

CHAPTER 2

LITERATURE REVIEW

2.1 COMMUNITY FOREST RESOURCE MANAGEMENT

A lot of work has been done in the country as well as globally on the importance of community management on Forest land. Several studies have established that the only way to preserve the integrity of the Forest as well as not depriving the forest dwellers of their means of livelihood, is to ensure that they have a stake in the preservation of Forests and manage it with benign intervention from the State. The role of the State should be at a level where it can act as a Facilitator.

According to Bahuguna, (1992) the key to involving local communities in finding solutions to over exploitation of resources lies in redefining the roles and responsibilities of the resource managers. This can be done by laying down a sound foundation of Collective Resource Management that is based on sharing of both rights as well as responsibilities. Thus while people will have to manage resources as a common property, they will also have to share a common responsibility for deriving these common benefits. Collective forest management is thus a process to ensure continuity in resource generation, stability in physical and social environment, and sustainability in the production of goods and services. (Lal 1992 as quoted in Bahuguna 1992). Conservation and enhancement of the already depleted resource base is meaningless without the purposeful involvement of the local communities.

In the Article “Forest Policy and Deprivation of Forest Dwellers in Independent India” (Tapan Kumar Mishra, 2006) the author(s) tests the hypothesis that there is an inverse relationship between population and forest resources . It appears logical that if the population around forest area increase, there would naturally be depletion of forest resources as the population depends on the Forest produce for its livelihood. The study however refutes these findings based on research conducted in Baidhara community in Orissa. he states that the Sustainable use of Non-Forest Timber Produce (NFTP) and devolution of forest Management to the local community is the key to sustainability. The article establishes that the seemingly divergent goals of preservation of natural resources and the rights of forest fringed dwellers can be aligned by involving them in the management of forest resources.

With an increasing presence of Forest products in the market economy increasing importance of livelihood sustenance of forest fringe community, and a greater understanding of the non-tangible benefits from forest : JFMs have brought to the fore inter related issues concerning Forest Management. The past working practices of the Forest allegedly only for timber extraction and industrial supplies have come in for criticism. In keeping with JFM strategies, there has been a shift from Revenue Oriented Forest Management to conservation that is primarily participatory and community based. These include replacement of uncontrolled exploitation, regeneration of NTFPs and encouraging communities to participate in decision making. (Debnarayan Sarker, 2008). The authors study the Economic outcome of JFM programme for forest fringe communities and forest protection activities of the government, based on a field survey of Bankura district in West Bengal. The study finds that after JFM

was introduced, the illegal income from Timber Forest Produce (TFP) decreased and the legal income from Non Timber Forest Produce (NTFP) increased. Substantial reduction in forest degradation also occurred. The study also analysis the ineffectiveness of legal provisions and coercion. It establishes that forcible implementation of rules is not possible in these far flung areas and cooperative management works best.

In the Article “Institutions, Forest Management and Sustainable Human Development – Experiences from India by Author Ram Prasad and Shashi Kant” have stated that the Government of India introduced a Non-Market Community Based Institutions known as JFM for Forest Management and protection in 1990. It is a sharing mechanism for Forest planning and Management based on sharing of Rights and duties, control and decision making authority over forest land between the Forest Department and local user groups. The study has stated that these Institutions have proved very useful and have contributed to Forest Management as well as four aspects of Sustainable Human Development (SHD) namely Ecological Output, Income Generation, Village Infrastructure Development and Community Empowerment. The study has further stated that in the long term, community based Institutions will prove to be a foundation of SHD and participatory democracy. (Ram Prasad 2003). New institutional economists have argued that this is one of the categories of institutions including market and non market institutions which will prove to be economically efficient for public goods and Common Pool Goods

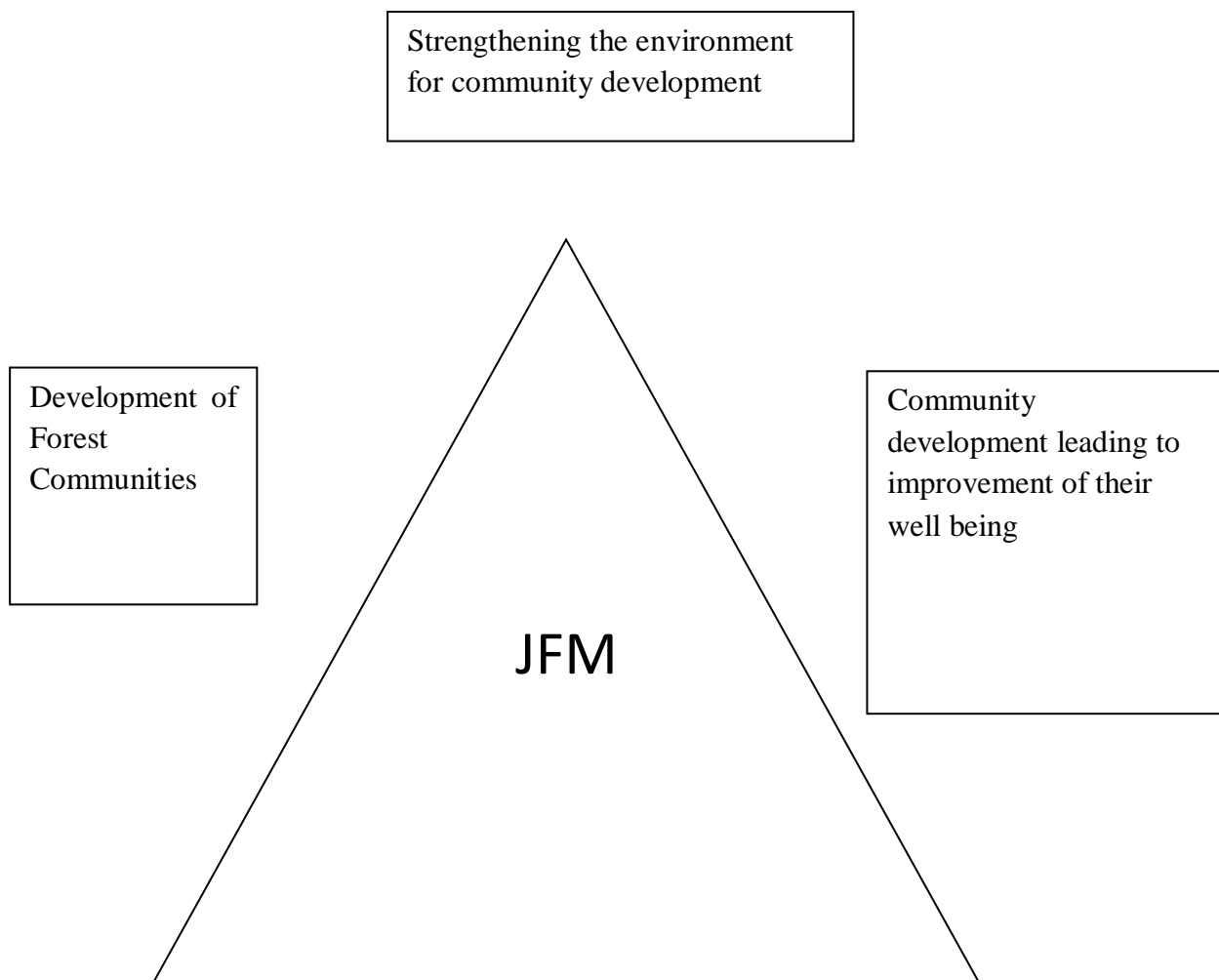
Further, the major features of contemporary forest governance include decentralisation of Forest Management concessions in publically owned produce and rights of Forests dwellers. Although a majority of Forests continue to be formally owned by Governments, the effectiveness of forest governance is increasingly independent of formal ownership. Growing and competing demands for food, bio-fuel, timber, and environmental services will post severe challenges to effective forest governance in the future especially in conjunction with the direct and indirect impacts of climate change. A greater role for community and market actors in forest governance and deeper attention to the factors that lead to effective governance beyond ownership patterns is necessary to address future forest governance challenges. (Arun Agrawal, Ashwini Chhatre and Rebecca Hardin, 2008). They also discuss the International trends in Forest Management and state that globally the trend for forest management revolves around the trio of Decentralisation, concession and certification. Decentralisation of forest policies in the global context was impelled in aprt by infusion of material and technical support from bilateral, multilateral and private donors who sought better forest governance from recipient countries. These external pressures co-incited with domestic demands for a greater recognition of local communities’ need for forest products and their role in managing local forests for multiple purposes. De-centralisation reforms in the past two decades have often promoted local, more democratic participation in governance. In tandem with policy advocacy and social movements, such reforms have fostered new practices of forest use, sometimes provoking social tensions revolving around claims of indigenous people within forest zones (P. Cronkleton 2008 as quoted by Arun Agarawal 2008)

In the Article “Malfunctioning of Forest Institutions in Orissa, Kailas Sarap and Tapas Kumar Sarangi published in Economic and Political Weekly, 2009 has however stated that the Forest Institutions like JFM are characterised by inefficiency, inequality in access and exclusion of certain groups in the State. There is lack of participation of poor and women. There is need to revitalise these Institutions through their democratisation by effective participation of these groups in the decision making process. This would help in the management of various types of conflict prevailing in forest dependent villages. Provision of tenure security through implementation of Forest Rights Act to forest dependent communities will go a long way in motivating the members for long term interest in their involvement in the protection and growth of natural resources. He has further stated that promotion of mix species in plantation activities, value addition and enterprise development, improvement of marketing networks and increased investment in the sector especially in value addition related activities would go a long way in raising the level of the income of the forest dwellers and bringing about equity and economic sustainability among them.

The three vital components of JFM have been identified as follows: (Sanjay Srivastava, 2005)

- i. Strengthening the enabling environment for community development
- ii. Developing the forest resources
- iii. Emphasizing community development and improving the wellbeing of the forest communities

Fig. 2.1 Three vital components of JFM



2.2 INTERNATIONAL PERSPECTIVE

In the Article “Community Forest Management in Asia – Review of Policy Programmes by Shri V. K. Bahuguna, the author examines the Forest Management in Asian countries namely Indonesia, Malaysia, Laos, Myanmar, Nepal, Philippines, Vietnam and Thailand. After detailed research, he has opined that the genuine involvement of larger civil society and the empowerment of the stakeholders through Capacity Building and Decentralisation should be a key element of forest management in the future. Foresters in the coming years will have to focus their professional expertise on Management of key eco-systems for bio-diversity conservation and spend their energy and skills in grooming people for the management of Forests and ensuring local livelihoods for the people in a sustainable manner without degrading manner.

While doing research on “Climate Change and Poverty” , Srividhya Mariyappam from Anna University Chennai Tamil Nadu, states that the developing countries will lead to find a middle path between development and addressing the sustainable challenges with forward looking policy interventions. Migration of people is a global social and economic concern that can to such extent be curbed by these interventions. Subsidies on products should be given on environmentally benign technologies so that the resilience of livelihoods is increased.

In the Article “Forest Rehabilitation and its Implication for Forest Transition Theory by Shri Wil de Jong published in Association for Tropical Biology and Conservation, the Author talks of participatory forest rehabilitation Era which started in the late 1990s where diverse stakeholders work towards improving the forestry governance. He gives examples of Philippines which first had its social forestry programme in 1982.the efficacy of this program is not outlined. However, in 1995, this community based forest management programme was adopted as the National strategy. Most of the plantations in the country have resulted from that programme. Vietnam followed the “Greening the Barren Hills” programme with a 5 million hectare reforestation project to be completed by 2010. This project has made significant progress involving farmers and communities in forest rehabilitation and forest protection. This project have two parts, the first three million hectares was proposed to be done only through State Forestry Enterprises. The subsequent one has been described more successful as it involved the local communities.

In the Article “Placing Humans at the Heart of Conservation by Shri Jaboury Ghazoul published by Association for Tropical Biology and Conservation (September 2007), the author states that there has always been some tension between different approaches to conservation, particularly between approaches that emphasize the protection of biodiversity against conservation in support of human wellbeing. While not necessarily mutually exclusive, protectionist conservation has a history of human exclusion, while prioritizing human livelihoods undoubtedly impacts ‘wild nature’. The balance between these approaches has been debated for many years with no coherent outcome. Integrated conservation and

development projects sought to bridge the gap between the two approaches, but largely failed owing to the inherent biases of such projects in favour of one approach or the other. Human-dominated tropical agroecosystems can have considerable biodiversity value, Madagascar and the Western Ghats in India being just two examples. On smaller scales, remnant forest patches, marshes, or ponds, long conserved within largely agricultural land-scapes by traditional belief systems, or retained for the valuable goods and services they provide, are testament to the diverse values that local communities place on them.

How do we promote pro-poor conservation in the context of complex, even conflicting, societal perspectives and aspirations? This remains an open question for which there remains considerable need for research. Conservation that aims to secure sustainable livelihoods should also consider the individual opportunity costs. While some members of a society may benefit from pro-poor conservation, others may perceive a restriction to their potential for livelihood development. Resolving conflicts among beneficiaries and debtors may be one of the primary challenges for pro-poor conservation, and one that may be facilitated or exacerbated by governance. Even local beneficiaries of conservation may ultimately aspire to escape currently sustainable but potentially limiting livelihood strategies in favour of alternative livelihoods that are less dependent on environmental uncertainties and hardships. Effective environmental management may certainly reduce environmental uncertainties, but may also restrict opportunities for short-term gain, which would otherwise open up new livelihood opportunities. A challenge for pro-poor conservation is therefore to accommodate shifts in livelihoods from ‘hanging-in’ activities, which secure livelihood levels at subsistence levels, to either ‘stepping-up’ activities, where existing livelihood strategies are expanded to increase returns, or to ‘stepping-out’, where the existing activities are used as springboard from which to embark on alternative higher-return livelihood activities.

2.3 NON TIMBER FOREST PRODUCE (NTFP)

All forest products other than timber, small wood and fuel-wood were termed initially as ‘minor forest products’ (MFP). MFP included ‘all animal, vegetable and mineral products other than wood found mainly in forest regions or collected there from’ according to the Forest Research Institute (FRI) publication ‘Indian Forest Utilization’ (Anon, 1972, as quoted by Manjari 2015). With the growing appreciation of the economic importance of MFP, an alternative term ‘Economic Forest Produce other than Wood’ was devised by the Fourth World Forestry Congress held in Dehra Dun in 1954 (Anon, 1972). Awareness grew with time about the valuable contribution of the sector to food, shelter, healthcare, etc particularly for forest fringe communities since early 1970s along with recognition of the enormous economic value and potential of MFP.

De Beer and McDermott used the term ‘Non-Timber Forest Products’ (NTFPs) for the first time in their groundbreaking publication on the economic value of NTFPs in South East Asia (Beer and McDermott, 1989). They proposed the following definition for NTFPs: “The term

‘Non-Timber Forest Products’ (NTFPs) encompasses all biological materials other than timber, which are extracted from forests for human use.” The authors set out the key point of distinction between timber and non-timber forest products: “that timber is managed on an industrial scale for interests located outside the forest, while NTFPs are extracted using simple technologies by people living in or near forest.”

FAO uses the term, Non-Wood Forest Products (NWFP) which was re-defined in 1999 as: "Non-wood forest products consist of goods of biological origin other than wood, derived from forests, other wooded land and trees outside forests." The key elements of the FAO definition are that it excludes all woody raw materials such as timber, chips, charcoal and fuel wood, as well as small woods used for tools, household equipment and carvings; that it excludes services, and that it includes products derived from both natural forests and plantations.

There are differences in definitions of the terms MFP, NTFPs and NWFP leading to some confusion, although these are often used as synonyms. The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (FRA) stated in Section 2 (i) that ‘minor forest produce’ includes all non-timber forest produce of plant origin but excludes animal products like cocoons, wax, etc.

R. Prasad of the Indian Institute of Forest Management, Bhopal, India, in his article, Joint forest management in India and the impact of state control over non-wood forest products States that Case studies suggest that state NWFP (NTFPs) monopolies may have disadvantages for the collectors and for the forests. It appears that the objectives of bringing NWFPs under state monopoly - to reduce exploitation of tribal people and other forest-dependent communities and to promote sustainable management of NWFPs - are not being realized. State control over the trade of NWFPs has often resulted in compounded problems of restricted access to resources and non-remunerative returns to the collectors. NWFPs are one of the keys to successful joint forest management, but if local people who are engaged in the arduous task of collecting NWFPs are not able to get fair wages even when the trade is handled by government-appointed agencies, JFM may not be a viable tool in the achievement of sustainable forest management.

He talks of huge mismatches between the declared objectives of NWFP trade monopoly and the field situation

Stated objectives	Actual situation
Welfare of forest-dependent communities	
Ensuring access to forests (implied)	Restricted by agents and subagents of government, e.g. in Orissa. (Agramee, 1997)
Ensuring fair wages	In Orissa, bulk profits are being apportioned by intermediaries/state

through prompt	government; in Madhya Pradesh, payments are not only delayed, but are inadequate because of the managed collection of predetermined quantity
Elimination of intermediaries	Intermediaries are agents and subagents of monopoly leaseholders, e.g. in Orissa (Aragamee, 1997)
Preventing exploitation of NWFP collectors	Where government alone does the marketing, it is inefficient; where marketing is left to private trade, it is exploitative (Prasad and Saxena, 1996)
Ensuring better socio-economic conditions	Perceptible improvement in economic conditions is not in sight
Maximizing collection to ensure more wages	Collection is regulated and thus the full advantage of the produce is not available to the NWFP gatherers, as illustrated by declining collection in Orissa and Madhya Pradesh
Maintenance of benefit sharing and gender equity	National Commission on Women reported very low payments to women, partly because of ignorance and partly because of women's fear of being denied collection access to forests (Prasad and Saxena, 1996)
Sustainable forest management	
Sustainable harvesting	Agents and subagents of monopoly leaseholders are interested in enhanced return and are unmindful of the long-term impact of destructive harvesting
Forest protection	Collection of sal seed, mahua, etc. is associated with extensive forest fire to clear the ground of leaf litter and to ensure clear visibility of the produce on the ground
Natural regeneration	Regeneration is very poor because of destructive harvesting, grazing and fire
Forest productivity	Forest degradation continues
Forest revenue to state	Forest revenue to state has increased tremendously
Protection of end users' interests	End users continues to pay more because the market is controlled by others

2.4 FOREST RIGHTS ACT

The government notified the ‘Scheduled Tribes and other traditional forest dwellers (Recognition of Forest Rights) Act on 29th Dec 2006. It is an Act which aims to recognise and vest the rights and occupation in forest land in the traditional forest dwellers who have been residing in such forests for generations but whose rights could not be recorded. It includes the responsibilities and authority for sustainable use, conservation of biodiversity and maintenance of ecological balance, thereby strengthening the conservation regime of the forest while ensuring the livelihood and food security of the forest dwelling Scheduled Tribes and other traditional forest dwellers. It talks of the historical injustice to these forest dwellers who are integral to the very survival and sustainability of the forest eco system. It states that it has become necessary to address the long standing insecurity of the tenurial and access rights of these people who were earlier forced to relocate their dwelling due to state development interventions.

Several authors have given detailed critiques on the Act. While some say that it was a much awaited and a positive step by the government, others feel that it is ‘too little, too late’ for the conservation of forest land and not enough for the forest dwellers. Others feel that implementation of the Act is a big challenge

In the Article, “Surviving the Forest Rights Act: Between Scylla and Charybdis” by Ms Madhu Ramnath published in Economic and Political Weekly (March 2008), the author presents the many arguments in favour of and against the Scheduled Tribes and Other Traditional forest Dwellers (Recognition of Forest Rights) Act, 2006, and the obstacles in implementation. Some of the various problems that arise due to the peculiar circumstances pertaining to tribal India, and the administrative machinery in place to guide the special policies concerning forest conservation and tribal people are also elaborated upon. The article brings out a number of field-level issues that deal with traditional conservation in tribal India as well as the limitations and pitfalls in entrusting the execution of the act to the Gram Sabha.

It has been stated in the act that the traditional forest dwellers are “integral to the very survival and sustainability of the forest ecosystem”. This is quite a volte face to the previously held views of the government, which decried the destructive tribal cultivation practices, suggesting that it was necessary to “wean the tribals away from shifting cultivation” and a forest-dependent way of life. The author feels that it is curious that along with India’s rise as an economic power today, the government feels the need to show that it is conscious of the plight of its marginalised people. She argues that this is apparently important for India’s image abroad, especially in its relations with other countries that must be convinced that they are dealing with a modern country that also values human rights.

The author brings out the importance of certain traditional tribal practices that have a role in conservation of forests and its biodiversity. She says that the government has now woken up to the significance of these practices which were perhaps rapidly disappearing. She states that combining the tribal rights and an environmental agenda, the government has even

recognised that the STS and other traditional forest dwellers have a primary role in sustainability of our ecosystem. Does this refer to certain adivasi practices that enhance tree growth? Like digging the edible tubers of various species of 'dio-scoreas', leaving behind the shallow pits that retain water during the dry season, providing moisture for the plants in the vicinity?

Forest Rights Act: Towards the End of Struggle for Tribals? is an article by Madhusudan Bandi written in the Social Scientist, 2014. It evaluates the Implementation of Forest Rights Act in various states. The findings are that there is consistently poor implementation of the Act across states and there is consistent denial of rights to forest dwellers despite the provisions of the Act. The articles relate to issues/ problems of tribal population mainly due to lack of awareness/ involvement of the tribal communities in management of forests. The article is relevant to the current study as a large fraction of tribal population form the forest fringe dwellers and their problems are similar.

Implementation of the Forest Rights Act in the Western Ghats Region of Kerala is another article written by Jyothis Sathyapalan published in the Economic and Political Weekly, Vol. 45, No. 30 (JULY 24-30, 2010). It talks about the Background of the Forest Rights Act, and the Adivasi movement in Kerala. The article also analysis the politics behind the poor implementation of FRA. It findings are that poor implementation of the Act is mainly due to lack of awareness among people and also poor coordination between various state govt. departments.

2.5 EXTERNALITIES AND GENDER

The network externalities and gender equations of such programmes are discussed in the Article "Network Externalities under Social Capital: Lessons from Gender Sensitive Forest Management Programme in West Bengal" by Shri Nimai Das and Debnarayan Sarker published in Indian Economic Review (2011). The Authors talk of the role of Women in forest management and the positive externalities women bring in the process. In addition they discuss the problem of free riding from the externality which the stakeholders receive from the use of forest under JFM. It is argued that when everyone is benefitted and no one can be excluded from the benefits, the problem of free riding arises. There is naturally the temptation of individuals to let others provide for the public good (Forests) where there is no way to provide the service without benefitting everyone. As a result, there is no incentive to pay for what the programme is really worth to them. The forest provides public goods to the universal community (Stakeholders or otherwise) in the form of indirect benefits like biodiversity conservation, ecosystem linkage, Carbon sequestration, water conservation etc. As in the typical JFM programme, the non-stakeholders do not receive the direct benefit sharing which is provided only to the village communities near the forests, the stakes for them in the protection and development of the degraded forests are higher. Here the forest resource is a common property or common pool that allows the selective body (like a group of households who are members of JFM) to device scheme which excludes other (non stakeholders) thereby allowing a collection set of users (Stakeholders) to capture the future benefits. Accordingly, the use of common pool forest resources under JFM does not allow

free riding. Rather it involves externalities to the stakeholders (JFM member-households), because the utility set of one user (Stakeholder) is affected by the activities of other users/stakeholders (economic agents involved in the programme) in the same neighbourhood (said JFM village) wherein the non-stakeholders do not habitually receive those externalities.

Regarding participation of women, the author opined that women value collaboration, altruism and conflict resolution more highly than men. They form stronger kinship and friendship relation than men. Therefore, the new management system of women forest, by the West Bengal Forest Department which established female headed forest protection committee has been successful in building the level of social network capital and its positive complimentary effect to the rural communities in participatory forestry.

In another similar espouse, *The Role of Non-Timber Forest Products in Poverty Reduction in India: Prospects and Problems*, an article by Golam Rasul, MadhavKarki and Ram P. Sah. Source: *Development in Practice*, Vol. 18, No. 6 (Nov, 2008), the problems relating to NTFP management: Exploitation by traders, restrictions on harvest, lack of processing and value addition of the NTFP are major concerns. It is stated that there is a need to devolve management of NTFP to local communities. Projects aiming at Value addition to the NTFP should be undertaken. There is also need to promote capacity development, technology development, dissemination and market creation of these products.

Kristin Bingeman of Natural Resources Institute, University of Manitoba in her article, *Women's Participation in Forest Management: Decisions in the Upper Kullu Valley, Himachal Pradesh, India*, published in 2001 in *Journal for the association for Nepal and Himalayan Studies* also strongly advocated greater role and more active participation for women in such programmes. Her paper analyzes women's participation in forest management in villages in the Manali area of the upper Kullu Valley, Himachal Pradesh, India. She explores women's participation in Joint Forest Management (JFM) projects and the forest-related activities and functioning of mahila mandals (village women's organizations). Women in the villages surrounding the town of Manali procure the majority of the forest products used daily within households. While women do participate in Mahila Mandal activities, their participation in JFM needs more encouragement. JFM is only part of the overall context for the interactions between people and the forests, and forest use and management. Women's participation within local groups such as the mahila mandals is significant because these groups contribute to forest management through the creation and enforcement of local-level rules about forest access and use. The author is concerned she feels that JFM threatens to undermine the existing pattern of women's involvement in forest use and management, including those aspects of forest management that are the domain of the mahila mandals.

She opines that the question of whether Joint Forest Management threatens to undermine the existing pattern of women's involvement in forest management through the activities of mahila mandals and their day to day use of the forest areas will be answered in time. The challenge lies in finding mechanisms to acknowledge and incorporate the ways that mahila mandals already contribute to forest management at the village level. The danger lies in allowing JFM to become a male-dominated process where men create and enforce rules

applicable to activities that are largely the domain of women and which may contradict or negate current rules established by mahila mandals.

Other studies also talk of advantages of women's participation in management of forest produce. Communities where women participation is more do much better in achieving the goals of joint forest management as compared to those that have lesser participation of women. Niami Das, 2011 studied the dependence of women on forests and their participation in JFMs in West Bengal. The study examines the extent of women's dependence on forest, and also their participation in gender sensitive planning of joint forest management programme in West Bengal. This study was undertaken where the provincial government made a pioneering attempt for women empowerment during early 1990s by establishing separate female forest management unit to accommodate women's preference, needs, knowledge and values on forest resources providing separate provision in institutions. The study suggests that women's participation in their management unit is substantially higher than men's in the general (joint) forest management unit, and this ensures women's major contribution to their household's income with and their greater physical involvement in forestry works.

Shri D. N Dhangare, on the other hand studied the role of Women in Joint Forest Management in Uttar Pradesh. In his article, People, Panchayats and Women, published in the Economic and Political Weekly, 2000, he reports the poor performance of joint forest management (JFM) initiatives in Uttar Pradesh. He states that Sustainable use of land and forest produce requires a change in attitudes both of government departments and the people. From experience in Uttar Pradesh, he feels that 'Joint' in JFM remains on paper only as forest departments work for, rather than with, the people. Role of women in the programme is minimal. He talks of integration of the initiative and suggests that women be given larger role which would contribute of the success of the programme.