

SOCIO ECONOMIC IMPACT OF JFM IN BANKURA

H.K. De and A. Ramesh Babu***

Joint Forest Management (JFM) is a new concept under which the Forest Department of the Government and the local communities jointly manage the state forest lands. In turn both share the responsibilities and benefits. The old custodial forest management systems developed and followed over a hundred years were rendered ineffective in the fifties and sixties due to various reasons.

National Forest Policy, 1988 recognized the rights and concessions of the people living in and around the forest. It also states that derivation of direct economic gain is subordinated to maintenance of environmental stability. It emphasized creation of a massive people's movement to reduce pressure of forest. It marked a watershed in the history of forest management in the country.

West Bengal has got 11,879 KM² recorded forest area, while the actual forest area is 8,186 KM² the actual forest cover is 9.2 percent of the total geographical area. Under some 2423 FPCs, an area of 3,90,919 ha is being managed. As a recognition of successful implementation of JFM, west Bengal has got few awards too. Does this novel approach has any impact on the economic lot of the fringe dwellers? In this paper an attempt has been made to study the socioeconomic consequences of JFM.

Methodology

This exploratory study was undertaken in Kansavati Soil Conservation Division of Bankura district (West Bengal). Four Forest Protection Committees were selected through multistage sampling. A multifaceted approach was adopted to collect data which includes non-participant observation, focus group interview and open-ended questionnaire. Two hundred forty participant villagers and sixty forest department officials including forest guards were contacted.

* Scientist, Central Institute of Freshwater Aquaculture, Kausalyaganga, Bhubaneswar-751 002

** Faculty member, Division of Agril. Research Institute, Pusa, New Delhi-11012

Results and Discussion

The JFM programme has affected the life pattern of the participating communities in a significant way.

Employment Pattern

JFM has had a positive impact on the employment availability for the local communities in respect to planting, harvesting, etc. Non timber forest produces(NTFP) are another major income source for forest fringe communities. At many places, there has been a shift in labour utilization pattern after the introduction of JFM.

Table 1. Annual labour use pattern (Female) of FPCs

	Wood collection (days)	Migratory labour (days)	NTFP collection (days)	Misc. (days)
Before FPC formation	145	45	100	75
After FPC formation	125	80	150	10
Change	-20	35	50	-65

Table 2. Annual labour use pattern (Male) of FPCs

	Wood collection (days)	Migratory labour (days)	NTFP collection (days)	Misc. (days)
Before FPC formation	170	45	45	105
After FPC formation	50	90	150	75
Change	-120	+45	105	-30

After the formation of FPC, the percentage of mandays employed for wood cutting activities decreased from 41 per cent to 12 per cent in case of males and from 40 per cent to 34 per cent in case of the females. The fall is not substantial in case of females as perhaps they are cutting wood mainly for domestic use. There is an increase in percentage of mandays employed for NTFP collection. It increased from 12 per cent to 42 per cent in case of males where as in case of females from 27 per cent to 41 per cent.

Encroachment of Forest Land

A major fear of some forest officials regarding the JFM programme is that it will take away Government's authority and forest lands would be encroached upon by the people (for cultivation etc.). However, actual figures vindicate the JFM strategy. It is observed that after the formation of FPCs, encroachments on forest lands have been removed amicably at many places.

Table 3 Recovery of encroached land in Bankura

Year	Encroachment recovery (ha)
1988-89	1989-90
1990-91	1991-92
30.45	30.52
112.55	125.52

Involvement of Women in Various Forest Related Activities

Women form an important component of the JFM programme. Women are largely involved in the following activities:

- ⇒ Leaf collection from forest
- ⇒ Plate making
- ⇒ Collection of twig and branches
- ⇒ Mushroom collection
- ⇒ Collection of medicinal NTFP
- ⇒ Thinning and final harvesting

Women maintain closer physical ties with the natural resource base thereby acquiring an in-depth knowledge and understanding of the properties and uses of various species. Women had significantly high awareness about the problems of degradation, as they reside permanently in the area. The men folk generally go out in search of jobs and have little concern about the problems of deforestation. With the closure of forests, involvement of women in different forest activities has reduced considerably. In view of the concern and role of women in forest related activities, it is imperative to involve

women in forest management programmes. This might be the reason that the Government of West Bengal modified its earlier resolution emphasizing women's participation in the joint forest management programme.

The concept of joint membership was also introduced which provides that if husband becomes member of the FPC, his wife also automatically becomes a member. In Joypur range, Brindabanpur FPC was found to be managed by women only whereas, in other FPCs, percentage of women represented in the executive committee was very low.

Availability of Non Timber Forest Produce

The participants are getting regular flow of different NTFPs, many of which are commercially important. Local foresters also agreed that after the community started participating in the JFM, the availability of NTFPs has increased considerably.

Table 4: NTFPs collected commercially from forests managed by FPCs of Bankura district.

S.No.	Botanical Name	Local Name	Plant Parts Collected
1.	Aegle marmelos	Bel	fruits
2.	Andrographis paniculata	Kalmegh	stem, branches, leaves
3.	Asparagus recemosus	Satmul	roots
4.	Azadirachta indica	Nim	leaves, fruits
5.	Hemidesmes indicus	Anantmul	roots
6.	Holarrhena antidysenterica	Kurchi	bark
7.	Madhuca indica	Mahua	flower fruits
8.	Phoenix sylvestris	Khejur	leaves, fruits and juice
9.	Phyllanthus embelica	Amloki	fruit
10.	Shorea robusta	Sal	green leaves and fruits
11.	Syzygium cunini	Jam	fruits
12.	Ternunalia belenca	Bahera	fruits
13.	Ternunatia chebula	Haritaki	fruits
14.	Mushrooms	Chhatu	fruiting body
15.	Silk	Tasar	leaves, cocoons

Availability of Fuelwood

Villagers are now getting dry leaves, twigs as fuelwood at their doorstep. FPCs are also authorized to collect royalty from outsiders who used to collect dry sal leaves. FPC collects Rs. 5.00 per bullock cart of dry leaves. The secretary of Bongeje FPC told the investigator that they had a collection of Rs. 30,000.00 only from dry leaves in the year 1995-96.

Availability of Crops

Villagers are now ensured of regular supply of fodder for their cattle. Intercropping *i.e.*, planting grasses in between two rows of trees has increased the bio-mass production. Food grains *e.g.*, Maize and Arhar are also being grown in rainy season on the forest floor. Tasar planting is carried out in small patches with a view to rear silk worm. Green tasar leaf is also a salable commodity.

Institutional Changes

An institutional mechanism at the grass root level is *sine qua non* to spearhead developmental activities. Changes are also essential in the way of functioning of forest department because without support from the top, the initiatives at the grass root level will have no meaning. A remarkable degree of attitudinal change is being witnessed in the people as well as forest department personnel in West Bengal. Institutional changes that has enabled the successful implementation of TFM are discussed under three heads - forest protection committee, forest department and non-government organizations.

A. Forest Protection Committees

1. **Motivation to form FFCs:** Follow up programme of Forest Department motivated the villagers to realize their benefits from forest protection. People have been gradually sensitized to protect the forest with their own effort. Panchayat and village leaders also played a positive role.
2. **Protection and patrolling system:** Patrolling is done on a voluntary basis by small teams in which all active male members of FPC participate by turn. The frequency and intensity of patrolling depends on the perceived need, which increases in the lean agricultural season, when there are greater chances of illicit falling. Generally women do not take part in patrolling.

3. **Fine systems:** A number of systems to impose fine have been evolved by FPC, to check illicit felling. In case of minor offence, many FPCs follow a system in which an offender is simply warned. However, in offences of a serious nature, FPC hands over the offender to the forest department. It was also observed that if the concerned forest official is lenient in dealing with the offenders, the FPCs tackle the situation at its own level. In some cases, system of monetary fines and social sanctions is also imposed.
4. **Conflict resolution:** It was observed that in case of intra village FPC conflicts, discussion involving Panchayat member is resorted to. Panchayats also play the role of arbitrators in case of inter-village conflicts. Friction with neighbouring villages is prevented by granting some usufructory rights to them. It is observed that most confrontations with outsiders occur during the first and second year of protection, after which the restrictions and rights of the protecting village are generally recognized.
5. **FPC meetings:** The Government orders stipulate that the FPC should have an annual general meeting. However, meetings are held whenever necessary. Meetings are conducted by the secretary of the concerned FPC, in absence of the local Beat Officer. Protection mechanism, distribution of employment opportunities, conflict resolution are the major issues discussed in such meetings.
6. **Present perception about forest department:** Villagers now appreciate the role of FD in providing assistance in respect of the following:
 - ☞ providing sal leaf plate making machine
 - ☞ training of youth in fishery, apiary, dairy etc.
 - ☞ construction of dam/renovation of pond for agricultural improvement
 - ☞ digging of well as a source of drinking water

This assistance is meagre compared to the developmental need of the fringe dwellers. Villagers have now realized the need to protect the forest and they have developed a sense of responsibility towards forests, which sustain their livelihood. FD officials have also reoriented themselves as a partner in the development process.

B. Forest Department

1. **Micro-planning:** A unique feature of West Bengal's JFM programme is the emphasis on micro-planning. Detailed guidelines on micro-planning direct the forest staff to adopt a flexible process of planning, intimately involving local people and their needs in the programme. An important feature of the micro plan is that information regarding the villages is collected in totality. Therefore, information regarding drinking water, roads and other public facilities is collected, and an attempt is made to meet the most pressing needs either through the forest department or through schemes/programmes of other departments. At many places, the forest department has initiated a number of programmes such as improved *Chullah*, training in apiculture, pisciculture etc. for the benefits of villagers. As such the micro-planning has helped the FD officials to build up closer rapport with the local people and diagnose their basic problems for appropriate solutions. The programmes started through participatory approach have provided rich dividends to the villagers.
2. **Revenue:** Although the major emphasis of the JFM programme is on meeting needs of the local communities, forest department has also financially gained from the programme. The forest department has started earning revenues from areas where previously nothing was available. The revenue data of the Bankura district shows that it increased from Rs. 2,448,347.90 in 1987-88 to Rs. 4,215,764.45 in 1991-92 (Jha, A. K. undated).
3. **Training and reorientation:** The forest department has been organizing regular training programmes for its staff since the inception of social forestry programme. This training has helped the staff to organize village meeting' successfully and even take their own criticism in a positive way. These training sessions also served as fora for getting feedback for the senior officers of the forest department *e.g.*, one feedback was that the staff feels more responsibilities and decision making powers should be given to the field level functionaries and the forest guards should be given powers to convene meetings as a forester may not be able to give proper attention to all the FPCs under his

jurisdiction. As a result, realization is growing for restructuring the department from a purely hierarchical ethos of a hundred years to the participatory approach both in the internal working of the department and its dealings with the village communities.

In order to make joint forest management effective, the delegation of responsibilities to the bottom level forest officials has also been felt. This is because of the reason that foresters are not in a position to cope with the demand of the activities initiated under his jurisdiction.

“There was a great deal of political will in West Bengal, not only at the top but also in the local governing councils, to encourage villagers to join the Forest Department in protecting the land. The state is unusual in that it has a high number of socially oriented foresters who can talk to local people and are responsive to this kind of collaboration.” - Prabir Guhathakurta (as quoted by Lurie, 1991).

C. Non Government Organizations (NGOs)

The JFM programme provided an opportunity to NGOs to get involved in forest related activities which are of importance to the local people. Although they were already working for the upliftment of people in rural areas, it was through JFM that they got a chance to get involved more closely in forestry through micro-planning, information dissemination, training and research. Notable NGOs are Indian Institute of Bio-social Research and Development (BRAD) and Ramakrishna Mission (RKM).

“Involvement of people is a *sine qua non* in matters of sustainable development and rejuvenation of nature. The whole exercise must be consistent with the needs and aspirations of the people and their urge for a better quality of life. As far as forest management is concerned, our experience in Bengal is unique. The success stems from the advancement of democracy which has by now taken a deep root in the fibres of social ramification. A pro-people Land Reform Policy, involvement of the three tier Panchayati Raj, and planning process from the grassroots level, blending with an institutionalized pro-people forest management have made this possible. A breakthrough has been achieved by ensuring a

distribution of social justice and by fostering a conservation culture.”- Dr. Ambarish Mukhopadhyay, Minister in-charge, Environment and Forest, Government of West Bengal (Bardhan Roy, 1992)

Conclusion

It is time foresters realize that commercial value of timber and pulp from natural forests is worth far less to the nation than the forest's role in supplementing livelihood of rural population. Instead of encouraging timber production, which generates quick and ready cash, they should pay attention to NTFPs which influences livelihood of poor.

It is recommended that FDs need to meet targets and standard procedure be subordinated to the needs of local people. There should be a delicate balance between protecting forest resources and providing opportunities for its use, especially by poor. Participants should be given training on Agri-Hort-Silvipasture techniques in KVKs. In order to reduce dependency on forests, they should be trained in vocations *e.g.*, agriculture, sericulture, dairying etc. Greater amount of resources is to be allocated to support activities. We recommend more supply of subsidized sal-leaf plate making machines to the fringe dwellers.

If this sustainable forest management is to occur, the movement towards it must be broad based. Broad range of project implementors including community organization, forest department, research institutions, NGOs etc. hold part of the answer. In designing an initiative for a given locale appropriate elements from each approach must be selected and assembled in accordance with prevailing circumstances.

References

- Bardhan Roy, B.K.(1992) Forests rediscovered - needed reforms. Indian forester 118(10) 744-750
- Lurie, T.(1991) Saving the forests: Indian experience in cooperation The Ford Foundation letter Spring/Summer 22(1) Ford Foundation, New York