/ village community and the forest department.

fundamental policy failure, which, in explicit terms, tilts the flow of benefits derived from rehabilitated forests in favour of the forest department, despite objections from village communities, as in the case of Andhra Pradesh where the forest department has refused to share revenue from bamboo with tribal communities[49].

In Karnataka, only one third of the community assigned forest produce was distributed by the forest department to the members in 18 JFM Committees in Uttar Kannada District[50]. A study on the JFM in Orissa found that benefit sharing is the most contentious issue and for the village communities the system of benefit sharing between JFM Committees and the forest department (50:50) seems like a 'share cropping system'[51]. A study of JFM in Uttar Kannada District revealed that the share of 25% of the income received by the village communities is too small an incentive for them to be actively involved in forest protection[52]. On the other hand, due to arbitrary changes in the benefit-sharing mechanism in a JFM programme in Haryana, the initial gains of a successful model have been eroded[53].

Moreover, arrangements for benefit-sharing between village communities and forest department vary from state to state. With the passage of time, different states have passed their own resolutions to resolve this issue. For example, in Gujarat, the distribution of benefits derived from community forests on government forest land between the forest department and village communities was in the ratio of 3:1 before the state government issued a JFM resolution in March 1991. Subsequently, a second JFM resolution was issued in June 1994, enhancing the share of benefits from rehabilitated forests to village communities from 25% to 50%[54]. Similarly, recent legislative orders in Andhra Pradesh have increased the benefit share of the village communities from 25% to 100% but restricted to incremental volumes in timber and bamboo[55].

Poverty Alleviation

The foremost issue of concern for India's JFM programme is whether or not it helps to alleviate poverty given the existence of socio-economic inequality in Indian villages. The rationale for collaborative/participatory/JFM programmes from a government or donor perspective is that such programmes would increase the flow to communities and help reduce rural poverty and thereby strengthen social security[56]. But recent studies[57] contradict this widely held assumption. This is coupled with the inequitable distribution of benefits accruing from the JFM programme among the participating households, and inequity in participation by the marginalised sections.

A study in Jharkhand reveals that it is the wealthier sections of the communities who have benefited from the JFM programme at the expense of the poor[58]. Similarly a case study of three villages in Gadchiroli District in Maharashtra found that no special attention has been paid to the purposive strategy of equity in benefit sharing and as a result the poor suffer[59]. In Andhra Pradesh, marginalised groups such as shifting cultivators and head loaders have been denied access to the forests in the JFM programme in the name of forest protection[60]. In the Attappady Wasteland Comprehensive Environmental Conservation Project in Kerala aimed at restoring commons to the people through people's institutions, the traditional access arrangements for tribals, such as the grazing of cattle in the commons has been changed; thereby, affecting their livelihood[61]. This situation is described as 'better off non-users become stakeholders, users become offenders'[62]. Further, a study of JFM in 13 hamlets in five forest divisions in Tamilnadu revealed inequity in participation in JFM activities and benefit sharing, and lack of adequate provision for extending individual assistance to all the poor and erstwhile forest users[63].

Thus the issue of empowerment of the marginalised sections needs to be placed at the centre of participatory processes. This becomes important given that a large proportion of forests in India is gradually coming under the JFM programme.

Institutional Impediments

With the wide acceptance of JFM in India, the need to

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overcome various institutional impediments, which result in high transaction costs, is being increasingly realised. In many states, the institutional elements of JFM function under a plethora of resolutions, laws, policies, and acts, which are often 'conflicting, ambiguous, [contradictory], and lack legal validity' [64]. That is, the JFM programme lacks legislative support even when it is based on administrative orders[65]. For example, the forest department is vested with the responsibility of resolving conflicts within JFM Committees, disbanding a badly functioning JFM Committee, cancelling membership, nominating NGOs for membership[66], and even nominating the members of the JFM Committee Executive Body[67].

JFM activities presently derive their legal legitimacy from the resolutions issued by state governments. However, these resolutions do not have a statutory basis and are therefore easily reversible[68]. The state government resolutions on JFM imply that JFM Committees are functional groups without a legal and statutory basis[69] and also without financial and executive powers[70]. This may affect the management of community forests by the JFM Committees on a long term basis. The situation creates uncertainty about the rights to tenure of village communities involved in forest protection. Hence, for the continued success of JFM, village communities need to be provided with enough flexibility to build sustainable institutional arrangements.

Furthermore, there remains a lot of variation between the JFM resolutions issued by different states. Also, JFM Committees in different states vary in nomenclature, structure, and composition, and whereas they are registered with forest departments in some states, in others they are societies and cooperatives. Even within a state there are different types of committees, e g, the State of Madhya Pradesh has Village Forest Committees for degraded forests, Forest Protection Committees or JFM Committees for good forests, and Eco Development Committees for protected forests under the ongoing JFM programme. The arrangements for benefit-sharing between JFM Committees and village communities, and the terms and conditions of forest land leased to JFM Committees, also vary from state to state. Even the recently instituted FDAs to facilitate JFM have created a mix-up. Since the guidelines for FDAs are different from JFM rules passed by the states, the 'same villages can have different committees' [71]; the FDA-JFM Committee model has also been criticised for reviving the top–bottom approach in the decision-making process and for many

other drawbacks in Orissa[72]. As such, there is a pressing need to unify policy in at least the more important aspects of JFM structure across the country in order to achieve better coordination among the states and for efficient monitoring and evaluation.

There are also several problems in the acquisition of village common lands for JFM implementation at the grass roots, in particular, the bureaucratic procedures and delays[73]. Confusion between the forest department and the revenue department over land records adds to the aforesaid problems. Acquisition of degraded lands classed as a common property resource is further aggravated by encroachment of local people onto such land[74]. A study of tree growers' co-operatives in Gujarat concluded that eviction following illegal encroachment on forest land is typically contested by individuals and organisations in India on the grounds that many of these encroachments had taken place in the past[75]. The lack of demarcation and confusion over the boundary of degraded lands suitable for JFM activities has also affected the programme, since the administrative boundaries determined in the settlement plans were concluded during the 19th century and reflect few of the present ground realities of use and resource management.

Marketing of forest products is often affected by institutional stipulations. For example, in several states, the provisions of the Forest Law impose restrictions on felling, transportation, and sale of timber, (e g, in Andhra Pradesh, the Forest Produce Transit Rules of 1970 regulate transit of forest produce into, from or within any area in the state). Under the JFM programme too, a JFM Committee has to get permission to fell and transport timber, which is often a time-consuming process. Many states have started exempting tree species that are grown by farmers on their lands from government regulations[76]. Such policy changes would positively impact JFM.

Moreover, poor infrastructure and a lackadaisical approach to marketing forest produce result in non-remunerative prices for the products. Marketing of forest produce in India is either done by State agencies or through the alternative markets controlled by middlemen and intermediaries. In most cases, beneficiaries do not get a remunerative price. These marketing organisations need to be revived or modified to function efficiently[77]. The most serious hurdle comes from the nationalisation of almost all the important and commercially valuable Non-Timber Forest Products (NTFPs), as there is only one

single buyer, the government, which effectively reduces competition and also brings the bureaucracy into marketing channels. This monopsony of the government has negative economic implications on the forest-dependent communities[78]—the gatherers of NTFPs—as it reduces their collection and income. For example, 22 NTFPs in Andhra Pradesh are given in lease to Girijan Co-operative Corporation, a state government agency (it is Kerala Forest Development Corporation (KFDC) in Kerala and Large Adivasi Multipurpose Society (LAMPS) in Jharkhand) thereby prohibiting tribal people from selling the produce in the open market[79]. In Tamilnadu and Karnataka, collection rights of a large number of NTFPs have been given to paper mills, owners of oil extraction plants, and auction bidders[80].

Lack of appropriate marketing infrastructure for forest produce has always been a serious constraint in the Indian forestry sector. The JFM programme in India emphasises production of NTFPs because they provide a regular income for JFM Committees. For this system to function efficiently, however, it is necessary to make JFM Committees self-sufficient for their day-to-day operations, rather than depending on the government and NGOs. Marketing of NTFPs varies between the states in India in terms of 'market structure, marketing channels, price, scope for value added processing ... depending on the nature of the products [and] their legal status… .'[81] Given this context, marketing strategies for NTFPs need to be radically revamped so as to fulfil JFM objectives. It would be a mistake for policy makers to wait and watch rather than to resolve this important issue, as in many states JFM is still in its infancy and marketing has not emerged as a serious constraint.

Institutional Finance

Institutional finance, a potential source of funding for forestry activities in India is yet to be tapped. The National Bank for Agricultural and Rural Development (NABARD), an apex development bank in India, supports and promotes tree plantations on private and community lands. NABARD provides refinance facilities to certain categories of financial institutions in respect of the loans advanced by them to the ultimate beneficiaries—including individuals and NGOs—for undertaking development activities. However, since the inception of NABARD in 1982, its contribution to tree plantation activities has been paltry[82], and in fact has declined in recent years[83]. Furthermore, there is almost a negligible flow of institutional credit for implementing ongoing JFM programmes.

Most of the funds for JFM come from government sources and donor agencies and are usually made available for short periods, typically between three to five years, for a particular project area. In many cases, discontinuity of funds affects the sustainability of the village-level institutions involved in JFM programmes. In such cases, financial institutions can provide credit to village communities to continue JFM activities. Given the poor performance of NABARD in disbursing institutional credit for tree plantation programmes in the past, it would be a challenging task to now increase the flow of institutional credit for JFM throughout the country[84]. NABARD has undertaken some small-scale initiatives to provide funds for the JFM programme[85] but the impact at the grass roots is yet to be observed. For example, funds from NABARD helped to overcome the collapse of the JFM process in the state of Andhra Pradesh after the completion of its first phase[86].

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Concluding Remarks

The JFM policy directives issued by the government from time to time since the announcement of the National Forest Policy of 1988 indicate the existence of a learning curve in the process of implementing JFM in India. These policy directives have been developed on the principle of 'analysis for policy'. This means that with the passage of time, policy makers have realised the need for new policy measures for expanding the JFM programmes together with the need for overcoming the constraints in their implementation, while involving various stakeholders in

evolving policies.

The development of any successful doctrine is likely to face failures. The JFM programme in India currently confronts several teething problems inherited from the past. While there are sub-national variations in JFM implementation, the programme in general is facing a range of issues that normally crop up when an institution begins to take root. These issues arise from the forest department's top-down approach, the process of JFM Committee formation in different states as well as the lack of participatory rural techniques during this process[87]. This requires change in the attitude of the forest department. There is a need to use methods such as collaborative learning, communities of interest and open decision-making, and transactive planning for promotion of collaborative public participation in decision-making situations[88].

The main issues confronting JFM are ensuring equity in representation and participation of the marginalised sections (such as the poor and women), and equitable benefit-sharing between the forest department and village communities, and within communities themselves.

In overcoming the benefit sharing problem, it is important for policy makers to examine the history of past settlements during colonial rule, wherein forest users were granted certain rights[89]. These rights should not be abruptly extinguished by imposing new benefit sharing arrangements under JFM as that will determine the response of village communities to JFM. The institutional design of the JFM programme should be reconsidered to enable negotiation processes between different categories of stakeholders. There is also a need to remove the government monopoly on marketing of some non-timber forest products while at the same time guaranteeing benefits to the poorest forest-dependent people[90]. This is one area where State intervention and institutional investment is vital to build the organisational skills of the communities. Furthermore, research needs to be undertaken to investigate into conditions—the policy and institutional mechanisms—to introduce Clean Development Mechanism (CDM) under the auspices of Kyoto Protocol on Climate Change into community forests as a carbon sink to benefit the village communities at large.

In conclusion, it seems reasonable to say that 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.

Acknowledgements

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